South Pacific Regional Environment Programme

and

United Nations Environment Programme

Strengthening Environmental Legislation in the Pacific Region

Workshop Proceedings

Edited by Ben Boer

With assistance from IUCN-the World Conservation Union and the Australian Centre for Environmental Law, University of Sydney.

USP Library Cataloguing-in-Publication Data

Strengthening environmental legislation in the Pacific region/Ben Boer editor. - Apia, Western Samoa : SPREP, 1993

p. : cm.

ISBN 982-04-0067-8

I. Environmental policy-Oceania
1. Environmental law-Oceania
2. Natural resources-Oceania-Management. Boer, Ben
11. South Pacific Regional Environment Programme
111.Title

HC79.E5M33 344.95046

Prepared for publication through the Australian Centre for Environmental Law, Faculty of Law, University of Sydney

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The World Conservation Union

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FOREWORD

This workshop, "Strengthening Environmental Legislation in the Pacific Region", was a significant event. As an integral part of the Regional Environment Technical Assistance Project (RETA) and its counterpart, the National Environmental Management Strategy (NEMS) Project, it has placed a new emphasis on the role of both international and domestic environmental law in our vast region.

The participants in this workshop were drawn from 15 countries. By asking for representatives from both the legal and environmental management departments of government, the workshop provided a forum for broad communication between different government areas and instrumentalities as well as, importantly, between different disciplines.

I am grateful to the instigator of this workshop, Mr David Sheppard, the RETA Project Team Leader, for his untiring efforts in bringing the workshop into being. Working closely with the workshop coordinators and with the SPREP Secretariat in Apia, a wide range of presenters and resource persons was drawn together from North America, Europe, from Australia and New Zealand, to share with us their extensive knowledge and experience in environmental law and related matters. I especially welcome the involvement of the United Nations Environment Programme, the Environmental Law Centre of IUCN-The World Conservation Union, the World Bank, and the United Nations University. Official representatives from the Australian and New Zealand governments were also very welcome. I am grateful for their efforts, both in terms of their formal presentations to the workshop as well as their informal interactions with workshop participants in the smaller working groups.

The workshop coordinators, Professor Ben Boer and Professor David Farrier, worked assiduously both before and during the workshop to ensure that the workshop materials, the programme, the input from presenters and from the participants was coherently organised and presented. Finally I would like to thank Professor Ben Boer and the Australian Centre for Environmental Law in the Faculty of Law at the University of Sydney for the work that was done in editing these Workshop Proceedings. Never before has such a broad range of environmental law and policy material been published in one volume for the Pacific Region. It complements the Legal Reviews carried out by Ms Mere Pulea, Ms Elizabeth Harding, Mr Clark Peteru, Mr Kosi Latu, Professor Tony Angelo, Professor Farrier and Professor Boer as part of the RETA and NEMS projects. It is bound to be a useful document for some years to come.

Dr Vili A Fuavao
Director
South Pacific Regional Environment Programme

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I INTRODUCTION

Ben Boer

This workshop on environmental law was the first of its kind in the Pacific region It was a natural follow-on from the work that has been carried out by the Regional Environment Technical Assistance Project and the National Environmental Management Strategy Project, both of which are producing National Environmental Management Strategies and Legal Reviews of a dozen countries in the Pacific. The workshop also followed hard on the heels of the United Nations Conference on Environment and Development (the UNCED Conference), to which international, regional and national environmental law proved to be a central and essential element. Because it followed so closely after the UNCED Conference, the workshop enabled a discussion of the many global issues which were fresh in the minds of many of the participants and presenters, which were brought down to a regional and more local level. This was particularly the case in relation to the question of appropriate mechanisms for the achievement of sustainable development.

The aim of the workshop was to focus on the strengthening of environmental law in the Pacific region, by bringing together a range of people working for Pacific Island governments, drawn from the legal field on the one hand and from the environmental management area on the other. The names of the participants are included at Appendix One. Participants came from 15 Pacific Island countries. A number of presenters and resource people specialising in environmental law and associated fields were also drawn together from countries and organisations both within and outside the region. In addition to officers of the South Pacific Regional Environment Programme (Dr Vili Fuavao, Mr David Sheppard, Ms Neva Wendt, Mr Iosefatu Reti and Mr Bernard Moutou), the following organisations and governments were able to provide representatives, who acted as presenters and resource persons: the United Nations Environment Programme (Mr Lal Kurukulasuriya), IUCN - the World Conservation Union (Dr Lothar Gündling), the World Bank (Mr Ralph Osterwoldt), the United Nations University (Mr Paul Szasz), the Ministry of Foreign Affairs of the Government of Western Samoa (Dr Kilifoti Eteuati), the South Pacific Commission (Dr. Sitaleki Finau), the Department of Foreign Affairs and Trade of the Australian Government (Mr Peter Lawrence) and the Department of Environment of the New Zealand Government (Ms Bronwyn Arthur). The Siosiomaga Society was also able to provide a representative (Mr Clark Peteru). One country participant, (Ms Elizabeth Harding of the Republic of the Marshall Islands) also acted as a resource person, and another, (Mr Teariki Rongo) acted as a presenter. The Faculty of Law at the University of Auckland was able make Mr Tim McBride available. The coordinators (Professors David Farrier and Ben Boer) were drawn from the Natural Resources Law Programme, Faculty of Law, University of Wollongong and from the Australian Centre for Environmental Law, Faculty of Law, University of Sydney. The details of participants, presenters and resource persons can be found in Appendix 1.

Whilst the focus of the workshop was on the development of appropriate legal regimes at a national and local level, the importance of developments in environmental law at an international level was a recurring theme, with several papers dealing specifically with the area of international law. The scholarly presentations by Dr Lothar Gündling, Mr Paul Szasz and Mr Peter Lawrence in these fields were well-received and appreciated. At the other end of the legal spectrum, there was an intense focus on the question of custom and its importance in achieving environmental goals. The excellent papers by Mr Iosefatu Reti and Mr Clark Peteru generated some of the best discussion of the workshop, and more time had to be allocated to this vital area.

As will be obvious from the workshop programme (see Appendix Two), the workshop was designed to ensure the widest possible interaction by the participants. Some weeks before the workshop, a set of comprehensive Workshop Materials was forwarded to all

participants, together with a request for participants to complete a Country Report and a Special Assignment. The Country Report was intended to be written, where possible, by participants on a collaborative basis and to include a brief description of the main environmental concerns of the country, identifying priorities for action and setting out the existing legal arrangements for environmental management and the conventions to which the country was a party. For the Special Assignment, participants were asked to choose an area of particular environmental concern to their country which required legislative attention in one of the following categories: Pollution control and waste management, environmental impact assessment, management of natural resources or the conservation of places of special heritage significance. Resource persons were allocated to the participants to discuss the Special Assignments with each of them. Details of the requirements for Country Reports and Special Assignments can be found at Appendix Three. The formal presentations of the workshop were generally followed by or mixed with discussion sessions and small group working sessions to concentrate on specific areas and problems. Particular emphasis was given to the articulation of experience of the participants in relation to their own countries, and sharing that knowledge and experience with other participants.

Funding for the workshop was provided by the Environmental Law and Institutions Unit of the United Nations Environment Programme, based in Nairobi, and the Climate Change Unit of the Department of the Environment, Sport and Territories of the Australian Government. Infrastructure support was provided by the South Pacific Regional Environment Programme, the Government of Western Samoa and the Australian Centre for Environmental Law. Support was also provided by each of the Governments which sent participants to the workshop. The organisers remain grateful for the enthusiastic financial and other assistance that was generated from all of these sources.

It became clear towards the end of the workshop that we were only at the beginning of what could be done with educational initiatives in the area of environmental law in this region. There was a good deal of enthusiasm expressed by many of those at the workshop for specialised workshops, to build on the solid foundation generated through this five day session.

There was a broadly agreed recommendation from participants that a comprehensive programme of training in environmental management, including "hands-on" training, be established in association with tertiary institutions within and outside the Pacific region. A scholarship programme for off-island tertiary institutions for students in environmental studies was also recommended. SPREP was identified as the body which should coordinate the seeking of funds for such programmes. Funds were recommended to be sought for the research and development of the training programme as well as for the programme itself. SPREP was also recommended as the body which should allocate the funds on the basis of requests from countries in the region.

This workshop would not have been possible without the direct support and encouragement of Dr Vili Fuavao, Director of the South Pacific Regional Environment Programme and the efforts of the initiator of the workshop, Mr David Sheppard, RETA Team Leader, as well as Ms Neva Wendt, NEMS Team Leader, and SPREP administrative staff, especially Ms Saunoa Mata'u and Ms Loise T. Moala. Thanks should also go to Mr Tim McBride, Senior Lecturer in Law from the University of Auckland, who proved to be invaluable in the direction and spirit of the event. Special thanks goes to Professor David Farrier, my fellow workshop coordinator, both for his clear and concise papers on the fundamental elements of environmental law and for his amicable collaboration on all aspects of the workshop. For their contributions to the editing of these papers, thanks are also due to Ms Jennifer Stewart and Mr Ron Stewart, voluntary workers at the Australian Centre for Environmental Law, and Ms Catherine Giraud, one of the Workshop resources persons. A debt of gratitude is owed to Ms Pauline Moore,

Ms Gail Bruton and Ms Michelle Lumley who carried the burden of wordprocessing all of this material.

Finally though, the ultimate success of this workshop was due to the enthusiasm and hard work of the participants, who made significant sacrifices of time and effort to ensure that their Country Reports and Special Assignments were completed in good time, thus ensuring that they were well prepared for the discussions to which they so willingly contributed in the plenary and small group sessions.

II WORKSHOP PAPERS

1. OBJECTIVES OF THE WORKSHOP

David Sheppard

Mr Attorney-General, ladies and gentlemen. I am pleased to reiterate the welcome given by earlier speakers. This workshop has been planned for a long time and it is a pleasure to now see the fruits of these earlier labours, with such an excellent range of participants.

This workshop is run jointly by the South Pacific Regional Environment Programme (SPREP) and the United Nations Environment Programme(UNEP).

SPREP is the regional environmental body in the Pacific. It is directly accountable to the governments of Pacific countries through an annual inter-governmental meeting. SPREP implements a wide range of environmental programmes in the Pacific region in response to the direction provided by member governments. It works closely with a range of regional and international organisations in implementing its ambitious programme. SPREP has been very happy to liaise closely with UNEP on the establishment of this important workshop.

One of the major current activities of SPREP is the development of National Environmental Management Strategies (NEMS) in a number of Pacific countries. A review of environmental legislation has formed an important component of NEMS development. The NEMS and the associated legal reviews will be discussed in more detail later in this workshop. These legal reviews have examined a large volume of environment-related legislation in Pacific countries. However, this legislation is often fragmented and not focussed on the key environmental issues existing in each country. The reviews highlight the need to develop environmental legislation which is tailored to the needs of each country.

The workshop aims to build on the achievements of the legal reviews. It has the following five objectives.

Objective 1

To increase awareness of the need for environmental law in the Pacific: There is currently limited awareness in Pacific countries of the need for environmental law, both within government and in the general community. This workshop has brought together participants from the Environment and Legal Sectors in 15 Pacific countries. It is hoped that it will open the communication channels between legal and environment officials in each country and thus contribute to increased awareness within each country of the need for environmental law.

Objective 2

To assist countries in clarifying their environmental law priorities and specifically to assist in developing appropriate legislation: The process of preparing legal reviews has assisted in identifying priorities in each country. This workshop will build on this process and will attempt to further develop and refine country priorities in the environmental law area.

Objective 3

To assist countries in developing responses to environmental concerns: A number of Conventions have recently been developed at the international level including the *Climate*

Change Convention and the *Biodiversity Convention*. They have significant implications for Pacific countries and will be explored in this workshop. The emphasis will be on providing assistance to Pacific countries to allow an effective response to these Conventions.

Objective 4

To increase country awareness of options for implementing environmental law programmes, through SPREP and other organisations: We are fortunate to have a range of organisations participating in this workshop. Many are very willing to work in partnership with Pacific countries in developing appropriate systems of environmental law. This workshop thus represents an excellent opportunity for ensuring that talk can be translated to action.

Objective 5

To develop recommendations for future environmental law action at the regional and national level, such as options for environmental law education: The legal reviews and this workshop represent the beginning, not the end. It is important that participants at this workshop focus on the question of "what comes next". Recommendations should be developed at this workshop to provide the basis for action at both a national and regional level.

We have the ingredients for a very successful workshop. I urge everyone to participate fully and ensure that this potential success becomes a reality.

2. OVERVIEW OF THE SOUTH PACIFIC REGIONAL ENVIRONMENT PROGRAMME AND THE NATIONAL ENVIRONMENT MANAGEMENT STRATEGY PROJECTS

Neva Wendt and David Sheppard

Introduction

Recent times have witnessed increasing pressures on the environments of Pacific countries. These pressures have led to a realisation that clear and effective action is necessary. The establishment of the South Pacific Regional Environment Programme (SPREP) is one indicator of the importance Pacific countries attach to environmental management. SPREP implements a range of environmental management programmes throughout the Pacific region.

In the late 1980s, Pacific countries became increasingly aware of the need for a strategy to ensure that their environments are managed on a sustainable basis and that important areas are protected. SPREP, on behalf of Pacific countries, approached a number of donor agencies to assist with development of such strategies.

In 1990, the Asian Development Bank and IUCN - the World Conservation Union, agreed to provide technical and financial assistance to develop National Environmental Management Strategies in 5 Pacific countries. This Project is referred to as the RETA (Regional Environment Technical Assistance) Project. It commenced in late 1990. Subsequently, the United Nations Development Programme (UNDP) agreed to fund an identical project in a further 7 Pacific countries. This project is referred to as the NEMS (National Environmental Management Strategy) Project; it commenced in mid 1991.

These two complementary projects are among the largest environmental projects ever implemented in the Pacific and, between them, will result in the development of National Environmental Management Strategies (NEMS), or their equivalent, in 12 Pacific countries.

Objectives

The RETA and NEMS projects have the following objectives:

* To develop National Environment Management Strategies (NEMS) for the Cook Islands, Federated States of Micronesia, Kiribati, Marshall Islands, Nauru, Niue, Palau, Solomon Islands, Tokelau, Tonga, Tuvalu and Western Samoa;

* to review the effectiveness of environmental and natural resource legislation in each of the above countries;

* to implement relevant environmental management training in the above countries as well as in Vanuatu and Fiji;

* to strengthen the capabilities of SPREP and participating countries to achieve National and Regional Environment Management Goals;

* to increase community awareness within participating countries of the need for environment protection.

Principles

The following principles have guided the implementation of the RETA and NEMS projects:

* Practicality: The emphasis, particularly in relation to the development of National Environment Management Strategies, has been on the development of practical recommendations which relate to prioritising environmental issues in each country.

* Ownership: The National Environmental Management Strategy must "belong" to the government and people of each country. There is no point in developing a Strategy which "sits on a shelf" and is not used to guide policy making and activities in the environmental area.

* Catalyst: The project will be used as a catalyst for encouraging awareness and support for environmental management and the implementation of projects in each country.

* Sustainable Development: The Strategy will link environmental management to long term economic development in each country. There will be an emphasis on convincing political and government leaders that sound environmental management practices equate to sound and sustainable economic development.

* Partnership: Activities associated with the RETA project will be in partnership with other international bodies, non-government organisations and other relevant parties working together to achieve shared environmental objectives.

Review of environmental legislation

One of the key objectives of the RETA/NEMS Projects is to review environmental legislation in each participating country. In many Pacific countries legislation in the environment management area is poorly developed or non-existent. Environment management responsibilities and attendant legislation are also often dispersed between different government agencies, with limited coordination occurring.

The review of environmental legislation is thus being carried out to identify the status of existing legislation and to critically assess its relevance to current environmental issues in each country.

The Legal Reviews are being undertaken by four legal consultants: Ms Mere Pulea, Ms Elizabeth Harding, Professor Ben Boer and Professor David Farrier. In the RETA countries, the review is being funded through IUCN- the World Conservation Union, input to the RETA and is coordinated through IUCN's Environmental Law Centre, based in Germany.

Final legal reviews have now been completed for Solomon Islands, the Federated States of Micronesia, Palau, the Republic of the Marshall Islands, Cook Islands and the Kingdom of Tonga. Draft legal reviews are either being prepared or have been prepared for Western Samoa, Tokelau, Nauru, Kiribati, Tuvalu and Niue.

Each legal review is a comprehensive examination of the environmental laws in each country. The details below represent a brief summary of the status of the environmental legislation in each country at present, as well as providing some general observations on the current status of environmental legislation in the RETA/NEMS countries.

Status of environmental legislation in Pacific countries

The current status of environmental legislation in each of the RETA/NEMS countries may be summarised as follows:

Cook Islands: A draft *Sustainable Environment Bill* has been prepared and is currently under internal review within the Cook Islands.

Federated States of Micronesia: There is currently a Federated States of Micronesia *Environmental Protection Act*. Responsibility for environmental management between the State and National government levels in the Federated States of Micronesia is a recurring issue. This issue was addressed in part in 1992 through the preparation of a joint State/National Attorney-General's opinion on responsibilities for environmental management.

Kingdom of Tonga: A draft *Land Use and Environmental Planning Bill* is currently under consideration in the Kingdom of Tonga.

Kiribati: Laws relating to the environment are included in other legislation relating to the management of natural resources.

Nauru: The current status of environmental legislation is unclear. This will be clarified once the review has been completed.

Niue: The current status of environmental legislation is unclear. This will be clarified once the review has been completed.

Palau: There are a number of Bills that relate to specific issues, such as wildlife, marine resources and forestry.

The Republic of the Marshall Islands (RMI): The RMI has a *National Environmental Protection Act*. The development of specific regulations on EIA (Environmental Impact Assessment) is currently proposed.

Solomon Islands: A draft *Environment Bill* has recently been prepared and has been endorsed by the Solomon Islands Cabinet.

Tokelau: The current status of environmental legislation is unclear. This will be clarified once the review has been completed.

Tuvalu: Environmental provisions are currently incorporated in a number of separate pieces of legislation, generally relating to the management of natural resources.

Western Samoa: Environmental provisions are currently incorporated in a number of separate pieces of legislation, generally relating to the management of natural resources. The development of separate EIA regulations is currently under consideration.

General findings of the reviews of environmental legislation

Although not all legal reviews have been finalised at this stage, it is possible to make some broad observations.

Firstly, the reviews have indicated that a considerable volume of law exists in relation to environment protection and the management of natural resources of Pacific countries. This law has usually been transposed from countries such as Australia, New Zealand or the

United States of America. Very few countries have consolidated environmental legislation, although a number are progressing towards that objective.

Secondly, existing laws have had varying success in addressing environmental concerns. In some cases this reflects the difficulties of enforcing environmental laws using a system of penalties, derived from 'western' models of law. In others, it reflects the limited applicability of laws to the issues within specific countries. In all cases there is a need for greater community awareness of what environmental legislation actually is and why it is necessary.

Thirdly, most Pacific countries have systems of traditional law which often dictate, amongst other things, how resources are to be used and protected. There appears to be greater scope for traditional law to be more effectively integrated with contemporary environmental legislation. It is also clear that any environmental legislation developed in Pacific countries must be tailored to the unique needs and circumstances in each country.

3. OVERVIEW OF ENVIRONMENTAL LAW AND POLICY AT GLOBAL AND REGIONAL LEVELS

Ben Boer

Introduction

This paper concerns some of the recent developments in environmental law and policy at the international and regional level. It traces briefly the history of the debate on sustainable development, and examines briefly the documents that were generated through the United Nations Conference on Environment and Development. *Agenda 21*, the "environmental action plan for the 21st century", is looked at in terms of its application to various sectors of activity.

Environment as an international and regional Issue

Any examination of legal needs for the 21st century cannot be done in the area of environment protection and resource allocation without being aware of the international dimensions. This decade has been declared by the United Nations as the Decade of International Law.[1] With the United Nations Conference on Environment and Development in Brazil in 1992 and the Conventions that have been drafted in relation to global environmental matters, the decade is likely to be particularly remembered for its development of international *environmental* law.[2]

The United Nations Conference on Environment and Development, (the UNCED Conference) took place in June 1992 in Rio de Janiero. The Conference was instigated by the United Nations General Assembly in December 1989, responding to the challenge presented by the 1987 Report to the General Assembly by the World Commission on Environment and Development, *Our Common Future*, known as the "Brundtland Report". That Report popularised the concept of "sustainable development", defining it as:

> development which meets the needs of the present without compromising the ability of future generations to meets their own needs.[3]

Primarily as a result of the UNCED Conference, sustainable development seems to have evolved into an "environmental mandate" for the world. In the Pacific it has been embraced by the South Pacific Regional Environment Programme (hereafter SPREP) and many of its member governments. It has already found its way into a wide range of policy documents and various pieces of legislation.

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1 United Nations General Assembly Resolution of 17 November 1989; see 20/1/2(1990) *Environmental Policy and Law* 48.

2 International environmental law has been considerably strengthened in recent years, with some 300 multilateral treaties and agreements and about 900 bilateral treaties and agreements having been concluded on the environment since the Stockholm Conference on the Human Environment in 1972; see Koester, V, "From Stockholm to Brundtland", 20/1/2(1990) *Environmental Policy and Law*, 14 at 15; see also, Robinson, N, "A Legal Perspective on Sustainable Development", in Saunders, J O, *The Legal Challenge of Sustainable Development*, Canadian Institute of Resources Law, Calgary, 1990, 26; see also, Caldwell, L K, *International Environmental Policy*, Duke University Press, London 1990, Ch 3; Rummel-Bulska, I, and Osafo, S (eds), *Selected Multilateral Treaties in the Field of the Environment*, Vol 2, United Nations Environment Programme, Grotius, 1991.

3 Problems with this definition are explored in Boer, B.W. "Implementing Sustainability", 1992 14 *Delhi Law Review* 1.

The international instruments agreed to at Rio were the *Rio Declaration on Environment and Development*, *Agenda 21*, the *Convention on the Conservation of Biological Diversity* and the *Convention on Climate Change*. Also agreed were the *Forestry Principles*. All incorporate the concept of sustainable development and are meant to provide the basis, in the spheres of their concerns, for the implementation of the concept.

A further decision taken at the UNCED Conference Summit was the establishment of the United Nations Commission on Sustainable Development. The Commission is to be considered by the United Nations General Assembly in December 1992 and is intended to be operational in the second half of 1993. The Commission is to be, among other things, a global monitoring agency for the introduction of strategies of sustainable development.

The Rio Declaration on Environment and Development

The *Rio Declaration on Environment and Development* is a set of 27 principles which build on the *Stockholm Declaration* of 1972. Its goal is a new and equitable partnership through the creation of new levels of cooperation between countries and between key sectors of societies and peoples, with a firm focus on the achievement of sustainable development. It recognises the integral and interdependent nature of the earth. The *Rio Declaration*:

* adopts the precautionary principle (that where there are threats of serious or irreversible damage, lack of full scientific certainty is not a sufficient reason for postponing cost-effective measures to prevent environmental degradation);

* recognises intergenerational equity (that the right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations); and

* recognises the financial and technological responsibility of developed countries towards developing countries and the important roles of women, youth and indigenous peoples.

Agenda 21

Agenda 21 is an extensive document which attempts to realise the principles of the *Rio Declaration*. It is intended to be the environmental agenda for the 21st century. It is a global environmental "action plan" comprising policies, plans, programmes and sets of guidelines for governments, the private sector, non-government organisations of all kinds and the general community. It applies to all areas of decision-making impacting upon environment and development in the broadest sense.

Agenda 21 establishes the foundations for a legal and regulatory framework to guide the decision-making and practice of governments and all other significant groups in society towards sustainable development. This is achieved by spelling out comprehensive strategies and programmes to be adopted at the international, regional, national and local level.

The document comprises 40 chapters, and is divided into four main sections:

(1) ***Social and Economic Dimensions***: examines the relationship between social and economic factors and sustainable development;

(2) ***Conservation and Management of Resources for Development***: deals with specific resources and areas of concern, or "sectoral issues", for the implementation of sustainable development;

(3) ***Strengthening the Role of Major Groups***: is concerned that the involvement of all social groups for the effective implementation of the objectives, policies and mechanisms of *Agenda 21*;

(4) ***Means of Implementation***: is primarily concerned with the financial and technological realities of implementing *Agenda 21*.

Broadly, *Agenda 21* recognises that current environmental threats have their genesis in development processes. In doing so, it requires the integration of ecological and economic considerations into *all* decision-making at every level of government as well as in the private sector.

It takes seriously the injunctions of well known economists and policy analysts[4] that the world has reached its limits, and that it is up to all of us to set in place the mechanisms for real and lasting change. Thus what seems to be called for is a social and political re-orientation from the dominant world paradigm of economic growth for growth's sake, to a re-definition of "growth" in qualitative rather than purely quantitative terms, which may help to ensure a sustainable world for present and future generations.

Agenda 21 is the most complex and potentially the most important document arising out of the Earth Summit. *Agenda 21* indicates that there are a broad range of issues that must be taken into account by every sector of the community, including business and industry, as a result of the programmes and policies agreed to by each national government.

It is likely that a plethora of legislative reform will be generated by *Agenda 21*, resulting in increasingly stringent environmental standards, as well as higher standards of legal responsibility demanded by the courts. These trends are already evident in the Australian environmental management arena, particularly following North American precedents in the past several years. However, they are likely to become much more significant as a result of *Agenda 21* and the *Rio Declaration*. These factors indicate the need to develop tighter corporate policies and codes of conduct on environmental protection matters.

Apart from the various legal and policy implications of *Agenda 21*, a feature of the programmes, plans and policies is international cooperation. There are clearly substantial responsibilities, as well as opportunities, for technical expertise and technology to be transferred from developed to developing countries, both through bilateral aid programmes as well as through direct, long term business investment.

Integrating Environment and Development in Decision Making

Chapter 8 of *Agenda 21* is concerned with the practicalities of integrating environment and development at the international and national levels. From the point of view of environmental law and policy, it is one of the most significant chapters.

Chapter 8 recognises that fundamental changes are required in the decision-making processes of governments at every level if environment and development are to be put at the centre of economic and political decision-making. It calls on countries to:

* integrate environment and development at the policy, planning and management levels;

* provide an effective legal and regulatory framework;

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4 Goodland, R. "The case that the world has reached its limits", in Goodland, R. Daly, H. Serafy, S.E. and von Droste, B. (eds), *Environmentally Sustainable Economic Development: Building on Brundtland,* UNESCO 1991.

* make effective use of economic instruments and market and other incentives;

* establish systems for integrated environmental and resources accounting.

Significantly, in the area of legal education, Chapter 8 suggests that competent academic institutions should cooperate to provide, especially for developing countries, postgraduate programmes and in-service training facilities in environment and development law. It also urges the development of effective national review mechanisms in relation to enforcement and compliance with environmental laws at every level of government. In the Pacific region, this would seem to call for close cooperation between the University of the South Pacific, the French University of the Pacific in New Caledonia and the Universities and other tertiary institutions in New Zealand and Australia.

Chapter 17 of *Agenda 21* is particularly important for the Pacific Region. It is entitled *Protection of the Oceans, all kinds of seas, including enclosed and semi-enclosed seas, and coastal areas and the protection, national use and development of their living resources*. The Chapter urges the integrated management and sustainable development of coastal and marine areas, including the sea environments of exclusive economic zones. The Chapter includes a special section on the sustainable development of small islands, noting:

> They are ecologically fragile and vulnerable. Their small size, limited resources, geographic dispersion and isolation from markets, place them at a disadvantage economically and prevent economies of scale. For small island developing states the ocean and coastal environment is of strategic importance and constitutes a valuable development resource.[5]

Chapter 17 sets out a range of activities which small island developing states could adopt. These include the study of special environmental and developmental characteristics of small islands, in order to produce an environmental profile and inventory of their natural resources, critical marine habitats and biodiversity. It also urges medium and long term planning for sustainable development, emphasising the multiple use of resources, the integration of environmental considerations with economic and sectoral planning, defining measures for maintaining cultural and biological diversity and conserving endangered species and critical marine habitats.

The Chapter also promotes the adaption of coastal area management techniques to suit the special characteristics of small islands, and to take into account the traditional values of indigenous people of island countries. Importantly, in the context of this Workshop, the review of existing institutional arrangements and the implementation of appropriate institutional reforms is envisaged. The design of response strategies for the environmental, economic and social impact of climate change and sea level rise is also emphasised, along with the promotion of environmentally sound technology appropriate for small island ecosystems.

The Chapter is thus a blueprint for future action both for SPREP's activities as well as for individual island nations. It can be noted in passing that many of the activities promoted in the Chapter were already underway before the UNCED Conference. In particular, the attainment of consistent and integrated policies and plans and their implementation is fundamental to the National Environment Management Strategies being finalised for a number of Pacific island countries through SPREP at the present time. The following passage will nevertheless be of continuing relevance:

> The total capacity of small island developing States will always be limited. Existing capacity must therefore be restructured to meet efficiently the immediate needs for sustainable development and integrated

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5 *Agenda 21*, Ch. 17, Section G 17.128.

> management. At the same time, adequate and appropriate assistance from the international community must be directed at strengthening the full range of human resources needed on a continuous basis to implement sustainable development plans.
>
> New technologies that can increase the output and range of capability of the limited human resources should be employed to increase the capacity of very small populations to meet their needs. The development and application of traditional knowledge to improve the capacity of countries to implement sustainable development should be fostered.[6]

The Convention on Climate Change

The prime objective of the *Convention on Climate Change* is to achieve the stabilisation of greenhouse gases through the limitation on emissions and by enhancing greenhouse gas sink reservoirs.

The Convention recognises that changes in the earth's climate and the adverse effects of that change are a "common concern" of humankind and that human activities have substantially increased atmospheric concentrations of greenhouse gases, enhancing the natural greenhouse effect. It states that there is concern that this will result in additional warming of the earth's surface and atmosphere, thus adversely affecting both natural ecosystems and humans. Importantly, it recognises explicitly that the major global emission of greenhouse gases originate in developed countries but also recognises that global emissions originating in developing countries will grow to meet their social and development needs. The Convention acknowledges that the global nature of climate change requires the widest possible cooperation by all countries in accordance with their common but differentiated responsibilities and their respective capabilities.

In the context of environmental law, the Convention states that each country should enact effective environment legislation and that the environmental standards, management objectives and priorities should reflect the environmental and developmental context to which they apply. One of the main arguments against strong national legal provisions in relation to the emission of greenhouse gases is an economic one, which can have significant political implications. The preamble to the Convention recognises this dilemma, stating that responses to climate change should be coordinated with social and economic development in an integrated manner in order to avoid adverse effects on that social and economic development.

The basic objective of the Convention is to achieve stabilisation of greenhouse gas concentrations at levels that would prevent dangerous and anthropogenic (human-caused) interference with the climate system. The Convention recognises that such levels should be achieved within a timeframe sufficient to allow ecosystems to adapt "naturally" (whatever that means in this context) to climate change to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

The Convention places obligations on developed countries to take the lead in combating climate change and its adverse effects. It places obligations on all countries to take precautionary measures to anticipate, prevent or minimise the causes of climate change and to mitigate the adverse effects. The Convention recognises that developed and developing countries have different responsibilities (according to the state of industrialisation and development of pollution control technology) and that economic development is perceived to be essential for adopting measures to address climate change, in the context of the promotion of sustainable development. The commitments which each country has taken on pursuant to the Convention are in summary as follows:

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6 Paragraphs 17.136 and 137, Ch. 17 *Agenda 21* op cit.

(1) Formulate and publish national inventories of anthropogenic emissions;

(2) Formulate and publish national programs containing measures to mitigate climate change;

(3) Promote technology transfer, practices and processes to control and reduce greenhouse gas emissions in all relevant sectors, including energy, transport, industry, agriculture, forestry and waste management;

(4) Promote sustainable management and cooperation in the conservation and enhancement of sinks and reservoirs of all greenhouse gases not controlled by the Montreal Protocol, including biomass, forests and oceans as well as other terrestrial, and coastal and marine ecosystems;

(5) Cooperate in preparing for adaptation to the impacts of climate change;

(6) Take into account climate change considerations in relevant social, economic and environmental policies and actions with a view to minimising adverse effects on the economy, public health and the quality of the environment;

(7) Promote and cooperate in scientific, technological, technical, socio-economic and other research;

(8) Promote and cooperate in the full, open and prompt exchange of relevant information;

(9) Promote and cooperate in education, training and public awareness and encourage wide public participation, including that of non-governmental organisations.

The Convention calls on each of the developed countries to commit themselves specifically to a range of programs. These include:

(1) Adopting national policies and measures on the mitigation of climate change;

(2) Reporting on such national policies and corresponding measures within 6 months of the entry into force of the Convention;

(3) Coordinating, as appropriate with other parties to the Convention, relevant economic and administrative instruments developed to achieve the objective of the Convention and to identify and periodically review its own policies and practices;

(4) Taking on obligations to provide new and additional financial resources to meet the agreed full costs incurred by developing countries in complying with their obligations in relation to implementation. Developed country parties are under an obligation to assist developing country parties which are particularly vulnerable to the adverse effects of climate change in meeting costs or adaptation to those adverse effects;

(5) Taking all practical steps to promote, facilitate and finance the transfer of or access to environmentally sound technologies and know-how to other parties and to support the development and enhancement of capacities and technologies of developing countries.

The Convention states that in the implementation of these commitments, full consideration should be given to what actions are necessary to meet the specific needs and concerns of developing country parties arising from the adverse effects of climate change, as well as the impact of response measures. The Convention identifies specific types of

countries in terms of these needs, concerns and measures. Among those countries are small island countries, countries with low-lying coastal areas, countries prone to natural disasters and countries with fragile ecosystems, including mountainous ecosystems; all of these types are found in the Pacific region.

The Convention on Biodiversity

The objectives of the *Convention on the Conservation of Biodiversity* are, apart from the conservation of biodiversity itself, the sustainable use of the components of biodiversity and the fair and equitable sharing of the benefits arising out of the use of genetic resources. These objectives are to be achieved by ensuring appropriate access to genetic resources, by appropriate transfer of relevant technologies and by appropriate funding. The Convention aims at ensuring effective international action to curb the destruction of biological species, habitats and ecosystems. It requires countries to legislate for the conservation of biological resources, especially by way of *in situ* conservation. Particularly important in the Pacific region is the requirement of establishing, as far as possible and appropriate, a system of protected areas, or areas where special measures need to be taken to conserve biological diversity, bearing in mind the obligation to respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities which embody traditional lifestyles relevant to the conservation and sustainable use of biodiversity.

This Convention has potentially very widespread effects for each of the world's nations. It recognises the intrinsic value of biological diversity as well as ecological, genetic, social, economic, scientific, educational, cultural, recreational and aesthetic values of biological diversity and its components. It emphasises the importance of boidiversity for evolution and for maintaining life-sustaining systems of the biosphere. Like the *Convention on Climate Change*, the conservation of biological diversity is recognised in the preamble as a "common concern" of humankind. The Convention also recognises that special provisions are required to meet the needs of developing countries, including the provision of new and additional financial resources and appropriate access to relevant technologies. The Convention places a general obligation on parties, both directly and through competent international organisations, to cooperate with each other for the conservation and sustainable use of biological diversity. The parties take on obligations to develop national strategies, plans and programs for the conservation and sustainable use of biological diversity, specifically to integrate the consideration of conservation and sustainable use into national decision making. Measures are to be taken to avoid or minimise adverse impacts on biological diversity, protect and encourage customary use of biological resources in accordance with traditional cultural practices and encourage cooperation between governmental authorities and the private sector in developing methods for sustainable use of biological resources. There are broad provisions in relation to public education and awareness, the use of environmental impact assessment, rights to access to genetic resources and access to transfer of appropriate technologies.

Importantly, there are also specific provisions on contracting parties to provide, in accordance with their capabilities, financial support and incentives to promote national biodiversity conservation activities, and in particular for developed countries to provide new and additional financial resources to enable developing countries to meet the costs of implementing the provisions of the Convention. Financial mechanisms are intended to be set up to provide financial resources to developing country parties on a grant or concessional basis.

The implementation of this Convention requires at a minimum for all parties to review all legislation and administrative policies which affect the use and conservation of all components of the natural environment.

Many countries in the Pacific have begun this process, either specifically or more generally, with a view to putting in place adequate mechanisms, both administrative and legal, to

meet the obligations under the Convention. It is clear that SPREP will continue to play a central role in promoting the implementation of the Convention. However, much remains to be done. The Conference on the Sustainable Development of Small Island States, scheduled for 1994, will no doubt provide further impetus for legal and policy initiatives on the environment in this region.

The Forestry Principles

The *Forestry Principles*, also agreed at the UNCED Conference, are a non-binding statement of global consensus for the management, conservation and sustainable development of all types of forests. These principles are of particular relevance to the timber-producing countries in the Pacific region.

The principles apply to all types of forests, both natural and planted, in all geographic regions and climatic zones.

As with the two Conventions discussed above, the *Forestry Principles* include the provision that countries have the sovereign and inalienable right to utilise, manage and develop forests in accordance with their development needs and level of socio-economic development, and on the basis of national policies and legislation consistent with sustainable development. It states that forest resources and forest lands should be sustainably managed to meet the social, economic, ecological, cultural and spiritual human needs of present and future generations. The Principles recognise that these needs are mixed: forests products and services such as wood, wood products, water, food, fodder, medicine, fuel, shelter, employment, recreation, habitats for wildlife, landscape diversity, and carbon sinks and reservoirs. Clearly some of these uses are inconsistent with each other.

The Principles encourage governments to promote and provide for community participation in development, implementation and planning of national forest policies and urge that all aspects of environment protection and social and economic development relating to forests should be integrated. Consistently with the *Rio Declaration on Environment and Development*, the Principles state that there should be recognition and support for the identity, culture and rights of indigenous people and their communities as well as other communities and forest dwellers. The full participation of women in all aspects of forestry management and development is also actively promoted.
The role of plantation forestry is recognised, enhanced and promoted by the principles.

The principles also provide that specific financial resources should be made available to developing countries to establish conservation programs for forests, in particular to stimulate economic and social substitution activities.

Under these principles, all countries take on an obligation towards the "greening of the world", taking positive and transparent action for reforestation, afforestation and forest conservation, as appropriate.

Conclusion

Many of the programmes, strategies and obligations incorporated in the *Rio Declaration, Agenda 21*, the Conventions on *Climate Change* and *Biological Diversity* and the *Forestry Principles*, have the potential to reach to every corner of almost every country. Given the fragile environments, both ecological and social, of many Pacific countries, these developments are particularly important for this region. The challenge for environmental law is to provide the mechanisms to implement and facilitate the international commitments taken on by the Pacific countries at a regional and national level. The role of the South Pacific Regional Environment Programme and its legal counsel in promoting the enactment of new environmental legislation and in supporting its implementation is likely to become increasingly important in this regard.

4. ENVIRONMENTAL CONCERNS OF THE SOUTH PACIFIC

Iosefatu Reti

Introduction

The biggest concern for the governments and peoples of the South Pacific in the next decade or so is whether they can continue to preserve their physical and cultural environment in the light of current population and development pressures. Population growth, coupled with increasing demand for more development, will impose considerable pressures on a shrinking resource base, thereby jeopardising the ability of future generations to meet their needs. This paper focuses on five major concerns which are expected to affect the people and environment of the South Pacific in the next few years. Although some are already evident today, they will be of a much greater scale a few years from now and, as such, will require a much greater commitment in terms of resources and willingness to address them. However, the resources may not be available in the next decade or two. In such circumstances, the magnitude and impact of these concerns will probably surpass anything we have seen to date.

To begin this discussion, I will ask three simple questions:

(1) What will the South Pacific be like in the next few years if present trends continue?

(2) What are the implications of these trends for the people of the South Pacific and for the world of nature which shares these islands with us?

(3) What can we do about these concerns now to prevent the situation deteriorating in the next few years?

Throughout history, people have of necessity adapted to the cycles of the changing earth. Where and when those changes have proceeded slowly, they have probably gone unnoticed. Even great natural catastrophes such as major volcanic eruptions, cyclones and massive floods, while they left scars on the body of civilisation, have had only a local impact on its progress. Such events have caused us in the South Pacific much suffering and social upheaval. In the past, we may have been able to excuse ourselves from responsibility, unless we chose to ascribe them to the vengeful 'Acts of God', who is irritated by our sins. Today, we know most result from the cumulative impact of two linked processes: the growth in human numbers and the process we call development. I shall return to these later.

Before we begin our discussion about the environmental concerns of the South Pacific, it would be wise to pause very briefly to remind ourselves of the three basic features of our environment. Firstly, except for Papua New Guinea, our region is made up of small islands with finite resources. The interactions between the living and non-living systems which helped create our current diverse habitats are hence critically susceptible to natural and man-made catastrophes.

Secondly, more than 90 per cent of the area under our sovereign jurisdiction is ocean, used only to a limited extent by land animals like ourselves. Although the plants in the sea have the capacity to fix about as much carbon annually as do those on land, we only take from the sea limited catches of assorted products annually. I expect that our descendants will take more through the cultivation of marine plants and animals in shallow waters. But even so, I believe that most of the South Pacific's future is going to depend on how we use or abuse our land.

Thirdly, our lands will remain highly heterogeneous as a habitat. People living in different parts of the region cannot expect to enjoy anything approaching environmental equality.

For example, it will always be easier to live in the urban areas where social services are expected to be better. However, people living in such areas are expected to pay heavily in terms of environmental amenity. Similarly, people living on the atolls will not have the same options as those on higher islands. It follows that anyone who thinks that every part of the region can be environmentally equal is talking nonsense. The implication of this is that if the South Pacific, as a whole, is to have a sustainable future on its diverse islands, it can only be through a process of national and regional cooperation that transcends everything we see today. This poses an immense challenge, one that it is necessary to meet if we are to attain some success over the next few years. We also have to contend with certain problems arising from the non-sustainable nature of the current development process which aggravates the challenge. I am particularly concerned about five of these problems.

Deforestation

I do not think it is honest to present all deforestation as an environmental disaster. There are examples in this region where conversion of forests to well-managed agricultural lands are perfectly acceptable. Reality suggests that we are going to see some further deforestation and the priority for governments would therefore be to steer this in the direction of sustainable cropping systems while halting any further destructive deforestation. These forests are valuable reservoirs for biological diversity, are essential to regulate water flow and local climate, and protect the soil from erosion. Looking beyond the next decade, my prediction is that indigenous forests of any reasonable size will then be concentrated in the more rugged and uncultivatable mountains and tracts of sparsely populated lowlands where the soils are poor. We may not like that pattern, but it is the one our descendants will have to live with.

The expected increase in deforestation and forest degradation during the next decade or so will inevitably result in a corresponding increase in the frequency and intensity of flash floods (on high islands) and water shortages, and further impoverishment of our soils. These are the conditions that future generations (which will probably double the present population in the next decade) will have to face up to. The end result should be very obvious; social upheavals will be widespread as more people compete for limited resources, as is already occurring in famine-stricken states of Africa.

We might be able to stop large-scale deforestation, but I honestly do not think we can stop land-clearing by subsistence farmers who are collectively responsible for the loss of significant areas of virgin forests every year. A few countries have embarked on large-scale reforestation projects to rehabilitate logged areas. However, these efforts lag far behind deforestation and are usually characterised by lack of government support and resources. Hence, it is expected that deforestation will continue to be a major problem for most Pacific Island countries.

Loss of biological diversity

Another problem for the South Pacific countries is the continuing loss of the region's biological diversity. The South Pacific is bound to lose a significant number of species of fauna and flora as a consequence of the development process driven by the imperatives of our human needs. My prediction is a logical conclusion because, as I have said, I do not think it will be possible to stop deforestation. About half the species believed to exist on earth are insects and other small organisms living in the canopies of the forests. A significant number of such species is bound to become extinct if the forests are cleared. The question we have to ask ourselves, and it is one that some conservationists understandably shirk, is whether these losses will matter. My own answer is: "Yes, they do matter, especially to those who can afford to care, but we must not oversell the disaster." They matter if you believe that this rich diversity of life maintains the equilibrium of nature and the environment in ways we still do not fully understand, and that reducing its diversity brings risks we do not comprehend.

The losses also matter because there may be many species and genotypes in the wild of considerable potential direct value to humanity and which may provide the genetic basis for evolution that will respond to future changes. A United Nations study estimated the total value of imports of medicinal plants in 1980 at $US550 million. That figure has risen to some $US40 billion a year. Approximately 40 per cent of the world's drugs come from wild sources, or are synthesised from wild derivatives. A plant from Western Samoa is said to be showing potential as a cure for AIDS. I am sure that many wild plants of the Pacific which have been used as traditional medicines in the past could provide cures for the many ailments which are now affecting our young populations. But unless the losses to our biological diversity are curbed, we may never be able to benefit from these resources. Compared with other countries of the world, many of our islands may be considered as extremely impoverished in terms of their biota, yet I think we would regard them as able to maintain essential ecological functions. I am not suggesting that some loss of biological diversity will inevitably bring collapse. The problem is that we do not know how much loss, and of what kind, is tolerable. That is one of the real challenges to science today.

Pollution

Pollution is already occurring in most of our islands and will continue to influence the quality of the environment that we live in for the next few years. The pollution of our water supply systems from soil erosion, unregulated use of pesticides, waste disposal, domestic animals and so on is extremely important and should concern us greatly. The roots of these problems can be eliminated if there is a political and popular will to change. My guess is that in the next few years, our aspirations for a better material lifestyle will remain, if not increase. More and more cars will be imported, more and more people will want to live in air-conditioned homes as temperature rises, and more and more resources will be extracted from our lands and waters. Disposal of solid waste on small islands will continue to be a problem and landfills will increasingly become a popular option, not only as a means of getting rid of waste, but also as a means of creating land. Pollution from chemicals may already be a major problem for many of our small island countries. Polychlorinated biphenyls (PCBs) and other persistent chlorinated organic substances may be widely dispersed in the ocean and the biological food chain though we do not seem to know much about their presence, let alone their potential impact on the environment.

Climate change

Because of the greenhouse gases already emitted into the atmosphere, there is reason to believe that by the year 2030, the world as a whole will be between one and two degrees centigrade warmer than it is now. We can then expect the wet areas to get wetter, dry areas may get drier and the vigour and frequency of storms may increase. Sea level may rise 10 to 20 cm - and that is assuming that measures now being proposed to curb the release of greenhouse gases will be put in place by the industrial world in the next decade. However, if they are not, then the world could be between two and four degrees centigrade warmer, and sea level may rise 20 to 40 cm. This would pose very severe risks to populations and developments in the region's low-lying areas.

Most of the population in the South Pacific region is found around the coastal areas. A rise in sea levels would seriously affect most of these areas, displacing thousands of people and communities. Even inland, climate change would threaten the accepted way of life of many people. Land boundary disputes would increase as people from low-lying areas began to claim rights to higher ground. More forests would be cleared to settle environmental refugees from coastal areas and many other problems will result.

An increase in temperature of between one and four degrees centigrade will make life in many of our tropical islands intolerable, unless the provision of air-conditioned homes was considered an option. But such an option will be disastrous for our island economies, and it is unlikely therefore that this will be favoured by our governments. Increasing

temperatures could also affect agriculture, which is the mainstay for most island economies. This could subsequently result in a change to our traditional diet and have severe social implications.

The low-lying atolls of the region will feel the most severe impact of climate change, not only from the expected rises in sea levels, but also from the impact of natural disasters such as cyclones which are becoming a common occurrence in the tropical Pacific. Temperature changes may well prove less important than the alteration in rainfall. The disruption of natural systems would be aggravated because the shifts in limits of tolerance could well occur far faster than species of trees and other dominant plants can keep up with by natural dispersion. The fact of the matter is that we do not know how the living systems will respond to climate change. Finding out is a major challenge which is only now being taken up by science.

Destruction of coastal areas

The destruction of coastal areas is a function of both the high population density and harmful resource harvesting activities. Overcrowding, sand mining, excavation and dynamiting are some of the common problems found all over the Pacific. Whilst dynamiting for fish is on the decline in many countries, sand mining is expected to increase as more and more people need to be housed and as old homes are rebuilt after destruction by major natural disasters. The destruction of the coastal areas has resulted in the erosion of the land and the pollution of coastal waters. This affects the fisheries upon which these same communities are dependent. Coral reefs have been badly affected by fish poisoning and dynamiting, waste disposal and other harmful fishing practices. A decline in fish catches has been reported from many countries of the region and the widespread effect of the crown of thorns is a very serious problem for many island countries.

Since the coastal areas are where most people live and are both the focus of subsistence and commercial agriculture and fisheries, and the target of most economic developments, they are understandably the most stressed of island ecosystems. This combination of factors is resulting in the destruction of coastal habitats, the degradation of the biological diversity they support, the over-exploitation of natural resources and growing conflicts in coastal resource use. In addition, coastal marine areas now face the threat of sea level rise due to global warming.

The causes of the problems

The concerns and problems of the South Pacific environment will take many years to rectify, if they can be rectified at all. The causes of these problems are not so easy to prevent. Let me make my point by discussing two of these causes.

(1) Increasing population

We are probably all familiar with the graph of human population growth and the dramatic acceleration which has taken the world's population from around one billion people in 1800 through to two billion in 1900, to over 5.2 billion today. The Pacific Islands face an ever-increasing population growth as almost half the population is still under reproductive age. In the next 30-40 years, most of those under 16 will still be alive, and they will have children aged mostly 10 to 35, some of whom will themselves have children. Family planning has been introduced in some countries, but realism indicates that people will not cut their family size to two. It will obviously require an immense change in attitude for this to happen in the next several decades.

Today's population explosion is a tribute to medical skill which has so greatly increased the average life expectancy for many of our societies. This advance

could clearly continue, provided that new diseases do not appear suddenly to exploit the wonderful habitat presented to them by so much relatively uniform human tissue. My own guess is that new diseases will indeed appear because the ecological niche is there for rapidly evolving organisms which are likely to exploit the particular means of spread provided by various human behaviours, just as acquired immune deficiency syndrome (AIDS) has exploited sexual behaviour and the unique human habit of transferring blood from person to person - a parasite's dream. However, I do not believe that new diseases will limit the growth of human numbers, especially because I have faith in the resilience of medicine.

So, as our populations grow with the help of medicine and development, more and more people will come up against environmental limitations, and real threats to the peace and stability of countries and communities are likely to arise. People are not going to sit still while starving. If they really run out of environmental resources regularly over significant areas, they will likely seek to migrate, and traditional boundaries or governments are unlikely to deter them. The only alternative is to accelerate programmes of sustainable development that meet human needs and, at the same time, provide the means and the incentive for stabilising human numbers. Let me say quite clearly that this will require a major change in attitude and a political recognition that population pressure is a genuine and urgent problem, something that a large number of Pacific Island people are at present reluctant to face up to.

(2) Erosion of customary laws

Customary sanctions under traditional laws used to be an effective force in maintaining standards of local behaviour against the environment. These sanctions, depending on the severity of the offence, included being killed; being set adrift in a canoe; banishment from the community; deprivation of certain rights; physical beatings; or having one's house, crops, or other possessions seized or destroyed. Unfortunately, in many of our societies today, these customary sanctions of the traditional societies are being questioned. Customary sanctions are no longer sufficiently cohesive or uniformly believed in to be effective. The fear of supernatural retribution and punishment bringing about illness, death, or misfortune not only to the offender but to a kin group or community, which used to be so effective in controlling people's behaviour, can no longer be effectively used in preventing environmentally destructive behaviour.

The seemingly harsh sanctions brought about by customary laws are already eroding and will no doubt continue to lose their hold on people's behaviour. Sanctions likely to be acceptable today, and in the future, are those of public apology; the offer of material goods or food for distribution to those who have been wronged, or the undertaking of non-paid work for the aggrieved party or community. But even these will probably need modification in order to be effective in the coming years. Regardless of the forms, these sanctions will probably find application in the protection of the environment in the future, but first Pacific Island governments and people must act to ensure that these sanctions and laws are not lost altogether.

I expect that the few natural resources that this region will control over the next decade will be concentrated in the rural areas, where government control will be least effective as a direct result of lack of manpower and the high cost of setting up administrative centres in the rural areas. Thus traditional law and sanctions of the past provide an invaluable alternative to the written law. Governments will do well to consider according such sanctions and other traditional protective measures the official recognition they deserve in the legal system, if those who are going to be responsible for the proper use and management of the region's natural resources and environment are to be entrusted with this difficult responsibility.

Conclusion

To sketch the environmental concerns of a large region in just one session is not easy, and some people here may disagree with what I have said. Well and good, for above all else, these matters need the widest debate. But let me leave this audience with a few concluding words to try to clarify these matters.

Firstly, the environmental trends of today point to severe problems and concerns for tomorrow, with an increasing number of people having to rely on a rapidly shrinking resource base. It is now time for our governments to recognise that a move towards a balance between population and development is a valuable, indeed essential, investment in the future prosperity of this region. Experience in China suggests that it is difficult even for an authoritarian and determined state to bring population growth under control. Very few countries in this region have population policies and those which do are faced with great difficulties in implementing them.

What this region does about its environment and the lifestyle of its people is inextricably linked with what is happening in other parts of the world. We can no longer think of the Pacific without also thinking about our global context. What we consume tomorrow is going to be influenced by what is available cheaply on the international market. It is not possible for a handful of small countries to address the effects of and to stop climate change if the industrial nations do not lend their support, not only in funding remedial actions, but also in reducing their emissions of greenhouses gases.

Finally, what we as a region can do to address our environmental concerns will depend on how we perceive the environment. Our understanding of the environment must pervade all sectors of our community, and this must bring about genuine changes to public information and education, the adoption and use of standards that improve the environmental compatibility of development and manufactured products, the encouragement of wise practices such as energy conservation, the discouragement of advertising that encourages wasteful overconsumption, and other combinations of information, regulation, and incentives to give the consumer a better future while not losing the amenities of today. Unless the present populations are brought under control, and are helped, guided and advised to alter their behaviour towards the environment, the concerns I have outlined in this paper will not only continue but increase in proportion. This will make them unmanageable for future generations of the region.

5. ENVIRONMENT AND HEALTH: TOWARDS A STRATEGIC ALLIANCE

Sitaleki A Finau

Environment and health have been debated and analysed at various levels. The first, and one which has received much academic attention, is the study of the relationship between the epidemiological state of a society and its level of environmental degradation. What can be seen here is the threat and generation of diseases due to pollution, pesticides, erosion, radioactivity, deforestation, climate change, depletion of the ozone layer, elimination of species and unhealthy working conditions.

The second level of analysis is the effects of health and environment policies upon the economy. Health has been naively declared by economists like Milton Friedman to be one of the principal causes of poverty. Recent experiences have relegated health to an investment in human capital together with other social services like education. At this level of analysis, environmental policies have had similar confrontations as that which arose between the need to conserve and harvest the fruits of nature for the benefit of a given generation with their resultant short and long term effects. At the individual level, the analysis has been based on the premise that "trees are for people and that people are not for trees".

The third level of analysis has been brought to our attention by the stark realities of the contemporary world situation. To understand it involves an integrated approach to the study of social sciences, political concepts, the state's role, the various structures of social participation, traditional and cultural practices, and customary laws. At this level, health and environment issues have again been shown to be dependent on personal behaviours and lifestyles dictated by government economic policies, rather than social policies, with inexorable links to inequitable distribution of resources and power.

At each level, the link between health and environment is no longer a point of contention. It is also becoming obvious that the main reason for people's concern with environment is the balance between the quality of life and the quality of the environment of the planet, or the impact on the health of those who live and will live on this planet. The challenge is to strike the proper balance between the benefits of economic actions and the level of environmental damage, in order to have a minimal adverse impact on people's health. Unfortunately immense disparities exist because developing countries, including those in the Pacific, are pressed by debts and serious survival needs. Often they search for quick fixes. Under such conditions, national long term solutions are not politically expedient.

This paper will examine the common grounds for health and environment upon which a mutually beneficial strategic alliance may be formed. The essence of such an alliance is born more from inherent similarity than force of necessity. In order to develop appropriate legislation, they must not be exclusive but inclusive of each other's economic, scientific and social contexts. Health and environment legislation need each other to coherently address the balance of individual and collective responsibility for quality of life and the environment of the planet.

Health, environment and development

Health is a state of social, mental, physical and spiritual wellbeing, not just absence of disease and infirmity. It is a state akin to satisfaction and happiness. A developmentally-oriented perspective makes health a state of well-being enabling people to fulfil their obligations to society without compromising the ability of others to do so. Often the mention of health conjures up hospitals, diseases, doctors and nurses in bloody situations, and lately, soap opera heroes. This has also been reflected in the development plans throughout the Pacific with heavy spending on body repair shops (hospitals), ministries of disease, and industries of death. In order for health and environment links to be

incorporated into legislation, health as a resource and a state of well-being, rather than as a state of disrepair, must be the focus.

Health is an essential part of the quality of life, which is the overall goal of development. It is at the base of all economic activities and development processes. It is integral to the state of well-being that people must possess to realise their full human potential and derive satisfaction from their lives. The protection and improvement of health must therefore be a central objective in all development strategies. Health is part of development in the same way as the environment is part of development. It has to be integrated into development policy with the same constant concern and attention as has been shown in relation to the environment.

The capacity to develop is dependent on people's health in order to produce and enjoy the fruits of their productivity. Therefore a healthy environment and development are intimately linked through:

* health as an objective of development and environment ventures;

* development capacity being dependent on the health of the workforce;

* utilisation, appreciation and enjoyment of the environment and wealth being dependent on the state of wellbeing of populations.

The achievement of appropriate health objectives is therefore an important measure of the effectiveness of environmental activities and of development strategies. The outmoded view is that the health sector is a welfare sector.

Good health is an investment in human capital and therefore a resource. Similarly disease and poor health in a society is a depletion of resources that needs to be deducted from any growth curve of the GNP.

It is increasingly obvious that development, the promotion of health and the rational utilisation of resources go hand in hand. Only if development is correctly oriented to take account not only of material, but also of socio-cultural needs, will it be possible to restrain population growth and promote a way of life that is more economical with natural resources. In both environmental and health areas, the emphasis of economic analysis should be oriented towards an improved understanding of underlying causes, and an assessment of the feasibility of alternative policy intervention in areas normally considered to be outside the purview of environmental and health agencies.

Environment and health agencies have traditionally been poor relations of other government departments, especially the ministries of finance. This has been mainly due to their inability to use the tools of economic analysis to make their case. Although there is general awareness that environment and health problems are by-products of development policies, investments in analytical effort to trace through the chain of causality which would facilitate the influencing of those policies have been rare. Improved understanding of the overall policy context within which environment and health status are determined, and an ability to articulate concerns at the highest levels of economic policy making, are indispensable if rapid progress in these two areas is to be achieved.

Social and health concerns in the Pacific

Long before anyone else in the Pacific, health professionals were stressing the importance of the environment as a vital element in human wealth and health. Even in ancient Greece, Hippocrates discussed health and environment in his treatise *Air, Waters and Places*, and it was the same concern for the environment that led to efforts to control major epidemics. In the 19th century, the hygienists' movement led to environmental measures such as good water supply and sanitation that had considerable impact on life

expectancy. In the 20th century, the role of the environment in health was neglected due to advances in biology and technology, focussing on curative medicine. However, since the 1970s, its importance has been rediscovered and health promotion, prevention and protection have all been perceived as major elements to be taken account of in health and environment policies. There is no doubt that long after the environmental issues have ceased to be fashionable, the health workers will still be chipping away at the environmental factors important to the quality of life of Pacific populations.

At present, the health needs of the Pacific communities outstrip resources. This, like environment issues, is going to bring health issues, in their broadest sense, onto the political agenda. The important concerns in the Pacific are:

(1) **Changing patterns of disease:** Chronic degenerative diseases (e.g. heart disease, diabetes, cancer, etc) have been added to the still unresolved burdens of infectious diseases. These are due to both demographic and epidemiological changes. Decreasing fertility and mortality will increase the proportion of elderly people, type of health service, need for social services, and effects of environmental interventions.

(2) **Population growth:** Some of the fastest growing populations (3-4%) are in the Pacific. The demand for services and consequent effects on environment need to be reconciled.

(3) **Population movement:** This includes both deliberate resettlement and ad-hoc migration. Both directly and indirectly affect health and the environment.

(4) **Food and nutrition:** These are problematic at both the production and distribution level. The diversity and quality of food crops should be expanded to meet nutritional needs, especially on atoll islands. Some countries produce enough quantity and quality, but it is not available where and when needed. Therefore the nutritional paradox of over-nutrition and under-nutrition can exist in the same family, community and country. A program in biodiversity conservation incorporating food availability would contribute to the resolution of these problems.

(5) **Mosquito-borne diseases:** These include malaria, dengue and filariasis. The use of insecticide, clearing of forests, irrigation and other control methods affect these vectors. Therefore a balance between environmental and health concerns needs to be struck.

(6) **Other infectious diseases:** The addition of AIDS and STDs to TB, Typhoid, Cholera and parasitic diseases threatens productivity. The approach to these diseases lies in the manipulation of both social and physical environments.

(7) **Environmental health:** Water supply, waste disposal, basic sanitation and personal hygiene are still the most important environmental health issues for more than 50% of Pacific populations. There are also other problems such as injuries, poisoning and occupational diseases.

(8) **Health service orientation and traditional medicine:** The realisation of the need to empower communities to control their health has led to the Primary Health Care approach. This addresses the need to provide health care that is scientifically sound and acceptable to communities at a price they can afford. This approach encourages community participation at all levels. Using methods that are acceptable and culturally appropriate may be useful for addressing environmental issues. A program in biodiversity should incorporate the cultivation of medicinal plants.

(9) **Health information:** The quality and quantity must be at a level to monitor changes in the quality of life and the effects of intervening factors. Inasmuch as research is an important factor in the definition of a reality, Pacific Islanders must be able to control research design, data collection and analysis if Pacifically appropriate information is to be used for designing the future. The legislation on rights to information and confidentiality, either personal, community or government, has yet to be developed.

(10) **Non-Communicable Diseases (NCDs):** These are lifestyle diseases that are largely due to ecological and economic factors such as diet, disposable income, etc. Appropriate questions to raise in conjunction with lifestyle include those related to individual and collective responsibility for given life situations. Are lifestyles a function of personal choice or physical and social environments? Addressing questions like this will force links between NCDs and the environment. For example, an encouragement of exercise will lead directly to a decrease in energy use as well as the creation of a culture of manual work rather than mechanisation. Such mutually enhancing tangential approaches will enhance both health and environment.

Conclusion

The process of change is in motion. Change does not necessarily lead to degradation. However, the direction and speed of change are the major contributing factors to social and cultural deteriorations. These, in turn, lead to health and environmental threats. The Pacific has choices of stopping, reversing or deflecting change. These are choices to be made at community level. The adverse experiences from top-down decisions (e.g. structural adjustments of global economy, professional control of health, state control of industries, etc) spells caution to the development of legislation based on professional and consultant world views, without proper community participation.

It is a function of professionals and consultants to critically provide adequate information to communities so they can make informed choices. The experiences from primary health care are a useful basis for an approach to developing community-based legislation on the environment. Like health, this is an area fraught with behavioural factors and social nuances that the communities themselves know best. Therefore, appropriate assessments must be the basis for development of legislation that reflects cultures. An impact assessment of policies and legislation will also be of assistance in managing inherent change. These are fundamental requirements since value judgement is the cornerstone of transition from science to legislation and making choices, especially on debatable issues like climate change and sea-level rise.

In line with the dictum of Schumacher that "Mistakes are unavoidable, therefore they should be kept small and reversible", the Pacific Islands should identify highly vulnerable groups for community-based environment initiatives. The conditions of vulnerability that recur in such groups, albeit in varying combinations, include: poor health, lack of functional literacy, low productivity and income earning capacity, and powerlessness and incapacity to gain access and control over resources. These conditions of vulnerability are found in many Pacific communities. Addressing them will also deal with the question of appropriate uses of the environment.

It will be unacceptable, now that protection of health and the environment have been recognised as crucial to sustainable development, if this partnership is not at the centre of the debate on humanism for the 21st century. From this perspective, three types of action are needed:

(1) Scientific work in the Pacific to obtain reliable knowledge in order to understand the interaction between human activity, the quality of different human environments and the health of populations;

(2) Rational concentration to ensure that decision-makers *and* users at all levels are associated with decisions and the implementation of decisions;

(3) Universal promotion of the principles of international solidarity and equity in order to respond to health and environment problems that can only be resolved if they are tackled at the global level.

It is obvious that health and environment share common goals and strategies by virtue of their similarities. It is also a logistically necessary alliance for environment, which needs the community-based network that health has established. Health, on the other hand, needs the current clout that the environment lobby has. The fact that health and environment are poor cousins gives them the blood ties to jointly wage a battle for the human race. It is the conception of a new paradigm and the implementation of a new humanism where people matter.

6: INTERNATIONAL ENVIRONMENTAL LAW WITH PARTICULAR REFERENCE TO THE PACIFIC REGION

Lothar Gündling

Introduction

International cooperation is essential to environmental protection. Pollution does not stop at political boundaries; it reaches into the territories of other States and into the global commons. Therefore, States must get together and take joint action if they really want to address and solve environmental problems. There are also other - and sometimes stronger - motivations for such international cooperation; environmental policy is an economic factor which affects and influences competition between companies and nations. This is why countries need to harmonise their actions instead of pursuing their own separate policies.

Therefore, environmental law is to a considerable extent international law. States have concluded hundreds of global, regional and bilateral agreements. International organisations have taken many important decisions, which are binding upon their members. International instruments concern a broad variety of matters ranging from air pollution, fresh water and oceans, wild flora and fauna to general issues such as harmonising environmental impact assessment procedures or freedom of information provisions.

I will deal with the following basic issues of international environmental law:

* what is international environmental law?
* why do we need international law?
* what is the procedure for creating international environmental law and what makes this procedure so lengthy and difficult?
* how do we ensure compliance with international obligations?

The paper concludes with some thoughts on the present state of international environmental law.

What is International Environment Law?

International cooperation takes place within international organisations and diplomatic meetings and conferences. Actions taken by States are not always legally binding. At the end of their meetings, they often adopt declarations, action plans, recommendations or other instruments of only a political nature. These instruments are important and relevant from a legal point of view. They are, however, not binding as such.

International environmental law consists, first of all and most importantly, of the very many international *conventions, treaties and agreements* which States have adopted at all levels - globally, regionally and bilaterally. Hundreds of multilateral treaties have been concluded over the last 25 years or so. Although covering an extremely broad range of issues they do not cover all issues, and not all existing treaties are effectively implemented and enforced. The number of treaties may be impressive, but looking at the reality of environmental degradation all over the world one has to recognise we cannot yet relax.

International lawyers agree that beyond treaty law there are rules of *international customary law* and a few general principles of law which apply to environment protection

and conservation. A rule of customary law has to be complied with by all States, even without explicit consent. A rule however, in order to be binding under international customary laws, has to reflect a common practice of the States, and it has to be accepted by the States as legally binding. These are difficult criteria, and it is no wonder that international customary law is an extremely controversial matter. Lawyers disagree on how to apply the above criteria in practice; consequently there is little consensus on which rules have to be considered as rules of international customary law binding all States. Among the rules which one can probably consider accepted in international customary law are the following: States are under the obligation not to damage the environment of their neighbours; States have to inform, and consult with, their neighbours about actual and potential transboundary environmental impacts; States have to share their common resources equitably; States have the obligation to protect the global commons and use their resources on a sustainable basis. One may add to these general obligations the principle of responsibility for transboundary environmental damage.

Even if there is a consensus about the existence of a rule, its application may raise difficult questions. This is not surprising given the generality of the rules which leaves much room for interpretation and controversy.

Principles of law are those legal principles which are recognised in major legal systems of the world. This is not exactly the language of Article 38 of the Statute of the International Court of Justice which speaks of the "general principles of law recognised by civilised peoples". This language however, is often felt to be discriminatory, and I understand these feelings. In the context of environment protection, reference is often made to the principle of good neighbourliness; to the basic rule of acting in good faith, or to the prohibition of the abuse of rights. What I said about customary law is probably also applicable to the general principles of law: even if these are recognised, their practical value for the solution of environmental problems remains marginal. Like the customary rules, they should be seen as guiding principles for the development of international environmental law which has to be laid down in agreements between States.

A word should be added on the *non-legal instruments*, which are often referred to as "soft law" to indicate that they are not legally binding as such, although not irrelevant from the legal point of view. These non-legal instruments - action plans, principles, declarations, recommendations, codes of conduct, recognised practices, etc. - are quite widespread in international practice. They may be important to lawyers for at least two reasons. First, they may contain binding legal principles and rules; often "soft law" instruments combine legal and non-legal rules. Examples are the *Rio Declaration on Environment and Development of 1992*, the principles adopted by the Brundtland Commission 1987 or the *World Charter for Nature* 1982. Second, the instruments may be considered as evidence of the consensus among States which is required for the recognition of a rule in customary law. One has to be cautious, however, because States choose these instruments very carefully. If they explicitly choose a non-legal instrument, the case cannot be seen as evidence of a law-creating consensus.

Why do we need International Law?

Environmental protection is an international problem which can only be solved by the cooperation of States. Everyone probably agrees on that statement. Most obvious are the *ecological considerations*. Pollution does not respect national boundaries; it may damage or threaten the environment and the people in neighbouring countries. Air pollution is not only a transboundary issue between two States; it changes the atmosphere of this planet, destroys the ozone layer, leads - as far as we know - to global climate changes and thus threatens humanity and all life on earth. The use of resources in one country may have an impact on other countries. The use of a transboundary watercourse in an up-stream country may negatively affect the use(s) of the same watercourse in the down-stream country (or countries). The use of forest resources in one country or region may directly and indirectly influence the global climate. The destruction of ecosystems or

habitats may lead to losses of species which could constitute a great potential for food or medicine. This is not to say that there is a legal obligation for States to negotiate and conclude agreements. However, it demonstrates that there are common concerns and a lot of good reasons to do so.

Transboundary effects and ecological dependencies are not the only driving forces behind international environmental law. *Areas outside national jurisdiction* such as the oceans, Antarctica, or outer space - usually referred to as the "global commons" - need to be protected and this can be done only through international agreements. Protection of the marine environment is of particular relevance here and consequently, the conventions on the marine environment and its resources constitute a major body of international environmental law.

However, just as important as ecological and jurisdictional reasons are *economic factors*. International trade not only provides benefits, it also leads to environmental problems. Hazardous substances and wastes are shipped world-wide, reaching countries which may not have either the capacity or the political will to regulate the use or handling of such substances as strictly as they should. International marketing of goods requiring safety regulations should, for reasons of fair competition, be based on common standards. Similarly it can be argued that production standards should also be harmonised to give all competitors the same chances in the world market.

There is no doubt that these economic factors are quite strong - sometimes they may even be stronger than any environmental considerations. They may be particularly important in a regional context where interstate trade is very intensive. This is the case for example, in Western Europe, where the European Communities had to introduce a common environmental policy for the purpose of ensuring fair competition between the member States and their companies. There is nothing to criticise here as long as the common environmental policy does not lead to a watering-down of the environmental requirements. There is however a risk of this because of the natural interest of business to conform to requirements at the lowest cost. Therefore, common environmental policies motivated by trade considerations need to be watched carefully.

Problems of Treaty-Making (1): Actors

I should like to come back to treaties as the major source of international environmental law. Treaties are negotiated by governments either at intergovernmental conferences or - more often - within *international organisations*. Today a broad range of international organisations deal with environmental matters at both regional and global level. Most important in this context is the United Nations Environment Programme (UNEP) within which major international agreements were negotiated. I refer here to the *Ozone Layer Treaty* and Protocol (Vienna 1985; Montreal 1987), the *Basel Convention* (1987) or the *Biodiversity Convention* signed at Rio in June 1992. On the other hand, there may be cases where States prefer to negotiate an agreement in a specifically convened diplomatic conference. This happened with the *Climate Change Convention* which was negotiated within an Intergovernmental Negotiating Committee. Similarly, the proposed agreement on desertification will be prepared by an Intergovernmental Negotiating Committee established specifically for that purpose.

International organisations providing conference facilities and specialised staff can speed up the international law-making process. However, the major actors remain the negotiating States: nothing can be achieved without or against their political will. Governments determine the pace of negotiations, the issues discussed and the decisions taken. These purely governmental processes are often criticised as being too lengthy, bureaucratic and compromise-oriented. Governments, it is said, tend to preserve the political status quo and are much more receptive to economic considerations than to ecological arguments. Therefore, it is often proposed to open up international negotiations to non-governmental actors, particularly environmental groups. Sometimes

it is even suggested that they should be given the right to vote. Although the latter is probably too far-reaching to be acceptable, the general idea of opening-up the negotiating processes is a valid one. Non-governmental organisations should be given access as observers to international law-making conferences, and they should have the right to speak. Experience in recent years has been encouraging, particularly throughout the UNCED process and during the Rio Summit. It is to be hoped that this development continues and that NGOs become regular actors in environmental diplomacy. NGOs offer a particular expertise in environmental issues and a have a particular interest in achieving results. Both the expertise and the commitment of NGOs therefore, should be used to a greater extent than they have been in the past.

Let me raise another point in this context. International conferences and negotiating meetings are increasing in number, whether from the rise in environmental problems, from growing awareness, or because problems have become so pressing that governments simply have to take action. Often the adoption of an agreement marks the beginning of a permanent negotiating process because the agreement is only the first step and other more specific measures must follow, implying an ongoing negotiating process. This poses problems for many countries, particularly those developing countries which lack the personal and financial resources to attend the numerous international meetings. It is obvious that these countries need financial and technical assistance. They also need more personnel to attend such meetings and this implies an increase in training in both negotiating skills and in subject matters of international concern. The magic word here is funding. Whenever negotiations take place within international organisations or concern the implementation of instruments within a conventional framework, funding should be provided to developing countries to enable them to participate on an equal basis in the international law-making process. Equal participation is a requirement of the principle of sovereign equality. States should realise this and find the political will to act accordingly.

Problems of Treaty-Making (2): Techniques

As stated above, there are no alternatives to international agreements. However, treaty-making is a lengthy process; the results are often poor, and these poor results are often badly implemented. Are there any means to cure this situation?

Law-makers - international organisations and governments - begin to learn from experience and to develop techniques which keep both the negotiating process going and increase its pace. Whenever it is difficult to start negotiations or to agree on binding rules it is possible first to adopt a *non-legal instrument*, e.g. a political action plan or a set of principles. Such an instrument constitutes a preliminary understanding between the States concerned: even if not legally binding it provides some incentive to comply with it, particularly if public opinion insists that States do so. Also it keeps up the momentum for negotiations and may be a source of inspiration.

Another technique which can overcome political difficulties is the *framework convention approach.* We increasingly observe, particularly at the global level, that States agree first on a framework convention which provides for principles and sets up machinery to develop the more specific actions to be taken. This technique was used in UNEP's *Regional Seas Programme starting in 1976*, in the 1979 *European Economic Community Geneva Convention on Long-Range Transboundary Air Pollution* and the *Ozone Layer* instruments (1985 Vienna; 1987 Montreal). It was also used in the *Climate Change* and *Biodiversity Conventions* signed in Rio. The idea always is to build a general consensus on the solution of a problem and to start a (permanent) negotiating process to work out the detailed instruments, often called "protocols".

The 1987 *Montreal Protocol on Substances which Deplete the Ozone Layer* provides another example for a flexible technique in treaty-making. This treaty adopted a plan and time-schedule for the reduction of production and consumption of the substances concerned and, at the same time, required the parties to renegotiate and tighten up the plan and

time-schedule. We all know that this approach worked fairly well and that it has been possible to modify the rules originally agreed on in Montreal.

One should, however, be balanced and also outline the problems of these flexible treaty-making techniques. From a legal point of view it is important to note that the framework convention approach creates a *plurality of regimes*. The framework convention and the implementing instruments ("protocols") are separate treaties; the parties may be different groups of States. States may adhere to the framework convention but not to the protocols. If there are several protocols, as with the "Montreal System", some States may adhere to the original agreements while others may decide to be bound by the later ones. In other words, the framework convention approach leads to several conventional systems and thus to a complex legal situation.

From a more political perspective one may object that these so-called flexible techniques only result in postponing solutions and in institutionalising discussion. This is, no doubt, a serious point; the step-by-step approach tends to promote compromise solutions and indeed to delay the "real actions". On the other hand, the process of negotiations is a chance to influence decision-making and put pressure on the various actors involved. NGOs in particular should use this opportunity instead of criticising agreements as being too weak. Both international cooperation and law-making is based on the consensus of governments. What is needed is the political will to take action and for that, governments need to be pushed.

Ensuring Compliance

Compliance with international environmental law is a much debated subject today. This reflects the experience that States often do not join international agreements or, even if they join, do not implement and enforce these at the national level. To international lawyers this is not really surprising. In a consensus-oriented legal system, as a matter of principle, one cannot force States to ratify or accede to international agreements, and mechanisms to ensure compliance are limited. Even so, the debate is urgently needed. There may be ways and means within the existing system to improve compliance.

Usually, conventions provide for *reporting* requirements, Parties are required to report at regular intervals to the secretariats executing the conventions about implementation measures. This is not a very strong mechanism. International secretariats have to rely on what governments report because often they do not have the resources or the right to verify the reports.

A number of proposals have been made to improve the reporting mechanisms. In particular, it has been suggested that NGOs should be involved. They could be invited by the secretariats to provide separate reports and/or comment on the governmental reports. Another proposal relates to the open and public discussion of the country reports at the regular meetings of the Parties. This could have two effects: first, it is an incentive for governments to fulfil their obligations; second, it urges governments (and others) to provide accurate reports. It has also been suggested, on a broader scale, that a system of international inspectors be introduced. While strengthening the capacity of international secretariats it would however require the explicit consent of the Party concerned.

In addition to these mechanisms, there are the traditional diplomatic and judicial means which Parties may avail themselves of vis-a-vis other Parties. The use of these means however is limited.

Particular legal issues are raised by those techniques which tend to achieve a broader or even universal acceptance of international conventions. There is a recent trend to use trade restrictions with regard to non-Parties in order to urge all States to become parties to a convention. This raises questions of international treaty law which are hotly debated today. I do not believe that there are clear answers to these questions on the basis of

existing law. Probably GATT needs to be revised to provide some solution to the problem.

Some concluding thoughts on the present state of International Environmental Law

During the last 25 years we have experienced considerable activity in international environmental law-making, yet environmental treaty law is still fragmentary. Many areas remain without any legal regulation while in others there are only very general rules (see for example forest protection, desertification, climate change, protection of biodiversity). Where agreements exist, acceptance by States is not universal. Often accepted treaties are either badly enforced or not enforced at all. There are areas where governments are particularly reluctant to agree on binding rules. One example is the responsibility and liability for environmental damage. After decades of academic and political discussion this is still a grey area.

It is clear that international monitoring mechanisms have to be improved and that the non-governmental sector must be strengthened. It is also clear that the inequalities in the community of nations have to be addressed; in particular the situation of developing countries has to be taken into account. Their problems can be addressed - at least in part - by legal techniques. One can provide for "common but differentiated responsibilities" and can modify the obligations of developing countries. Another strategy would be to increase technical and financial support to developing countries to enable them to comply with their obligations and make them equal partners.

However, it is clear that legal techniques alone do not solve the problems. What is also needed is the political will to stop environmental degradation wherever it occurs, and to overcome the inequalities in the world of today. The best legal mechanisms are useless without the preparedness to apply them and to achieve the ends for which they are established. The building of political will is a task in itself; we all know that it does not come out of the blue. But this is clearly the subject for another day.

7. THE ROLE OF THE UNITED NATIONS ENVIRONMENT PROGRAMME IN THE DEVELOPMENT AND IMPLEMENTATION OF ENVIRONMENTAL LAW WITH SPECIAL REFERENCE TO THE SOUTH PACIFIC REGION

Lal Kurukulasuriya

The United Nations Environment Programme (UNEP) is pleased to be associated with the organisation and convening of the Workshop on Environmental Law for countries in the South Pacific Region in collaboration with the South Pacific Regional Environment Programme (SPREP). As you probably know, UNEP's close association with the South Pacific Region goes back to 1974, just two years after its own creation, when its commitment to cooperate with and assist countries of the region was translated into concrete action with the launch of its Regional Seas Programme. The Executive Director of UNEP, Dr. Mostafa K. Tolba, attaches the greatest importance to the rapid realisation of the objectives of its joint programme with SPREP on a wide range of environmental activities of vital importance to the region and sends his greetings and best wishes for the success of the workshop.

The Pacific Way, that excellent report of the Pacific Island Developing Countries to the Earth Summit, was prepared by SPREP with major contributions from the National Task Forces of countries in the region. It vividly captures the essential features of existing and perceived environmental and developmental problems of the region, the variety of factors that impede their resolution, including some over which the countries in the region may, with the best efforts in the world, have little or no control. It also incorporates their major concerns for their future, perhaps even survival, in some of the low-lying areas of the Pacific Island States. High among these are:

(1) climate change and consequential sea level rise;

(2) conservation of biological diversity;

(3) sustainable coastal and living marine resources development;

(4) toxic and hazardous wastes;

(5) environmental and developmental decision-making. Among the recommendations made in this Report for resolution of these problems, and allaying concerns over the future are: transfer of financial and technical resources required for following a path of sustainable development;

(6) capacity-building; and

(7) the development and effective implementation by all concerned of relevant legal and institutional arrangements at international, regional and national levels.

During the last decade, UNEP has galvanised international support for, and helped in the development of four major global environmental Conventions, the negotiation and the conclusion of three of which were held under its auspices. All four Conventions have far-reaching implications for the resolution of some of the most pressing environmental problems of the South Pacific Region. I refer to the *Vienna Convention for the Protection of the Ozone Layer* and its *Montreal Protocol on Substances that Deplete the Ozone Layer*, the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal* and the *Convention on Biological Diversity* negotiated and concluded under the auspices of UNEP, and the *Convention on Climate Change*.

In addition to these four global Conventions of crucial significance to the region in the resolution of their major environmental and developmental problems, UNEP's Regional

Seas Programme provides an agreed legislative and institutional basis for marine resource conservation and prevention and control of pollution in coastal seas in eight important regions of the world, including the South Pacific. The collective experience of the development and implementation of these programmes provides a useful basis and an impetus for further strengthening the process of implementation of the South Pacific Regional Seas Programme.

Let me now deal with the salient provisions of these agreements and draw your attention to the way in which the mechanisms embodied in them could be made use of by countries of the region in resolving some of their crucial environment and development problems.

The *Vienna Convention* and its *Montreal Protocol* may be said to have heralded a new era of global cooperation in responding to common dangers threatening humanity. Several mechanisms embodied in the *Montreal Protocol*, in particular, are ground-breaking and have provided a new direction to international cooperation and law making.

First and foremost, the scheme of the Convention and Protocol invests it with a certain inherent flexibility by providing a legal basis for appropriate action to be taken by the parties, as and when required, to meet the challenges arising from fresh scientific evidence of increasing ozone depletion. It not only provides for this to be expeditiously achieved, though the adoption of protocols, annexes, amendments and adjustments by the Conference of the Parties, but also establishes a Scientific Assessment Panel entrusted with the task of assessing scientific evidence of ozone depletion and making appropriate recommendations to the Conference of the Parties. As we meet here today, the Conference of the Parties of the *Vienna Convention* and the *Montreal Protocol* gets under way in Copenhagen, Denmark. On the Agenda of the Conference of the Parties to the *Montreal Protocol* are further amendments and adjustments to the Protocol to expand the list of ozone-depleting substances it controls and to advance the phase-out schedule of controlled substances and the phase-out schedule of countries operating under Article 5(1), which are, for the most part, developing countries. A substantial amount of work by several working groups and expert panels established by the *Vienna Convention* has been accomplished in the last two years. They examined and analysed these issues and available options to facilitate decision-making at the Conference of the Parties.

The second unique feature is the creation by the Conference of the Parties to the *Montreal Protocol* - at its second session in London in 1990 - of a funding mechanism, the Interim Multilateral Fund, to assist developing countries to make the switch to ozone-friendly technology without unduly hindering their economic development. Those countries required to contribute to the fund, (which are, for the most part, developed countries), have pledged $126 million for 1991-92, of which $64 million has so far been paid into the fund. In view of the demonstrable willingness of the most industrialised of the developing countries to advance the phase-out of the production and use of ozone-depleting substances by the year 2000, substantially higher commitment of resources to the fund is being called for at the Copenhagen Conference.

Other unique features of the *Ozone Convention* and its *Montreal Protocol* include the establishment of an Implementation Committee. The further development of this committee's mandate is also on the agenda of the Copenhagen Conference. The committee's principal function is the monitoring of non-compliance on the basis of a system of reporting provided for in the Protocol. The other provision is for the transfer of ozone-friendly technology to countries operating under Article 5(1), which are, for the most part, developing countries. This process has been facilitated by the establishment, under the Protocol, of the Technical Advisory Committee on Destruction Technologies and the Technology and Economic Assessment Panels. The transfer is effected through country programmes implemented under the Interim Multilateral Fund.

You will see, therefore, that the *Vienna Convention* and its *Montreal Protocol* have forged international consensus on a sound and effective mechanism for preventing further

depletion of the ozone layer and providing for its recovery. They have also, in the process, set up important precedents for transfer of technology and financial resources to developing countries to enable them to participate effectively in global efforts to respond to major environmental problems, and thus set up a truly global partnership.

It is indeed heartening to see concrete evidence of the influence that the *Vienna Convention* and the *Montreal Protocol* have had in the development of two important global *Conventions on Biological Diversity and Climate Change*. As you know, these two Conventions were opened for signature at the Earth Summit and received unprecedented endorsement at the Summit when each was signed by 154 states and the European Community.

Let us now turn to an inquiry into whether these innovative processes and mechanisms have found expression in the *Biodiversity and Climate Change Conventions*. If so, how have they done so?

Article 23 of the *Biodiversity Convention* establishes a Conference of the Parties with a wide range of powers and functions designed to enhance effective implementation and achievement of the objectives of the Convention. They relate to reporting and monitoring of implementation, review of scientific and technical advice, the power to adopt protocols, amendments and annexes, establish subsidiary bodies and to undertake additional action that may be required for achieving the purposes of the Convention in the light of experience gained in its operation. You will therefore see that like the Ozone regime, the *Biodiversity Convention* is conceived and structured in such a way as to constitute a living document, amenable to further strengthening through decisions of the Conference of the Parties. The Convention also provides a basis and establishes mechanisms for the transfer of technology and financial resources to developing countries. There was a sharp division at the negotiations on the institutional mechanisms for the transfer of financial resources. This was resolved through the adoption of a Resolution on Interim Financial Arrangements, leaving it to the Conference of the Parties to decide on the final institutional structure after the Convention has come into force - yet another innovation to the process of negotiation of international treaties.

Articles 16, 18 and 19 of the *Biodiversity Convention*, based on the recognition that both access to and transfer of technology are essential elements for the attainment of the objectives of the Convention, provide for the transfer to developing countries of technologies relevant to the conservation and sustainable use of biological diversity on fair and most favourable terms, including on concessional and preferential terms. The *Biodiversity Convention* may even be said to have built upon the firm foundations of the *Vienna Convention* and *Montreal Protocol* and further advanced the new directions in international law-making, when, in Article 20(4) it provided a direct link between the implementation of the Convention by developing countries and "the effective implementation by the developed countries of their commitments under the Convention relating to financial resources and the transfer of technology".

Despite early hopes of stabilising and reducing emissions of greenhouse gases, the *Climate Change Convention* contains only commitments regarding stabilisation. On the other hand, while the Convention does not commit itself to specific limitations on greenhouse gas emissions, it does in Article 4 establish a process designed to improve the information base, to reduce uncertainties and, through the mechanism of the Conference of the Parties, to review the adequacy of the measures prescribed in the Convention for limiting anthropogenic emissions of greenhouse gases - (Article 4(2)(a); for stabilising emissions at 1990 levels, Article 4(2)(b)). Based on this review, the Conference of the Parties is empowered to take appropriate action which may even include the adoption of amendments to the above-mentioned commitments.

The Convention also provides for the developed countries to provide developing countries with new and additional financial resources to meet the agreed full cost incurred by the

latter in complying with the obligations under Article 12(1), which deals with communication of information related to implementation. The Convention further provides that developed countries will provide financial resources, including transfer of technology needed by the developing countries. Parties are to meet the full incremental cost of implementing measures undertaken under Article 4(1), i.e. a list of 10 different obligations assumed by contracting parties relating to greenhouse gas emissions.

You will therefore see that the essential features of the unique and innovative mechanisms of the *Vienna Convention* and its *Montreal Protocol* have been further reinforced through incorporation in the *Biodiversity* and *Climate Change Conventions*. Indeed, one might even say they have been further advanced with the development of concepts such as "common but differentiated responsibility" and "new and additional resources". UNEP takes much satisfaction in having contributed towards the development of these new directions in the progressive development of environmental law.

It is therefore crucial for all States, including developing countries, to examine these Conventions carefully, in terms of their costs and benefits to each country, and to take early decisions on their ratification and entry into force. These Conventions have clearly advanced the frontiers of international cooperation for environmental management and have built in mechanisms for enhancing their capacity to provide even more effective responses to the respective global environmental problems being dealt with in the face of new challenges. Provisions have been incorporated relating to the transfer of technology and financial resources to developing countries to facilitate the implementation of their obligations under these Agreements. These aspects, I am sure, will be given due consideration by the distinguished participants when providing advice to their respective governments on matters relating to ratification. To assist in this inquiry is the publication: *Costs and Benefits for Developing Countries of Becoming Parties to Environmental Conventions* by Dr Mostafa K. Tolba, the Executive Director of UNEP.

Another area of environmental concern for countries in this region, in respect of which UNEP has contributed to the development of a global regulatory regime, is the transboundary movement and disposal of hazardous wastes. This was achieved through the adoption in 1989 of the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*. The Convention emphasises the sovereign right of every state to ban the import of hazardous wastes into its territory, a right enforced through a system of notification of such decisions to other parties through the Conference Secretariat. Contracting parties receiving such notification are obliged to prohibit the export of such wastes to the notifying parties. It also provides for international cooperation in achieving the Convention's objectives, more particularly transfer of technology and the establishment of a revolving fund to assist in case of emergencies or accidents, and to assist developing countries to reduce the generation of hazardous wastes, to strengthen disposal facilities, to prevent pollution in the management of hazardous wastes and to reduce the transboundary movement to a minimum.

Every party is obliged to introduce national legislation to prevent and punish illegal traffic in hazardous wastes. The Convention came into force this year and the first Conference of the Parties is scheduled to be held in early December in Uruguay.

These Conventions were concluded under extremely difficult circumstances. The provisions relating to transfer of technology and financial resources to developing countries as a part of this global partnership have been achieved following lengthy, patient and painstaking negotiations. The successful implementation of the *Ozone Convention* and its *Montreal Protocol* provides inspiration to embark on the implementation of the more recent global conventions with confidence.

Towards this end, the distinguished participants present here must surely carry a great responsibility in their role as legal and policy advisers to their respective governments on environmental matters.

This brings me, finally, to deal briefly with two other areas in which UNEP contributes to the development of environmental law which is of special interest to the South Pacific Region. They are the development of national legislative and institutional regimes for environmental management - the central theme of this workshop - and assistance in capacity-building, through training programmes and information dissemination. UNEP is currently carrying out a structured and phased programme to provide developing countries, at their request, with assistance in carrying out their own activities for the development of country-specific national environmental legislation and related institutions. *Agenda 21* calls UNEP the "principal body within the United Nations system in the field of environment". It lists among the priority areas on which UNEP should concentrate, the provision of technical, legal and institutional advice to governments, upon request, in establishing and enhancing their national legal and institutional frameworks for environmental management and sustainable development. Since the mid-seventies, UNEP has provided this assistance to over 60 developing countries. UNEP is happy to make available this collective experience to the countries in the South Pacific Region through its joint programme with SPREP. This workshop is only a part of that continuing cooperation with the countries and peoples of this region, which I have every reason to expect will be further developed and strengthened in the years to come.

8. INTRODUCTION TO BASIC CONCEPTS OF ENVIRONMENTAL LAW

David Farrier

Introduction

> States shall enact effective environmental legislation. Environmental standards, management objectives and priorities should reflect the environmental and developmental context to which they apply. Standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries (*Rio Declaration on Environment and Development*, Principle 11).

Before transposing the techniques and concepts which this paper addresses to your own countries, it is crucial that you first identify the precise source of the environmental problems which you are experiencing. Most of the models of environmental regulation which currently exist have been developed in the context of highly industrialised and commercialised societies. Although the activities of individual members of the public in these societies are regulated to varying degrees, the main focus of legislation, and particularly the enforcement of legislation, has been on those seeking to develop the environment on a substantial scale for profit. Even here, in many societies it has been the urban industrial developer, rather than the rural landholder, who has borne the brunt of environmental regulation. More recently, there has been a growing concern with the development activities of government itself.

Some of the island nations of the Pacific are indeed facing pressures from developers in such areas as forestry, tourism and mining, which might be usefully regulated by resort to legislative models and techniques used in development economies. The position is more complex and sensitive where the development is funded by overseas aid and carried out by a foreign government in cooperation with the national government. It may be more efficient and effective for the agencies of the foreign government to be required to comply with their own domestic environmental laws, rather than developing countries seeking to introduce their own expensive regulatory systems. This is already the position in some cases, but where it is not, island nations as a group might want to consider lobbying donor countries through international and regional forums, such as SPREP.

Finally, pressure on the environment may stem from broader social changes, involving significant sections of the indigenous community - for example:

* rapid urbanisation, resulting in land shortages and pressures on sewerage facilities and freshwater supplies;

* the transition from a subsistence to a market economy, leading to over-exploitation of resources, such as fisheries, which have been traditionally regulated through customary rather than legislative controls.

This raises quite different issues for the environmental legislator. Regulatory techniques developed to control industrial pollution and large-scale commercial forestry are quite inappropriate as a response to domestic pollution and vegetation clearance for subsistence agriculture. It is not sufficient simply to enact legislation. It must also be enforced, and this is a largely impossible task where laws are imposed by central governments on remote communities which have not been convinced of their necessity. In these situations, it may be that we should be asking why customary controls have broken down and how best they might be revived. It may be that legislative reinforcement (perhaps through local ordinances rather than national legislation) would help, but education may be more appropriate. Ultimately, the only way the matter might be resolved may be through financial incentives, such as, paying for domestic connections to sewerage systems.

These introductory remarks raise issues which should come up again and again throughout the workshop. The fact that the focus is on the development of environmental legislation does not mean that we should avoid the prior question of whether legislation is appropriate. If it appears to be, then it is crucial that you should think creatively and not simply follow models adopted in other contexts. Symbolic legislation may satisfy the demands of international conventions, but legislation which is not enforced will do little to protect the environments of your countries. Indeed it may lead to a complacency, based on a belief that something is being done, that is positively damaging.

The notion of environmental law

Discussions of what we mean by environmental law frequently begin by examining definitions of 'environment' found in particular pieces of legislation. The main function which these definitions perform within each piece of legislation is in fact not to identify the scope of environmental law but rather to spell out what decision-makers should be concerned with when they are directed to take decisions about the 'environment'. Does environmental impact, for example, include social impact on human communities? Nevertheless, we can use these definitions to raise some general questions about environmental law.

One frequently used definition found in Australian legislation (*Environment Protection (Impact of Proposals) Act 1974* (Commonwealth) refers to it expansively as:

* all aspects of the surroundings of human beings whether affecting them as individuals or in their social groupings (section 3).

In the *Environmental Planning Act 1978* (Papua New Guinea), it is defined to mean:

* the total stock of physical, biological, and social resources available to man and other species and the ecosystems of which they are a part (s. 2).

In the *Resource Management Act 1991* (New Zealand), it includes:

* ecosystems and their constituent parts, including people and communities;

* all natural and physical resources;

* the natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes ("amenity values"); and

* the social, economic, aesthetic, and cultural conditions which affect the matters above or which are affected by those matters (s. 2).

The first point to make here is that legislation covering the things identified in these definitions is not a recent phenomenon. Legislation dealing with the regulated exploitation of forests and minerals for commercial, as distinct from subsistence, purposes, has existed in many countries for some time. The problem has been that historically it has concentrated on the utility of a specific item as a resource for human beings and the ensuing need to create easy access to it, neglecting the impact that this would have on other aspects of the environment. This was a segmented rather than a holistic approach to regulating access to the environment.

The result was that those parts of the environment which had at that time no obvious use for human beings (e.g. wetlands) or which appeared to be in plentiful supply (e.g. air) were not taken into account in the decision-making process. They were not taken into account by private developers when making their commercial decisions because they had no value

in the market place. In the language of the economist, these environmental impacts were externalities because the costs which they imposed were borne by the community rather than the developer. The developer was effectively receiving a subsidy. Nor did the legislation require government bodies charged with the task of supervising developers to bear them in mind in deciding whether to allow the development to proceed.

Today, nothing has changed as far as the developer is concerned - the market place still does not value these aspects of the environment, although this may be changing. What has changed is that the wider community, acting through the political process, is increasingly placing values on them. The result of this is that a new breed of environmental laws now requires governmental bodies charged with the task of supervising developers to take these factors into account in deciding whether to give the go-ahead to projects.

Secondly, environmental law is not just concerned with the environment in its natural state. The fact is that even apparently natural areas have experienced some degree of impact from human beings. Human beings and the things they have created are part of the environment. Under the first of the definitions set out above, environmental law is concerned with the whole spectrum of the physical surroundings of human beings, ranging from natural environments, such as rain forest, at one extreme, to the built environment (cultural heritage as well as modern urban development) at the other.

Thirdly, there is a temptation to place human beings at the centre of the environment. The first definition talks about the surroundings of human beings, while the second, though toned down, still singles 'man' out for separate mention. This reflects an anthropocentric (human-centred) focus. So too does an emphasis on environmental law as being concerned with the allocation of scarce resources. The implication is that the natural environment only has significance insofar as it is of benefit to human beings, rather than as a phenomenon which is worth preserving in its own right. It becomes a means to an end rather than an end in itself. Some argue that this is inevitable given that, when all is said and done, it is human beings who make the law and the decisions. No matter how motivated, we cannot avoid the fact that a human interpretation of the needs and desires of the natural environment will prevail. But it may be that we should at least be striving towards an ethic which asserts the intrinsic value of the components of the environment, and using non-anthropocentric language would be a vital first step in this direction. The danger is that, by using the word "resources", we will focus on minerals and timber which are valued in the market-place and forget that the air which we breathe and the water which we drink - and both of which we pollute - are also vital resources.

Finally, these definitions raise the question of the extent to which environmental law is concerned with the social environment. The New Zealand definition goes furthest in this regard. It certainly makes sense to insist that environmental law takes account of the effect of arrangements which we make in relation to the physical environment upon the social environment (e.g. the dramatic effects which destruction of forests in some parts of the world have on the lives of indigenous peoples). It is also appropriate that it should be concerned with aspects of the physical environment which derive their significance not from any intrinsic values, but from the cultural meanings which are given to them by human beings (e.g. rocks and landforms).

Ecologically sustainable development

We are increasingly likely to see attempts to incorporate the concept of ecologically sustainable development into environmental legislation as an appropriate objective for environmental agencies and decision-makers. It has its origins in the Report of the World Commission on Environment and Development, *Our Common Future* (Brundtland Report), where development was defined as sustainable "if it meets the needs of the present without compromising the ability of future generations to meet their own needs" (p. 8).

Attempts have been made to give the concept greater precision and to make it a more useful tool in legal contexts. *The Protection of the Environment Administration Act 1991* (New South Wales) set up the Environment Protection Authority and provided that in pursuing its objective of protecting, restoring and enhancing the quality of the environment of New South Wales, it should have "regard to the need to maintain ecologically sustainable development" (s 6 (1)(a)). This is said to require "the effective integration of economic and environmental considerations in decision-making processes". The principles which can assist in its achievement include (s 6(2)):

* the precautionary principle: "if there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation";

* intergenerational equity: "the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations";

* conservation of biological diversity and ecological integrity.

Section 5 of the *Resource Management Act* (New Zealand) aims not for ecologically sustainable development, but for the sustainable management of natural and physical resources, defined to mean:

> Managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic and cultural well-being and for their health and safety while -
>
> (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
>
> (b) safeguarding the life-supporting capacity of air, water, soil and ecosystems; and
>
> (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

Another approach which is gaining increasing international currency is the polluter-pays principle, i.e. that those who cause pollution should pay for the costs of containment, avoidance or abatement, through government taxes and charges where other means are not available. Principle 16 of the *Rio Declaration* provides that:

> National authorities should endeavour to promote the internalisation of environmental costs and the use of economic instruments, taking into account the approach that the polluter should in principle bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.

Private or public ownership of land

Environmental legislation is frequently concerned with land use and management issues. Land may be privately owned, by individuals or groups (e.g. under customary tenure), or belong to the State. In theory at least, publicly owned land should present far fewer problems from the perspective of introducing environmentally sensitive land uses (e.g. changing from commercial forest to conservation area). The main issue is one of government motivation. It is, however, important not to forget that the government is not

one-dimensional. There may be important vested interests, within the bureaucracy for example, which will resist the implementation of government policies.

Legal restrictions placed on the use of land in private ownership create quite different problems because by restricting activities on the land they interfere with the specific expectations of landholders, and usually the commercial value of the land. Such legal restrictions include for example, restrictions on the removal of native vegetation or the building of dwellings on water catchments. In these circumstances there will be demands that the government lease the land, or at least pay compensation, rather than simply enacting legislation which threatens landholders with penalties if they change its use without specific authorisation.

Where activities on private land spill over into what economists refer to as common property resources (e.g. air and water pollution), it is much easier to justify legal regulation of some kind to protect neighbours and the broader public interest.

What does environmental law look like?

It is rare that we will be able to spell out in the legislation itself precisely how people should behave in relation to the environment. We will usually want to look at the precise circumstances in which a particular land use is proposed. There are very few activities, for example, which we are prepared to say that we will never countenance under any circumstances. One example appears in the *Uranium Mining and Nuclear Facilities (Prohibitions) Act 1986* (New South Wales), which prohibits all prospecting and mining for uranium in New South Wales, with the limited exception of those who mine very small amounts in the course of mining for some other mineral. The same legislation prohibits the construction and operation of a wide range of nuclear facilities, including reactors and reprocessing plants, with limited exceptions.

Apart from occasional examples such as this, however, environmental legislation is, for the most part, concerned with setting up procedures and delegating power to make decisions to those who act on the specific facts of individual cases in accordance with these procedures - for example, local councils, government ministers and licensing bodies. These decisions can take a number of different forms:

* setting aside conservation areas on publicly owned or leased land;
* making environmental plans;
* granting permissions;
* issuing directions; and
* entering into conservation agreements.

Publicly owned/leased conservation areas

Land which is already in public ownership can be set aside for conservation purposes. Beyond this, most countries will have legislation which allows the government to compel landholders to sell private land to them for public purposes. In practice, however, most governments will be reluctant to use these powers and may prefer some sort of leasing arrangement.

Once in government hands, land can be set aside for specific purposes, ranging from residential to conservation. Falling into the latter category, national parks and nature reserves are managed for conservation or to preserve scientific values or both. Management may be placed in the hands of a specialist government agency or, alternatively, people who are indigenous to the area, or a combination of the two.

Plans

Planning legislation sets out the procedures according to which environmental or town and country plans are to be made if they are to have the force of law. The legislation does not detail the rights and obligations of developers in relation to the development of a particular piece of land. Once made, the plan itself may move some way towards spelling these out. It may provide information about what sorts of development are prohibited on a specific piece of land and what kinds are permitted without needing to get development consent. This technique is known as zoning. It may also spell out development standards, for example, maximum height or minimum area requirements.

There will still, however, be a large number of gaps, stemming from the fact that many kinds of development will be permitted only if developers first obtain the permission of a particular decision-maker, looking at the detailed facts of the case. In other words, not only has the legislation delegated the decision to determine the contents of the plan to another body, but that body has further delegated the decision about what development should be allowed on particular sites.

The origins of town planning can be traced back to early this century when middle-class reformers in industrialised countries such as the UK and Australia began to voice concern about slums and the contribution they made to crime, disease and other forms of social malaise. The role of town planning was to create a better physical environment by providing people with pleasant structures in which to live and work and adequate recreational facilities, including open space. The belief was that physical surroundings were major determinants of social behaviour and personal satisfaction. By improving these, it was thought that people's behaviour and happiness would be improved.

Little attempt was made to identify the differing needs of different groups within an area - the old, the young, different kinds of families, small businesses. No account was taken of the existing culture and the extent to which this should be supported. The assumption was that any cultural or social system existing in slums was inevitably bad and deserving of destruction. The inter-relationship between the physical structure of cities and the economic system, including the need to provide employment opportunities within easy reach of residential areas, was rarely considered.

Environmental planning attempts to correct these deficiencies. While still focusing on the relationship between human beings and their physical environment, it aims to take account of social and economic factors in determining the appropriate structure of the environment. In addition, while town and county planning had in practice little to say about planning outside urban areas, environmental planning is very much concerned with rural planning, including planning for nature conservation on privately owned land. In the future it seems that environmental planning will increasingly move away from its current negative emphasis on *restricting* land use and become concerned with management planning. This involves the adoption of detailed commitments to look after the land on an ongoing basis, including commitments to carry out positive activities, such as restoration, rehabilitation and pest control.

Permissions

Apart from provisions dealing with the making of plans, much of environmental law is concerned with setting out the procedures according to which permissions, such as consents, approvals or licences are to be obtained. While we rarely find absolute prohibitions placed on activities, such as those noted above in relation to uranium and nuclear facilities in New South Wales, we frequently find qualified prohibitions which allow an exception where a decision-maker has given prior approval and any conditions have been complied with. Most of the substantive obligations imposed by environmental law are in this form. So, for example, the New South Wales *Clean Waters Act, 1970* at one stage states in clear terms that 'a person shall not pollute any waters or cause or permit

any waters to be polluted,' without risking a substantial fine. But it later adds that it is not an offence if a licence is first obtained and its terms and conditions are complied with.

Where the law requires permission to be obtained, an applicant will not know the actual position until these procedures have been followed and a decision on the facts of the particular case obtained. The legislation itself will set out the steps which must be taken in an attempt to secure consent or a licence and will determine the procedures and powers of the decision-maker.

The decision will turn on the way in which the authority hearing the case chooses to exercise the powers which it has been given, i.e. exercises its discretion.

This body is in a very different position from a court of law applying general legal rules to the facts of a specific case. Its decision will be based on the specific circumstances involved in the particular case before it rather than a general rule, and we would not normally regard such decisions as being part of the law, although they clearly have legal consequences.

It is important to distinguish between one-off permissions and continuing licensing obligations. For example, when dealing with industrial development, we will usually want permission to be obtained for the initial siting of the installation and the question of pollution will be a relevant factor in reaching this decision. We will not want it situated near residential areas or where patterns of air movement will mean that residential areas will be affected. Once this permission is given and acted upon, it will usually last indefinitely and will not be subject to alteration or revision: existing use rights will be protected. At the same time, however, we will want to regulate the emission of pollution on a continuing basis by also requiring a licence to be obtained and regularly reviewed and renewed, allowing, for example, for the adjustment of conditions setting out what and how much pollution can be emitted. As technology improves, the emission standards will be tightened, and this will be made clear to the developer at the outset.

Directions

Another technique frequently used in environmental legislation is to give bodies the power to make directions or issue orders to specific individuals in particular circumstances, ordering them to do or to cease doing certain things. This allows bodies to create individualised obligations within the broad limits set out in the legislation. The legislation itself is again only concerned with setting out the procedure which must be complied with and outlining what sorts of things can legitimately be demanded. The actual direction will be adapted to a specific situation.

Examples would include:

* the power to issue a direction to an industrial polluter to cease emitting a particular polluting discharge and to clean up pollution which has already escaped;

* the power to make an order protecting a particular building until a decision has been made as to whether it should be classified as an item of the cultural heritage.

The distinction between directions and permissions is that in the case of directions, the administrative agency has to take the initiative by issuing a direction before any legal obligations are created and this becomes less likely as financial and human resources become short. The requirement to obtain a permission means that the onus is on that person to approach the agency and the agency cannot ordinarily avoid making a decision.

Conservation agreements

The decisions discussed so far are imposed upon people by government authorities rather than resulting from any agreement. If individuals or corporations are reluctant to comply with them, they can then be coerced into doing so by threatening criminal sanctions or obtaining civil orders (injunctions), even where the activities at issue are on their land. A very different approach is to try to gain the cooperation of landholders and to seal the bargain in the form of a contract. Such an approach assumes that the landholder has the right to go ahead unless persuaded not to do so in the free market. It differs fundamentally from situations where the government is prepared to control land use directly by command and control regulation.

Agreements normally take the form of undertakings by landholders to restrict activities on the land to protect the environment, in return for tax relief or compensation. Where this approach is taken, special arrangements are usually made to ensure that the contract also binds other people who might buy the particular piece of land in the future. Although some landholders may be motivated to enter into such agreements in order to ensure long-term protection of their land, the fact is that most landholders will need to be offered substantial financial inducements. This approach represents an alternative to compulsory purchase or lease of land by government.

9. REGULATION AND ENVIRONMENTAL DECISION-MAKING

David Farrier

Regulation

Some environmental law is addressed directly to those whose activities may damage the environment. Many are involved in specialist activities - urban development, farming, industry and mining, for example. But ordinary citizens can also come across legal restrictions placed upon their activities, such as restrictions on what they can build on residential blocks (e.g water catchments) and prohibitions upon using explosives to catch fish. Some of these prohibitions can be by-passed by getting a prior approval, but others, like fishing with explosives, will usually be absolute.

These provisions create offences. The threat is that unless you obey the law or get permission in advance to deviate from it, you will be punished, usually by way of fine, rarely by imprisonment. Offences frequently take the form of doing something without getting permission (e.g. a pollution licence) or failing to abide by the conditions attached to a permission.

Criminal offences

These offences appear at first sight to be very different from those found in Criminal Codes, such as theft, homicide and rape. Conviction of Codes offences has traditionally been related to some degree of moral guilt because of the historically strong connection between criminal law and immorality. This means that before somebody can be convicted they must ordinarily intend to carry out the prohibited conduct. On top of this, there is generally a requirement that the prosecution must prove that identifiable damage has been caused, or is at least imminent. Offences must be proved by the prosecution beyond a reasonable doubt.

The Canadian Law Reform Commission has argued that a distinction should be drawn between 'real criminal law' and regulatory offences ('acts merely prohibited for convenience'). Regulatory offences have arisen as criminal law has expanded into more and more areas of everyday behaviour and, in the process, lost its clear connection with moral guilt. The prosecution will frequently not have to prove intent: it will be sufficient if it can show that perpetrators were negligent, in the sense that any mistake they made was not one which a reasonable person would have made if they exercised "due diligence". Sometimes the burden of proof will be reversed and the perpetrator will have to prove that due diligence was exercised. Partly as a consequence of this watering down of traditional principles of the criminal law, the penalties will be less severe.

In the past, the assumption has been that environmental offences fell within this category of regulatory offences. In some countries, however, this perception is changing and demands are being made that some of the most serious offences should be treated as real crime and punished more severely. The Canadian Law Reform Commission recommended the creation of a new criminal offence of recklessly causing disastrous damage to the environment. To prove recklessness, the prosecution would have to show that the accused realised that disastrous damage to the environment would probably occur. In New South Wales, it is an offence if someone wilfully or negligently causes any substance to leak, spill or otherwise escape in a manner which harms or is likely to harm the environment. The potential penalties are very severe. This is the most serious of the pollution offences. There is another tier of offences dealing with less serious acts of pollution; beneath these there is yet another tier allowing on-the-spot fines to be imposed for offences committed by the general public.

The first thing to notice is that the Canadian recommendation requires proof of *disastrous* damage to the environment. 'Disastrous damage' would in practice ordinarily involve at least the risk of serious long-term harm to human health.

The New South Wales offence, on the other hand, is much broader in that it covers *any* damage to the environment. In fact, the legislation goes even further by defining harm to include mere air or water pollution. On top of this, there is no requirement to prove that the defendant acted deliberately. The offence is committed by those who acted negligently. What this means in essence is that the issue will be whether the accused had a reasonable system of pollution control and management in place. This offence appears to go far beyond what might reasonably be regarded as 'real' criminal law.

Fault

There are important lessons to be learnt from this for those drafting legislation which creates offences and imposes penalties. It is important to work out the precise degree of fault which must be proved before an offence is committed. Polluting behaviour ranges from deliberate acts of dumping which cause serious damage to the environment, through breaches by companies of emission standards set in pollution licences as a result of failure by employees to turn off a valve, to accidents resulting from equipment failure which could not have been predicted. It seems reasonable that the level of penalties should vary according to degree of fault, and also, perhaps, the degree of damage of caused.

Penalties

It is also important to think creatively about the types of penalties used. Whereas fines and even imprisonment may be appropriate for the executives of large corporations who deliberately ignore their environmental obligations and cause significant damage as a result, fines will be quite useless where we are dealing with those living in a subsistence economy, and imprisonment is likely to be quite inappropriate. In these circumstances, we need to think about penalties which require those convicted to carry out work within the community to repair damage to the environment, perhaps including an element of punishment by making them go beyond the damage which they have themselves caused. This could take the form of a community service order.

Customary law

Some countries, such as Kiribati and Tuvalu, have enacted legislation which provides that customary law - for example "the customs and usages, existing from time to time, of the natives of Kiribati" - has effect unless it is inconsistent with legislation. In other words, if legislation makes it an offence to kill protected birds, it is no defence that this is permitted under customary law. But there are a number of qualifications to this. Customary law 'may be taken into account' in criminal cases for certain purposes. The circumstances are:

(1) ascertaining whether a person has a particular state of mind which must be proved for the offence to have been committed or is a vital part of a defence (i.e. determining the level of fault);

(2) deciding whether a person behaved reasonably, where the definition of an offence makes this an issue;

(3) deciding whether an excuse put forward is reasonable, where reasonable excuse is a defence to the particular offence charged;

(4) deciding whether to proceed to a conviction where the court has the option of merely finding that the facts have been proved and not registering a conviction;

(5) determining the penalty;

(6) "where the court thinks that by not taking the customary law into account injustice will or may be done to a person".

In practice, any of these issues could be raised in a prosecution for an environmental criminal offence, depending on the precise definition of the offence. If, for example, an offence prohibits the killing of protected turtles or birds, it may be appropriate to provide a defence of reasonable excuse and allow customary practices to be taken into account in determining the reasonableness of the excuse. Even if the legislation did not provide a specific defence, a court might decide not to register a conviction or to reduce the penalty because taking turtles or protected birds is a customary practice. It might even decide, in accordance with the last of the exceptions noted above, that it would be unjust to convict at all. One argument might be that the accused did not realise that a particular bird was protected, an excuse that would ordinarily fall into the category of mistake of law rather than fact and not constitute grounds for acquittal under (1) above. An approach which allowed such an argument to be pleaded as an excuse or in mitigation of penalty would be especially attractive in a situation where the government made a relatively sudden decision to start enforcing laws such as this in areas where they have not been enforced at all in the past.

Enforcement

A particular law may not reflect the values of the community, or indeed may actually conflict with those values (e.g. wildlife protection laws in communities where certain species of wildlife have traditionally been an important food source). In these circumstances, its effectiveness depends upon adequate enforcement through arrest, conviction and punishment, at least in the short term until the community becomes convinced of its necessity. This may be largely impossible where the particular community is physically distant from central government and where the enforcement agents must themselves live among the local population. In these circumstances the likelihood is that they will use the discretion, which all enforcement agencies possess, not to prosecute.

A distinct phenomenon which has been documented in some developed countries is that enforcement agencies engaged in industrial pollution control may adopt a deliberate policy of relying on prosecution as a last resort, only to be used when bargaining with polluters over the amount and concentration of discharges has failed to produce a compromise or there has been a major incident and an ensuing public outcry. In other words, the emphasis has been on inducing cooperation rather than coercion. Supporters of this approach argue that it is the best way of ensuring the industry gradually upgrades its performance - that by adopting a confrontationist stance we will simply drive it underground. Opponents suggest that the enforcement agency has essentially been 'captured'. In other words, it has taken on the values of those whom it is supposed to be regulating; instead of controlling them, it is in fact protecting them.

Rather than leaving the decision on what sort of enforcement strategy to pursue to the enforcement agency, it may well be appropriate to spell this out in the legislation itself, to protect the agency from accusations that it is not fulfilling legislative intentions. An example of this can be found in the South Australian *Soil Conservation and Land Care Act 1989*, which provides that soil conservation boards, in implementing and enforcing the legislation, must 'endeavour to do so as far as possible on the basis of first seeking the cooperation of owners of land within the district'. Such an approach, emphasising education and gentle persuasion as the first step, and prosecution as the very last resort, may also be appropriate where the pursuit of biodiversity protection and resource conservation both on land and in the sea conflicts with established patterns of resource exploitation by indigenous peoples.

Civil enforcement

An alternative approach to the use of prosecutions for offences is the use of civil enforcement proceedings. These result not in punishment but in an order (an injunction) to cease carrying out a prohibited activity and, perhaps, to compensate those who have been affected and to carry out remedial work. If this precise, individualised order is not obeyed, criminal sanctions will come into play because those carrying out the activity will be in contempt of court. The effect is that instead of criminal punishment being used immediately, it is postponed to allow those in question one last chance to bring themselves into line.

Provision can be made for civil enforcement proceedings to be brought by enforcement agencies as an alternative to prosecution for offences or by members of the public. Members of the public would need to have broad rights of standing to sue to overcome common law restrictions on access to the courts (e.g. a provision allowing anyone at all to take proceedings to restrain and remedy a breach of the legislation). Besides this, there would have to be adequate provision for legal aid and access to information if this is to be an effective regulatory alternative. In practice, resort to legal proceedings by members of the public in the small South Pacific nations would appear to be an unlikely scenario, although one suggestion is that civil proceedings would be more attractive, as well as taking on a punitive dimension, if exemplary damages, going beyond compensation, could be awarded. The likelihood is that the main burden of enforcement will continue to be borne by specialist enforcement agencies, with non-government organisations perhaps becoming increasingly involved where large scale development impacts upon local populations.

Administrative law and discretion

So far, the focus has been on laws addressed to those whose activities might harm the environment. Other environmental laws are addressed to the public officials who operate the decision-making systems under which licenses and other approvals are issued. Even though they have a great deal of discretion when it comes to making decisions, they must stay within the ground rules laid down by the legislation. Where they are given the task of deciding whether to grant a permission to carry out an activity which is otherwise prohibited, for example, the legislation is likely to direct them to take certain factors into account before reaching a final decision. They may have to go as far as having to consider an environmental impact statement in the case of certain activities which seem likely to have a substantial environmental impact. They may also have to advertise the fact that the permission has been requested so that the general public can make comments, which the decision-maker will have to take into account.

In New South Wales, for example, the following factors must be taken into account by the Environment Protection Authority in deciding whether to issue a pollution licence and, if so, what conditions to attach:

(1) the pollution being or likely to be caused by the applicant and the impact of that pollution on the environment; and

(2) the practical measures which may be taken:

  (i) to prevent, control, abate or mitigate that pollution; and

  (ii) to protect the environment from defacement, defilement or deterioration as a result of that pollution.

It is now accepted that the reference to 'practical measures' allows the EPA to take into account the economic capacity of existing industry when deciding when to phase in

pollution control requirements. What this means is that some sort of balance must be reached between environmental and economic factors.

Note that the obligation laid down by the legislation is only to take these things into account. This means that they must be given *real* consideration; the decision-maker cannot simply pay lip-service to them. However, the degree of importance given to each of them, when it comes to the final decision, rests with the decision-maker. There is no requirement that each factor be given the same weight. The courts will not interfere, for example, if a particular decision-maker, charged with the responsibility of regulation development in an area, is pro-development rather than pro-conservation and this is reflected in its decisions. Where the decision-maker is an elected body, such as a local council, the precise weight given to different factors will reflect the political values of the particular council. This may be as it should be, but the situation is very different where the decision-maker is a non-elected public official or body such as an Environment Protection Agency. In these circumstances, there is a strong argument that the decision-maker should be given clearer guidance in the legislation as to the weight to be given to different factors.

This approach, which decision-makers are allowed by law to take, is very different to that taken by economists when carrying out a cost-benefit analysis. There, the basic idea is that all values should be reduced into dollars and cents equivalents to ensure that there is a common standard of measurement. The problem with this cost-benefit approach is that it is extremely difficult, if not impossible, to reduce all values into these terms (e.g. the value of an endangered species). Apart from this, economic cost-benefit analysis is only concerned with questions of economic efficiency. It does not take equity considerations into account (i.e. the distribution and redistribution of wealth in society). The argument is that this involves political issues, which are best left to elected representatives, such as those we find on local councils.

An alternative approach to one which simply requires decision-makers to consider a whole range of factors, including the balancing of economic against environmental factors, would be to incorporate a precautionary approach into the legislation itself. Principle 15 of the *Rio Declaration* describes this approach in the following terms:

> Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

Even if enacted into domestic legislation, this approach clearly does not go as far as to place the burden of proof on developers to show that their actions are environmentally benign. This would be one extreme version of an approach which emphasised the need for development to proceed cautiously, but it is clearly not the version contained in Principle 15. Does it go as far as to direct decision-makers to give greater weight to environmental, as distinct from economic factors? Could the 'measure' to be taken consist of a refusal to allow a development to proceed at all or is the implication that the precautionary principle is only concerned with the conditions to be attached to development approvals? In this connection, you should note the requirement that measures to be taken should be cost-effective.

In decisions by the New Zealand courts, legislation has been interpreted so as to require decision-makers to give greater weight to factors concerned with conservation of the natural environment. In *Ashburton Acclimatisation Society v Federated Farmers of New Zealand* [1988] NZ 78, Cooke P concluded in relation to the water conservation legislation under discussion:

> ...as a general working rule or guideline, preservation of the natural state, either as fully as possible or to the extent of protection of outstanding characteristics or features, is to be aimed at unless clear and clearly sufficient reason is shown to the contrary. The ultimate criterion must be

the public interest. The presumption is in favour of conservation. A strong, really compelling case is needed to displace it.

There are a number of formulae which could be used in legislation to give environmental protection greater prominence in the decision-making process. For example:

* a provision that development should not be allowed to proceed in a particular area unless it is essential for a purpose in the public interest and no reasonable alternative is available;

* a provision that a public body should not give approval to an activity unless it is satisfied that it will be carried out in a manner which 'minimises' the risk of pollution, land degradation and/or loss of biodiversity;

* a provision that a public body should not give approval to an activity unless it is necessary for the reasonable economic use of the land;

* a provision that a public body should not give approval to an activity unless it is satisfied that there will be no adverse effect on wildlife.

Judicial Review

The legal process by which the courts try to ensure that public decision-makers stay within the procedures and only take into account the factors spelt out in the legislation is known as "judicial review". When carrying out this function, the courts are not concerned with whether the ultimate decision made is a good or a bad one but simply with whether the correct procedures have been followed and the relevant factors have been properly taken into account.

In certain circumstances, they will strike down a decision on the grounds that it is manifestly unreasonable. In other words, it is a decision which is so unreasonable that no reasonable person could have reached it. But they are extremely loathe to intervene on these grounds, emphasising that it is not the function of the courts to substitute their own decisions on what is best in the particular circumstances, because Parliament has given the responsibility for making this decision on the merits to the decision-maker whose decision is being reviewed.

The effect of a successful application for judicial review is that the decision challenged will simply be declared invalid and an injunction may be issued to prevent the activity from going ahead. The reviewing court will not substitute a decision favourable to the applicant. There is no question of the decision-maker being punished for failing to follow the correct procedures.

Appeals

Only if there is a right of appeal on the merits of the case can the body reviewing the decision go further than the very limited role allowed to it under the judicial review procedure. While judicial review is part of the common law and will operate unless excluded by legislation, a right of appeal only exists if it is specifically provided for by legislation. An appeal on the merits allows the appeal body to completely reopen the decision and substitute its own conclusion as to the correct approach to take.

In environmental law, those applying for a permission are usually provided with a right of merit appeal if permission is denied or if conditions are attached which they do not like. On the other hand, a right of appeal is rarely given to those who are aggrieved by a decision to grant permission, such as neighbouring landowners or conservation organisations. Where these rights do exist, they are usually called "third party appeal" rights.

Merit appeals involving environmental issues are usually dealt with by special tribunals rather than by courts. Sometimes, however, courts are specified by the legislation as the relevant appeal body, for example the Land and Environment Court in New South Wales. In these circumstances, it is important to bear in mind that they are essentially taking the place of the body which was responsible for making the initial decision. This could, for example, be the local council. In this situation, they are not really playing the role that courts have traditionally played. Some would accuse them of making what are essentially political decisions, even though they have not been elected to do so.

Environmental impact assessment (EIA)

Where a public body has a legal duty to consider factors relating to the impact of an activity on the environment before deciding whether or not it should be allowed to go ahead, this represents a rudimentary form of environmental impact assessment. Such a duty is in fact a prerequisite to any form of environmental assessment. Where there is no such legal requirement, the decision-maker who insists on considering environmental factors is at risk of being found to have taken into account irrelevant considerations and having its decision overturned.

Whether or not environmental factors have to be taken into account by decision-makers depends on the precise wording of legislation. Under the New South Wales *Environmental Planning and Assessment Act 1979*, for example, a general duty to do this has now been placed on all public bodies when deciding whether or not to give approval to development, even though the specific piece of legislation under which approval is required has nothing to say about this question and may otherwise look to be very much pro-development (e.g. legislation dealing with forestry and mining). In essence, the 1979 legislation placed a gloss on all existing legislation, much of which had been enacted at a time when there was a development-at-all-costs mentality. The courts have the job of seeing that decision-makers comply with this duty.

The preparation and consideration of an environmental impact statement (EIS) is simply one of a number of methods of environmental impact assessment. In Western Australia, there are in fact four gradations of assessment:

* An Informal Review with Public Advice;
* A Consultative Environmental Review;
* A Public Environmental Review;
* An Environmental Review and Management Programme.

One of the bases on which different levels of assessment can be distinguished is in terms of the degree of public input into the assessment process which is allowed. This is one of the factors which account for the distinctions drawn in Western Australia. Another turns on the extent of evidence which those seeking the go-ahead for a project are required to gather and to present to the government decision-maker.

There are a number of potential sources of information about environmental impact - most particularly, the developer, the regulatory body and members of the public. Legal structures for impact assessment identify the sources from which information is to be sought. As far as members of the public are concerned, the issue is whether they are to be allowed to participate in the decision-making process in any way - to present any information at all.

The environmental impact statement (EIS)

An EIS (or an 'environmental plan' under the Papua New Guinea *Environmental Planning Act 1978*) is simply one input into the decision-making process. It has three primary functions:

* it requires developers to take account of environmental factors in addition to the economic considerations which the market makes them consider;

* it provides decision-makers with information so that they will be better equipped to reach decisions;

* it ensures that members of the public obtain sufficient information to allow them to participate in the decision-making process.

Who is responsible for preparing the EIS?

It is normally the developer who must produce the EIS. The ideal is that environmental assessment should become simply another input into the private decision-making process, along with commercial factors. In practice, unless legal obligations are imposed, this is an ideal which will simply not be achieved as long as environmental damage is a social cost borne by the whole community and not a private cost which has to be born by the developer. In practice, EISs are frequently prepared by consultants and this has led to some misunderstanding, with some people arguing that the consultants must remain at arms length from the developer and that the EIS must be in some sense 'objective'. But this is to misunderstand the whole process as it currently stands: the consultant is simply acting as the agent for the developer and in the end it is the latter's views which count. There is nothing to prevent the regulatory body making its own investigations rather than simply commenting on those carried out by the developer and its consultants. Frequently legislation will require it to report on or assess the EIS which has been prepared (e.g. *Papua New Guinea Environmental Planning Act 1978* s.13(1)). Another approach to ensuring that EISs are not completely self-serving documents is to open them up to public comment (e.g. *Papua New Guinea Environmental Planning Act 1978* s. 14, allowing anybody at all to make representations). Some jurisdictions even allow the courts to examine EISs to make sure that they comply with legislative requirements relating to what they should contain.

An alternative approach would be to have the developer pay for the EIS to be carried out by another body which could make some claim to impartiality and objectivity. It could, however, be argued that it is the state's responsibility to ensure that there is at least basic information about the environment of a particular area and that the developer's obligation should go no further than having to assess the precise impact of its proposal in light of this background information. In other words, the state should be collecting this information at the stage of strategic planning, well before any specific proposals have come up.

When is an EIS required?

Whether or not an EIS must be prepared by the developer for consideration by the decision-maker will depend on the terms of the legislation concerned, or policy guidelines where there is no legislative basis. One approach is to spell out in detail the precise activities which require the preparation of an EIS. The problem with trying to be very precise is that certain activities which really ought to be formally assessed in an EIS may be omitted by oversight. This problem can be avoided by using a more flexible test, such as 'significant effect' on the environment. The problem is that this leaves those who have to make the decision as to whether an EIS is required with precious little guidance.

If this more flexible approach is taken, the next issue is who should make the decision on whether an EIS is needed. One approach which can be taken is to leave it to the government authority with specialist expertise in the environment. Other government departments and public bodies, which either themselves act as developers or regulate private development, must then filter out proposals which they think will not affect the environment to a significant extent, passing the remainder up for consideration by the Environment Department. This filtering process, however, leaves the referring bodies with control over what is handed up and there is room for disagreement over whether proposals are likely to have significant environmental effects.

Under the Papua New Guinea *Environmental Planning Act 1978*, the issue is whether, in the Minister's opinion, 'the proposal may have significant environmental implications' (s. 4(1)). This leaves the question of whether an environmental plan is required a discretionary matter in the hands of the Environment Minister. But the Minister does not have to wait for referrals from other government bodies responsible for development; he or she can also act on his or her own initiative (ss. 4(1) and 7).

A different approach is to hand over the decision on whether to require an EIS to the government body responsible for the development. This could be, for example, the department responsible for road construction, forestry or electricity generation and supply. It may be proposing to carry out the development itself, or have the responsibility of making the decision on whether private development should be allowed to go ahead. Many of these bodies have traditionally had a development rather than a conservation ethos. One argument in favour of placing the onus on them, therefore, is that only by fixing such bodies with this responsibility will we ensure that, in the longer term, consideration of environmental factors becomes an integral aspect of decision-making processes. Sooner or later, they will simply have to develop expertise in relation to environmental matters to comply with their legal responsibilities.

The final decision

Even where the Environment Minister, department or agency plays a significant role in the environmental assessment process, it may not make the final decision as to whether the project in question should go ahead. This may be left to the government body charged with the task of regulating activities of the kind in question or proposing to carry out the particular project itself, with the environment authorities playing only an advisory role.

Monitoring and management

Provisions need to be made for monitoring development once it has been given the go-ahead. The objective is to assess actual impact in comparison with the predictions in the EIS and to assess the effectiveness of any safeguards which have been taken, enabling appropriate adjustments to be made in the light of this. There may be a requirement for an ongoing management programme.

10. THE ROLE OF CUSTOM IN ENVIRONMENTAL MANAGEMENT AND LAW IN THE PACIFIC

Iosefatu Reti

Introduction

Before we begin this discussion, let us first attempt to define and understand what we mean by custom.

Mere Pulea (1985) suggested that "custom is a set of written or unwritten rules to which people must conform". Custom is therefore a ritual or process where conformity is vital for the practice of a particular activity, whether it be social, as found in the customs of marriage, or economic customs as found in the various customary practices of traditional fishing and management of resources. Customs dictate the pattern of behaviour, the violation of which invokes action to bring about obedience or redress.

Since custom is a process, it is always changing along with people's behavioural changes. What we know today as custom may not have been so several years ago. However, we have come to adopt these as customs as they seem to cover not only the practices we have come to accept, but also the patterns of behaviour and social norms of the present generation.

It is also important that we have a common understanding of what we mean by 'law'. Law is conceived as rules or modes of conduct made obligatory by some sanction which is imposed and, when violated, enforced by a controlling authority. The sanctions can be of a psychological nature such as ostracism, ridicule, avoidance or denial of favours. When such sanctions are defined at a particular time and fixed by legislation, they are thereafter referred to as the 'written' or 'legal' law. When custom is defined and fixed in such a manner, it is no longer custom although the law itself may argue that it is legislating custom. For ease of understanding, I shall refer to the legal and customary laws as being synonymous with the written and unwritten laws respectively.

Characteristics of Pacific island customs

Pacific Island people, like those in other parts of the world, behave differently and thus have different customs. However, there are some common characteristics in the cultures and customs of these people upon which we can generalise in this discussion. In so doing, we must also be careful about oversimplifying the diversity of Pacific customs as they do indeed have some significant variations.

One of the more common features of Pacific Island customs is the social structure evident in the family or village organisation. In Tokelau, the Faipule (head of the island) and the Pulenuku (head of the village) are traditional roles which are accorded respect and authority and which are now given statutory protection under law. The role of customary chiefs in Vanuatu has been recognised through the establishment under the Constitution of a Council of Chiefs. One of the main functions of the Council is to discuss all matters relating to custom and tradition. This is not only for the preservation and promotion of culture and languages - it is also consulted on any questions relating to tradition and custom in connection with any Bill before Parliament. The Great Council of Chiefs created under the *Fijian Affairs Act* is a recognition of the role of traditional leaders in making decisions and recommendations for the benefit of the Fijian people. In Western Samoa, the village Fono (council) is presided over by the Matais (chiefs) who regularly deal with local offences and with conduct which threatens village harmony. The Fono, described as the 'watch-dog of Samoan customs', is probably the most institutionalised traditional 'court' in the whole of the Pacific.

Since Pacific customs and laws have not been codified, the varying information on customs and practices has been one of the main reasons for treating points of customary law as questions of fact rather than law. Reliance on oral evidence for the ascertainment of customary law and practices makes it very difficult to determine the facts relating to differences in opinion regarding what is custom and what is not. Traditional knowledge is fading because of social changes and increased migration. The authority of traditional leaders is being questioned by the younger generation. Sanctions which would normally be applied in this type of situation are no longer effective in controlling and regulating behaviour. The isolation of Pacific islands from the mainstream of world travel is no longer a factor in keeping traditional custom and practices free of outside influence. Pacific Islanders will therefore have to live with the expectation of further changes to their customs and traditional way of life.

The role of custom in environmental management

The sanctions imposed by custom and traditional law used to be very effective in shaping Pacific Island peoples' behaviour against the environment. The fear of supernatural retribution and punishment, or the embarrassment caused to one's family or community, used to be effective forces in maintaining standards of social behaviour and practices within a community and its environment. The ban of certain types of activity in honour of the death of a high chief, the restriction of catches of certain species at certain seasons, and the communal ownership of resources helped regulate selfish exploitation of resources.

Traditional methods employed for the management of resources are usually, but not always, conservationist. For example, the practice of taking mangroves for firewood has affected the habitat for marine-life such as crabs and small fish. Coral crushing has had a destructive effect on small fish. Nevertheless, the impact of traditional practices is usually less severe than that of modern techniques. For example, the use of dynamite to kill fish is not only destructive of large and small fish populations, but also has a long-term effect on fisheries resources.

Increasing populations and commercial exploitation in most Pacific Island countries have reduced the effectiveness of custom and law in the management of natural resources, and this has also led to the erosion and gradual loss of traditional knowledge about resource management. The decline in the importance of water rights in the Pacific for the last century has been due largely to the shift in emphasis from pearl shelling and beche-de-mer trade to intensive cash cropping and wage employment. Water rights became less important and there was less exploitation of the sea. But changing patterns today have given water rights a new importance because of the increase in population, the 200 mile Exclusive Economic Zone and the increasing awareness of the marine environment as a major economic resource.

These developments have been largely responsible for the decline in the use of traditional practices for the management and use of resources. Nevertheless, enough knowledge is still found in the older populations to enable people today to consider their reintroduction in the management of the remaining resources of the region. Traditional fishing customs and practices have been useful means of control with the imposition of taboos towards fishing in certain areas in certain seasons. Therefore it is important to understand customary rights and traditional conservation and management practices as they do have a valuable role in the management of natural resources in the environment of the region.

Sanctions imposed by custom are likely to be much more effective in the management of resources, especially in the rural areas where, incidentally, resources are going to be concentrated over the next few years. The use of traditional practices and the recognition of traditional systems and rights are likely to encourage the cooperation of the resource owners in efforts to manage and use natural resources. This is extremely important as,

without such cooperation, governments and organisations involved in resource conservation are likely to fail in their efforts.

The role of the written law in resource management

Neither the written nor the unwritten law will by itself achieve environmental management in the Pacific. I say this because of the existence of dual claims on resources in the region. Throughout the region, governments are forever struggling to achieve a balance between environmental management and development, and the latter is always the excuse for the neglect of the former.

While legislation for the exploitation of natural resources has been developed in most countries of the region, only a handful have passed environmental legislation whereby these same resources can be protected from destructive exploitation. Occasionally, environmental considerations are included in other resource-related legislation and these are implemented as an additional responsibility for a non-environmental government ministry. Until 1988, only Papua New Guinea had established a separate Ministry for the Environment responsible for the conservation of natural resources and the environment of that country. Many other countries have recently included provisions in other legislation to cover environmental concerns relating to activities of a particular Ministry or agency. But these provisions are usually copied from foreign legislation which may have little relevance to the local context. As a result, opposition from local communities and conflicts with local customs are common in the enforcement of such legislation.

The written law has an important role to play in the resolution of conflicts relating to resource use and rights, especially since customs and traditional rights to the resources are often confused and unclear. This is not to say that the written law has overtaken the authority of the unwritten law as, in many countries of the region, the authority of the unwritten law is still an important force. In a few countries, this force has been granted recognition by the courts. Several countries have recently given recognition to customary laws through laws relating to natural resources such as land, forests, fishing etc. Others have established special courts to deal with issues which are inherent in their customs and which their existing courts may not have had sufficient competence to resolve. For example, in Western Samoa, the *Lands and Titles Protection Ordinance 1934* gives the Lands and Titles Court jurisdiction over disputes affecting all property held according to Samoan custom and succession to Samoan customary land. The Nauru Lands Committee is empowered by legislation to determine questions of ownership, or rights, in respect to land. In the Cook Islands, every title and interest in customary land is determined according to ancient custom and usage of the natives of the Cook Islands.

Experience in the region indicates that the written law is seen as a last resort in the management of the environment, or the resolution of conflicts arising therefrom. This is because the land and sometimes the coastal areas are held under customary ownership and there is a tendency to resolve conflicts locally, to reinforce local jurisdiction over resources. Intervention by the courts may be seen as an indication of division in local rule and could give rise to questions relating to the traditional leaders' ability to command obedience and respect from the members of the community. This is better reflected in situations where a decision by the courts is rejected by a community. Cases such as this will normally result in conflicts between the government and local community.

Incorporation of customary law into the legal system

As has been indicated earlier, customs and traditional law have in the past had some success in the protection of the natural resources and environment of countries in the Pacific. However, some customs and laws have lost the degree of the respect they used to command and are not as effective today as they were some years ago. The ever-increasing reliance on the legal system to resolve issues more permanently has also seen the rapid

decline in the power of the traditional law within the rural communities, which had traditionally looked at the legal system as the last resort in dispute resolution.

Both the written and unwritten laws can contribute positively to the protection of the environment of the Pacific. The unwritten law which has its basis in the traditional customs and practices can bring together local communities to observe and to pay respect to policies and principles set under the written law for the protection of the environment. The legal system must also respect the local traditions and practices if it is to gain the support and cooperation of the local people. Much of the legislation in the region has been adopted from that of countries like Australia and New Zealand and will need to be reviewed with the view to incorporating local customs and law where such customs and laws are considered appropriate for the protection of the environment.

In some countries of the region, measures are being taken to give legal recognition and power to traditional groups which have been considered instrumental in initiating and implementing community activities consistent with government policies and plans. In Western Samoa, for example, a Bill has recently been passed giving official recognition and more power to the Pulenuu (village mayor) to act as an official of government. If given similar recognition and power to act with respect to the protection of the environment, no doubt the efforts of government would be better supported and appreciated by the local communities.

The incorporation of customs and traditional law in the legal system will not be an easy task as not all customs and laws are conducive to the protection of the environment. Legislating custom could very well be the first step to losing that custom permanently. Further, in countries with two or more ethnic groups, customs will differ and the task of reconciling them, or deciding on which custom to apply universally, could lead to division within the communities. However, if the concern for the environment as a rapidly vanishing national treasure is genuine, its protection and wise management should override customs and political differences, for the damage to the environment will affect countries and individuals alike. No government, group or community will by itself be able to protect the environment.

Only when these groups are able to work together will we be able to see a reversal to the present trend in environmental degradation and abuse. But such cooperative efforts will be best served by legal instruments which take account of the customs and traditional laws of the local communities and provide local people with the recognition and power to protect and manage natural resources based on sustainable principles and practices.

Conclusion

It is clear that local customs and law have had some success in the protection of island environments in the past decades. It is also clear that these customs and laws have eroded over time as younger generations have started to question their authority, especially in the light of the effectiveness of the legal systems adopted by these countries under colonial administrations. Customs will continue to change and it is expected that some of the practices which have been effective in the protection of the environment will be lost unless such practices are reintroduced and reinforced by the granting of official recognition under the existing systems. The 'tapus' on the use of certain species or areas was probably the most effective practice of the past in the protection of the environment. This practice is gradually being phased out as indiscriminate practices of resource exploitation are introduced in the guise of 'effective technology'. Competition for land and resources is also a contributing factor as private ownership of land, a foreign concept which has rapidly found acceptance in the region, becomes widespread. These trends are unlikely to be reversed and the problem of environmental protection is therefore going to be an extremely difficult challenge for present and future generations of the region.

A number of experts have implied that the problems facing the people of the Pacific today arise from the processes of social, economic and political change, but that these processes have also solved some problems that have existed before. Some go further and state that Pacific people can solve many of their problems by adapting their culture to the needs of modern times, by abandoning or modernising their traditional land tenure systems, communal obligations, customary rights to the marine environment, ritual and 'tapus' in order to compete with the outside world and progress towards a richer commercial economy. These arguments are not difficult to make nor are they difficult to understand. What is more difficult to spell out are the implications these changes will have on the social structures and value systems of island peoples. We do know that despite the changes brought about by the written law to regulate or replace some of the basic customary law and practices of the local people, the complex traditional systems of environmental management tend to continue. The existence and continuation of the body of customary law and practices not only serves to maintain tradition, but can also be integrated into the legal and economic systems in order to produce a more comprehensive environmental protection package for the Pacific.

Reference

Pulea, M., *Customary law relating to the environment*, SPREP Topic Review 21, Noumea 1985.

11. COUNTRY PRESENTATIONS ON CUSTOMARY PRACTICES AND LAW

Compiled by John Delany

The following is a summary of short presentations made by various participants.

GUAM

Joanne Brown

Guam has been colonised for longer than any other Pacific country and has only recently begun going back to its traditions. It is currently undergoing a rapid development process and there is a movement among the people to refer back to their heritage to balance this process which involves all kinds of American, Philippine, Japanese and other foreign investment. A country of 215 square miles, it is littered with hotels and tourist resorts. There are five or six golf courses of 300 to 400 acres each being developed, even though there are already 27 golf courses on the island. Development brings land and water use into conflict with traditional uses. For example, should jet skis be allowed in traditional fisheries areas? The developers are now getting into the central section of the island where there are waterfalls and caves in the more undeveloped parts.

However, there is a feeling that the community has always used them and local people should be able to continue to use this part of their country and have it free from development. It is against this background of over-development that customary practice struggles. While Chiefs used to control land use in villages, now they are gone. There are current important issues of custom and development such as in Towar Bay where there is a debate as to whether it is appropriate for tourists to use the area which has been used for centuries by traditional fishermen, and in Pago Bay where development has been discouraged because of the action of local fishermen.

VANUATU

Hamlison Bule

There are 105 languages spoken in Vanuatu and custom plays a significant role in society. Custom dominates the regulation of land law and land use in Vanuatu. Custom Judges sit in some Courts and traditional Courts are provided for in Vanuatu's Constitution. The Constitution also provides that if there is no law about a particular matter, it should be decided according to custom.

WESTERN SAMOA

Samula Sesega

Customary practices have created many problems in Western Samoa. Village custom based on village families and communities can be compared with a European type court system of values. A person is still punished in a village for an offence and may be fined or banned. We have the *Village Council Act 1990* which tries to bridge the gap between the two systems of law. The government tries to endorse village-based decisions to minimise the conflicts.

Samoans have a deep respect for their natural environment. There were always traditional controls over agriculture and fishing aimed at conserving these resources since

they were essential to the survival of people in earlier times. For example, practices such as shifting the cultivation from one garden to another and temporary bans on the killing of animals and fish perhaps accidentally achieved conservation under customary law.

Western Samoa has not looked at incorporating these customary practices into its environmental legislation.

TONGA

An opinion was expressed that Iosefati Reti's view - that custom should not be incorporated into legislation - might not be shared by all participants.

12. INSTITUTIONAL STRUCTURES AND REQUIREMENTS FOR THE IMPLEMENTATION OF MULTILATERAL ENVIRONMENTAL CONVENTIONS

Paul C Szasz

Unlike many branches of international law, that relating to the environment is for the most part of relatively recent vintage - much of it created during the past two decades since the Stockholm Conference - and is rarely in the form of binding customary law. For the most part, it is either expressed in multilateral international treaties, which are binding but only on the parties thereto, or in 'soft law', such as high-level declarations (e.g., those of Stockholm and Rio, and the World Charter for Nature) or mere technical standards, which are not binding but are addressed to the world community generally and are designed to guide governmental behaviour. What both these forms of law have in common is that they are mostly generated within international organisations, often in a more or less continuous norm-making process, and that these organisations also monitor and assist in the implementation of such law.

In order to appreciate these processes, it is therefore useful to understand the variety of international organisations engaged in environmental norm-making and implementation, and for that it is necessary to have a basic grounding in the nature of these agencies. This paper therefore first outlines the basic information and terminology in this area, and then systematically sketches the most important of the environmentally active organisations.

I. Principles and terminology relating to International Organisations in general

1. Two varieties of International Organisations (IOs) exist:

   Intergovernmental Organisations (IGOs) are established by multilateral international treaties (their constitutional instruments), and have international legal personality and memberships consisting of States.

   Supra-national organisations are those few IGOs (e.g. the European Community) that exercise some legislative, executive and judicial powers with respect to their member States.

   Non-Governmental Organisations (NGOs) have at best very limited international personality (mostly deriving from their relations to certain IGOs) and memberships consisting either of individuals or of national NGOs.

2. IGOs have various types of organs:

   Representative organs, in which the member States are represented. Every IGO has at least a plenary organ consisting of the entire membership, and large and busy ones may also have one or more restricted organs that can meet for longer and more frequently.

   A Secretariat, led by an executive head and consisting of a staff of international civil servants.

   There may also be expert and judicial organs.

   Organs may be principal, established by the constitutional instrument, or subsidiary, mostly established by decision of principal organs or of senior subsidiary ones (the parent organs).

Some subsidiary organs are complex, i.e. they themselves have one or more representative and expert organs and a secretariat essentially separate from that of the parent IGO.
Some complex subsidiaries organs (e.g., UNEP) are characterised as quasi-autonomous, having an executive head in effect elected by a representative organ and only nominally subject to the executive head of the parent IGO , but rather answering to a representative organ of the subsidiary, and with a budget partly or wholly independently financed from that of the parent IGO (e.g. by directly made voluntary contributions). Such organs are sometimes hard to distinguish from independent specialised agencies (see 3.3), the essential difference being that the latter are created by a constitutional treaty while any subsidiary organ, no matter how complex or autonomous, is created by a decision of a representative organ of the parent IGO.

Some treaties, especially environmental ones, in effect create mini-IGOs with a plenary organ meeting only rarely and a minimal secretariat, usually attached to the IGO that sponsored the treaty. Sometimes there is no separate secretariat at all, in which case that of the sponsoring IGO may service the treaty's representative and expert organs and these are then characterised as treaty organs of the sponsor; an IGO (or a quasi-autonomous organ) that sponsors significant treaties may have its own activities controlled more by the latter than by its own constitution (or establishing resolution).

Some organs are joint, having been established by several IGOs (such as the United Nations Food and Agricultural Organisation sponsored the World Food Programme). There are also inter-agency organs, established by a senior IGO to service its entire 'system' (see 3.3).

Organs may also be classified according to their duration, i.e. as standing (though any subsidiary organ can be terminated or transformed by its parent) or ad hoc. A special type of the latter are conferences (e.g. UNCED), including their preparatory commissions.

3. IGOs, as well as quasi-autonomous organs, can be classified according to:

Their membership: as universal or global, regional, sub-regional or non-regional;

Their terms of reference: as general or political (such as the UN and the Organisation of African Unity), or technical (e.g. the environmental ones) or financial, or military, etc.

Some IGOs are grouped, such as the UN System, which consists of: the UN, its specialised agencies (which are independent global IGOs with generally technical tasks, e.g. International Labour Organisation, the World Health Organisation, the United Nations Education Scientific and Cultural Organisation, the International Maritime Organisation), some other related IGOs (e.g. International Atomic Energy Agency), numerous global (e.g. United Nations Environment Programme, United Nations Conference on Trade and Development) or regional (e.g. Economic and Social Commission for Asia and the Pacific) quasi-autonomous organs, plus some joint and inter-agency organs that help tie the system together.

4. IGOs and certain organs can also be classified according to:

How they are financed: by assessed contributions, by voluntary contributions, by capital payments, by periodic replenishments, by income from operations or by taxes imposed on certain activities or entities.

How they take decisions: by one-member-one-vote, by weighted votes (e.g. according to contributions), by assigning some decisions to restricted representative organs with specially balanced membership, any of which may be subject to requirements of simple or qualified majorities, unanimity or consensus, or selective veto rights -- which are often related to how the IGO is financed.

II. The range and structure of International Environmental Organisations and Organs[1]

1. The United Nations system

The UN proper

Within the UN System, there is no IGO (aside from a number of mini-IGOs), such as a specialised or related agency, whose terms of reference are primarily environmental. Nor does any principal organ of the UN have such a charge. The environmental activities of the system, which are becoming more and more extensive and diverse, are therefore assigned and accomplished as follows.

The centre-piece of the UN's environmental work is the United Nations Environment Programme (UNEP), established by the UN General Assembly[2] as a quasi-autonomous organ on the recommendation of the Stockholm Conference. It consists of a 58-member Governing Council, an Environment Secretariat headed by the Executive Director, and an Environment Fund. Its original Environment Coordination Board was later replaced by an inter-agency organ (the Designated Officials on Environmental Matters (DOEM)) that reports to the UN system's Administrative Committee on Coordination (ACC). During the two decades of its existence, UNEP has formulated a substantial amount of soft law (guidelines, model laws, etc) to assist its members and has also sponsored a great number of multilateral international Treaties of a global nature (such as on *Ozone Layer Protection*,[3] *Hazardous Wastes*[4] *and Biodiversity*.[5] It has also initiated, together with the World Meteorological Organisation (WMO), work on the *Climate Change Convention*[6]) or regional scope (especially under its Regional Seas Programme, which now covers 14 areas through nearly three dozen treaties). Aside from sponsoring the negotiation of these instruments, UNEP assists in their implementation, in part by servicing treaty-organs created by some of these instruments (e.g. certain Regional Seas ones) or by sheltering the mini-IGOs created by the several global treaties it has sponsored. Though chronically underfunded, UNEP also performs extensive educational, technical assistance and some research functions to assist States. It is charged with coordinating all UN System environmental activities, and runs, partly in cooperation with other IGOs, a number of monitoring and information systems (e.g. GEMS[7], INFOTERRA,[8]

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1 A good description of the current and immediately anticipated structure of international environmental institutions appears in Chapter 38, "International Institutional Arrangements" of UNCED's *Agenda 21* (A/CONF.151/26 (Vol III). Annex II, Section IV).

2 A/RES/2297(XXVII) (1972).

3 1985 *Vienna Convention for the Protection of the Ozone Layer*, International Legal Materials (ILM), vol. 26, p. 1529, and its 1987 *Montreal Protocol on Substances that Deplete the Ozone Layer*, ILM, vol. 26, p. 1550.

4 1989 *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*, ILM, vol. 28, p. 657.

5 1992 *Rio Convention on Biological Diversity*, ILM, vol. 31, p. 822.

6 1992 *Convention on Climate Change*, ILM, vol. 31, p. 851.

7 Global Environment Monitoring System.

8 INFOTERRA is a global information system on the environment.

IRPTC[9] and IPCS[10]). UNEP also provides the current home for the secretariat of the UN Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), which the General Assembly had established in 1955[11].

UNCED recommended the establishment of a Commission on Sustainable Development (CSD) to ensure the effective follow-up on the work and recommendations of the Conference, and to help coordinate national and international actions in relation to environment and development. It is to report to the General Assembly through the Economic and Social Council (ECOSOC), but its terms of reference still remain to be established by the General Assembly at its current session.

The following principal organs of the UN carry out, as part of their overall tasks, significant environment-related functions, and others (such as the International Court of Justice and possibly even the Security Council) stand ready to perform such functions within their terms of reference:

(a) The General Assembly is the parent of UNEP and CSD, as well as of some lesser environment-related organs (e.g. UNSCEAR), the supervisor of ECOSOC, the convener of both the Stockholm and the Rio Conferences, the creator of the mechanism to negotiate the *Rio Framework Convention on Climate Change*, and the senior representative organ in the UN System on all environmental matters, which issues solemn pronouncements such as the *World Charter for Nature*.[12] It considers, usually in odd-numbered years, a number of environmental issues in its plenary Second (Economic and Financial) Committee, for the most part on the reports of the just-mentioned organs. However, its over-burdened schedule leaves it and its Second Committee little time to give serious consideration to these matters.

(b) The Economic and Social Council (ECOSOC) receives the reports of UNEP as well as of most quasi-autonomous organs and the specialised and related agencies, many of which carry out environment-related activities. However, for the most part it is merely a way-station to the General Assembly, with little independent input in this field.

(c) The Secretary-General, the chief administrative officer of the UN and the head of its Secretariat, is the nominal superior of the UNEP Executive Director and the more immediate chief of a number of secretariat units carrying out a miscellany of environmental tasks.

In addition to the above mentioned principal organs and the specialised environmental ones, a number of other UN subsidiary organs have significant environmental functions. These include the UN Development Programme (UNDP), the UN University (UNU), and the five Regional Commissions -- some of which work in co-ordination with regional environmental bodies. Particularly environmentally active is the Economic Commission for Europe (ECE), which for example sponsored the *1979 Long-Range Transboundary Air Pollution Treaty*[13] and its several *Protocols*. The Economic and Social Commission for Asia and the Pacific (ESCAP) has established a Committee on Environment and Sustainable

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9 International Register of Potentially Toxic Chemicals.

10 International Programme on Chemical Safety, operated together with ILO and WHO.

11 A/RES/913(X) (1955).

12 A/RES/37/7 (1982).

13 ILM, vol. 18, p. 1442.

Development and approved a Regional Strategy on Environmentally Sound and Sustainable Development,[14] but has otherwise done relatively little in this field.

Finally, mention should be made of the two major environmental conferences convened by the General Assembly, the 1972 Stockholm Conference on the Human Environment and the 1992 Rio Conference on Environment and Development (UNCED). Other environment-related conferences dealt with subjects such as Population (Bucharest, 1974), HABITAT (i.e. human habitation, Vancouver, 1976), Water (Mare del Plata, 1977) and Desertification (Nairobi, 1977). Each such conference had a Preparatory Commission, which in turn convened a number of regional or specialised representative and expert bodies, so that the conference itself did not merely consist of the one or two-week climactic session, but of a multi-year process involving studies and negotiations in a number of temporary and relevant standing organs (in many of which the public participated through NGOs and the media) and often extensive follow-up programmes and mechanisms.

Specialised, related and other agencies

The Food and Agriculture Organisation of the United Nations (FAO) is one of the first IGOs to concern itself with the environment, for example by sponsoring the 1951 *Rome International Plant Protection Convention*,[15] numerous treaties on the regulation of fishing, the 1981 *World Soil Charter*,[16] the 1985 *Tropical Forest Action Plan* (TFAP)[17] and the 1985 *International Code of Conduct on the Distribution of Pesticides*.[18] It has always been an important player in relation to the protection of biodiversity.

The United Nations Educational, Scientific and Cultural Organisation (UNESCO) in 1971 initiated what may be considered as the precursor of broad-based international environmental programmes: Man in the Biosphere (MAB),[19] and in 1972 it promulgated the *Convention Concerning the Protection of the World Cultural and Natural Heritage*,[20] which established the World Heritage Committee now carrying out its important functions as a treaty organ of UNESCO.

The International Maritime Organisation (IMO), and particularly its Marine Environment Protection Committee, is responsible for the negotiation and/or administration of a number of important conventions relating to ocean pollution, such as the 1954 *International Convention for Prevention of Pollution of the Sea by Oil*[21] (including the 1971 Amendment concerning the Protection of the Great Barrier Reef[22]), and the 1972 *London Dumping Convention*.[23] The International Atomic Energy Agency (IAEA) has a statutory concern for nuclear safety that is now understood as including environmental considerations; it has promulgated instruments such as the 1980 *Convention on the Physical Protection of Nuclear*

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14 ESCAP/RES/47/7 (1991).

15 UN Treaty Series, vol. 150, p. 67.

16 FAO Conference Resolution, 21st session, 8/81.

17 FAO Publication M-30.

18 FAO Conference Resolution, 23rd session, 10/85.

19 See *Man Belongs to the Earth* (UNESCO, 1988).

20 UN Treaty Series, vol. 1037, p. 554; ILM, vol. 11, p. 1358.

21 UN Treaty Series, vol. 327, p. 3.

22 IMCO/RES/A.232(VII).

23 *Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matters*, UN Treaty Series, vol. 1046, p. 120; ILM, vol. 11, p. 1294.

Material,[24] the 1983 *Guidelines for Mutual Emergency Assistance Arrangements in Connection with a Nuclear Accident or Radiological Emergency*,[25] and the 1990 *Code of Practice on the International Transboundary Movement of Radioactive Waste*.[26]

The World Bank has, after years of relative indifference, recently evinced an increasing concern for the environmental soundness of the national projects it finances, and has also started supporting specifically environmental projects. In 1991 it joined with UNEP and UNDP in establishing the Global Environment Facility (GEF),[27] which includes the *Montreal Ozone Protocol's* Interim Multilateral Fund.[28]

Other UN specialised agencies, such as the International Labour Organisation (ILO), the World Health Organisation (WHO) and the World Meteorological Organisation (WMO), as well as UN-related agencies such as the General Agreement on Tariffs and Trade (GATT) and the World Tourism Organisation (WTO) also carry out important environment-related functions, including the negotiation of relevant conventions, the generation of soft law and the monitoring of environmental conditions and compliance with international environmental norms.

The environmental work of all these organisations and organs is coordinated through the inter-agency ACC, using subsidiaries such as DOEM and the Committee of International Development Institutions on Environment (CIDIE).

Finally, there are numerous environmental mini-IGOs and treaty organs established by treaties formulated within the UN System (some of which were mentioned above), which are largely embedded in their sponsoring organisations and also constitute part of the structure of UN-related global and regional environmental IGOs.

2. Other global or non-regional organisations

Aside from the IGOs of the UN System, there are a number of other non-regional entities that concern themselves mainly or peripherally with environmental matters. Many of these were established to protect or save particular species, such as the International Whaling Commission and the Inter-American Tropical Tuna Commission. Others have a more general charge, such as the International Union for the Conservation of Nature and Natural Resources (IUCN - The World Conservation Union) and the European and Mediterranean Plant Protection Organisation.

3. Regional Organisations

A number of the regional IGOs, such as the Organisation of American States (OAS) and the Organisation of African Unity (OAU) consider environmental matters directly or through specialised organs or IGOs. In Europe, the Organisation for Economic Co-operation and Development (OECD) and the European Communities (EC), have issued numerous binding or facultative decisions, directives, guidelines and recommendations in the environmental field; in 1990 the EC established a European Environment Agency and a European

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24 UN Treaty Series, Registration No. 24631; IAEA INFCIRC/274.

25 IAEA INFCIRC/310.

26 IAEA INFCIRC/386.

27 World Bank Executive Directors Resolution 91-5; ILM, vol. 30, p. 1758.

28 UNEP/OzL.Pro.2/3 and ILM, vol. 30, pp. 1770, 1773.

Environment Information and Observation Network. The European Bank for Reconstruction and Development (EBRD) is specifically charged with taking environmental considerations into account in carrying out its functions.

4. Non-Governmental organisations

As in the human rights field, NGOs play an important role in respect of the environment. These organisations, like IGOs, can be general or specialised, and function on global, regional, sub-regional or national levels; some have also established effective networks to facilitate achieving shared objectives. Their functions in respect of the international legislative process (III below) can be classified roughly as follows:

(a) Assisting in the formulation of environmental norms (whether these are to be set out in binding treaties, in 'soft law' declarations, recommendations or guidelines, or in 'non law' model legislation, etc) through the provision of specialised data, proposals, draft texts and arguments to IGO bodies (representative, expert and secretariat);

(b) Assisting in the monitoring of environmental conditions in general (macro-monitoring) and particularly on compliance by States, individuals, corporations and other entities with established national and international environmental norms (micro-monitoring);

(c) Assisting in the evaluation of projects with environmental implications, particularly when environmental impact statements are prepared and assessed in some public body, whether legislative, administrative or judicial;

(d) Educating and mobilising the public, to demand the formulation and promulgation of national and international environmental norms, and their proper implementation through local, national and international authorities.

III. The international legislative process

Until relatively recently, the international legislative process as such, that is the procedures by which international law is created, was not recognised as a distinct mechanism. Even in UNCED's extensive *Agenda 21* the subject is barely mentioned, except for the expression of concern about the insufficient participation of developing countries in the process,[29] which indeed is one of its weaknesses.

Basically, the international legislative process creates international law of various kinds: most conspicuously, multilateral law-making treaties; less directly, customary law; and considerable volumes of the so far often under-appreciated 'soft law', which States are not obliged to, but may nevertheless find it convenient to follow, and even of 'non law', such as model laws and treaties, that do not suggest any need for compliance but make it convenient to utilise texts that embody the desired norms.

What has not changed since older times is that the principal actors in creating international law are still States. What is new is that more and more of the fora in which international norms are formulated and the agents through which compliance with these norms is facilitated and furthered are IGOs. Furthermore, these IGOs or IGO organs, especially those heavily involved in these processes,

29 A/CONF.151/26 (Vol. III), Annex II, Section IV, Chapter 39, paras. 39.1(c) and 39.9.

such as ILO and UNEP, have evolved regular procedures, which they improve from time to time on the basis of experience. However, looked at overall, there is still not much pattern to be detected, though of course IGOs learn from each other, particularly because the national officials who act as representatives in one organisation often do so also in others. But the process is still highly decentralised, with dozens of world-wide and regional organisations engaged in numerous legislative projects. Though occasional overlaps are thus inevitable, serious ones are normally avoided because at least some of the individuals involved - representatives, experts and secretariat - are well enough informed.

The most formalised of these processes are the ones that produce global multilateral law-making treaties, while those through which solemn high-level declarations and expert technical guidelines or model texts are produced tend to be simplified versions of treaty-making. In general, one can distinguish the following steps:

(a) The initiation of the process, usually through the introduction of a proposal by a State in a senior organ of a competent IGO. That organ then considers, perhaps with the help of experts, whether the proposal to formulate a treaty should be pursued, by examining the alleged defect or lacuna that the treaty is to cure (i.e. the current state of the law and developments in other IGOs), the appropriateness of the proposed method (i.e. would some other type of legal instrument, such as a soft law one, be preferable), the likelihood of success (i.e. are sufficient States apt to agree), and the prospective length and cost of the process. The latter consideration is becoming more and more important, as both IGOs and participating States find themselves overwhelmed with a multitude of legislative projects.

(b) If it is decided to proceed, the initiating organ must designate the organ or organs (standing or temporary; representative, expert or secretariat) in which the next stage - formulation and negotiation - should take place. This choice depends of course in part on the complexity of the subject matter and the degree to which States differ as to how, and indeed whether, it should be handled. During this process NGOs are more and more often given the opportunity to participate, usually as observers, but sometimes even as participants.

(c) If the negotiations are successful and a largely agreed text is produced, the IGO will proceed to the adoption stage. This may be carried out either in a standing organ in which most of the potential parties are represented, or a 'plenipotentiary' conference may be convened.

(d) Once adopted, a treaty of course does not automatically enter into force (and this is the principal difference between the domestic and the international legal processes), but must first be ratified by a sufficient number of States (specified in the final clauses of the treaty) in order to enter into force at all, and even then it does so only for the States that have done so. The recent increases in the number of States, particularly developing ones, and the number of new treaties formulated each year (nowadays typically more than a dozen global ones and even more regional ones), has caused many States to fall further and further behind in acting domestically on these instruments. Some IGOs have attempted to assist States in doing so.

(e) Finally, and this is particularly relevant to environmental treaties, which often relate to technologically rapidly developing situations, it has become necessary to develop devices to facilitate the up-dating of treaties without

the involved process of initiating, negotiating, adopting and ratifying amending instruments. Various procedures are evolving for this purpose, such as technical annexes that can be changed by expert organs, and which become automatically binding on States unless objected to within a specified period.

13. THE IMPLEMENTATION OF ENVIRONMENT CONVENTIONS IN THE SOUTH PACIFIC

Kilifoti S. Eteuati

Introduction

The term 'Environment Conventions' in the topic refers to the *Convention on the Conservation of Nature in the South Pacific* (*Apia Convention*, 1976), and the *Convention for the Protection of the Natural Resources and Environment of the South Pacific Region* and Related Protocols (*SPREP Convention*, 1986). However, it is important to remember that there are other regional agreements which also promote balanced resource management and environment protection in the South Pacific, for example the Rarotonga *South Pacific Nuclear-Free Zone Treaty*, 1985, the Wellington *Driftnets Convention*, 1989, the Nukualofa *Fisheries Treaty*, 1987 and the *Forum Fisheries Agency Convention*, 1979.

For several reasons which will be mentioned later in this paper, the implementation of these latter agreements has been pursued with vigour, commitment and a great deal of success. On the other hand, the implementation of the *Apia Convention* and the *SPREP Convention* has not attracted similar commitment and application. At the same time, as a result of the similarities of the objectives of these agreements as well as other programmes and initiatives relating to the protection of the natural resources and the environment in the South Pacific region, the successful implementation of these other measures would also mean, in part at least, the implementation of the two specific environment Conventions.

It is also important to remember that the primary purpose of these two environment Conventions is to provide a legal framework or basis for implementing the Action Plan for managing the natural resources and environment of the South Pacific region. It is therefore very important that the provisions of these two Conventions are actively and specifically implemented instead of being incidentally implemented through the fulfilment of obligations in other agreements and programmes.

The Apia Convention

The principal objective of the *Apia Convention* is the conservation of natural ecosystems in the South Pacific region. This Convention was concluded in Apia on 12 June 1976 but only came into effect on 28 June 1990, ninety days after the deposit of the fourth instrument of ratification or accession. The five States which are parties to this Convention (Cook Islands, France, Fiji, Australia and Western Samoa) all joined between 1987 and 1990.

The first meeting of the parties took place in Noumea on 12 July 1991 and they adopted procedural rules for meetings and established a list of topics, all related to the implementation of the Convention, which are open for discussion in these meetings. They also requested the SPREP Secretariat to prepare financial regulations and budget for the operation of the Convention to be considered by an extraordinary meeting of the Parties after the 1992 SPREP Intergovernmental Meeting in Apia. The Convention itself does not provide for a meeting of the parties and nor does it contain any other arrangements for its implementation.

The second meeting of the parties (extraordinary meeting) held in Apia on 18 September 1992 was a disappointing affair. Representatives of four of the five parties attended but, for some reason, it was ruled that the meeting lacked a quorum although only two-thirds of the parties were required to form a quorum. The full consideration and adoption of the financial regulations and budget were deferred and the only other matter discussed was the desirability of developing the *Apia Convention* as a Protocol to the *SPREP Convention*.

The specific implementation of the *Apia Convention* is therefore still in the preparatory stages. But even here, there is little enthusiasm. Indeed, as shown in the aborted extraordinary meeting of the parties in Apia this year (1992), the parties and the SPREP Secretariat seem more interested in turning this Convention into a *Protocol* to the *SPREP Convention* than in promoting and implementing it.

Two comments would be helpful here. First, it would be extremely difficult to turn the *Apia Convention* into a Protocol to the *SPREP Convention* for the technical reason that each applies over a different geographic area. Secondly, and even more importantly, such a step would clearly defeat the objective of protecting the environment and natural resources in the South Pacific region. The *Apia Convention* covers the land as well as the marine areas whereas the *SPREP Convention* applies only in the 200 mile marine Exclusive Economic Zone.

In my view, upgrading the *Apia Convention* to accommodate recent developments and approaches in the protection of natural ecosystems and their components in the South Pacific region would be a more constructive use of time and resources than altering it to be a Protocol to the *SPREP Convention*. It would also result in better protection of the natural environment in this region.

The SPREP Convention

The principal objective of the *SPREP Convention* is the protection of the natural resources and environment of the South Pacific region. Unfortunately, the Convention applies only in the 200 mile Exclusive Economic Zones of the parties and the areas of high seas fully enclosed by these zones.

The *SPREP Convention* was concluded in Noumea on 24 November 1986, after four years of negotiations. It came into force on 30 August 1990, 30 days after the deposit of the tenth instrument of ratification or accession.

The first meeting of the parties (Australia, Cook Islands, Federated States of Micronesia, Fiji, France, Marshall Islands, New Zealand, Papua New Guinea, Solomon Islands, United States of America and Western Samoa) took place in Noumea on 10 to 11 July 1991. In this meeting, the parties discussed the measures to be taken to implement the Convention and its Protocols as required in the Convention. They adopted rules of procedure for the meetings of the parties and asked the SPREP Secretariat to prepare financial rules and budget for the administration and implementation of the Convention and its Protocols, these latter rules and budget to be considered by the extraordinary meeting of the parties after the 1992 SPREP Intergovernmental Meeting in Apia. There was discussion of other general points towards the implementation of the Convention, but there were no decisions on specific actions to be taken by the parties. The meeting however adopted a resolution strongly urging other eligible governments to join the Convention "without further delay".

The extraordinary meeting of the parties held in Apia on 18 September 1992 was attended by representatives of seven countries (out of 11) and they decided to discuss the financial regulations and other Convention matters informally as they were insufficient to form a quorum.

Therefore, as with the *Apia Convention*, the specific implementation of the *SPREP Convention* is in the preparatory stages and a great deal more needs to be done by the parties and the Secretariat before the region begins to derive any lasting benefits from it.

Incidental implementation

As mentioned earlier in this paper, the implementation of other agreements, programmes, and initiatives in the region has resulted in the incidental implementation of certain provisions of the two environment Conventions. There is nothing wrong with this

development and it was expected, given the similar objectives. There is a danger, however, that the countries of the region will be satisfied with these results and therefore place less emphasis on the implementation of the Conventions.

The protection of the natural environment is vitally important to the existence of all living things, including people, so that specific Conventions aimed at achieving this protection should be promoted and implemented in their own right. Also, protecting the environment through legal obligations contained in specific environment Conventions provides a stronger binding force on governments and a firm and sure foundation for everyone, including donors, on which to operate.

Implementation difficulties

The other regional agreements mentioned in the first paragraph of this paper were all initiated by the governments of the region. The *Apia Convention* was an IUCN/Arthur Dahl initiative, while the *SPREP Convention* was part of the UNEP Regional Seas Programme. The South Pacific countries recognised the need for these environment Conventions and so they negotiated and concluded them. However, the implementation of the two Conventions has never been promoted as strongly and as successfully as that of other regional agreements, indicating perhaps that the countries of the region have not put as high a priority on them as on the agreements which they initiated.

It also seems clear that the lack of active implementation of the environment conventions has been a consequence of the uncertain situation under which the SPREP Secretariat has operated within the South Pacific Commission. In the case of the other regional agreements, the regional organisations which handled them, such as the Forum Secretariat, Forum Fisheries Agency and SOPAC, were in the forefront actively seeking support and promoting the implementation of these Agreements. They did not wait for the Governments, they took the initiative and their efforts were rewarded with success.

The SPREP Secretariat has not done the same with the environment Conventions, and with good reasons. They lacked the status, the organisation and the staff while they were in Noumea, and while the situation has improved since shifting to Apia, they are still struggling to keep up with the rapidly expanding workload and their status has yet to be finally resolved.

Implementing the regional environment Conventions

The SPREP Secretariat will have to take an active lead in efforts to implement the environment Conventions or they will not be effectively implemented. The result of the work which is now being conducted under SPREP, particularly through the National Environmental Management Strategy and Regional Environment Technical Assistance projects and the Biodiversity Programme, would in fact amount, to a large extent, to the implementation of the *Apia Convention* and the *SPREP Convention*. What is needed is for the SPREP secretariat to establish clear linkages between the objectives and obligations in the Conventions and the work which is now being done, draw up a list of the outstanding obligations, and then actively persuade governments to take the necessary measures to fulfil their obligations under the regional environment Conventions. As with other regional agreements, the governments will respond positively to the Secretariat's efforts and the South Pacific region will have fully effective environment Conventions.

14. IMPLEMENTATION OF THE CLIMATE CHANGE CONVENTION IN THE PACIFIC

Peter Lawrence

Introduction

At the United Nations Conference on Environment and Development in June of this year, nine Pacific Island countries were among those to sign the *Convention on Climate Change*. Australia has joined the Pacific Island countries in calling for as many countries as possible to ratify the Convention to ensure that it enters into force as soon as possible. Thus the South Pacific Forum Communique this year also called on all countries to become parties to the Convention as soon as possible. Entry into force of the Convention requires 50 countries to deposit instruments of ratification. At present, it is expected that the Convention will enter into force sometime in 1993, with the first conference of the Parties to take place in 1994. In the South Pacific region, the Marshall Islands has already ratified the Convention and I understand that Vanuatu is introducing legislation to its Parliament to enable ratification in the near future.

Before moving on to the substance of the *Climate Change Convention*, I wish to mention a number of general factors relating to the implementation of treaty obligations in domestic law. While the application of these factors will depend on the constitution and legal system of the particular country, they are nevertheless of some general relevance. Australia, like many Pacific Island countries, follows a practice according to which it will not become a party to a particular treaty and thereby accept obligations under it until it has the legislation and/or practices in place to enable it to give effect to the obligations contained in the treaty. Part of the rationale for this practice is that if legislation is necessary, and a treaty is ratified without implementing legislation already in place, then a breach of the treaty would occur. There are of course some exceptions to this general principle - for example, where the treaty in question calls for progressive implementation of the obligations it contains - see e.g. Article 7 of the *Convention for the Protection of the Natural Resources and Environment of the South Pacific Region* (the *SPREP Convention*).

Linked to this view is the notion found in common law countries that treaties are not directly incorporated into domestic law by the international act of ratification. A treaty per se does not form part of domestic law unless incorporated by legislation, and in the absence of such legislation, generally cannot create rights or impose obligations on citizens and residents within a country.

In contrast to the position described above, there is a large group of countries in which treaties are 'self-executing' - that is, upon becoming a party to a particular treaty, the obligations set out in the treaty automatically become part of the domestic law of the country concerned. It would appear that some South Pacific countries, particularly those which were former trust territories of the United States, would follow this tradition according to which at least some treaties are 'self-executing' and become a part of the domestic law of a country once they have been ratified and enter into force. Normally, ratification in these circumstances would also require approval of the relevant legislature (e.g. the Republic of the Marshall Islands).

Following a cursory examination of the constitutions of Kiribati, Nauru, Papua New Guinea, Solomon Islands, Tonga, Tuvalu, Vanuatu and Western Samoa, it appears that in most cases the power to approve ratification of a treaty lies with the Executive. For these countries, it would appear that - similar to the position in Australia - if the rights and duties of individuals would be affected in order to implement an international obligation or benefit, it would be necessary for the relevant legislature to pass legislation. Even if legislation was not necessary to safeguard the rights and duties of an individual, it may be

that parliamentary approval of the entry into law of the treaty is sought for political reasons, or as evidence of a country's commitment to the international law concerned.

As a general rule, in many South Pacific countries, parliamentary approval of a treaty is not a prerequisite to a country becoming a party to a treaty. As indicated above, this is related to the fact that, for most Pacific Island countries, the act of becoming a party to a treaty is an executive and not a legislative act. Nevertheless, in some Pacific Island countries, parliamentary approval is necessary. For example, under Article 24 of the Constitution of Vanuatu:

> Treaties negotiated by the government shall be presented to the Parliament for ratification when they:
>
> (a) concern international organisations, peace or trade;
>
> (b) commit the expenditure of public funds;
>
> (c) affect the status of people;
>
> (d) require amendment of the laws of Vanuatu; or
>
> (e) provide for the transfer, exchange or annexing of territories.

Few of the Pacific Island countries' constitutions would appear to deal specifically with treaty making. The exception here is paragraph 39 of the Tongan Constitution which provides that "it shall be lawful for the King to make treaties with foreign states provided that such treaties shall be in accordance with the laws of the Kingdom." It would appear therefore that Tonga would not be able to enter into a treaty unless its legislation was consistent - or had been amended to be consistent - with the particular treaty.

Ratification of the United Nations Framework Convention on Climate Change

Frequently treaties can be implemented under existing legislation. It is crucial therefore to examine existing legislation in the light of the obligations set out in a particular treaty to determine whether it is necessary to draft new legislation. Implementation of the *Climate Change Convention* provides a useful illustration of this point. As we shall see, a country may be able to comply with the obligations set out in the Convention by taking certain actions but without necessarily having to amend or introduce any new legislation. The central question is whether a country is in a position of being able to give effect to all of the obligations of the Convention under its existing legislation.

The main obligations of the *Climate Change Convention* are dealt with below. The Convention caters, in a number of respects, for the special position of Pacific Island countries, and in light of the differing sets of obligations for developing as to opposed to developed countries (so-called 'differentiated obligations'). I will attempt to identify those features of the Convention of particular importance and interest to Pacific Island countries.

Obligations and benefits of particular interest to Pacific Island countries

Objectives

The ultimate objective of the Convention is to achieve stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a timeframe sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner (Article 2).

The provisions contained in the Convention represent a starting point in the direction of this longer term objective. The Convention is envisaged as an evolutionary instrument, which may over time require further elaboration.

Preamble

Paragraph 3 of the Preamble notes:

> ... that the largest share of historical and current global emissions of greenhouse gases has originated in developed countries, that per capita emissions in developing countries are still relatively low and that the share of global emissions originating in developing countries will grow to meet their social and developmental needs.

Paragraph 12 of the Preamble recalls General Assembly Resolution 44/206 of 22 December 1989 on the

> ... possible adverse effects of sea level rise on islands and coastal areas, particularly low lying coastal areas...

Principles

Article 3 of the Convention refers to a number of principles which are to guide countries in the implementation of the Convention. In particular, paragraph 2 refers to:

> the specific needs and special circumstances of developing countries, especially those that are particularly vulnerable to the adverse effects of climate change.

Paragraph 4 of Article 3 provides that:

> parties have a right to, and should, promote sustainable development. Policies and measures to protect the climate system against human-induced change should be appropriate for the specific conditions of each party and should be integrated with national development programs.....

Commitments

The commitments which would be entered into by Pacific Island countries under Article 4 are subject to the qualifications that parties take into account:

> their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances.

Under Article 4 all countries agree to:

* develop, periodically update and publish national inventories (in accordance with Article 12) of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the *Montreal Protocol* (that Protocol addresses substances which deplete the ozone layer but which also happen to possess greenhouse properties; Article 4(1)(a));

* formulate, implement, publish and regularly update national programs to mitigate climate change by addressing anthropogenic emissions by sources and removals by sinks of all greenhouse gases and to facilitate adequate adaptation to climate change impacts (Article 4(1)(b));

* promote sustainable management and promote and cooperate in the conservation and enhancement of sinks and reservoirs of greenhouse gases, including biomass, forests and oceans (Article 4(d));

* take climate change considerations into account in relevant social, economic and environmental policies and actions (Article 4(1)(f)).

It should be noted that the parties mentioned in Annex I to the Convention have assumed a number of additional obligations to adopt national policies and take corresponding measures aimed at limiting anthropogenic emissions of greenhouse gases and at enhancing greenhouse gas sinks and reservoirs. None of the Pacific Island countries are included in this list and therefore they would not be subject to these additional obligations.

Inventories

Pursuant to Article 12(1), Pacific Island countries would be under an obligation to communicate to the Conference of the Parties a national inventory of emissions and sinks of all greenhouse gases together with a general description of the steps taken by the party to implement the Convention. In the case of Pacific Island countries, that communication must be within three years of the entry into force of the Convention for each country, or alternatively, within three years of financial resources being made available by developed countries to assist them in this task. Parties that are least developed countries may make their initial communication at their discretion (Article 12(5)).

The methodology according to which such inventories are to be prepared is to be considered by the first Conference of the Parties (Article 12(1) and Article 4(2)(c)). Some Pacific countries may, for example, pass legislation requiring persons within the jurisdiction of the country to provide relevant information to government authorities. Other Pacific countries may already have in place appropriate mechanisms which can be used for collecting this information.

It should be noted that developed country parties listed in Annex II of the Convention are required to provide new and additional financial resources to meet the agreed full costs incurred by developing country parties including Pacific Island countries in complying with their reporting obligations under Article 12(1); see also Article 4(3)).

The Article 12 reporting requirement may be implemented on a regional basis 'subject to guidelines adopted by the Conference of the Parties' (Article 12(8). Thus, for example, SPREP could on behalf of its members make a joint communication to the Conference of the Parties provided that:

* prior notification had been given to the Conference of the Parties that this was to take place;

* such communication included information on the fulfilment by each individual party of its individual obligations under the Convention (Article 12(8); see also Article 4(1)(b)).

Funding and technology transfer

Implementation of the Convention by Pacific Island countries should not only be looked at in terms of what obligations must be complied with, but also in terms of what action may be taken by countries in the region to avail themselves of the benefits available to them under the Convention.

In addition to the assistance available for the preparation of national inventories of greenhouse gas emissions, the developed countries listed in Annex II of the Convention are under an obligation to provide funding, including for the transfer of technology,

needed by the developing countries to meet the full incremental costs of implementing their other commitments (Article 4(3)).

Implementation by developing countries of their commitments under the Convention depends upon the effective implementation by developed countries of their obligations relating to financial resources and transfer of technology (Article 4(7)). In implementing the commitments under the Convention, including actions relating to funding and insurance and the transfer of technology, to meet the specific needs and concerns of developing country parties, full consideration is to be given to the adverse effects of climate change and/or the impact of the implementation of response measures on small island countries and countries with low-lying coastal areas (Article 4(8)).

Adaptation

Parties to the Convention have an obligation to cooperate in preparing for adaptation to the impacts of climate change. This is particularly important for low-lying Pacific Island countries. Article 4(4) provides that the developed country parties "shall also assist the developing country parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects". In the light of this provision, it may be worthwhile developing a regional strategy in relation to adaptation and presenting this to the Conference of the Parties for assistance. The funding mechanism for the Convention - the Global Environment Facility - is limited to funding projects with a global environmental benefit.

Research and cooperation

The Convention requires the promotion and cooperation in research related to climate change (Article 4(1)). The Australian Government is presently financing a sea-level and climate monitoring project in the South Pacific (a $A6.7 million AIDAB project).

Education, Training and Public Awareness

Article 6 of the Convention requires parties to promote and facilitate at the national, and as appropriate, subregional and regional levels, educational and public awareness programs on climate change, public access to information on climate change and public participation in addressing climate change.

Conclusion

It is apparent from the above brief survey, that there are few - if any - obligations under the *Climate Change Convention* which would require legislation prior to ratification by Pacific Island countries. The one exception may be that relating to reporting. It may be necessary for legislation to be put into place requiring persons within the jurisdiction of each Pacific Island country to provide information for government authorities so to as enable that country to comply with the reporting requirements under Article 12 of the Convention. It may also be that some governments may wish to pass legislation dealing with a number of matters relating to the Convention to demonstrate the importance they attach to implementation of the *Climate Change Convention*.

The author wishes to acknowledge the assistance of Mr Bill Campbell of the Australian Federal Attorney-General's Department in the preparation of this paper.

15. INSTITUTIONAL STRENGTHENING IN THE ENVIRONMENTAL AREA IN PACIFIC COUNTRIES

David Sheppard and Neva Wendt

What is Institutional Strengthening?

The term Institutional Strengthening has slipped into common usage in the past few years. References from Pacific countries and donor agencies are littered with mentions of Institutional Strengthening and constantly refer to the need to strengthen institutions in the environmental area. But what does Institutional Strengthening mean? Despite all the discussion, a consistent definition has not emerged.

We decided to go to the experts, the participants, working in groups in this legal workshop, in search of an answer to the question: "What is Institutional Strengthening?" The answers varied, proving that the search for a common definition is indeed elusive.

Responses included:

Definition 1

Institutional Strengthening is the process of clarifying governmental responsibilities and supporting the authorities entrusted with environmental oversight. Support for an authority may include enhancing technical expertise through training or funding new positions. Support also includes enhancing the ability of environmental authorities to reach out to government, non-government and public bodies.

Definition 2

(a) adequate staff and infrastructure
(b) a sympathetic Minister
(c) adequate legislative framework
(d) adequate community involvement systems
(e) educational strategies

Definition 3

(a) expansion of area of influence
(b) milking the system
(c) absorbing special interest groups
(d) centralising power and consolidating control

A new definition of Institutional Strengthening.

The above were good responses but we were still no closer to a consistent definition. It is also clear that viewpoints vary, depending on "which side of the fence you are sitting". We thus tried to synthesise the range of views and develop our own definition of Institutional Strengthening, which is:

> The process of increasing the effectiveness of relevant agencies responsible for environmental management at the national and regional level.

What is meant by "relevant agencies"?

The words "relevant agencies" and "effectiveness" are key components of the above definition and warrant further explanation.

In a sense most organisations in Pacific countries are "relevant agencies" when it comes to environmental management. The development of National Environmental Management Strategies (NEMS) in a number of Pacific countries has clearly shown that virtually all governmental agencies have some involvement, or direct interest, in the management of the environment. It is useful to consider relevant agencies at two levels.

The first level relates to those agencies actually described as environment agencies, whose primary charter relates to the protection or enhancement of the environment. Many Pacific countries have established such agencies.

The second level relates to those agencies whose primary charter is in other areas, but for which the environment is of considerable importance. For example, tourism agencies have the primary goal of encouraging tourists to visit Pacific countries. However, tourists will only visit if the environment of Pacific countries is attractive. Tourism agencies thus have a considerable vested interest in ensuring that Pacific environments are managed appropriately.

What is meant by "effectiveness" and what makes an agency effective?

The word "effectiveness" is the most important element of the above definition of Institutional Strengthening. Effectiveness can be simply described as the ability to achieve results. It is clear that the effectiveness of environmental agencies in the Pacific varies considerably.

Why are some agencies effective and others not? The answer to this question is provided by examining the keys to effectiveness, which are: political support, partnership, staff and funding.

Effective agencies are those that have a high level of political support. Such support is often reflected in a relatively generous allocation of resources and an ability to raise and implement initiatives at the Cabinet level. One indicator of political support can be seen by reviewing organisational structures. Organisations with a strong level of political support often report directly to a Minister; those that do not are often "buried" within some other agency as a unit or division.

Effective agencies are able to work in close partnership with other agencies in achieving their own objectives. Often these other agencies are involved in such a way that they see the objective as a shared one, the implementation of which they will benefit from. To move down to a local example: in Solomon Islands, it makes more sense for the Environment Division to encourage the Forestry Division to develop an awareness campaign on environmental forestry than for the Forestry Division to set up their own internal unit trying to do the same thing.

Effective agencies have adequate numbers of staff with the right mix of skills. The selection of the right staff is critical, particularly in relation to the selection of agency Chief Executive Officers. This can be seen in relation to the performance of environmental agencies in the Pacific, where there is a clear connection between performance and the type of people "holding the top jobs". This mirrors the situation in countries such as Australia, where the selection of dynamic Chief Executive Officers often has considerable dividends in terms of agency performance.

Without adequate funding it is impossible for an agency to be effective. This is closely related to the above factors, particularly the level of political support.

Institutional Strengthening in the Pacific - the rhetoric.

The rhetoric relating to Institutional Strengthening in the Pacific is excellent. The United Nations Conference on Environment and Development Conference (UNCED), held in

Brazil in 1992, was attended by the Heads of State of a number of Pacific countries and a number of strong and very significant statements were made by Pacific leaders.

The South Pacific Forum, after its annual meeting in Honiara in 1992, issued a communique which placed strong emphasis on the importance of environment protection for the continued livelihood of Pacific countries. At the national level, countries are actively involved in the development of NEMS which will be endorsed at the Cabinet level.

Institutional Strengthening in the Pacific - the reality

The above statements would suggest that the environment is becoming more important in Pacific countries and that it is moving to the centre stage of the political agenda. It is thus interesting to examine the reality in the light of this rhetoric. This can be done in the context of the previously mentioned indicators of effectiveness.

In relation to political support, most Pacific countries have established Environment Units or their equivalent. These agencies are often small and are staffed with a limited number of dedicated professionals. Most environmental agencies are subordinate to other bodies, such as Ministries of Natural Resources.

In relation to partnership, it is clear that environmental agencies are starting to work more effectively with other agencies in Pacific countries. An important recent initiative has been the establishment of high level task-forces in a number of Pacific countries to oversee the development of the NEMS. These task-forces have brought together senior representatives of a range of government and non-government agencies to identify the most appropriate responses to environmental issues.

The staffing and funding of environmental agencies is still a constraining factor. However, several environmental offices in Pacific countries are starting to develop the "cramped office syndrome", reflecting an infusion of resources to the environmental area. These resources have usually come from outside the country, for example from donor agencies.

We consider it fair to say that while a lag exists between the rhetoric and the reality, change is occurring. This can be most clearly seen at the regional level with the recent expansion of the South Pacific Regional Environment Programme (SPREP). We believe that this trend of increased Institutional Strengthening will continue and even accelerate for two main reasons.

Firstly, the magnitude of the environmental problems facing Pacific countries requires an effective and immediate response. The consequences of inaction are becoming increasingly obvious and have potentially disastrous consequences for the economic well-being of Pacific countries. The establishment of effective environmental agencies at the national and regional level is a key element of an appropriate response to this issue.

Secondly, the increasing involvement of donor agencies in the environmental management area, with their emphasis on linking financial assistance to environmental performance, is likely to play an increasingly important role in the approach of Pacific countries to environmental management.

Concluding Remarks - Where to from here for Institutional Strengthening?

If Institutional Strengthening accelerates as we suggest, then it is essential that it occurs appropriately. It is our view that Institutional Strengthening should be approached in a systematic manner, along the following broad lines:

(i) It is important to build on institutional arrangements recommended in National Environmental Management Strategies. Each NEMS places strong emphasis on

Institutional Strengthening and recommends approaches that are relevant for each country. These recommendations should establish the blueprint for future activities and be used as the basis for future action.

(ii) Each Pacific country should establish a central government agency responsible for environmental management. This agency should be 'lean and effective', with the ability to influence key government decisions relating to environmental management. Such an agency would have a clear role in coordinating other government and non-government agencies in relation to environmental management activities and programmes;

(iii) Other agencies in Pacific countries, such as forestry, marine resource and tourism bodies, should be encouraged to increase their level of environmental involvement and expertise. Environmental management should not be viewed as the domain of only one agency. It should be considered as a routine part of each agency's business;

(iv) Each Pacific country should establish a high level body with the objective of integrating environmental factors with economic decision making. The existing task-forces have fulfilled this important role in the Pacific countries to date and it is imperative that they continue to do so.

16. DRAFTING A MODERN ENVIRONMENT ACT

(i) The Cook Islands Environment Bill

Teariki Rongo

In 1987, without any consultation with the Environment Unit, the Parliamentary Office drafted an *Environment Bill*. It came into force in May 1987. It established a conservation service which was an independent corporation, answerable to the Minister. The Act provided for National Parks and Reserves, Conservation, Pollution and Marine Resources. In 1988, an expatriate Director was appointed to head the Corporation. There were major problems with the Act while it was in force. These were:

* it had an impact on debate in Parliament where the opposition was so effective in criticising it by saying: "Here come the people who are going to take our land";

* there was no public input into the Act;

* it was found that it was very expensive to explain the new law to the people because doing so through the media cost money and the Corporation had limited financial resources;

* there were limited human resources to administer the Act and there was opposition to the Corporation from other Departments.

However, over three years, the Act increased public awareness of the environment. The need for environmental impact assessment, especially in the areas of tourism, was recognised and there was a public voice on the environment through the media and public questioning of what was going on. People were starting to accept the Act but then, in May 1991, an *ultra vires* action was brought and the Courts said that the Act was invalid. The new Cook Islands Government said that it would review the Act and decided that there would in fact be a total review. A new Act would recognise the rights of landowners and the concept of sustainable development. Importantly, it was to be a piece of Cook Islands legislation.

The Review went through the following process:

(a) the preparation of a discussion document;

(b) the discussion document was presented at the RETA/NEMS Seminar;

(c) the discussion document was circulated among members of parliament and departmental heads;

(d) there was a meeting held with non-government organisations and traditional leaders in the community;

(e) a Task Force was set up;

(f) the revised and re-drafted Bill was sent to Cabinet where it now awaits further consideration.

The structure of the new Bill is that there is an Agency with an Environmental Council which has a policy role and an Environmental Service which has the role of implementing the legislation. It provides for environmental impact assessment, National Parks and Heritage Protection by an Environment Notice for the protection of historic sites on private land. The Bill also has provision for Management Plans for areas in the Cook Islands.

(ii) The Integrated Resource Management Model in action: The New Zealand Resource Management Act 1991

Tim McBride

Introduction

The World Commission on Environment and Development in its 1987 Report, *Our Common Future*, emphasised the overriding importance of the concept of sustainable development. In the *Resource Management Act* - the largest single law change in New Zealand's history - the sustainable management of natural and physical resources is made the cornerstone of the legislation. The legislation has made New Zealand a 'world leader' in aspects of resource management.

Having said that, the question remains whether the New Zealand experience has any application to other countries considering possible changes to their systems of environmental law and administration. New Zealanders must be careful to avoid thinking that the approach adopted in the *Resource Management Act* is capable of export without major modification. At the same time, however, I believe that a number of the underlying concepts in the *Resource Management Act* are worthy of serious consideration by environmental law reformers in other countries.

The principal focus of these comments is Part II of the *Resource Management Act*. These provisions constitute the core of the new law. Note at the outset that the New Zealand legislation does not use the expression "sustainable development". Instead, the much narrower concept of "sustainable management of natural and physical resources" constitutes the overriding purpose of the new law.

A study of the changes made to the core provisions in Part II during the legislation's tortuous passage through parliament gives some insights into the perplexing world of New Zealand resource management politics.

Restructuring of environmental and local government administration

During the period 1986-90 there was a major restructuring of the system of environmental administration in New Zealand. At the same time, there was a complete revamp of the structure of local government. These developments should be borne in mind by anyone consulting the *Resource Management Act*. Despite its massive size, the *Resource Management Act's* enactment did not occur in isolation. In many ways it is merely a part, albeit an important part, of what has been the most far-reaching restructuring of government administration in New Zealand this century.

In the field of environmental administration, the major developments involved the enactment of the *Environment Act 1986* (which established the Ministry for the Environment and set up the Office of Parliamentary Commissioner for the Environment); the *Conservation Act 1987* (which established a new department - the Department of Conservation), and the *State-owned Enterprises Act 1986*. State-owned enterprises established included the Forestry Corporation, Land Corp and Coal Corp. In the creation of these new resource management agencies, there was a clear separation of conservation from production functions. The principal objective of every State-owned enterprise is to operate as "a successful business" (s. 4(1)).

The Ministry for the Environment acts as adviser to the Minister for the Environment. A key role is that of policy formulation. The Ministry sees its role as the giving of objective advice from a position of declared neutrality (i.e. an advocate of balance). This reflects the approach taken in the long title to the *Environment Act*. It provides that the purpose of the legislation is to ensure that "in the management of natural and physical resources,

full and balanced account is taken of the intrinsic values of ecosystems; the sustainability of natural and physical resources; and the needs of future generations".

The Parliamentary Commissioner for the Environment sees herself as the guardian of the new system of environmental administration. The Commissioner has extensive powers. They include obtaining information; conducting an inquiry; being heard in statutory proceedings; reporting to the House of Representatives and publicising findings and opinions.

The *Conservation Act 1987* establishes the Department of Conservation. One of its key functions is to act as statutory advocate for conservation. Other functions include the regulation of reserves, protected areas, coastal strips, national parks, walkways, historic places and archaeological sites.

The Resource Management Law Reform (RMLR) Process: Problems identified in existing resource management laws

In the lengthy process known in New Zealand as Resource Management Law Reform (RMLR), which led to the enactment of the *Resource Management Act 1991*, a number of major problems with existing resource management laws were identified. These included:

(a) there was no consistent set of resource management objectives;

(b) there were arbitrary differences in management of land, air and water;

(c) there were too many agencies involved in resource management, with overlapping responsibilities and insufficient accountability;

(d) consent procedures were unnecessarily complicated and costly, and there were undue delays;

(e) pollution laws were *ad hoc* and did not recognise the physical connections between land, air and water;

(f) in some aspects of resource management, there was insufficient flexibility and too much prescription with a focus on activities rather than end results;

(g) Maori interests and the *Treaty of Waitangi* were frequently overlooked;

(h) monitoring of the law was uneven;

(i) enforcement was difficult.

Perhaps most significant of all was that the existing legislation was not seen to prevent significant environmental degradation in terms of air, land, and water quality standards. The laws had evolved in a piece-meal fashion. The result was a complex, overlapping, and sometimes conflicting set of legal rules. The lack of a common approach created many difficulties. Resource management was on the whole inconsistent. Some resources, such as land, were subject to stringent rules. The management of other parts of the environment was, on occasions, inadequate to prevent unsatisfactory environmental outcomes.

The country reports prepared for this workshop suggest that a number of the problems identified above are applicable to particular Pacific Island states. For example, many of the laws covering the management of resources appear to lack a consistent set of objectives. In some countries, there appear to be too many agencies involved in resource management with consequent overlapping of responsibility and insufficient accountability.

Monitoring and enforcement of environmental laws is at best haphazard, and in some places, seemingly non-existent.

The key features of the *Resource Management Act* include:

1. The concept of sustainable management of natural and physical resources; this is the core purpose of the entire statute.

2. An integrated system for the granting of resource consents; an assessment of the likely effects of any proposal on the environment forms a component of this system.

3. The focus is on the effects and results of activities; the aim is that planning be outcome-oriented.

4. A legal obligation on all persons exercising decision-making powers under the *Resource Management Act* to take into account the principles of the *Treaty of Waitangi*. This Treaty, signed by representatives of the British Crown and many of the Maori chiefs in 1840, is seen by an increasing number of New Zealanders as the country's founding constitutional document.

5. Increased opportunities for public participation. The old rules relating to legal standing have been abolished. For example, any person may make a submission to a consent granting authority.

6. Increased flexibility (i.e. an attempt to move away from planning systems based on zoning).

7. New rules relating to resource allocation.

8. The Crown is, with few exceptions, bound by the new law.

In essence, the *Resource Management Act* is a legal code aimed at controlling the effects of land use planning, water and soil, minerals, pollution and coastal management. The rights, responsibilities and functions of all tiers of government (i.e. central, regional and territorial) are clearly stated. Regional government, in particular, is given major new resource management responsibilities.

The aim of the *Resource Management Act* is to have an integrated, coordinated system of resource management. The architects of the new law were keen to build on the 'good aspects' of the existing system of resource management in New Zealand. The then Minister for the Environment emphasised on a number of occasions during the RMLR process that the new law should not be seen as a radical change simply for the sake of change.

The concept of 'sustainable management'

The concept of sustainable management is the "single and overarching purpose of the Act". Section 5(1) makes it clear that the core purpose of the *Resource Management Act* is to promote the sustainable management of natural and physical resources. This is a long-term goal which is to be pursued constantly. Section 5(2) contains a complex definition of sustainable management:

> In this Act, "sustainable management" means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while:

(a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and

(b) safeguarding the life-supporting capacity of air, water, soil and ecosystems; and

(c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

With regard to the first of these provisos, (a), fisheries and forestry are two areas where the concept of sustainability has an obvious application. Where major problems arise in the application of the concept of sustainability is in the area of non-renewable resources. The example most commonly given is that relating to the use of minerals. This problem has been avoided in the *Resource Management Act* by the specific exclusion of minerals from this limb of s 5(2).

The reference to the concept of reasonable foreseeability is intended to place some limit on the extent to which consideration of the needs of future generations is required. What appears to be required is a reasonable assessment of the anticipated needs of future generations, having regard to the current state of knowledge and projected future requirements.

The focus of the second proviso, (b), is on ecological sustainability. In contrast to the first limb, this is not explicitly concerned with meeting the needs of future generations. Indirectly, however, it does attempt to serve that purpose by its focus on safeguarding at all times the life-supporting capacity of air, water, soil and ecosystems.

The third proviso, (c), would see adverse effects on the environment avoided if possible. Where this cannot be done, the potential damage caused by these effects should be remedied. Where this is not possible, any remaining adverse effects should be mitigated.

The relationship of the elements of the definition of : "sustainable management", one to another, is by no means clear.

Fisher has analysed the definition in the following manner:

> The first stated function is managing (the "management function"):
>
> The object of the management function is the use, development and protection of resources. The manner of achieving this object or the object itself of either the management function or the object of use, development and protection, is the social, economic and cultural well-being and the health and safety of people and communities;
>
> The second stated function is sustaining the potential of resources, safeguarding life-supporting capacity and avoiding adverse environmental effects as described in paragraphs (a), (b) and (c) (the "ecological function").

Fisher considers that the critical question is the meaning to be given to the word "while" in subsection (2) of the Act. (see above). It is this word which links the "management function" with the "ecological function". If it is a coordinating conjunction, then the Act prescribes a balance to be achieved between the first function and the second function. If "while" is a subordinating conjunction, then the ecological function is afforded a degree of priority over the management function (ibid) p 13. Fisher concludes that, in this context, the word "while" acts as a subordinating conjunction. The result is that the ecological

function is to be given primacy over the management function (see Fisher, D., Introduction to *Resource Management*, Brooker & Friend, 1991, p 11).

Other commentators have disagreed strongly with this interpretation (e.g. Milligan, "Pondering the 'While'" (1992) *Terra Nova* 50-51). In their view, "while" is best interpreted as meaning "at the same time as". Under this approach the two "functions" in s 5(2) are of equal importance.

This on-going debate on the correct interpretation of section 5(2) will continue until, and probably beyond, the first authoritative judicial interpretation of "sustainable management", as contained in the *Resource Management Act*. That interpretation may be some time coming.

The New Zealand experience illustrates the difficulties which can occur when an attempt is made to define a concept which, of necessity, contains elements in conflict and/or competition. Perhaps it is preferable to leave such a concept undefined.

An interesting contrast is the Cook Islands draft *Environmental Bill 1992*. Under this Bill it is proposed that an Agency for the Environment be established. One of the Agency's principal functions would be to "protect and conserve the environment *and* ensure the sustainable development of the Cook Islands". The term 'sustainable development' is not defined.

Matters of national importance

In achieving the fundamental purpose of the *Resource Management Act 1991* (i.e. promoting the sustainable management of natural and physical resources), decision-makers are required to "recognise and provide for" a number of "matters of national importance" (s 6).

(a) The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development.

In important respects, this provision uses wording formerly contained in the *Town and Country Planning Act 1977*. Under that provision, the coastal environment was to be protected from "unnecessary" development. Many commentators believe that the use of the term "inappropriate" in the *Resource Management Act* weakens the protection to be accorded the coastal environment. On the other hand, the inclusion of wetlands within this national legislation represents an expansion of previous law.

(b) The protection of outstanding natural features and landscapes from inappropriate subdivision, use and development.

This provision is intended to apply to the protection of natural features in landscapes.

(c) The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna.

(d) The maintenance and enhancement of public access to and along the coastal marine area, lakes and rivers.

This provision is particularly relevant where a proposed development will restrict public access to the coast, lakes or rivers.

(e) The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.

This expands on what was formerly a "matter of national importance" in the *Town and Country Planning Act 1977*. Recognition is now extended beyond ancestral lands to water, sites, waahi tapu (sacred areas) and other taonga (cultural treasures).

Other matters

Subordinate to both the fundamental purpose of promoting sustainable management and the identified matters of national importance are what are termed "other matters" (s 7). This provision applies to all persons exercising functions and powers under the new law. They are required to have "particular regard to" the "other matters" specified. The obligation is therefore of less injunctive force than that contained in s 6 (i.e. "recognise and provide for").

The "other matters" are:

1. The maintenance and enhancement of amenity values.

2. The intrinsic values of ecosystems.

3. The recognition and protection of the heritage value of sites, buildings, places or areas.

4. Any finite characteristics of natural and physical resources.

5. Kaitiakitanga, this expression is defined as meaning the exercise of guardianship; in relation to a resource, it includes the ethic of stewardship based on the nature of the resource itself.

Treaty of Waitangi

In the resource management laws which existed before the *Resource Management Act*, there was no explicit recognition of the *Treaty of Waitangi*. In more recent years, however, there has been reference to the Treaty in an increasing number of Acts including the *Environment Act 1986*, the *State-owned Enterprises Act 1986* and the *Conservation Act 1987*. The *Resource Management Act 1991* requires all persons exercising functions and powers under it to take into account the principles of the *Treaty of Waitangi* (s 8). While this means that there is explicit recognition of the importance of the Treaty, its placement within Part II of the Act means that it is subordinate to the Act's overriding purpose (i.e. the promotion of the sustainable management of natural and physical resources).

Other major aspects of the Resource Management Act of possible relevance to Pacific Island Countries

In summary these include:

* a clear statement of the rights and obligations of persons (natural and legal) in relation to the management of natural and physical resources;

* new rules for the allocation and use of major natural resources;

* provision for national policy statements;

* various types of resource consents required before a development can proceed;

* a system of national heritage orders;

* provision for the establishment of a specialist tribunal to conduct inquiries and hear appeals in the field of resource management;

* provision for the issuing of abatement and enforcement notices;

* criminal offence provisions covering a wide range of situations where the criminal law is considered appropriate as a means of environmental protection;

* provision for the establishment of a specialist agency for the management of hazardous substances and new organisms.

Conclusion

The integrated resource management model, the approach adopted in the *Resource Management Act*, is worthy of serious consideration as a possible option by Pacific Island countries currently reviewing their systems of environmental law and administration. As a law on the statute books, the *Resource Management Act* is much too complex (unnecessarily so, even for New Zealand), and much too sophisticated for most Pacific Island states. At a conceptual level, however, the *Resource Management Act* has much to commend it. In understanding the *Resource Management Act*, the on-going series of publications produced by the New Zealand Ministry for the Environment and the Royal Forest and Bird Society of New Zealand (e.g. *Handbook of Environmental Law* (October 1992)), are very useful.

(iii) The New Zealand Resource Management Act 1991

Bronwyn Arthur

The *Resource Management Act 1991* was not an instant creation. New Zealand had a number of environment-related laws including the *Town and Country Planning Act 1977*, the *Water and Soil Conservation Act 1967*, the *Soil Conservation and Rivers Control Act 1941*, the *Clean Air Act 1972* and the *Noise Control Act 1982*. The *Town and Country Planning Act* was in the process of being reviewed when Sir Geoffrey Palmer became the Minister for the Environment in 1987.

It was Sir Geoffrey's enthusiasm for reform of the environmental legislation which pushed the *Resource Management Act* along its way. His promotion to Prime Minister assisted the Bill through the process and resolved a number of interdepartmental disputes.

Sir Geoffrey set up a core group of four women. One was from the Ministry's policy area, another was the Manager of the Maori Secretariat within the Ministry. As well there was a Treasury representative and a private lawyer.

A number of discussion documents were circulated by the core group to obtain the public's views on particular issues. A telephone call-in process was arranged, hui (meetings) were held on marae (Maori communities), visits were made to regional centres and there were opportunities for written submissions. The documents were, however, very general. A number of people were later concerned that a draft Bill was not circulated for comment before it was introduced into the House.

It took over two years from when this major reform was proposed until legislation was introduced to Parliament on 5 December 1989. Apart from the public discussions, behind the scenes negotiations were undertaken with a number of government departments. Compromises resulted in a number of anomalies within the *Resource Management Act*.

The Bill was sent to a Select Committee for consideration. The public interest was so high that an almost record number of submissions were made. The Select Committee chose to travel around the country and, for example, sat on marae to hear submissions. The Bill was reported back in August 1990 but was not passed in the then Labour Government's term of office.

With the election, the new National Government was wary of the Bill and sent it to a Review Group made up of lawyers and others working in the resource management area for further consideration. This Group also received public comment and recommended a number of changes to the Bill.

Finally, in July 1991 the Bill was passed by Parliament, incorporating a substantial number of changes. Right until the last moment, discussions were still being had on the wording of the definition of 'sustainable management'.

The Bill came into force on 1 October 1991. The delay between enactment and coming into force was partly to allow councils and the public to adjust to the new situation.

Contrary to some expectations, getting the Bill passed did not mean the end of the Ministry's work. A number of guidelines and other documents were produced to help explain the Act. The Ministry has written thousands of letters and representatives have appeared at numerous seminars to discuss the *Resource Management Act*.

The workload has also increased, as the Act provides for a number of new functions. Local authorities are the key players in the resource management area and the Ministry has had to assist them in developing policies and plans. For the legal directorate of the

Ministry for the Environment, this has meant developing policies incorporating an understanding of the processes of the principles. It has also involved appearances at local authority and Planning Tribunal hearings if earlier consultation has not brought plans into line with the Ministry's interpretation of the Act.

No-one expected the Act to be perfect and special regulation-making provisions were included which have enabled the Ministry to amend the Act seven times in the last year. The Ministry has also sought comments from those working in the area and carefully watched Tribunal and Court decisions. By the end of this year (1992) it is hoped to introduce the First Amendment Bill which is 220 clauses long.

Although the *Resource Management Act* may be too complex to use as a precedent for a number of countries in the Pacific, some points may be applicable.

* Consultation was seen as very important. Besides providing the Ministry with some very useful information, it meant that there was a greater understanding of the issues by the general public.

* Appropriate consultation was appreciated. Hui meant that Maori did have an opportunity to be heard. Written documents reached people outside of the main towns and cities. Travelling to the regions gave those in the rural communities an opportunity to hear and be heard. A toll-free telephone line enabled those who could not or did not take the opportunity to write a chance to have their say.

* Consultation between departments was fraught with difficulties. Having a Treasury representative on the core group did help save the legislation from possible sabotage by Treasury. A Department of Conservation official was also closely involved. This also kept the legislation moving, although it resulted in many compromises.

* There is, however, a risk of consulting too much. If people do not see that their comments are having an effect, or are not even being listened to, they will switch off. A negative reaction can set in and they will then be determined to undermine instead of support the new legislation.

* Having a powerful Minister was an asset which cannot be undervalued. Obtaining such a Minister is not something a department can do, but as environmental issues grow in importance, both internally and internationally, it can be hoped that Ministerial status may also improve.

* A change in government may not necessarily be a bad thing. The review by the new government did improve the Bill. It also means that both main parties now feel that they 'own' the legislation and so are therefore more inclined to support it.

* Recognition that it was not perfect meant that an unusual regulation-making provision was included. This has saved industry and local bodies from some very onerous requirements where the transitional provisions (i.e. provisions relating to conversion from the old legislation to the new) were not adequate.

* Just because a Bill is passed, the job of the administering the department is not over. Besides monitoring the implementation so that potential amendments can be spotted, you may also need to undertake a publicity campaign to explain what the Act does. Administering is more than just monitoring for amendments. It means active involvement in the process so that the Government's policy intentions are given effect.

* Amendments do not mean you got it all wrong. In such a complex area, there will be some gaps or errors. Even with all the consultation, some problems cannot be foreseen until the Act is actually being used.

* In drafting legislation, you must consider what functions and powers you are imposing on your department. It is true to say that the Ministry did not really appreciate the extra work it gave itself, so resources and people are very stretched at present.

* Although the Ministry prepared the legislation, once it became an Act, it was left up to the Courts to interpret what the Act actually meant. The Ministry has to be careful about giving out advice about what the Act means or what was intended.

17. THE NEED FOR INSTITUTIONAL AND LEGAL CHANGE: A SOUTH PACIFIC NON-GOVERNMENT ORGANISATION PERSPECTIVE

Clark Peteru

THis paper addresses the need for institutional and legal change from the perspective of a non-government organisation (NGO).

There is nothing mystical about NGOs that gives us an exclusive insight into what changes are needed in the system. In fact, much of what follows might easily have come from the pen of a non-NGO person; or for that matter any concerned person. Indeed, government employees are among the biggest moaners I've heard regarding the performance of politicians. Having worked in government myself, I can understand that the urge to make known certain issues is sometimes irrepressible; even though it may look as if one is biting the hand that feeds one.

Many government employees, I believe, are frustrated in not being able to air what they know to be "the right thing". This is usually coupled with feeling like a cog in a wheel, of feeling powerless to bring about change. Nevertheless, I also know there will always be a handful of individuals who stand up to political interference often at the risk of losing their jobs. We are no longer naive enough to believe that what is good for the government of the day is necessarily good for the country.

The ability of an NGO to make statements on matters in the public interest - though not necessarily in the interests of the government or the private sector - is not a characteristic fully enjoyed by our colleagues in government. This is what gives NGOs their distinctive flavour. It is this watch-dog function that many people associate with environmental NGOs; Greenpeace is an example.

NGOs will sometimes engage in heated arguments with government or the private sector. The more radical NGOs have been known to engage in activities that fall just short of hand-to-hand combat. My remarks here, however, will be relatively routine and I certainly won't be advocating violent forms of action. The NGO I work for doesn't have the advocacy skills of our more illustrious overseas cousins. However, we are working at an advocacy role in our own way.

I will deal with the topic in two parts, taking as a starting point that institutional and legal changes are indeed needed. I will address the topic in the context of changes needed in Samoa, though I hope there will be relevant lessons for your own countries.

Part 1: Institutional Changes

There exists a matrix of various institutions, traditional and non-traditional, formal and informal, domestic and foreign, involved (whether they know it or not) with environmental issues. I will describe a few of these.

Family

Samoa is a traditional society in which the aiga (family) is the basic unit of social organisation. Such a family does not consist merely of parents and children, but encompasses a wider family group of blood and marriage or even adopted connections who all acknowledge one person as the matai or head of that particular family.

Such a matai is a titled person either a chief (alii) or an orator (tulafale) whose particular duty is the leadership and care of the family under his control, and in return is entitled to the services and cooperation of all members of the family. All members of such a family group need not necessarily live under the same roof or even in the same village but will, when occasion requires, assemble, usually at the residence of the matai, to discuss family

affairs or any happenings affecting the interests of the family, or to discharge the duties associated with deaths or weddings. Such an assembly to discuss family affairs is not merely a duty on the part of members of the family, but is a right which is jealously guarded. It is the duty of the matai to take care of the family land and to apportion it for the use of family members in return for services rendered to him as head of the family.

In short, a matai, acting if necessary with the advice and consent of members of the aiga, controls the affairs of the aiga, who look to him for guidance and assistance in their time of need. Family membership requires the allegiance of the individual to the aiga. The interests of the individual are subservient to those of the group.

Village Fono

A village comprises groups of families, either claiming descent from a common ancestor or allied for traditional, matrimonial or other reasons. It is capable of existing as a separate political entity.

The titular head and representative of each family is the matai, and village affairs are controlled and directed by a council (fono) of all the matai of the village. This group meets regularly, and on such other occasions as required, to decide any issues in village affairs or to enquire into any misdemeanours, and each family or matai acknowledges the authority of any decision reached after full discussion by the village fono.

Although each matai controls his own family land, the fono normally exercises authority in matters relating to the lay-out and the precincts of the village, the reception of visitors, the use of water holes, the passing of local village laws, the imposition of fines according to Samoan custom (generally foodstuffs) for the breach of a village law or rule, the consideration of or adjudication upon the conduct of any matai of the village, and, generally speaking, any aspect of the communal life that calls for a wider and more general control than that exercised by a matai. Matters requiring decision are debated until unanimity is reached and all signify their agreement.

Church

As early European recorders of Samoan history have confirmed, Samoans had an Atua (God) whom they called Tagaloaa Lagi and who existed long before the arrival of Christianity.

The early spirit mediums are known as taula aitu. They were regarded as the mediators between the gods and the people. If a mala (great misfortune) befell an aiga or village or an individual, it was generally assumed that the gods had meted out punishment for an indiscretion or for a crime that had been committed.

When Christianity arrived, the Samoans readily accepted this new lotu (religion) as a confirmation and reinforcement of their own spiritual beliefs. That is, there is a God above all gods and there are mediators between the people and the gods. It was also accepted for two other reasons - the timing of missionary John Williams' visit with that of King Malietoa's rise, and the willingness of the London Missionary Society and the Methodist Church to allow church government to pass into village hands. This resulted in a reinforcement of faaSamoa (this translates roughly as the "Samoan way of life").

The pastors, priests and other anointed religious people can be thought of as the modern-day spirit mediums. The introduced lotu, with its teachings, was so relevant to the needs of 19th century Samoa for a lasting peace that Christianity has received a special place of honour in traditional oratory.

The Church is seen as the vehicle which sanctifies the Samoan culture. To the Samoan involved in everyday living, a basic premise is that all things come from God. If, therefore,

a calamity befalls any person, it is regarded as a just punishment from God. As a result, faatoesesga (forgiveness) is sought by that person through the pastor. When good tidings are received, no matter who the giver might be as intermediary, thanks are extended to God for the gifts. Samoans, therefore, accord the best food to God's messengers on earth and donations to church are obligatory as thanksgiving for His blessings.

The structural hierarchy of many Christian churches is controlled by Samoans themselves. They have fully accepted Christianity and regard churches as their own. Both the churches and faaSamoa benefit mutually from their acceptance of one another.

In controlling the destiny of their own respective churches, Samoans have been able to Samoanise Christian theology and, in turn, faaSamoa has been Christianised. This process has been a two-way street for faaSamoa and the churches, each institution recognising its dependence on the other.

The church is still a hallowed institution here after one hundred and sixty-odd years of religion. The three predominant denominations are Congregationalists, Catholics and Methodists, but they are losing members to a growing number of less traditional religions.

Government

Parliament

Samoa now has its first full Parliament, elected by those 21 years and over. Prior to the general election in April 1991, Samoa had a system of matai suffrage, that is, only matai could vote - except in respect of two 'European' seats. With the exception of those two seats, it is still the case that only matai can run for Parliament. Although we have a two-party system, the opposition has lost its effectiveness. The two parties are based more on personal alignments rather than matters of policy or substance. Fortunately, we have a press which scrutinises government action both in and out of Parliament. This helps build public pressure which occasionally influences government. There is an ombudsman's office but its investigations are not yet a matter of public knowledge.

Cabinet

When people complain about government, the crux of their complaint can probably be traced to the Cabinet. This body is selected by the Prime Minister. Until this year there were nine Cabinet Ministers including the Prime Minister. Now there are thirteen. This is where almost all the real power resides. Sometimes the power is wielded in an arbitrary fashion, often blatantly. This behaviour is generally tolerated, I think, largely because of one's duty of deference to a matai. However, forced resignations did occur under at least one of our earlier Prime Ministers. One must also realise that the national motto is: "Samoa is founded on God". This will help explain why Cabinet Ministers not infrequently move in mysterious ways.

Sometimes departmental heads will keep Ministers in check, but that has become harder as those positions are no longer permanent Public Service positions but are held under two-year contracts, with Cabinet making the appointments.

The Division of Environment and Conservation

This division is only a few years old, but is already making steady progress. Because it plays a watch-dog role, it needs to maintain a functional independence from government and should be insulated from political interference. Moreover, it needs legislation with teeth and a unit to carry out monitoring and enforcement of legislation. The passage of EIA regulations is a much awaited development. The Division's public education campaign is meeting with success. The public is well informed about the environment, although its behaviour may not yet be consistent with the message.

The Public Health Division

There is much that this division could cover, as a cursory tour of Apia will reveal. The Division should be encouraged to take legal action where possible and, with a bit more encouragement, can play a major watch-dog role.

The legal system

The English common law came to apply in Samoa in 1920 as a consequence of Samoa being administered as an integral part of the Dominion of New Zealand. From that date to 1962, much was done to centralise government and to establish the English legal tradition. Since 1962, Samoa has made its own laws.

This system co-exists with the traditional customary law system and is discussed under the heading of Legal Changes.

Non-governmental Organisations

Many NGOs (or people's organisations) exist at the national level with branches in villages. For example, the Red Cross, the YMCA and Women's Committees. Trade unions such as the PSA are also a species of NGO. The environmental message is well received by NGOs. In general, NGOs carry out educational and vocational activities and seldom put pressure on government. A notable exception was the PSA strike of 1982 which helped oust the incumbent government in the elections which followed. One of the aims of the Siosiomaga Society is to monitor and respond as required to activities which adversely impact on the environment. We are working on strengthening our institutional capability in this regard.

Overseas organisations

In addition to these local institutions, there are a number of overseas institutions (in the sense that they do not arise from, nor are controlled by, the local populace) which should be mentioned.

SPREP

SPREP already has a multitude of functions, but should nonetheless consider taking an advocacy role on regional issues such as the plutonium shipment that is likely to come through the Pacific in several weeks' time.

Aid Agencies

These include UN agencies such as UNDP as well as the World Bank, the Asian Development Bank, the European Community, AIDAB, USAID and so on. My only comment is that it is encouraging now to see a trend whereby donors are stipulating that environmental guidelines be in place, or EIAs commissioned, in order to minimise environmental damage as a condition precedent to aid being provided. Indeed, our own local Development Bank may well be worth studying as to its lending policies.

NGOs

The bigger international NGOs have taken an interest in the Pacific and have programmes in many of the islands. It may not yet be the case in Samoa, but I have heard that in other islands programmes are set up which do not include consultations with local landowners.

This has prompted the suggestion that there should be code of conduct for northern NGOs carrying out development work in the Pacific. Our own work with a northern NGO has made us aware of some of the pitfalls that can occur in the absence of a proper working relationship between overseas (donor) organisations and local (implementing) organisations.

The above listing of institutions is by no means exhaustive. However, it serves to illustrate the different tiers at which institutional activities take place.

Traditional institutions

As regards the traditional institutions of the family, the village fono and the church, each works according to the faaSamoa. The social structure is held together and is actively maintained by an adherence to unwritten but universally understood cultural conventions. These conventions govern the formalised giving and receiving of ava (respect), faaaloalo (reverence), and alofa (love, compassion and concern). These three practices are the basis of spiritual and cultural living. Respect, reverence and love are seen as qualities acceptable to God and hence necessary in the practice of faaSamoa.

However, a major drawback to the faaSamoa is its consumption orientation. It is not considered to be poor cultural practice if material wealth is redistributed to "aiga faalavelave". This term refers to community-related obligations and commitment that families experience, and to occasions when the family requires support in order to maintain its strength. Accumulated material wealth can be distributed to the lotu (church), or to the nuu (village) to be used for the support of local activities. The obligation to serve the aiga is referred to as tautua.

Pastors, for example, are accorded a special place in village rankings. Consequently, they are well looked after. Their material needs - a house fully furnished, food and salary - are provided by the village. One denomination - the Christian Congregational Church of Samoa - is particularly demanding in the contributions it extracts from its parishioners, for such things as Head Office administration, maintenance of church schools, overseas mission work and the like. For those members of the congregation living outside Apia, pressure to provide for the church means more intense exploitation of their natural resources: marine, agricultural and forestry.

Despite this, the faaSamoa responds to the realities of the Samoan economy: everyone is assured of a job, a piece of land to work on, assistance in times of need, protection in old age and a place in the community. FaaSamoa maintains order and stability. It represents a way of life, a code of behaviour and a perception of the world that is uniquely Samoan. It is an essential part of the Samoan identity and one that Samoans do not want to lose. Traditional institutions are by their very nature resistant to change. There are certainly good and bad sides to the culture, but it is not something that can be lightly tinkered with in order to give a desired output.

Governmental institutions

Samoa has made the transition from a system of autonomous self-governing village units into a centralised state. Whilst the degree of village self-government is still considerable, the institutions of central government are now operating effectively and gradually extending their influence.

The faaSamoa nonetheless has a pervasive influence in the manner in which duties are administered. There is far too much political interference in the running of departments. As you come out of Aggie's Hotel tomorrow morning, note the reclamation taking place directly opposite. That is destined to be a helipad. As you walk along the seaward part of the road, you will notice the margin of land that has recently been added, extending seawards. This was originally planned, I'm told, to be an extra traffic lane. That idea has

now been abandoned. Finally, you will notice that where the margin of land ends, there are two multi-storey buildings going up on the Reclaimed Area. What these developments have in common is the fact that they were accomplished either without the knowledge, or against the advice, of a relevant government department and that they were initiated by senior cabinet ministers. Moreover, the public had no say in those matters.

A matter that needs to be watched is the development push that government advocates. Among other things, this will mean growth in the tourism sector and 'revitalisation' of the primary sector. Recently, Cabinet instructed a group of senior officials to report back on the land tenure system with a view as to how it might be more productively utilised. Customary land in Samoa comprises about 80% of the land area. Under the Constitution, it cannot be sold or mortgaged. Recently, Government has reached the required two-thirds majority to change the Constitution and it has done so on two occasions. One hopes that, flushed with this success, they do not tamper with the land tenure system without having first called for extensive public discussions on the matter over a reasonable period of time. A government that votes itself into power for an extra two years is to be regarded with some scepticism.

Part 2: Legal Changes

Comments were made in the workshop as to the findings of Legal Reviews in other Pacific countries. Based on those, I think, the following would apply to Samoa. Firstly, a large body of environmental law already exists. In some cases, it may be outdated or piecemeal or inappropriate to the Samoan context and therefore may need to be consolidated, amended or even repealed. If there is a need for new legislation, it should be specific and appropriate to the Samoan situation.

Secondly, these laws have been severely limited in terms of enforcement. Not only must they have teeth, there must also be identifiable persons or institutions to enforce them without fear or favour. In some cases it is the police. In others, it is the Public Health Division or the Division of Environment and Conservation. Other regulatory legislation, such as that regarding building standards, is policed by the Public Works Department. Unfortunately, there is often a lack of capacity within departments to carry out these tasks and the lack of coordination of efforts between departments often exacerbates matters. I think it may be wishful thinking to expect the government to pass legislation granting standing to citizens or NGOs to bring court action against environmental abusers, but this is nonetheless something that can be lobbied for. Penalties need to be reviewed for deterrent capability. Penalties by way of fines need to be constantly updated and thought needs to be given to the idea of whether some forms of environmental abuse need to be criminalised.

Thirdly, customary law needs to be integrated with existing black letter law. There are about 300 villages and 16,000 matai in Samoa. It has been observed that Samoa has succeeded in retaining a relatively comprehensive, unwritten, customary law system. Government has belatedly recognised the need to promote better liaison with village fono through the passage of the *Pulenuu and Sui o le Malo Act 1978*, the *Internal Affairs and Rural Development Act 1983*, and the *Village Fono Act 1990*. The last Act states in its preamble that its purpose is to "validate and empower the exercise of power and authority by village fono in accordance with the custom and usage of their villages and to confirm or grant certain powers...". In other words, it sanctions the exercise of some aspects of authority by the village fono.

The Constitution is the supreme law of Samoa. It recognises custom and usage regarding land and titles matters and a Land and Titles Court has been set up for the resolution of disputes regarding land claims or matai titles. The Constitution does not recognise custom and usage as a species of law and so it has a subordinate ranking in relation to the Constitution, ordinary Acts of Parliament and regulations. At least in theory.

In practice, village fono exercise legislative, executive and judicial functions. They can pass measures which run contrary to the law: imposing curfews, regulating the length of women's dresses and men's hair, compelling church attendance, placing rocks in the road to get cars to slow down, and the like. Often the police are loathe to interfere but will do so in respect of the more serious breaches of the law such as kidnapping or murder. The point, however, is that village authority can also be used for beneficial purposes and enforced in a way not possible through government. For example, banning dynamite fishing; prohibiting commercial logging; banning the hunting of flying foxes or the killing of turtles. Laws and government institutions need to be responsive to that reality. This may mean, for instance, a decentralisation of government functions and the employment of villagers to police their forests or lagoons.

In a few months' time, it will be possible to give a more detailed response as to what legal changes the country needs. This is because Samoa is on the way to formulating a National Environmental Management Strategy (NEMS). NEMS is a statement of a country's environmental principles and a detailed plan for the realisation of its long-term environmental goals. A component of the NEMS programme involves a legislative review under which a team has been assigned to:

* Collect data on policy, legislation, regulation and administrative procedures (including monitoring activities) which have a bearing on environmental and resource management. Also review court records and other sources to determine past trends in litigation connected with environmental issues.

* Review the collected data and identify existing administrative structures and evaluate these in the context of the types and priorities of environmental issues identified in the State of the Environment Report.

* Interview government authorities, NGOs and other relevant organisations to identify overlaps or gaps in the operation or jurisdiction of institutional responsibilities and management activities related to environmental protection.

* Undertake an assessment of the enforcement history of regulatory authorities, relying substantially on the review of litigation and concentrating on those authorities which regulate aspects of the economy facing or causing significant environmental problems, in order to evaluate the effectiveness of existing environmental management.

The existence of a National Environmental Environment Strategy has obvious advantages. The existing law can be monitored as to its continuing relevance and as to how it is being enforced. If Samoa had a Law Reform Commission, that process could be assisted. A Law Reform Commission would review the country's laws in general and environmental laws would be reviewed in relation to all other laws.

A further area of improvement relates to international conventions. As I understand it, a definitive list of environmental conventions to which Samoa is a party or signatory is not available. One should be compiled and updates given as to how they are being implemented. Sometimes this will mean infrastructural developments, such as those required by IMO Conventions. For example, an oil spill response capability would require equipment and facilities of a special kind. At other times, this will mean Samoa will be required to pass domestic laws in order to give effect to the convention in question. Again, such laws that are passed should be effectively enforced.

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The views expressed by the writer are not necessarily those of the Siosiomaga Society.

18. CLIMATE CHANGE AND LOSS OF BIODIVERSITY: DO THE NEW CONVENTIONS HELP?

Lothar Gündling

Introduction

The problems of climate change and loss of biodiversity are particularly relevant to the countries of the South Pacific. One effect of climate change will be sea level rise, which will have drastic consequences for all low-lying island countries in the region. Parts of their territory could disappear completely. The South Pacific countries are particularly rich in biodiversity and many of the species are endemic. If these species become extinct here they will be lost forever; there will be no chance to find them elsewhere or to bring them back. The value of wild species - particular plant species - is increasingly recognised; wild species have an economic potential for human nutrition and medicine. Wild species are the resources on which a new and promising industrial development is based: biotechnology. Today the issue is not only the preservation of the beauties of nature; today we are talking in terms of economic costs and benefits, about needs and resources, perhaps of survival.

These are the threats; they have been known for years. What have governments done so far? Have they taken the threats seriously? Where are the actions that have been taken to stop the developments which may all have such detrimental effects? Are the two Conventions signed in Rio - the Convention of Climate Change and the Convention on Biodiversity - at least the first steps in the right direction?

The Convention on Climate Change

The need for action

Climate change is still a controversial issue. Many still believe that concerns are exaggerated and that there is no reason to stop our 'business as usual'. News that raises concerns alternates quite regularly with news which indicates that there is no evidence for concern.

It is true that the issue still is surrounded by uncertainty. We do not know everything about causes and effects, and also the consequences are not entirely certain. Yet, we do have the knowledge which provides reason enough to act. We know that emission of certain gases, including CO_2 and CFCs, cause an increase of temperature of the atmosphere. We know that an increase in temperature may cause climatic changes which may change the rainfall patterns with consequences for soils and vegetation cover, and may also lead to a rise of sea-levels with consequences that are obvious. We also know that we cannot wait until we will have full evidence of causes, effects and consequences. It may then be too late for any action to be taken. It is the application of the precautionary principle which must force us to act. This principle tells us that there are consequences which simply are not acceptable and have to be prevented. The costs involved - and there are massive costs - provide no argument. It is the potentially massive damage to the environment and to humanity which outweighs such costs.

Existing law?

The main problem is the emission of greenhouse gases. As to international regulation, we do not have to start from zero. One aspect, the emission of CFCs (chlorofluorocarbons) has already been addressed in one important international Convention - or more precisely - a system of international Conventions: the *Vienna Convention for the Protection of the Ozone Layer* and the *Montreal Protocol on Substances that deplete the Ozone Layer*, with its subsequent revisions. Whether these Conventions will solve the problem of ozone depletion in the upper atmosphere is uncertain. Large quantities of CFCs have been

released in the past and are doing their destructive business over time. The Vienna Convention and the Montreal Protocol were probably as far as the community of States could go at that stage, after they had realised the magnitude of the threats. One can debate about whether the measures agreed on in Montreal could have been stricter. However, with the subsequent revisions of the Protocol, the production and use of CFCs will be probably reduced before the end of the century.

At a more regional level, within the region of the UN Economic Commission for Europe which includes the US and Canada, a treaty system of air pollution control has been established. This is the 1979 *Geneva Convention on Long-Range Transboundary Air Pollution* and its Protocols on CO_2, Carbon Dioxide and NOx, Nitrogen Oxide. The background for that treaty system was *not* the climate change problem; it was the problem of "acid rain" which had lead to massive damage to forests in Central Europe and North America. Therefore, these agreements will probably not be used to develop policies for the control and reduction of greenhouse gases.

The Convention

It became clear that the development of a new international instrument was needed. But does the Convention signed in Rio fulfill expectations? Many, particularly environmentalists, in both the governmental and the non-governmental sector, were disappointed. The Convention does not yet provide for the actions which many feel are urgently needed. There are no provisions for reducing emissions of at least some of the greenhouse gases, and there are no agreed time schedules.

Rather, the Convention is a framework treaty listing a number of principles and general obligations and setting up a machinery to negotiate on the more specific measures. All countries are obliged to:

- prepare an inventory of relevant emissions
- introduce policies for mitigating climate change
- conserve sinks and reservoirs
- prepare for adaptation to the impacts of climate change
- introduce climate change impact assessment
- promote scientific research, education, training and public awareness.

For developed countries the Convention sets out particular obligations. These countries are required to:

- develop policies to mitigate climate change by limitation of emission of greenhouse gases (the Convention does not speak of "reducing" them)
- assist other countries with the fulfilment of reporting requirements
- assist developing countries, particularly those mostly affected, to prepare for the negative impact of climate change

The Convention also provides for the establishment of a funding mechanism. Details have to be decided later. Once the Convention has entered into force (after 50 ratifications), the operation of the funding mechanism will be entrusted to one or more existing international entities. On an interim basis, the Global Environmental Facility (GEF) is to provide funding.

It seems that there is still too much disagreement among States about what has to be done and who has to do what. It is probably also fair to say that the political will to take action is still missing. The rich countries of the north, mainly responsible for the greenhouse gas emissions in the past, do not seem to be prepared to change their life-style and the way they run their economies. Growth still is the magic word. While CFC emissions, as indicated above, will be reduced and probably stopped entirely before the end of this century, the more relevant emissions of CO_2 will increase, also in the industrialised

countries. However the position of these countries is not uniform; some still refuse to take any action while others have at least made political commitments. The European Communities for example, declared two years ago that they would stabilise CO_2 emissions by the year 2000 at the levels of 1990. The (West) German government (before re-unification) decided to be more progressive and reduce the CO_2 emission by 25 to 30% by the year 2005, taking the emissions of 1987 as the basis for calculation. But all these are political intentions, not legal obligations, and scientific studies support the concern that achieving the targets will be difficult, if not impossible.

The Biodiversity Convention

Can we be more optimistic when we turn towards the other problem - the protection of biodiversity? The conservation of species and their habitats has been a concern in many countries for quite some time. Nature protection laws, the objectives of which include species conservation, are known throughout the world. As we know, they are not always as effective as they should be. The history of international legal instruments dealing with protection of species is much shorter, dating back basically to the beginning of the 1970s. International Conventions in this field deal either with particular species and their habitats (e.g. the Convention on wetlands, often referred to as the "Ramsar Convention", and the Bonn Convention on Migratory Species) or particular sites of outstanding beauty (the World Heritage Convention) or particular aspects ("CITES" the "Convention on International Trade in Endangered Species"). Existing international law on the protection of species and their diversity therefore, has been fragmentary and there has been a consensus in recent years that a comprehensive new agreement was necessary.

If we look at the Biodiversity Convention signed by - almost - all States in Rio we recognise that a comprehensive agreement could be achieved. True, that agreement was reached at a fairly abstract level. Many provisions are very general and may require specifications in later protocols or decisions of the Conference of the Parties. Other provisions are vague, intending to cover different approaches or even contradictory positions of States or groups of States. Nonetheless, the Convention attempts to achieve a comprehensive protection of biodiversity which is understood as diversity within species, between species and of ecosystems. It emphasises *in-situ conservation* which is the protection of species in their natural surroundings. It stresses the importance of planning and environmental impact assessment. It requires, of course, the taking of *ex-situ conservation* measures (zoos, botanical gardens) to complement protection of natural habitats.

The Convention, however, is not only a comprehensive approach to biodiversity conservation. In addition to that, it regulates access to and use of genetic resources, thus reflecting the increased economic interest in biological resources and biotechnology. It contains detailed provisions on access to and transfer of technologies, including biotechnology. These provisions were hotly debated during the negotiations and their implementation will probably not be easy. Like the Climate Change Convention, the Biodiversity Convention provides for a funding mechanism which is to support developing country Parties to implement their obligations. Developed countries are required to provide "new and additional financial resources" to help developing countries. The mechanism has to be set up by the Conference of the Parties after the entry into force of the Convention (after 30 ratifications).

What South Pacific island countries can gain from ratification

I was asked to say a word on whether or not the South Pacific states should join the two Conventions. I do so very reluctantly because this question is a very complex one and involves a lot more than just an analysis of the text of the Conventions. The particular situation of each country must be taken into account to prepare a solid assessment of the costs and benefits.

Nonetheless, a few general observations may be made which all countries in the region might consider. Although my assessment of the *Climate Change Conventions* was critical, I would urge all countries to think positively about that Convention. Even if it is true that the major actions still have to be taken in the future, they will not be taken without the Convention. The Convention needs to enter into force in order to get the machinery started, within which the measures will be discussed and adopted. It is in the interest of all States to participate and to introduce their particular ideas and concerns. Developing countries may also be in a position to receive technical and financial assistance.

The fact that developed countries have the primary responsibility for the problem is no reason not to join the Convention. On the contrary, being represented in the coming negotiations is a prerequisite to discuss that primary responsibility of the rich countries of the north and to contribute to the shaping of their particular obligations.

With the Biodiversity Convention the question of what South Pacific island countries can gain might be easier to answer. It is my feeling that the countries of the region have much to gain. I think particularly of the provision on access to genetic resources which strengthens the sovereign rights of countries over these resources, and the Articles on technology transfer and financial assistance. These provisions may be difficult to implement in practice; however, they provide for a number of benefits, particularly for developing countries, which may clearly outweigh the costs.

19. THE INTERNATIONAL LAW CONCERNING NUCLEAR TESTING AND THE DISPOSAL OF NUCLEAR WASTE

Paul Szasz

Although the word nuclear appears in both parts of this dual title, it should be recognised that there is really very little that substantively connects the two topics it covers. I shall therefore deal with them one after the other.

I. The legality of nuclear testing.

Nuclear testing is of course the short-hand reference to the testing of nuclear weapons both of the atomic or fission and the still more dangerous hydrogen or fusion variety. Both these types are much more powerful, or energetic, than conventional explosives, and their explosive power is consequently usually expressed as the number of tons, or even thousands of tons, of dynamite that would produce an equivalent explosion. It might, however, be remarked that the power of even the biggest hydrogen bomb is only a small fraction of what nature unleashes in a major storm or in an earthquake, though the bomb may be more destructive because its explosive power is so concentrated and is likely to be directed against a sensitive target. Moreover, the direct destructive power of these weapons is greatly enhanced by the production of both an immediate burst of deadly radiation which may even be enhanced in so-called neutron bombs and of large quantities of more or less persistent radioactive isotopes that are, even in so-called 'clean bombs', widely dispersed through the explosion, unless the latter is sufficiently contained, which is only practicable deep underground.

Just like any weapon, nuclear ones are tested for a variety of reasons: to develop new and "better" ones (whether more reliable, or lighter, or more powerful, or nastier, or cleaner); to train persons in their use and possibly in defensive manoeuvres; to ascertain that stockpiled items have not deteriorated; and quite possibly to impress actual and potential enemies. Another reason, rarely stated, may however be the most trenchant one: to stimulate the 'military industrial complex', which cannot easily survive without some activity.

From the first test explosion in a New Mexico desert in July 1945, the only test that preceded the bombings of Hiroshima and Nagasaki to end World War II a month later and for the following two decades, most such exercises took place at or above the surface of the earth the better to permit scientific observations with the then available instruments, and to reproduce to some extent the anticipated situation in which these weapons would be deployed from an airplane, or later a rocket or even an artillery shell, or a shallowly buried mine. Almost immediately opposition was expressed to such tests, both by pacifists resisting the development of any weapons and particularly such terrible ones, and by those who feared that the radio-nuclides spread ever more widely through more and more powerful nuclear explosions constituted a substantial danger to persons close to the test sites and perhaps even to all of humanity, particularly to children. Although initially the official experts of the countries engaged in testing down-played these fears, other scientists convinced the citizens of most democratic countries that nuclear testing was indeed dangerous in raising radiation levels measurably throughout the biosphere. In a sense, this was one of the first occasions when what we now call 'environmental' concerns became a significant factor in shaping governmental policy. And though the governments involved kept belittling such dangers, they gradually yielded to the anti-testing pressures, first by removing the test sites to locations more and more remote from the bulk of their citizens - such as the South Pacific - and later by shifting to underground explosions and eventually by diminishing their numbers and usually their power, lengthening the intervals between tests and observing unilateral or agreed moratoria. Incidentally, only somewhat later were the fears concerning the safety of those closest to the initial test sites (e.g., those conducted in the Nevada desert) tragically confirmed by considerably increased cancer

rates and reduced life expectancies, and only quite recently have certain governments admitted their responsibility and offered some compensation to substantial numbers of victims.

As some nuclear testing is still continuing, it is useful to consider to what extent such testing is legal under or perhaps prohibited by international law. This requires an examination of both treaty and customary law, as well as of other legal arguments that might bear on the subject.

1. Treaties relevant to nuclear testing

There is only one global treaty that is directly relevant to nuclear testing: the 1963 *Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Under Water*,[1] to which three of the five declared nuclear powers and well over 100 other States are parties; however, significantly, the People's Republic of China and France are not.

This Treaty is popularly referred to as the *Partial Test Ban Treaty (PTBT)*, because instead of banning all tests outright, it merely bans those in most media, as indicated by its full title. What are not banned are underground tests, as long as these are conducted so that the explosion does not result in any radioactive debris outside of the territorial limit of the State conducting the test. The reason for this exclusion is simple: when the PTBT was being negotiated, no agreement could be reached on banning such underground tests. The basis for this disagreement may be found on the one hand in the desire of some parties to continue at least those tests that were not subject to the criticism that they endangered the global environment. On the other hand was the concern that with the then available technology it would not be possible to detect such tests with certainty from a distance so that, if all tests had been banned, secretive States might have gained an advantage by continuing with at least low yield underground tests.

During the almost three decades since the conclusion of PTBT, and particularly during the past years, the pressure has been growing for the closure of the perceived hole in that instrument - i.e. for either the conversion of the *Partial* into a *Comprehensive Test Ban Treaty* (CTBT) or the conclusion of a new agreement to that effect. The reasons for these pressures, which are exerted by almost all non-nuclear-weapons States (NNWSs) are several: (1) they see that the nuclear-weapons-states (NWSs), through tests, keep enhancing their own nuclear capabilities (vertical proliferation), thus leaving the others even further behind; (2) they fear that some NNWSs might develop and test a bomb (horizontal proliferation), while if they could not test they might not engage in the development process at all; (3) they consider that with modern means of observation, the excuse that some underground tests could escape detection is no longer valid; (4) they fear that even if underground tests release no detectable radiation, they still degrade the environment, perhaps in some as yet unknown serious way. Consequently, some years ago these States launched, through the UN General Assembly, the PTBT Amendment Conference - which, however, suspended itself after a brief opening session last year (1991), when it became clear that the opposition of the NWSs prevented any immediate progress. Also, the attention of the NPT parties (which now encompass all the NWSs - including as of recently France and China) has repeatedly been drawn to their obligation under that treaty to negotiate a CTBT - an issue that may crucially affect the 1995 Nuclear Proliferation Treaty Extension Conference.

Aside from the PTBT, there are several non-proliferation treaties, one on the global level (the 1968 NPT[2]) and two regional: the *1967 Tlatelolco Treaty*[3] for Latin America and the

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1 UN Treaty Series, vol. 480, p. 43.
2 UN Treaty Series, vol. 729, p. 161.
3 UN Treaty Series, vol. 634, p. 281.

1985 Rarotonga *South Pacific Nuclear Free Zone Treaty.*[4] The latter prohibits its regional parties from conducting or allowing any nuclear explosions on their territories; Protocols 1 and 3 thereto, which are open to NWSs (all non-regional) would prohibit them from conducting any nuclear tests within the Zone - i.e. either on territories they control within it, or on the high seas encompassed in the Zone. Though China and the former Soviet Union have become parties to Protocol 3 and the UK and the USA have in effect promised to abide by it, France has not yet done so.

As there is no way of requiring States to become parties to international treaties, or of requiring them to abide by any to which they are not parties (though they may voluntarily undertake to do so, and may even bind themselves to that effect), at present there are no treaty commitments that ban France from continued nuclear testing in any medium in any place in the world (except for Antarctica[5] and outer space[6]).

2. International customary law

International customary law is that which reflects how States actually behave, but only to the extent that such behaviour is based on the belief that it is required by international law.

In respect of nuclear testing, there is little customary law. The fact that the overwhelming majority of States (i.e. the NNWSs) have not tested, is not primarily due to their views on the international legality of testing but to their non-possession of nuclear explosives - in part due to the NPT or its regional counterparts. Some of the NNWSs that perhaps could have tested apparently refrained from doing so (or, in the case of India, from doing so more than once) because of political/military constraints. The NWSs, on the other hand, have tested except to the extent that they have bound themselves by treaty (especially the PTBT) not to do so. Though they have from time to time declared moratoria on testing, it is clear that they never did so because of presumed legal constraints, as evidenced by the fact that these have always been declared for a limited time or on the basis of reciprocity. Thus, even if one were to hold that the NNWSs have largely created a rule of customary law that prohibits testing, the NWSs have, as is permissible, exempted themselves from that rule by their constant public opposition to it.

Consequently, it appears difficult to find that nuclear testing in general is constrained by customary law - though perhaps an argument to that effect might now be made for tests other than underground ones, because both France and China, though unrestrained by treaty, have unilaterally declared that they would in effect abide by the limitations of the PTBT.

Incidentally, an opportunity to secure a judicial determination of this question was lost when in the 1970s France refused to litigate the question in the World Court in cases brought by Australia and New Zealand and in which Fiji sought to intervene.[7] However, in effect France brought the inconclusive termination of these cases by unilaterally undertaking not to conduct any further atmospheric tests, a restraint by which it has since abided for almost two decades.

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4 International Legal Materials (ILM), vol. 24, p. 1440.

5 *Antarctic Treaty*, UN Treaty Series, vol. 402, p. 71 (1959), Articles I.1 and V.1.

6 *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies*, UN Treaty Series, vol. 610, p. 205; ILM, vol. 6, p. 386 (1967).

7 Nuclear Tests Cases, Australia v. France and New Zealand v. France, ICJ Reports 1973, pp. 99 and 135, 1974, pp. 253 and 457. See in particular the two volumes of Pleadings, Oral Arguments and Documents.

3. International consensus and condemnation

The great majority of the international community clearly condemns nuclear testing, including underground. This condemnation has been expressed in numerous General Assembly resolutions,[8] as well as in declarations of other world-wide and regional bodies.

It is well established that binding international law cannot be made by the mere declarations of international organs, unless they are clothed with some specific, and generally very limited, legislative capacity. Thus mere declarations, especially such that are regularly opposed by the States that are meant to be bound or at least influenced thereby, are not generally considered as sources of binding international law. Traditionally they can become that only by being embodied in treaties, which sometimes happens but which are binding only on the parties thereto. In addition, such declarations may influence State behaviour, thus stimulating the creation of new rules of customary law.

There is, however, one prominent exception to the principle that international organs cannot directly make law. Under Chapter VII of the UN Charter, if the Security Council should find (as it could quite rationally) that nuclear testing is a threat to the peace, it could forbid it, with binding effect on all States. However, such a decision could only be taken if none of the five permanent members opposed it - and these happen to be the five NWSs!

In some instances, nevertheless, world-wide public opinion may have acquired a certain law-making quality. Thus it is generally held that South Africa could not, merely by opposing until recently every condemnation of apartheid and by declining to become a party to the treaties to that effect, stop the incorporation into international law of the principle that apartheid is illegal, constituting an international crime. It may, however, be doubted that this example, which involved the practice of one isolated and universally condemned State, could apply equally to a rule that has been resisted, in various ways, by each of the five permanent members of the Security Council and, as such, leading members of the UN and of the world community.

4. Other arguments for the illegality of nuclear testing

Nuclear testing can, of course, be condemned if it violates any other strictures of international law. In particular, such tests may not be carried out in the territory (including the Territorial Waters and the Exclusive Economic Zone) of any State that does not consent thereto. Nor may such tests be carried out in such a way that any State's territory is impacted without its consent, nor if areas that may be considered as part of the global commons (e.g. the high seas, Antarctica and outer space) are so impacted without the consent and actually against the will of the world community. This reflects the ancient principle of *sic utere tuo ...*, that one is free to use one's own territory as long as one does not thereby harm one's neighbour - which was restated in an environmental context in Principle 20 of the *Stockholm Declaration* and in Principle 2 of the *Rio Declaration*.[9]

The question therefore becomes: is there any such impact from the underground tests still being carried out? That remains a matter for controversy. The actual radiation releases are minimal. However, they are not non-existent, nor is it quite clear that radioactive debris now confined to the testing sites will always remain so contained; finally, there is the very real possibility of an accident resulting in far more significant releases.

Although international law did, and probably still does, require proof of actual damage rather than merely speculation about remote negative effects or about possible accidents, these requirements of certainty and immediacy of harm are being eroded as barriers to

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8 E.g., A/RES/1632 and /1648(XVI) (1961), /1762(XVII) (1962), 31/66 (1976).

9 A/CONF.151/26 (Vol. I), p. 8.

opposing certain dangerous activities. In particular, the ever wider acceptance of the 'precautionary principle'[10] is designed to reverse the burden of proof in such cases, by requiring those planning to carry out a dangerous activity to establish with an ever higher degree of certainty that what is proposed to be done will certainly not harm other States.

Thus what may have been legal yesterday, and probably still is not definitely illegal today, might very well be forbidden by international law, if not yet now, then in the none too distant future.

II. The disposal of nuclear wastes

Both the military and the civil uses of nuclear energy create waste products, including both by-products and other materials radioactively contaminated. Although their absolute quantities are not large (compared, for example, to the thousands of tons of ashes created by a single coal-fired power station), nuclear wastes, in particular the most dangerous 'high level' ones, have some special characteristics that make it particularly difficult to dispose of waste products permanently and safely. Some, like plutonium, are highly toxic in the normal chemical/biological sense. All emit radiation (though at a rate that diminishes over time - most quickly for the strongest and almost infinitely slowly for the weakest ones) that is dangerous to living matter and may also over time destroy inanimate containers; and those that radiate thereby also emit energy, which in a closed container builds up as heat that may cause its breach, unless there is sufficient cooling.[11] Although it seems that burial at sufficient depth in suitable geological formations (e.g., granite) can ensure long-time safety, such methods may, on the one hand, be more expensive than the operators are willing to pay, and on the other may be resisted on the basis of the 'not in my backyard' syndrome (NIMBY).

In considering what, if any, restrictions international law places on the disposal of nuclear wastes, one must search first of all for any norms that may relate to this rather narrow topic (which are summarised in Chapter 22 of UNCED's *Agenda 21*[12]), then for those relating on the one hand to all types of hazardous wastes (Chapter 20[13]) and on the other to nuclear activities in general (e.g. IAEA Safety Standards). Finally we need to look to any relevant general international environmental principles, such as those most recently expressed in the *Rio Declaration on Environment and Development*.[14] The latter include: the already-mentioned restatement of the *sic utere* principle (Principle No. 2); that environmentally dangerous activities and substances should not be transferred to other countries (Principle No. 14); that the precautionary approach be applied (i.e. if in doubt, assume the worst) (Principle No. 15); that environmental impact assessments be undertaken (Principle No. 17); and that other States be notified in advance of activities that might adversely impact on their environment (Principle No. 19).

It is useful to distinguish here between the disposal of wastes on land, all of which is under the national jurisdiction of some State, and in waters, most of which (the high seas) constitutes a global "common", which in turn is not physically separable from waters within national jurisdictions. On the other hand, it is generally not necessary to distinguish between wastes resulting from civilian activities and those due to military ones, as their physical/chemical nature is the same - though technically IAEA standards are only applicable in relation to peaceful uses. The possible use of nuclear wastes for hostile

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10 Ibid., *Rio Principle 15*.

11 Effects on the Environment of the Dumping of Nuclear Wastes, IAEA, Vienna, 1990. See also the Chapter of *Agenda 21* cited in note 12 below.

12 "Safe and environmentally sound management of radioactive wastes", A/CONF.151/26 (Vol. II), Chapter 22.

13 Ibid., "Environmentally sound management of hazardous wastes, including prevention of illegal international traffic in hazardous wastes", Chapter 20.

14 A/CONF.151/26 (Vol. I), part I.1, Annex I (1992).

purposes has been condemned by the General Assembly[15] and is to be forbidden by the proposed Convention on the Prohibition of Radiological Weapons. Finally, if, as has been suggested,[16] an international register of nuclear disposal sites were to be established, it would be desirable to include therein both land and maritime sites, and not to distinguish between civilian and military wastes.

1. Nuclear waste disposal on land

The basic international legal principle governing activities such as the disposal of any type of wastes, within the territorial jurisdiction of a State, is that this is entirely governed by its national law, except to the extent that any such activities may harm those outside - in which case international legal rules (requirement to pay damages; prohibitions) may come into play - or to the extent that a State has limited its own freedom of action through an international undertaking.

Thus, to the extent that nuclear wastes generated in a State can be disposed of on its own national territory in such a way that none of them enter either the atmosphere or flowing waters (e.g. rivers that enter or border another country or empty into an international sea), nor are likely to do so during the extremely long periods that nuclear wastes may remain dangerous, this is up to each State to regulate - or not. The International Atomic Energy Agency (IAEA) is in the process of developing a set of Radioactive Waste Safety Standards (RADWASS) that, like other Agency safety standards, are not of themselves binding on States but can assist them in developing appropriate national rules or even international treaties - whereby such standards could become binding. In addition, the IAEA has established a Waste Management Assessment and Technical Review Programme (WATRAP) and a Waste Management Advisory Programme (WAMAP) to assist its members.[17]

In the exercise of its sovereignty, every State has the right to ban any imports, including those of nuclear or other hazardous wastes. Equally, all States have the right to import, or rather to accept the export from other countries of such materials. However, as many States feared that this freedom could lead to major abuses, particularly of developing countries that might not be in a position either to police adequately the shipment of wastes into their territories (i.e. even to determine whether such shipments had taken place), or to provide for their safe disposal once they arrived, or that might be tempted to compete with their neighbours for the monetary rewards of accepting such wastes, a number of restrictive rules and agreements have been developed during the past several years. In part these are also informed by the principle that hazardous materials generated in one country should generally not be transferred to others (Rio Principle No. 14) - in part as a means to discourage any avoidable production of such materials - and particularly not to less developed ones.

Starting in the mid-1980s a number of European organisations (OECD, Euratom) adopted recommendations concerning the transboundary transfers of nuclear wastes.[18] In May 1988 the Organisation of African Unity Council of Ministers adopted a resolution declaring the dumping of nuclear and industrial wastes in Africa a crime, and calling on African countries to stop accepting such materials and on the international community to mobilise against such practices.[19] This was rapidly followed by UN General Assembly resolutions condemning the dumping of radioactive wastes for hostile purposes or so as to

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15 See note 20 below.

16 By the IAEA Director General, at the 36th session of the IAEA General Conference.

17 See note 9 above.

18 E.g., OECD Council Decision/Recommendation on Transfrontier Movements of Hazardous Wastes, OECD C(83)180(Final) (1984); EEC Council Directive: Transboundary Shipment of Hazardous Waste, OJEC 1984 L 326/31 (1984).

19 OAU Council of Ministers Resolution on Dumping Nuclear and Industrial Waste in Africa, ILM, vol. 28, p. 567 (1989).

infringe the sovereignty of states (e.g. dumping without a States knowledge or informed consent),[20] by the adoption of UNEP's 1989 *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*[21] (which basically established the principle that States must prohibit the export of any hazardous wastes whose import is not positively consented to by the State concerned - but which explicitly excludes nuclear wastes from its field of application[22]), the *1989 Fourth Lome Convention*[23] between most developing (ACP) States (including those represented in this Workshop) and those of the European Community (EC) (which generally prohibits the export from EC to ACP countries of radioactive and other hazardous wastes), and by the *Bamako Convention on the Ban of Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa*[24] (which absolutely prohibits the importation of such wastes, including radioactive ones, into the States parties). In effect, all these agreements are ones by which developing countries mutually agree to tie their own hands, and the developed world agrees to respect this self-restraint.

The IAEA in 1990 developed a *Code of Practice for the International Transboundary Movement of Radioactive Waste*[25], which reflects the general principles and objectives of the *Basel Convention*. This says that every State has a sovereign right to prohibit the movement of waste into, from or through its territory; that transboundary movements of radioactive waste should take place only in accordance with internationally accepted safety standards with prior notification to and the consent of the sending, receiving and transit States; and that all States involved should have the administrative and technical capacity, as well as the regulatory structure required to manage and dispose of radioactive waste in a manner consistent with international safety standards. Although, unlike a treaty, which is binding - but only on its parties - the Code is addressed to the world community generally, and it can acquire legal force by incorporation into national laws or international agreements or regulations.

2. Nuclear waste disposal into the sea

In the early days of atomic energy, the oceans were often regarded as infinitely large and therefore safe disposal sites for nuclear wastes, particularly those of relatively low activity levels. However, by the time of the Stockholm Conference, the error of that approach was generally recognised and various instruments calling for the monitoring, restricting or prohibition of such activities were developed.

Aside from the increased sensitivity towards environmental issues in general and in particular the recognition of the potential dangers of radioactive contamination of the seas, the concept of international responsibility for the latter has during the past decades clearly shifted from the *res nullius* approach (i.e., that the high seas belong to no one and can therefore be used by anyone for any purpose) to the *res communis* principle (that the oceans are common property to be guarded by the international community) - which now is often expressed by calling the high seas "global commons".

One of the first instruments that reflected movement towards these newer notions was IMO's 1972 *London Dumping Convention*,[26] which obligated States parties to prohibit the

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20 E.g., "Prohibition of the Dumping of Radioactive Wastes for Hostile Purposes", A/RES/43/75Q (1988); "Dumping of Radioactive Wastes", A/RES/43/75T (1988); "Prohibition of the Dumping of Radioactive Wastes", A/RES/46/36K (1991).

21 ILM, vol. 28, p. 657 (1989).

22 This conclusion resulted from the consideration that the IAEA was concurrently developing a Code on this subject (see note 25 below and the related text) and is reflected in resolution 5 of the Basel Conference.

23 ILM, vol. 29, p. 783 (1990).

24 ILM, vol. 30, p. 775 (1991).

25 IAEA document INFCIRC/386 (1990).

26 UN Treaty Series, vol. 1046, p. 120; ILM, vol. 11, p. 1294 (1972).

dumping of, among other things high-level radioactive wastes or other matter and to regulate the disposal of other radioactive wastes and materials. With explicit reference to that Convention, OECD in 1977 adopted a decision establishing a *Multilateral Consultation and Surveillance Mechanism for Sea Dumping of Radioactive Waste*.[27] The 1982 *UN Convention on the Law of the Sea*[28] (which is not yet in force) contains very strong provisions regarding the protection of the marine environment and especially measures to prevent, reduce and control its pollution; although radioactive materials are not explicitly mentioned, it is clear that the extensive provisions relating to hazardous wastes apply fully to nuclear materials. Finally, Article 7(1)(a)-(c) of the 1985 *Rarotonga Treaty* explicitly bans the dumping of radioactive matter at sea, and so does Article 10(1) of the 1986 *Noumea Convention for the Protection of the Natural Resources and Environment of the South Pacific Region* (the *SPREP Convention*).

More recently, in a 1989 resolution,[29] the UNEP Governing Council called for the application of the precautionary approach to marine pollution, including waste-dumping at sea. The Parties to the *London Dumping Convention* adopted a voluntary moratorium on sea-disposal of low-level radioactive waste, and in 1990 extended that moratorium to the sub sea-bed disposal of radioactive waste. Under the 1981 *Lima Convention for the Protection of the Marine Environment and Coastal Area of the South-East Pacific*, a 1989 Protocol was adopted *for the Protection of the South-East Pacific against Radioactive Contamination*. And just a few weeks ago 15 European States signed a treaty providing for a 15-year moratorium on the disposal of radioactive wastes into the North Atlantic.

Thus it can be seen that through a combination of binding treaties and voluntary undertakings, relating to either nuclear wastes in particular or to various classes of hazardous wastes in general, most States that are in a position to generate nuclear wastes have undertaken not to dispose of them into international waters. Such bans are either permanent or at least set for extended periods, which are meant to be long enough to enable relevant scientific studies to be carried out.

In addition, it is clear that as to its Territorial Sea and its Extended Economic Zone, each State has an absolute right to prohibit the disposal of nuclear wastes to the same extent as in respect of its land surface. The several treaties and regulations relating to nuclear waste disposal in various countries and regions also apply to these national maritime spaces. Indeed, a State may be considered to have a duty to do so to the extent that wastes disposed of in its waters might then contaminate the high seas. A question that is, however, increasingly controversial is whether a State may ban from its sea lanes the transit of ships or aircraft carrying nuclear wastes on the grounds that such transit does not constitute "innocent passage" within the meaning of maritime law, which otherwise does not permit interference with such crossings.

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27 International Protection of the Environment: Treaties and Related Documents, vol. 19, p. 9743 (1977).

28 ILM, vol. 21, p. 1261 (1982).

29 UNEP/GC/DEC/15/27 (1989).

20. THE GLOBAL ENVIRONMENT FACILITY

Ralph Osterwoldt

A. What is the GEF?

1. **Pilot program** - grants or concessional loans will be provided to eligible World Bank member countries; GEF is additional to, and complementary of, multilateral and bilateral assistance, in particular International Development Assistance.

2. **Goal** - to help implement programs that "assist in protecting the global environment and promote thereby environmentally sound and sustainable economic development" (World Bank Resolution 91-5).

3. **Consisting of:**

   (a) Global Environment Trust Fund (GEF));
   (b) Co-financing arrangements with the GEF;
   (c) The Ozone Projects Trust Fund; and
   (d) other possible future arrangements.

B. Coverage of the GEF

The GEF covers four areas affecting the global environment:

(1) the protection of biological diversity;
(2) limiting the effects on the world's climate of greenhouse gas emissions (global warming);
(3) the protection of international waters from pollution; and
(4) the protection of the ozone layer, consistent with the provisions of the *Montreal Protocol on Substances that Deplete the Ozone Layer*, by assisting developing countries in making the transition from CFC use and production into available more benign substitutes and alternatives.

C. What Led to the GEF?

1. Scientific evidence proves need to address global environmental issues.
2. UNDP funds a study by World Resources Institute concluding, *inter alia*, there is a need to establish an international environment financing facility to assist developing countries, in particular, in dealing with global environment problems.
3. France proposes, with Germany's support, the establishment of a global environment facility with an initial capital amount of SDR 1 billion, to be associated with programs of the World Bank.
4. World Bank meetings with potential donors culminated in a resolution of the Executive Directors of the Bank on March 14, 1991, to establish the Global Environment Facility (GEF).

D. GEF Tripartite Institutional Structure -

UNDP, UNEP, World Bank - provide continuous interaction on the work program of investments, scientific and technological support, and technical assistance to be financed by the GEF:

1. **UNDP** - ensures complementarity between environmental and development concerns and is responsible for pre-investment studies and activities; small grant programs for NGOs;

2. **UNEP** - ensures GEF program is consistent with existing conventions, coordinates research and data collection and provides the overall scientific and technological guidance through its establishment of the Scientific and Technical Advisory Panel (STAP), notable scientists who review work programs and provide GET donors with advice and

3. **World Bank** - as Administrator of the Trust Fund, organizes project identification, appraisal, and supervision process with UNDP and UNEP participation.

E. What is the Governance Structure of the GEF?

Implementing agencies report to the GEF Donors ("Participants"). The Participants:

1. meet twice yearly to review progress on the various components of the GEF and work programs prepared by the Implementing Agencies, eligibility criteria, and other issues of relevance to the GEF;

2. make decisions by way of consensus, or more precisely, on the basis of the sense of the meeting as summarized by the Chairman of the GEF, who is appointed by the World Bank; and

3. neither Resolution 91-5, nor the document negotiated with the Participants as the basis for the Resolution, provide for a voting system at this time.

F. What is the Size of the GEF?

1. SDR (Special Drawing Rights) 1 billion - (SDR 663 million to CORE Fund; SDR 219 million for co-financing; approximately SDR 118 million for Interim Fund of Montreal Protocol).

2. **Core Fund**

   (a) Consists of: i) grants; and ii) co-financing arrangements.

   - Minimum contribution: SDR 4 million over three years/eight years for LDCs.

   (b) Currency disbursements from core fund are denominated in SDRs.

   Donor contribution can be in any convertible currency.

3. **Co-financing Arrangements**

   (a) should provide flexibility and broad participation, supporting action in one or more areas covered by GEF; cofinancing is untied as to procurement.

   (b) be used on comparable basis to Core Fund resources;

   (c) be partially funded by Core;

   (d) be untied; and

   (e) provide resources on grant or highly concessionary terms.

4. **Debt Instruments**

- GEF can accept debt instruments, in the form of voluntary contributions for debt-for-nature trades, although not in substitution for Core Fund contributions.

5. **Operating Costs**

- Charged directly to GEF resources; reimbursement for co-finance operation expenses expected from co-financiers.

G. Which Countries are Eligible to Join the GEF?

1. Developing countries and territories with UNDP programs with per capita GNP at or below US $4,000.

2. 72 participants to September 1993.

H. What is the GEF's Relationship to the Bank?

1. As set forth in the Bank's ED Resolution No. 91-5, the Bank serves three main functions: as Trustee of GEF funds, as Administrator for the GEF Chairman (M. El Ashry, also Director of Bank's Environment Department) and as IMPLEMENTING AGENCY.

2. **Resources held in trust**

- Bank holds resources by way of grant in trust (GEF), administered within the GEF.

- Bank administers the GEF "in accordance with Articles of Agreement, By-Laws, rules and decisions of the Bank, and such rules and regulations as are necessary or appropriate" (Resolution No. 91-5).

3. **GEF Funds kept separate**

- GEF Funds are kept separate and apart from all other assets of Bank.

4. **Administrative Expenses are Reimbursed**

- Bank is reimbursed for its reasonable GEF co-financing and other administrative expenses.

I. What is the relationship between the GEF and the Montreal Protocol on Substances that Deplete the Ozone Layer?

Parties to Montreal Protocol requested the Bank to administer and manage the investment operations under the Interim Multilateral Fund. Participation is within the framework of GEF, and is to provide the incremental costs to enable developing countries to comply with the Protocol control measures. The Bank is to keep Ozone Trust Fund assets separate from the GEF.

GEF finance is available only to eligible countries that have signed the Protocol but do not qualify for support under the Interim Fund because their ozone-depleting emissions are

above the cut-off point of 0.3 kilograms per capita, as specified at the London meeting in June 1990 when agreement was reached on the interim fund.

J. What are Project Funding Eligibility Requirements?

1. Other than exceptions set forth in OD 9.00.01 (July 1991), GEF operational procedures follow standard Bank procedures.

2. Normally, GEF projects are investment operations and should be components of Bank-financed projects. Thus, GEF complements but does **not** substitute for action supported under existing programs.

3. In "exceptional circumstances" (OD 9.00.01) freestanding GEF projects below $10 million are possible.

4. Regional projects, e.g., biodiversity in adjacent countries, may be eligible.

5. Projects must:

   (a) be consistent with relevant global convention;
   (b) be consistent with country-specific environment strategy or program;
   (c) utilise appropriate technology;
   (d) be cost-effective (based on physical, *not* monetary measure of global benefit) and of high global priority; and
   (e) go through Bank's standard project evaluation methodology.

K. What is the relationship between the GEF and NGOs?

1. Resolution 91-5 clearly allows NGO involvement in the GEF.

2. 20 NGOs associated with GEF project proposals in first tranche work program.

3. Implementing agencies have organized daylong meeting with NGOs for the day prior to each Participants meeting.

4. Participants have endorsed small grants window for local NGOs ($5 million for use in up to 35 countries).

L. What is the Future of the GEF?

1. Participants desire GEF activities to be quickly implemented so that the experience provides input into UNCED.

2. In the intergovernmental negotiations on the Climate Change and Biodiversity Conventions, there are proposals by OECD countries that the "evolving", or "modified" GEF should be the financial mechanism for each of these conventions.

3. Participants from the developed countries have indicated a preference for the GEF as the single funding mechanism for all international environmental Conventions.

4. GEF has, however, been criticised by NGOs and developing countries as lacking transparency, as an exclusive club, and lacking a clear governance body outside of the Implementing Agencies.

5. Developing countries have stated that:

(a) each convention should have its own funding mechanism on the basis, *inter alia*, that participation by developing countries in the GEF was limited because of the required "entry fee" of SDR 4 million; and

(b) the responsibility for deciding project criteria and the approval and funding of projects should rest with the Participants rather than the Implementing Agencies, and that the administration of the GEF must become more responsive to the Participants.

6. In response, the GEF Chairman presented three options for consideration of the Participants, namely:

(a) maintaining the present GEF structure with minor amendments to improve implementation and governance (Option I);

(b) modifying the GEF with increased oversight by the Participants and clearer articulation of the roles of the Participants, the GEF Chairperson, Secretariat, and the Scientific and Technical Advisory Panel (Option II); and

(c) transforming the GEF into a separate legal entity, possibly affiliated with an existing Bretton Woods or other UN institution.

M. Future Governance of the GEF

Option II, the significantly modified option, was broadly endorsed by the Participants. The following would be among the main features:

(a) a "Participants' Assembly", which will continue to meet twice a year and will consider a joint work program of the current Implementing Agencies of the GEF. Consideration could be given to adding other implementing agencies. Projects to be financed will be approved in accordance with existing procedures in such agencies;

(b) should deliberations of the Participants Assembly with an enlarged participation become unwieldy, a system of representation according to constituencies could be explored;

(c) decision-making will be by consensus as is the case with the present GEF. Subsequently, other voting mechanisms will be considered; and

(d) institutional flexibility will be maintained so that the GEF as envisaged may respond to changing circumstances.

Despite broad areas of agreement, several issues remain:

(a) whether there should be distinct funds for each of the conventions, with funding based on assessed contributions;

(b) whether to establish programs and projects to achieve the objectives of the particular convention, as well as the provision of general policy direction and eligibility criteria; there are two views on this issue. Some Participants indicated that the Conference of Parties should establish program priorities and criteria in the area of concern, while the GEF Participants' Assembly would ensure compliance with the Convention-specific criteria by overseeing the work programs prepared by the Implementing Agencies.

This view is not acceptable to those who favor the primacy of the Conference of Parties of the respective Conventions. In response, some have suggested that the Participants Assembly provide reports on a routine basis to the Conference of Parties, and that there should be periodic consultations between the restructured GEF's STAP and the scientific advisory bodies established under the Conventions. In addition, the Chairpersons of the Conventions' advisory bodies could become full members of the GEF's STAP to ensure consistency in the review of work programs prepared by the Implementing Agencies.

(c) the relationship between the GEF and the Contracting Parties of a Convention in cases where there is incongruity in the membership. In this situation, it has been suggested that only those Participants who are parties to a particular convention may make decisions on issues related to such conventions.

N. Conclusion

1. The GEF remains an option as the financial mechanism for each Convention and should continue to play an important role in financing developing countries' activities of global environmental significance.

2. The GEF's role was also recognized in the deliberations of the Preparatory Committee Meetings for UNCED. Mr. Maurice Strong said:

> Proposals have been made for the establishment of new funds linked to *Agenda 21*, notably, the proposal of China and the G-77 for a Green Fund. At the same time there is a strong preference on the part of some to utilize existing institutions, at least as a starting point, in particular, through replenishment of a modified Global Environment Facility at something on the order of three or four times its current funding level to finance the incremental costs to developing countries in meeting important global environmental priorities. This would, of course, require agreement on changes in the provisions for governance of GEF on its mandate. I am pleased to note the progress that is being made in this respect. Opening statement to the Fourth Preparatory Committee Meeting on March 2, 1992, by the Secretary General of UNCED.

GEF Participants - June 1993

1. Algeria
2. Antigua and Barbada
3. Argentina
4. Australia
5. Austria
6. Bangladesh
7. Belgium
8. Botswana
9. Brazil
10. Canada
11. Chile
12. China
13. Colombia
14. Cote d'Ivoire
15. Cuba
16. Czech Republic
17. Denmark
18. Ecuador
19. Egypt
20. Finland
21. France
22. Germany
23. Ghana
24. Greece
25. India
26. Indonesia
27. Italy
28. Japan
29. Kenya
30. Republic of Korea
31. D.P.R. Korea
32. Latvia
33. Lebanon
34. Malaysia
35. Mauritania
36. Mexico
37. Morocco
38. New Zealand
39. The Netherlands
40. Nigeria
41. Norway
42. Oman
43. Pakistan
44. Peru
45. Philippines
46. Poland
47. Portugal
48. Russia
49. Senegal
50. Spain
51. Sudan
52. Sweden
53. Switzerland
54. Thailand
55. Tunisia
56. Turkey
57. Uganda
58. United Arab Emirates
59. United Kingdom
60. United States
61. Uruguay
62. Republic of Vanuatu
63. Vietnam
64. Zimbabwe
65. Ethiopia
66. Estonia
67. Hungary
68. Iran
69. Panama
70. Venezuela

21. SUMMING UP OF WORKSHOP

David Sheppard

I am pleased to provide some brief closing remarks to what has been a very successful workshop. As I said in my opening, this workshop has been planned for a long time and it is now good to be able to say that it has indeed been worth waiting for. Much has been achieved, and I am sure that we will be able to look back in a few years and view this workshop as a significant event for environmental management in the Pacific.

My introduction to this workshop outlined five objectives. I would like to briefly examine these and see what we have achieved.

Objective 1

To increase the awareness of the need for environmental law in the Pacific. It has been particularly pleasing to see the representatives from each country working closely together to address environmental law issues. It is to be hoped that this liaison continues and will increase when participants return to their countries. The workshop has also shown that there is significant common ground between lawyer and non-lawyer and that the two groups can work together most effectively.

Objective 2

To assist countries in clarifying their environmental law priorities and specifically to assist in developing appropriate legislation. Country representatives have clearly addressed this issue. The country papers and exercises which were prepared as an integral part of the workshop have contributed to a much clearer picture of specific requirements and priorities for the implementation of environmental law in each country. The presence of such a wide range of resource persons at this workshop has also assisted country representatives in clarifying their priorities.

Objective 3

To assist countries in developing responses to environmental conventions, including the *Climate Change Convention*, the *Biodiversity Convention* and the *World Heritage Convention*. A number of clear and concise presentations to this workshop have provided excellent background on several of the key international environmental conventions. This area has created some confusion in Pacific countries, particularly in relation to the implications of conventions at the national level. It requires further attention.

Objective 4

To increase country awareness of options for implementing environmental law programmes, through SPREP and other organisations. I believe that the presence of so many international agencies has added considerable depth to this workshop. Participants from Pacific countries should now have a much clearer picture of the role of individual donor agencies and how they may be able to assist environmental law activities in their country. An effective dialogue between countries and donors has started at this workshop and I would urge all concerned to ensure that this continues.

Objective 5

To develop recommendations for future environmental law action at the regional and national levels, such as options for environmental law education. A number of clear recommendations have been developed and these provide a basis for action at both a

national and regional level. SPREP is looking forward to working with member countries and donor agencies to address these recommendations.

This has indeed been a successful workshop. I would urge all participants to keep the momentum going to ensure that the results are translated into action.

III COUNTRY REPORTS

This Part includes fourteen Country Reports on environmental law and policy specially prepared for the Workshop by the participants.

COOK ISLANDS COUNTRY REPORT

Teariki Rongo and Janet Maki

Introduction: Issues and responses

As the list below shows, there are at least fourteen pieces of legislation which have direct environmental emphasis.

	Issues	Problems Project Response	Administrative Response	Legislative Response
1.	Waste Disposal	Unhealthy environment	Waste-Management Waste-Management	*Crime Act 1969* *Land Use Act 1969*
			Recycling Business (SPREP Consultant)	*Public Health Act & Ordinances 1984*
			Privatisation of Garbage Disposal System	*Noise Control Act 1986*
			Women, Youth & Welfare Activities	*Conservation Act 1986/87*
			Education	*Building Control and Standards Act 1991*
			Public Health Inspections	
2.	Siltation Inland Erosion	Kill corals blockage of water outlets on Makatea Islands	Forestry and rehabilitation project	*Island Council By-laws* *Conservation Act 1986/87*
			Education and Public Awareness	*Land Act 1969*
3.	Sand Mining	Coastal erosion	Identification of other sources, inlands and pits	*Conservation Act 1986/87*
			Education and Public Awareness	

Issues	Problems Project Response	Administrative Response	Legislative Response

Issues	Problems Project Response	Administrative Response	Legislative Response
4. Destructive fishing practices and over-harvest	Declining fish stocks and unhealthy fish environment	Island Council Resolutions Education and Public Awareness	*Marine Resources Act 1989* *Conservation Act 1986/89* *Aitutaki Paua By-law* *Outer Islands Local Government Act 1987*
5. Land Tenure	Difficult to acquire land for conversation purposes	Land Court Restrictions - 5 year restrictions	*Lands (Facilitation of Dealings) Act 1970*
	uncontrolled development of steep inland areas	injunction proceedings	*Conservation Act 1986/87* *Cook Islands Act 1915*
	unnecessary over-cultivation of land		

International Conventions

The Cook Islands is a signatory to 11 international conventions and agreements, which have direct relevance to the environmental conditions prevailing in the Cook Islands.

1. *South Pacific Forum Agency Convention*, signed, 10 July 1979
2. Canberra Agreement (SPC) acceded to 14 October 1980
3. *Law of the Sea Convention*, signed 10 December 1982
4. *South Pacific Nuclear Free Zone Treaty (Rarotonga Treaty)* signed 6 August 1985, ratified 28 October 1985
5. *United Forum Islands Countries Fishing Agreement*, signed 2 April 1987, ratified 17 June 1987
6. *SPREP Convention* and its 2 Protocols signed 25 November 1986, ratified 9 September 1987
7. *Apia Convention*, acceded to 27 October 1987

4. *South Pacific Nuclear Free Zone Treaty* (*Rarotonga Treaty*) signed 6 August 1985, ratified 28 October 1985

5. *United Forum Islands Countries Fishing Agreement*, signed 2 April 1987, ratified 17 June 1987

6. *SPREP Convention* and its 2 Protocols signed 25 November 1986, ratified 9 September 1987

7. *Apia Convention*, acceded to 27 October 1987

8. SOPAC Agreement, signed 10 October 1990, not yet ratified

9. *Driftnet Convention* (Wellington Convention), signed 29 November 1989, ratified 24 January 1990

10. Forum Secretariat Agreement, signed 29 July 1991, ratified 23 August 1991

11. *Rio Declaration on Environment and Development*, signed June 1992

Existing legal arrangements

- *Conservation Act 1986/87* has yet to be applied.*

- Government has decided to carry out a review of the *Conservation Act 1986/87* and in particular the definition of the foreshore.

  The definition of the foreshore has been the most contentious issue of this legislation.

- In reviewing the Act, the Council was advised by the Minister to look at the whole Act, and to make sure the Act recognises the heritage given to Cook Islanders by its constitution - the ownership of land.

*[*Editorial note: for further explanation of the process of enactment of the Conservation Act, see Rongo, T. Drafting a Modern Environment Act, in Workshop Papers, above.]*

Recent government policies

- Uphold its policies as stated under the Parties Manifesto.

- To have an *Environment Act* taking into account Sustainable Development.

- Establishment of a Resource Management Committee advised by a Technical Advisory Committee.

Future priority actions

1. Legislative

   - Establish Environment Service (advisory, consultative role).
   - Environmental impact assessment.
   - Agreement Mechanism between the Environment Service and landowners relating to the protection of the environment.

2. Administrative

   - Strengthen environmental management capabilities of relevant Departments, and Island Councils.
   - Promote inter-departmental co-operation.
   - Education and public awareness activities at all levels.
   - Promote and encourage non-government organisation involvement.

FIJI COUNTRY REPORT

Paul Cowey

Main environmental concerns

Fiji has many environmental concerns that are shared by all South Pacific Island nations, as well as a number of unique problems.

Unsustainable resource use

Fiji has considerable natural resources. However, it is a small nation and these natural resources are quickly exhausted when unsustainable exploitation occurs. Long term benefits are easily sacrificed for quick, short term profits. A classic example is the beche-de-mer and clam meat industries whose expansion was not carefully contained. When the resources were exhausted, the industry collapsed. This short term perspective is also evident in the forestry industry in that it ignores sustainability of timber harvest and water catchment resources. Sugar cane cultivation is spreading to marginal foothills without consideration for erosion. Minority elements within the ginger industry are stripping the soil of its vitality and simply moving on without replenishing it.

Pollution

The lack of monitoring and enforcement is of grave concern. The lack of effective legislative machinery to control companies which pollute is frequently a problem. The maximum fine for pollution of a harbour is Fiji $400, although the clean-up may cost millions. In addition to the legislative weaknesses, there is a lax attitude toward enforcement of good legislation. For example, exhaust pollution by buses in urban areas is rarely prosecuted, despite its being an offence under the *Traffic Act*.

Waste disposal

Municipal waste management is a national dilemma. Although at present inconvenience is only being caused to those in the surrounding areas, it is a time-bomb which will cause considerable damage. Prevention is better than cure. Measures must be taken now before it becomes too a great a problem to remedy.

Urbanisation

Physical planning is sorely needed to counteract the negative effects of urban drift. In addition to the problems of pollution and waste disposal, the interaction between social and environmental problems needs to be addressed by municipal authorities. On an individual level, there is also a desperate need to motivate individuals to care for their immediate environment rather than let it take care of itself. There is a cultural background of respect for the environment, but adjustments to urban lifestyles have meant that this has often been lost. This respect needs to be revived.

Genetic and biodiversity resources

Both wildlife and vegetation are undervalued as assets with cultural, natural and tourism significance. The current legislation neglects certain species and has large loopholes. The management number and size of protected areas is inadequate to properly conserve Fiji's natural heritage.

International perception

The strength of the international green lobby will provide added incentive to induce Fiji to modify its environmental priorities. The possibility of 'green bans' on goods produced in

unsustainable industries underscores, in economic terms, the pleas and warnings the green lobby has given so far. If the threat of green bans is not heeded, costly sanctions may result. Fiji will then suffer economic as well as environmental loss. International lending and donor agencies also are specifying environmental sustainability. Fiji's failure to adjust to this now will result in difficulties in attracting such loans and assistance. The damage to Fiji's reputation as a tourist destination resulting from bad environmental publicity would be significant.

The existing legal arrangements

Fiji is signatory to some 20 international conventions (listed in Annex 1). However, due to the piecemeal system of responsibilities for different areas of the environment, many Ministries are unaware of their treaty-based responsibilities or duties.

The legislative framework is exceptionally fragmented. Fourteen Ministries, bodies or agencies administer some 27 pieces of environmental legislation (see Annex 2). The essential problems relating to environmental legislation are three-fold. Firstly, there is no single body responsible for the administration of the current existing environmental law and which can influence Government at policy making level. This has resulted in the lack of a uniform policy and a shortage of information and awareness at high levels. Secondly, this lack of a single body of environmental law has resulted in a half-hearted enforcement of current standards and a lack of trained staff to do so. This is true both in individual Ministries and in areas which 'fall between Ministries'. Thirdly, the existing environmental laws need modification in at least 9 areas. These are: the land tenure system, planning and assessment, agriculture, minerals, fisheries, water quality, waste management and pollution and the establishment of protected areas.

The past two years

Over the past two years the Government has moved environmental warnings out of the 'too hard' basket and has begun to take them seriously. Steps have been taken and more will follow once it becomes clear which is the best way to proceed. A number of reviews have been undertaken. These include an 'environmental audit' (the State of the Environment Report), two reviews on Environmental Law and a comprehensive National Environment Strategy which has been circulated in draft form. The Strategy proposes three main objectives: establishing an effective environmental management capability, heritage protection and developing public participation in environmental matters.

Fiji now has a Secretary of State for the Environment. The Environmental Management Unit now stands alone rather than under another Ministry. Its role is to provide policy advice to Government. The Environment Management Committee is an inter-ministerial management committee. It provides technical expertise, especially to the Director of Town and Country Planning.

The National Environment Council is now in the process of being established. It will be the national coordinating body for all government departments concerned with the environment, and will monitor environmental issues. As far as legislative action is concerned, Fiji is still considering whether to introduce a comprehensive *Resource Management Act* or to target legislation to the specific areas of concern with separate Acts.

Priorities for future Action

To progress towards sustainable use and conservation of resources, the Government of Fiji should have three major priorities according to the National Environment Strategy. These are to be put to Cabinet within the next few weeks for consideration and adoption. The priorities proposed are as follows:

1. **Development of a national environmental management capability**

This would involve an integrated evaluation of the various policy considerations by all sectors of government, with public input. It is vital that all government bodies adopt and adhere to such a policy. This would require some institutional and administrative change to keep environmental issues in view at all policy making levels of government. There are two options for reform of the administrative structure. One possibility is a large centralised Ministry which deals with all areas of environmental concern. The second is a smaller 'hub' type Ministry overseeing environmental units placed in all other Ministries.

2. **Comprehensive heritage protection**

The protection of wildlife, vegetation, historic and cultural sites and parks requires a central administrative framework rather than the current piecemeal situation. This is also one of the areas which urgently requires legislative reform.

Fiji also must consider becoming a party to two conventions, the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES) and the *Convention on the Conservation of Migratory Species*.

3. **The implementation of international conventions**

Annex I

International Conventions to which Fiji is signatory

- *International Plant Protection Convention 1956*
- *Convention on the Continental Shelf 1970*
- *Convention on the High Seas 1970*
- *Convention on Fishing and Conservation of the Living Resources of the High Seas 1970*
- *Plant Protection Agreement for South East Asia 1971*
- *Treaty Banning Nuclear Weapons Tests in the Atmosphere, Outer Space and Underwater 1972*
- *Treaty on the Non-proliferation of Nuclear Weapons 1972*
- *International Convention for the Prevention of Pollution of the Sea by Oil 1972*
- *Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological and Toxic Weapons and their Destruction 1973*
- *International Convention Relating to an Intervention of the High Seas in Cases of Oil Pollution Casualties 1975*
- *International Convention on Civil Liability for Oil Pollution Damage 1975*
- *South Pacific Forum Fisheries Agency Convention 1979*
- *United Nations Convention on the Law of the Sea 1982*
- *International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage 1983*
- *South Pacific Nuclear Free Zone Treaty and Protocol 1985*
- *Vienna Convention and Montreal Protocol on Substances that Deplete the Ozone Layer 1989*
- *Convention on the Conservation of Nature in the South Pacific (Apia Convention) 1989*
- *Convention for the Protection of Natural Resources and Environment of the South Pacific and their Related Protocols - (SPREP Convention) 1989*
- *Convention Concerning the Protection of the World Cultural and Natural Heritage - (World Heritage Convention) 1990*

Annex II

Land and Resource Use Legislation

Mining Act 1966
Forest Act 1953
Town Planning Act 1946
Native Land Trust 1940
Land Development Act 1961
Land Conservation and Improvement Act 1953
Agricultural Landlord and Tenant Act 1966

Conservation and Quarantine

Birds and Game Protection Act 1923
National Trust for Fiji Act 1970
Preservation of Object of Archaeological and Palaeontologist interest Act 1978
Plant Quarantine Act 1982
Noxious Weeds, Pests and Disease of Plants Act 1964
Animal Importations Act 1970

Marine and Pollution/Conservation

Marine Species Act 1977
Fisheries Act 1941
Fisheries Regulations 1965
Continental Shelf Act 1970
Ports Authority of Fiji Regulations 1990

Water Pollution

River and Streams Act 1982
Irrigation Act 1973
Drainage Act 1961
Water Supply Act 1955
Mining Regulations

Pollution Generally

Pesticides Act 1971
Traffic Regulations 1974
Public Health Act 1955
Penal Code 1945
Litter Decree 1991

FEDERATED STATES OF MICRONESIA COUNTRY REPORT

Isamu J Abraham and Nancee Murray

Environmental concerns

The Federated States of Micronesia (FSM) is experiencing a number of critical environmental problems which pose severe constraints to the attainment of long term sustainable development. The major problems may be categorised under four headings, as follows:

1. **The degradation of coral reefs and mangrove resources**

   Coral reefs and mangrove swamp ecosystems exist along the coastlines of the many islands that comprise the FSM.

   These ecosystems are particularly vulnerable to human activities. There is growing concern over coral reef degradation through:

   - dredging and sand-mining;
   - sedimentation from on-shore soil and erosion from agricultural activities;
   - pollution from sewage, oil and hazardous chemicals;
   - destructive fishing methods (including use of explosives);
   - overfishing.

   The degradation of mangrove resources is occurring through:

   - cleaning and infilling to create new house sites and expand current ones;
   - cutting for firewood;
   - siltation from on-shore soil, erosion arising from road construction, earth-moving and agricultural activities; and
   - use of mangrove resources as landfill for household garbage and other solid waste.

2. **The pollution of land and marine resources by human waste**

   The FSM presently lacks effective and organised systems for the collection, treatment and disposal of liquid and solid waste. Although a number of sewerage systems have been built in the major urban centres, the collection or disposal of sewage is still affected by severe operational and maintenance problems which, in most areas, leads to the discharge of untreated sewage into the marine environment. The widespread use of toilet facilities which directly discharge into the sea in coastal communities also continues to pose a pollution hazard.

3. **Degradation of land and forest resources**

   The forests of Micronesian islands have important ecological functions of watershed protection, erosion control, soil fertility maintenance and wildlife habitat.

In addition, the forest resources have also provided Micronesians with food, building materials, clothing, medicine, ornaments and other numerous subsistence products for thousands of years. The forest resources in the FSM are being threatened by a number of human activities. These include mangrove cutting, agricultural clearing, indiscriminate burning of vegetation and uncontrolled cutting of forest trees. These practices are leading to increasing problems of soil erosion, the reduction of dry weather flows in the streams, degradation of the quality of surface water resources and siltation in coastal areas.

The over-exploitation of forest resources will also lead to the gradual depletion of resources in the long term.

4. **Poor sanitation conditions**

It is estimated that 60% of the population of the FSM lacks access to safe drinking water and sanitation facilities. The absence of these facilities is a feature of life in most of the rural communities and the outlying islands. The lack of safe drinking water and basic sanitation, when combined with other problems associated with the poor drainage of livestock facilities and the non-existence of solid waste collection and disposal systems, contributes to a low level of environmental cleanliness and severe public health problems.

National Eenvironment Management Strategy

The Government of the FSM has now formulated a National Environment Management Strategy as a first step in the implementation of a program to address the environmental concerns outlined above. The four broad goals of this strategy are to:

1. Integrate environmental considerations with economic development. This will involve the establishment of a nationwide environmental administration system and the adoption of environmental impact assessment (EIA) as a routine administrative procedure.

2. Improve environmental awareness and education by incorporating educational material on the environment in school curricula, and developing and implementing a 'grass-roots' community education program.

3. Manage and protect natural resources by improving the data base on the nation's natural resources and building on the traditional systems which have long been in place to support the sustainable use of marine and land resources.

4. Improve waste management and pollution control by setting up effective systems and institutional mechanisms for the collection and disposal of sewage and solid waste.

Priority actions

The following priority actions are proposed by the FSM's National Environment Management Strategy (NEMS) as a means of improving environmental management in the FSM:

1. Continue funding for a National Board on Environment and Sustainable Development, and the establishment by each State Governor of a State Task Force on Environment and Sustainable Development, to ensure that

all significant development projects are subject to an appraisal process. This should include an assessment of the project and the determination of measures to mitigate any adverse environmental impact.

2. Enact the necessary legislation to ensure that all land use activities are subject to appropriate controls. This should involve the establishment of a permit system to regulate development activities, as well as formulation and enforcement of zoning regulations to facilitate a land use administration system.

3. Development of Environmental Impact Assessment (EIA) guidelines and minimum standards for National and State Governments.

4. Seek funding to improve sewage and solid waste collection and disposal systems in the FSM.

5. Implement a comprehensive water supply and sanitation development program aimed at improving the supply of safe drinking water and the disposal of household waste.

6. Increase environmental awareness and improve environmental education in the FSM by development of environmental education resources for every organisation concerned.

7. Preserve traditional knowledge and resource management systems by documentation, and by the continued application of traditional knowledge and management.

8. Implement a nation wide protected areas system.

9. Implement comprehensive support of renewable resource management efforts.

10. Implement coastal resources management and ocean management by reef and lagoon resources survey etc.

11. Development a Resource Information System.

12. Strengthen plans for pollution emergencies.

13. Develop an action plan to manage endangered species and areas of high ecological, cultural, historic and other scientific value.

14. Strengthen the database for better decision making.

GUAM COUNTRY REPORT

Joanne Brown

Introduction

As an emerging economic mecca in the Pacific, the United States Territory of Guam is faced with a major challenge to balance economic development and growth with the maintenance and protection of its ecological resources. For thousands of years, the islanders have enjoyed the clear blue skies, lush green forest and an ocean environment abundant in marine resources. Today, the challenge is to protect the island's natural resources, which are stressed as never before, and maintain a balance between growth and development. Creation of the Guam Environmental Protection Agency 20 years ago was a very significant legislative step forward to provide legal protection and regulatory authority to protect Guam's environment.

The Guam Environmental Protection Agency

The Guam Environmental Protection Agency (EPA) became a formal department of the Government of Guam in 1973. As an enforcement agency, Guam EPA derives its authority from local statutes as well as Federal laws implemented by the United States Government. Guam EPA maintains a cooperative working relationship in the regulatory arena with its Federal counterpart at the United States Environment Protection Agency.

The Federal EPA contributes over 40 percent of Guam's annual budget to assist in the implementation of Federal Consolidated Grant programs that outline the Agency's objectives in implementing Federal statutes on Guam. The Government of Guam funds the remaining 60 percent of the Agency's operational budget. With 56 personnel, Guam EPA has the largest staff and one of the most effective environmental regulatory programs within the Micronesian Region.

Guam EPA: environmental programs

At the most basic level, the framework for the implementation of environmental legislation already exists in Guam. Guam's programs focus on air pollution control, water pollution control, safe drinking water, water resources management, pesticide enforcement, and solid and hazardous waste management. The following five divisions oversee the implementation of these programs: Water Programs Division, Air and Land Programs Division, Monitoring Services Division, Environmental Review Section and the Administrative Services Section. The strength of Guam's EPA regulatory role exists in its legislative status that grants the Agency enforcement authority. The private sector, the military and the Government of Guam are all part of Guam EPA's regulated community. In the event that Federal environmental laws are violated and the local environmental agency is unable to bring a violator into compliance, the Federal EPA may intercede and pursue a Federal legal case against a violator.

Beyond the existence of formal legislation, the actual implementation of such laws in the regulated community on Guam is also an important consideration that must be further explored. The size and scope of a number of development projects on Guam require an increase in the fines and penalties that are issued by the judicial system. A number of current statutes on Guam are not cost-prohibitive enough to deter environmental degradation from occurring. For example, in the case of clearing and grading permits issued by the Agency for earth-moving activities, the current $1,000 per day violation that must be imposed by the courts is cheaper to pay than providing a proper environmental protection plan and fulfilling the requirements of conditions set under a formal permit. In addition, environmental violations have not traditionally been viewed as a priority on the court calendar by comparison to other social crimes.

The challenge for new environmental legislation

The challenge for Guam's environmental protection agenda goes far beyond implementing the defined environmental programs that have been listed. In Guam's dynamic growth process, a large grey area exists between basic environmental protection and incorporating the existence of an environmental ethic into the growth process. Rapid economic development, fuelled by foreign investment (predominantly Japanese) directed toward resort and recreational development has placed a greater strain on Guam's natural environmental resources. Community concerns in recent years have arisen over such issues as land use, municipal water and marine water use and the protection of natural habitats for endangered animal and plant life.

On the economic front, beyond the natural population growth process, Guam supports a transient tourist population of close to a million tourists a year. In addition, thousands of alien workers have also been brought into Guam, primarily to work in the construction industry, adding an additional burden to Guam's natural population growth. Hundreds of acres of land have been purchased for both current and future construction of hotel and other resort facilities with land to be used for golf courses leading the list of development projects. There are currently a total of 27 golf courses approved, or entering the approval process, for construction. This is a significant number considering that Guam is only 214 square miles in size and the average golf course incorporates between 250 and 300 acres of property.

The grey area between politics, economics and Guam's environment

The grey area that holds the future direction of Guam's environmental vision is caught between politics and economics. The very engine that fuels the island's economic success, and movement for more political autonomy, threatens the loss of some of Guam's most pristine natural land resources, such as the limestone forest and the lush ravine forest that serve as havens for receding plant and animal life. Large portions of central southern Guam which have remained in their natural state for thousands of years are now at the brink of destruction. Environmental legislation for Guam is challenged to place a value on natural resources that have been taken for granted because they have always existed in the visual surroundings. The task of striking a delicate balance between protecting Guam's ecosystem and promoting an economic growth process upon which the island is dependent, is seldom directly pursued by island policy- makers.

New guidelines for development legislation

The closest that Guam has come in setting guidelines to broach the environmental concerns of development were incorporated into two Executive Orders 90-09 and 90-10, signed by Governor Jose F Da in 1990, creating a Development Review Committee consisting of representatives from all related Government Departments and Agencies. This Committee would review the social, infrastructural and environmental impacts of proposed development and make recommendations to the Territorial Land Use Commission to approve or dismiss such projects for the Territory. In addition, Executive Order 90-10 requires developers to produce an environmental impact assessment to be reviewed and approved by the Guam Environmental Protection Agency before such projects can be brought before the Commission for consideration. While the Governor's Executive Orders have set a framework for the review of development projects they require more consideration to mitigate against possible damage to the island's ecological resources, and further definition of their legal terminology.

Protective environmental legislation is emerging at a time when laws related to land ownership, property rights and water rights have already been embedded in the legal process. The conditions that are set by Guam EPA in the approval of an environmental impact assessment can be legally challenged due to a lack of clear legal definitions in the

Governor's Executive Orders. The interpretation of such legislation will be left to the courts if no action is taken to formally incorporate defined regulations through the legislative process. The island of Guam is reaching a critical point with regard to legislative protection of natural resources and the introduction of an overall island land use plan. There is still time, but the clock is ticking.

KIRIBATI COUNTRY REPORT

Tererei Abete

Introduction

The Republic of Kiribati consists of 33 low-lying coral atolls with a population of 72,000, about 35 percent of whom reside in the capital, Tarawa (1990 Census Report).

Kiribati is very much concerned about the environment and about pursuing sustainable development. In line with that concern, an Environmental Division has been formally established under the Ministry of Environment and Natural Resource Development to deal with environmental issues.

The main environmental concerns of Kiribati are as follows:

1. The impacts of population growth, modernisation and urbanisation;

2. Global warming and sea level rise;

3. The dangers associated with nuclear pollution and the disposal of hazardous wastes by industrialised nations.

On Tarawa, environmental problems are more acute, with water contamination, overfishing and coastal erosion being the more alarming problems resulting from over-population and human-made seaways and causeways. Concern about these problems means Kiribati has given, and will continue to give, priority to the implementation of the following actions:

1. A public awareness campaign to promote environmental issues through the use of posters, organising environmental song and essay competitions and other educational programmes;

2. Incorporation of Environmental Impact Assessment (EIA) into the National Development Projects Planning and Physical Land Planning processes;

3. Partaking in all relevant regional and international efforts to address environmental issues and problems.

International Conventions

Kiribati has become a party to a number of environment-related regional and global conventions and agreements which include the following:

1. *South Pacific Nuclear-Free Zone Treaty* (Rarotonga);

2. *Convention for the Prohibition of Driftnet fishing in the South Pacific*;

3. *Convention on the Prevention of Marine Pollution by Dumping of Wastes and other matters* (1972) (*London Dumping Convention*);

4. *Convention to Regulate International Trade in Endangered Species of Flora and Fauna* (1973);

5. *Climate Change Convention* (1992);

Kiribati is currently considering becoming a party to other environment-related conventions such as:

1. *Convention for the Protection of the Natural Resources and Environment of the South Pacific Region* (1986)

2. *Nuclear Non-Proliferation Treaty*;

3. *International Maritime Organisation Convention*;

4. *International Convention for the Protection of Pollution from Ships* (1973)

National environmental laws

Kiribati does not as yet have a single or specific piece of legislation that addresses environmental matters. However, environmental matters are accommodated in a number of statutes and by-laws (see below). This legislation is administered by various Government Ministries.

There are certain problems with this legislation. They are as follows:

1. Difficulty of implementation. This is due to political and customary reasons as well as lack of qualified personnel, or uncertainty as to which office should implement laws;

2. Inadequate addressing of current environmental issues/problems, for example the exclusion of EIAs under the *Land Planning Ordinance*.

The present Government's environmental policies, stipulated in its Policy Statement are:

1. To introduce proper conservation measures in the exploitation of marine and other natural resources and to encourage the private and public sectors to adopt development policies which are both economically and environmentally sustainable;

2. To actively participate in all relevant regional and international efforts to address environmental problems, including global warming and sea level rise;

3. To promote environmental issues through appropriate educational programmes.

Kiribati is giving priority to the following actions to improve environmental management:

1. The review of the existing Environmental Division within the Ministry of Environment and Natural Resource Development, to determine its competence - in terms of the number of staff etc - to carry out a better and improved management and coordination of environmental issues;

2. Consideration of the recommendations and proposals contained in the *Report on Environmental Law in Kiribati* which include the need to review statutes dealing with environmental matters;

3. Assessment of the extent to which customary rules and practices can accommodate the national and global concern for a preserved and improved environment;

4. Attempts to influence all sectors to appreciate the need to reduce and eliminate environmental damage; to minimise risks to people, animal, plants, nature, water, air and soil.

Legislation List

1. *Kiribati Constitution*
2. *Local Government Act 1984*
3. *Prohibited Areas Ordinance*
4. *Closed Districts Act 1990*
5. *Wildlife Conservation Ordinance*
6. *Harbours Ordinance*
7. *Shipping Act 1990*
8. *Kiribati Ports Authority Act 1990*
9. *The Merchant Shipping (Oil Pollution Guilder Islands) Order 1975*
10. *The Nuclear Installations (Guilder and Alike Islands) Order 1972*
11. *Public Health Ordinance*
12. *Public Utilities Ordinance and the Public Utilities (Amendment) Act 1983*
13. *The Patio Town Council (Public Health) By-Laws 1975*
14. *The Mineral Development Licensing Ordinance 1978*
15. *The Foreshore and Land Reclamation Ordinance*
16. *The Fisheries Ordinance 1978*, *The Fisheries (Amendment) Ordinance 1978*, the *Fisheries (Amendment) Acts 1983* and *1984* and the *Fisheries Conservation and Protection (Rock Lobsters) Regulation 1979*
17. *Neglected Lands Ordinance 1979*
18. *Plants Protection Ordinance 1976*
19. *Customs Ordinance*
20. *Animals Ordinance*
21. *Native Lands Ordinance 1956*
22. *The Guilder and Phoenix Islands Lands Code*
23. *The Neglected Lands Ordinance*
24. *The Non-Native Land (Restriction on Alienation Ordinance)*
25. *The Native Lands (Amendment No. 2) Act*
26. *The Land Planning Ordinance*
27. *The Public Highways Protection Act 1989*

THE REPUBLIC OF THE MARSHALL ISLANDS COUNTRY REPORT

Elizabeth Harding

Introduction: Environmental concerns and priorities for action

The Republic of the Marshall Islands (RMI) consists of 29 low lying coral atolls and five small islands, or table reefs, arranged in two almost parallel chain-like formations over approximately three-quarters of a million square miles of the Central Pacific Ocean. The total land area is small - about 70 square miles in total - and an atoll's average height above sea level is between six and eight feet. The country's population of 47,000 is concentrated in two urban areas: the capital, Majuro, and Ebeye Island, Kwajalein Atoll. The Marshallese people share with all peoples of the Pacific a deep and abiding respect for the land and the sea, which have provided them daily sustenance for thousands of years.

In recognition of the fragility of its unique environment, the RMI Government has committed resources to maintenance and preservation. The daily management and conservation of the environment has fallen to two government-funded statutory authorities: the RMI Environmental Protection Authority (RMIEPA), with legislative ties to the Ministry of Health and Environment, and the Marshall Islands Marine Resources Authority, which works in connection with the Ministry of Resources and Development. In addition, the Historic Preservation Office operates out of the Ministry of Interior, and plans are presently underway to develop a nature conservation unit within the Government.

RMIEPA programs include fresh and marine water quality monitoring, issuing of permits for earth-moving and sewage disposal, solid waste management, pesticide monitoring, provision of toilet facilities, a village inspection program, and an active public education program. Recent educational funding has allowed the production of local environmental videos, quarterly newsletters and an environmental primer for grade school use. The legal program presently emphasises the development of a comprehensive national environmental regulatory scheme with strengthened enforcement provisions.

In late 1991, the RMI's National Task Force on Environmental Management and Sustainable Development identified the following 11 environmental concerns and ranked them in order of priority for action:

1. Anticipating Sea Level Rise
2. Enhancing Fresh-Water Supply
3. Improving Solid and Hazardous Waste Disposal
4. Improving Management of Marine and Coastal Resources
5. Improving Sewage Disposal
6. Strengthening Environmental Education
7. Strengthening Environmental Instruments
8. Protecting Special Areas and Species
9. Protecting Cultural Values and Practices
10. Improving Management of Agricultural Resources
11. Anticipating Environmental Emergencies

The RMI Government has placed a high priority on global warming issues, as RMI is particularly vulnerable to the threat posed by sea level rise. Other recent Government priorities include the control of solid and hazardous wastes. The Marshall Islands shares the fate of many developing Pacific nations in its present inability to control increasing land and sea pollution. RMI lagoons and shorelines are becoming spoiled by urban wastes. Overcrowding and poor sanitary conditions on more populated atolls exacerbate this problem. RMI requires a further monetary commitment to public environmental education, as well as expanded environmental participation by traditional landowners.

Further, much work remains to be done in the protection of species and development of nature preserves. Currently, there are no legally established protected areas in the Marshall Islands, nor is there any legislation for this purpose. At the request of the Marshall Islands, a multidisciplinary team of scientists and planners in 1988 conducted a field survey of the biological diversity and ecosystems of six atolls and one island in the northern Marshall Islands.

The primary objective of the project was the assessment of the ecological conditions of the atolls and island with a view toward determining their sustainability as candidates for a system of protected areas in the Marshalls. This survey, in conjunction with increasing environmental awareness on the part of the Marshallese people, has lead to new interest in establishing Taongi (Bakok) Atoll and Bikar (Pikaar) Atoll as National Preservation Areas. Taongi's outstanding features are its pristine natural state and its birdlife. Bikar's most important conservation feature is its marine turtle nesting sites.

The process of increasing environmental awareness in RMI continues. Legislative efforts, recently focused on public health and environmental safety concerns, will soon expand to include draft legal documents concerning coastal erosion, protected areas, endangered species, and environmental impact assessment.

Legislative efforts must be followed by committed oversight. Implementing and enforcing new environmental law in the Marshall Islands has so far proven difficult. Marshallese geography militates against easy enforcement; far-flung atolls create difficult communication problems. A further constraint is the strong cultural tradition of customary landowning that resists government control of land use through environmental regulation. Stronger local participation in environmental decision-making is a partial solution, as are increased conservation funding and facilities.

International environmental conventions signed by RMI

The RMI is signatory to a number of international conventions and treaties relating to environmental concerns.

A. Compact of Free Association

The pre-eminent international document in RMI is the Compact of Free Association between the Government of the United States and the Government of the Republic of the Marshall Islands, which defines the relationship between the two sovereign nations following the termination of the United States Trusteeship. The people of RMI approved free association status by plebiscite in September 1983. The United States Congress passed the agreement in January 1986. The Nitijela (Parliament) approved the Compact and its subsidiary and related agreements by Resolution on February 20, 1986. The Compact came into effect on October 21, 1986.

Under Title One, Article VI of the Compact, the United States and Marshall Islands Governments have pledged to "promote efforts to prevent or eliminate damage to the environment and biosphere and to enrich understanding of the natural resources of the Marshall Islands". To carry out this policy, the United States has agreed to develop appropriate mechanisms, including regulations or other judicially reviewable standards and procedures, to regulate its activities governed by compact section 161(1)(3). The alternate standards must account for the "special governmental relationship" between the RMI and the United States. Technical support from appropriate United States environmental agencies is required in the development of the standards, and RMI must be given the opportunity to comment during their development. (Section 161(1)(4))

Reciprocally, the Marshall Islands, under section 161(b) of the Compact, has an obligation to develop and enforce comparable environmental protection standards and procedures.

Negotiations regarding the development of "alternate standards" for United States Government activities in the Marshalls moved forward rapidly throughout 1990 and 1991. An initial draft set of standards was made available for review in 1992.

B. SPREP Convention

As a member government and active participant in the South Pacific Regional Environment Programme (SPREP), RMI was among the first countries to ratify the *Convention for the Protection of the Natural Resources and Environment of the South Pacific* (*SPREP Convention*) and its two related Protocols. Ratification of the *SPREP Convention* and related Protocols occurred on May 4 1987.

C. Maritime conventions

In concert with RMI's enactment of the *Maritime Act 1987* (later replaced by the *Maritime Act of 1990* [P.L.1990-94]), which provides in part for a Registry of Vessels of the Marshall Islands, on March 7, 1988, the Marshallese Nitijela by Resolution accepted and approved the following maritime conventions:

* *Convention for the Safety of Life at Sea 1974*, as amended; and its related Protocol, 1976;

* *Convention of the International Regulation for Preventing Collisions at Sea 1972*, as amended;

* *International Convention of Load Lines 1966*;

* *International Convention for the Prevention of Pollution from Ships* (*MARPOL 1973/1978*), as amended;

The tenets of the *MARPOL Convention*, although politically accepted and approved, have yet to be put into full practice in the Republic.

D. Driftnet prohibition

On February 15, 1990, the Nitijela approved and accepted the *Convention for the Prohibition of Fishing with Long Driftnets in the South Pacific*, including the Protocols and associated instruments to the Convention. This Convention prohibiting long driftnet fishing was adopted in Wellington, New Zealand on November 29, 1989, at an international meeting attended by RMI. Although approved by the Nitijela, RMI has not yet ratified the Convention. RMI further demonstrated its commitment to halting the spread of driftnet fishing by adoption of the Marshall Islands *Marine Resources Authority (Amendment) Act 1989*, which prohibits the use and possession of driftnets from within the exclusive economic zone of the Republic.

E. Anticipated ratifications

RMI is still a very young country, and has therefore not yet ratified a number of proposals of interest to its environmental community. Informal discussions in government circles have indicated some political interest in ratification of the following five agreements:

* *Convention on International Trade in Endangered Species* (*CITES Convention*);

* *London Dumping Convention*;

* *Migratory Bird Treaty*;

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

* *United Nations Convention of the Law of the Sea.*

RMI laws related to environmental control and management

1. *National Environmental Protection Act 1984* (NEPA)

   Regulations promulgated pursuant to NEPA:

   (a) RMIEPA Earthmoving Regulations
   (b) RMIEPA Solid Waste Regulations
   (c) RMIEPA Toilet Facilities and Sewage Disposal Regulations
   (d) RMIEPA Marine Water Quality Regulations
   (e) RMIEPA Draft Pesticides Regulations
   (f) RMIEPA Draft Clean Air Regulations
   (g) RMIEPA Draft Marshall Islands Pollutant Discharge Elimination System (MIPDES) Regulations

   (NOTE: NEPA Section 66 saves the as-yet unrevised Trust Territory environmental regulations labelled h) and i) below.)

   (h) Trust Territory Fresh Water Quality Standard Regulations
   (i) Trust Territory Public Water Supply Systems Regulations

2. *Coast Conservation Act 1988*

3. *Marshall Islands Marine Resources Authority Act 1988*

4. *Marine Resources Authority (Amendment) Act 1989*

5. *Marine Mammal Protection Act*

6. *Marine Resources Act*

7. *Marine Resources (Trochus) Act 1983*

8. *Endangered Species Act 1975*

9. *Historic Preservation Act 1991*

   Regulations promulgated pursuant to the *Historic Preservation Act:*

   (a) Access to Prehistoric and Historic Submerged Resources
   (b) Land Modification Activities
   (c) Conduct of Archaeological and Anthropological Research in RMI
   (d) Disposition of Archaeologically Recovered Human Remains
   (e) Taking and Export of Artifacts

NEW CALEDONIA REPORT

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Translation: Catherine Giraud

New Caledonia has the particular characteristic of being one of the non-independent States of SPREP. Its legal regime stems from the law of November 9, 1988 which distributes power between the French State, the New Caledonian Territory and the three Provinces within the Territory. This brings difficulties in terms of defining jurisdiction, including matters related to the protection of the environment. The state of the legal regime protection of the environment in New Caledonia will be examined in three stages.

I: Laws prior to the law of November 9, 1988
II: The distribution of powers from the law of November 9, 1988
III: Environmental regulation since 1988.

I: Legal regime prior to the law of November 9, 1988

This is composed of two bodies of text deriving from separate origins, which complement each other to ensure environment protection: a text of French national origin and regulations adopted by the Territorial Assembly.

A. Texts of a national origin (French state)

The texts are of two kinds: either they are texts applicable to French National Territory, the application of which has been extended to New Caledonia, or they are specific texts that the French legislature has adopted, which apply specifically and only to New Caledonian Territory. Among the first kind are some which are more that a century old. For example, the *Water Irrigation Regime* (Law of April 29, 1845 and Law of August 11, 1847) or the *Water Drainage Regime* (Law of June 10, 1854). Specific texts applying to New Caledonia are more recent. Among the most important ones are those relating to forests and their protection.

B. Law of the Territory of New Caledonia

At the beginning of the 1980s, the New Caledonian Territory had passed a series of laws relating to the protection of the environment and pollution control. Indeed, since 1956, more than ten Deliberations of the Territorial Assembly and more than thirty Articles of the Executive Power of the Territory, complemented by ad hoc provisions taken from the French civil and criminal codes, have been added to the five laws and three decrees of national origin.

The Territory then undertook the vast task of remodelling and codifying of all the texts which, in 1982, formed the *Code of Protection of Nature and the Environment*.

This important work was divided into two parts: the protection of nature and sites, and pollution control.

1. The protection of nature and sites

a. Protection of the environment:

* complete natural reserves, where all human activity is banned. Flying over the area is regulated, and scientific research may only proceed with a written permit.

* territorial parks, for the protection and conservation of wildlife, both fauna and flora, for the recreation and education of the public.

* special reserves, which protect either flora or fauna: human activity may be regulated, or banned, in order to conserve certain species that are unique, rare or endangered.

b. Sites and monuments

The objective here is to establish a list of areas, sites and natural monuments, the conservation or the preservation of which presents a historical, artistic, scientific or legendary characteristic or is of interest for tourism.

In order to ensure the conservation or preservation of these monuments and sites, a listing procedure is established whereby any alienation or modification of the area is prohibited. Also prohibited are archaeological searches with the purpose of looking for objects of a prehistorical, historical, scientific, artistic or archaeological interest, unless a permit is issued by the administration.

c. The protection of small islands

In order to prevent the destruction of vegetation and trees on islands, the introduction of goats is forbidden.

d. Repression and penalties

Non-compliance with the provisions of the laws related to Parks and Reserves is punishable by a fine of 2 000 to 30 000 Central Pacific Francs together with the confiscation of hunting and fishing instruments as well as all vehicles used by the offenders when entering or leaving the area where the offence has been committed. Penalties may include imprisonment, which in the case of destruction of classified goods may be for a maximum of two years.

2. Pollution control

There are three main areas of concern: water, mining sites and the mining industry.

a. Water: surface water as well as groundwater is protected. Hence it is forbidden to discharge any waste into surface water, groundwater or the ocean. In particular, industrial and radioactive waste that may have a detrimental effect on public health and the fauna and flora of the aquatic environment, as well as the economic and touristic development of coastal areas. Regulations relating to the protection of waters apply to town planning when building on new sites. River dwellers have the obligation to maintain the quality of the river, and the drainage of wetlands and drainage is regulated.

b. Mining sites: prospecting, research and exploitation of minerals may be regulated or prohibited with the purpose of protecting buildings and townships, springs, communication links etc as well as the public interest. A commission is established to prevent and regulate mining pollution.

c. Mining Industry: The establishment of new mines is subject to a permit and their use is strictly regulated. Non-compliance with the laws relating to water or mining are punished by means of a fine and/or imprisonment of up to two months.

C. Measures adopted for the protection of the environment:

Legislative and regulatory provisions have led to the establishment of the following protected areas:

- The complete natural reserve "the Mountain of Springs".
- The territorial parts of the Blue River and the Thy Forest.
- The marine special reserves (in particular the Merlet Reserve and the wildlife reserve of Maître and Amedèe Islands).
- Four special fauna reserves: Haute Yate, island of Le Predour, Isle of Pam, summit of Aoupinie.
- Special botanic reserves: Mont-Mou, Mont Panic, Mont Humboldt, "From the South Reserve".
- Areas with restricted hunting and movement:
- 12 areas of complete protection managed by the Mining Department.
- Approximately 20 sites and classified monuments in the Territory.

D. Other regulations aiming at the protection of certain animal species.

These regulations specifically address hunting and fishing practices. Certain species, are permanently protected in relation to hunting, eg. green pigeons; their capture may also be regulated with regard to numbers or to specified periods of the year (eg. flying fox). In relation to fishing, dugongs are permanently protected (except for certain ceremonies but limited to one animal only). Oysters, crabs and tortoises may only be fished during certain periods of the year, with a minimum size specified. Their commercial sale as well as the commercial sale of certain species of fish is regulated.

II. The distribution of power under the Law of November 9, 1988

The Law of November 9, 1988 did not explicitly include the protection of the environment amongst those matters reserved to the French State and the Territory, hence it is left to the jurisdiction of the Provinces. The flora and fauna law however cedes to the Territory in regulating matters of flora and fauna, whereas the French State sees its jurisdiction and sovereignty over the Maritime Public Domain reaffirmed. This has led to a situation of conflict in which the Administrative Tribunal has had to state its position in a case related to the creation and organisation of marine reserves in the Southern Province. The representative of the French State in the Territory had challenged this decision on the basis that the Southern Province has ignored what was a Territorial jurisdiction in respect of flora and fauna and a State jurisdiction in respect of the Maritime Public Domain. The Tribunal decided in favour of the legality of the decision of the Southern Province, but the opposite position could have equally been justified. This is due to a conflict of jurisdiction: could the Southern Province, empowered with matters in relation to the protection of the environment, partially or permanently ban fishing in a marine reserve, since the regulation or banning of fishing is an exclusive jurisdiction of the Territory? The Territory also has jurisdiction in the matter of communication by maritime transport and of port facilities when they are of territorial interest. Yet this jurisdiction impinges on matters relating to the protection of the environment, as port facilities and maritime transportation are, by their nature, polluting activities.

More critical is the risk of conflict in the texts. The virtue of the principle of permanency of regulatory and legislative acts is that any text remains in force until another text enters

into whereby the previous text is either modified or rendered void. Hence the Environment Code of 1982 remains in operation despite the "Arrête of the Government Dêlêgue" of December 15, 1989 which transferred the powers in relation to the protection of the environment to the Provinces. However the future of the legal regime depends on the Provinces, which may conserve the previous regime, render it void or modify it. In the short to medium term, the risk is the creation of diverging sets of regulations, as each Province is autonomous.

It does not appear however that up to now, the Provinces have seen the modification of the code provisions as a priority, with the exception of the Southern Province.

III The law in the Provinces after 1988

Of the three Provinces of New-Caledonian Territory, only the Southern Province has enacted various pieces of legislation, as opposed to the Northern Province and the Loyalties Province. The Southern Province has adopted six main Acts, which substitute themselves for the provisions of the Code:

- Deliberation no 14/90 APS of January 24, 1990, on the protection and conservation of the Southern Province. This text institutes measures to protect natural sites as well as sites of archaeological, historical, picturesque or artistic interest, as well as objects related to the above-mentioned interests when the owners are residents of the Southern Province.

The classification aims at preventing any harmful interference with the sites and monuments. More flexible protection is also put into place through registration of sites on a list. This protection does not provide for the conservation of the sites, but for conditions of assistance in the restoration and maintenance of the heritage by the Province.

- Deliberation no 15 of March 19, 1992 on advertising and shop signs.

In order to protect the quality of the environment, advertising and shop signs are regulated along any road or street open to the public. A general regime is instituted, that may be extended or restricted by municipal authorities in certain areas such as parks and reserves. The text also regulates the size and materials to be used in advertising signs.

- Deliberation no 37 of March 28, 1990 on terrestrial and marine protected areas for the protection of the environment in the Province maintains the provisions of Deliberation no 108/ of May 9, 1980 of the Territorial Assembly.

The text gives a definition of natural reserves (complete reserve, special reserve, provincial park) and establishes the listing procedure.

Over 10 terrestrial and marine reserves now exist in the Southern Province:

- Deliberation no 38/89 of November 14, 1989 maintains the enforcement of Deliberation no 14 of June 21, 1985 on the classification of industries for the protection of the environment.

The text provides for the declaration of authorisation or permits from the administration, depending on the nature of the industrial plant. Technical prescriptions are imposed in order to prevent or reduce risks the plant may cause to health and the environment. Fifty six texts exist instituting these technical measures.

Town planning regulations also contribute to pollution control.

- Deliberation no 13 of January 24, 1990 on Mining.

- Deliberation no 78/91 APS of December 10, 1991 on mining plants.

This text replaces those of the previous regime with a permit requirement instead of the sole declaration procedure. Declaration is maintained only for quarries exploited by owners of the land for their own use, if the total area is equal to or less than 500 m^2 outside the public domain. All the others are subject to a permit, with or without a public inquiry depending on the time requirement of the mining plant. In the case of a public inquiry, an environmental impact assessment is also required. Finally, the operator is required to rehabilitate the site at the end of exploitation.

It would be unfair to include pessimistically conclusion with regard to the interest of the Provinces in their environment. For example, it can be noted that the three provinces have given unanimous consent to the development of a reaforestation policy for the Territory.

NIUE COUNTRY REPORT

Bradley Punu and John McFadzien

Niue is often described as the world's largest uplifted coral island. It has a land area of 259 square kilometres, and is surrounded by a small reef. The land area is mostly rugged, with coral pinnacles, and includes several thousand acres of native forest. There is no surface water, but artesian bores throughout the island enable subterranean reservoirs to be tapped for domestic and agricultural use.

The population of Niue has at times been as high as 5,000, but at present is approximately 2,500.

Agriculture and fishing play an important role in providing households with daily sustenance, and almost every Niuean, regardless of what other employment he or she may have, is directly involved in one of these activities for either export (in the case of agriculture) or more commonly, for domestic consumption.

Tourism has been identified by the Government as the major potential revenue earner, and a substantial sum has been expended on the upgrading and expansion of tourist accommodation and recreational facilities during recent times.

The principal concerns are:

1. Deforestation

   The rugged nature of the landscape and the fact that in most places there is only a thin layer of soil, means that it is impractical to cultivate land by means of tractor and plough. As a consequence, traditional "slash and burn" methods are used to clear land, and cropping areas rotated, with the result that much of the native forest has been destroyed and replaced with scrub in areas not being currently cultivated.

2. Chemical Pollutants

   Niue is "honeycombed" with numerous underground caves in which fresh water gathers. The nature of these is such that rainwater does not necessarily filter its way down, and there is a risk that chemicals used in agriculture, or as a by-product of other activity on the surface, will find their way into subterranean fresh water reservoirs.

3. Overfishing of Reef

   Due to the limited extent of the reef surrounding Niue, overfishing, especially of shellfish, is of real concern. The reef is seen not only as a source of food, but as a potential tourist attraction.

National Environmental Legislation

Agriculture Quarantine Act 1984

Provides for the regulation and (if necessary) prohibition of the importation of plants, plant products, animals and animal products. The purpose of the Act is to prevent the introduction of plant and animal diseases from other countries.

Atomic Energy Act 1945

This New Zealand enactment is in force in Niue, and includes provision for the control of the mining and treatment of uranium. It should be noted that studies have indicated the possibility of uranium and other minerals beneath Niue.

Continental Shelf Act 1964

This New Zealand Act, in force in Niue also, prohibits mining for minerals on the seabed without a licence.

Land Act 1969

This Act contains a number of provisions relating to land law generally, but also includes provision for the establishment (with the consent of the landowners) of reservations for communal purposes, including places of historic interest, and fishing grounds.

Marine Pollution Act 1974

This Act, passed by the Parliament of New Zealand, is Niue law also. A number of regulations in force under the Act are also Niue law. These include -

* *Oil in Navigable Waters (Exceptions) Regulations 1971*

* *Oil in Navigable Waters (Heavy Diesel Oil) Regulations 1971*

* *Oil in Navigable Waters (Prohibited Sea Areas) Regulations 1971*

* *Oil in Navigable Waters (Records, Transfer and Enforcement of Convention Order) Regulations 1971*

* *Oil in Navigable Waters (Ships Equipment) Regulations 1971*

The combined effect of the Act and the Regulations provides for the prevention and dealing with pollution of the sea.

Mining Act 1977

This Act vests all minerals in the Crown, and establishes a licensing procedure for the exploration for and mining of minerals of all kinds.

Although no mining operations are taking place at present, a number of exploratory bores have been drilled, and indications are that exploiting the minerals may at some future time become a commercially viable activity.

Niue Fish Protection Act 1965

This Act prohibits certain fishing methods including the use of explosives, Lakau Niukini, and scuba gear. The Act also gives statutory recognition to the traditional practice of "fono" and restricts to customary practice the places at which, and the bait to be used for catching one popular kind of fish (ulihega).

Niue Public Health Act 1965

Although the principal provisions of the Act relate to health and disease, this Act also contains provisions prohibiting water pollution, and enables sources of water to be declared as water supply sources.

Pesticides Act 1991

This enables the import of pesticides to be restricted, by requiring all imports to be approved by a Pesticides Committee, which includes representatives from the departments of health and agriculture.

Territorial Sea and Exclusive Economic Zone Act 1978

This Act, similar to others in the region, establishes a territorial sea (12 miles) and an exclusive economic zone (200 miles) around Niue. The Act also provides for the licensing of fishing by foreign vessels within those waters. A new, more extensive *Fisheries Act* is presently being drafted.

Wildlife Act 1960

This enables restrictions to be placed on the hunting and killing of certain species. Under this Act, the killing of the native pigeon (lupe) and flying fox (peka) are prohibited except during a limited season. The former two-month season was reduced last year to one month. The Act also enables Cabinet to declare any species of wildlife to be absolutely protected.

Proposed Legislation

A new *Conservation Act* has been drafted by Niue and is presently under consideration by Ministers and officials prior to being submitted to the Assembly for enactment.

The proposed Act, includes provisions relating to:

* The establishment of a conservation service including a Conservation Council appointed by Cabinet, and Conservation Officers;
* The establishment of National Parks and Reserves;
* The formulation and approval of conservation management plans;
* The protection of coastal zones;
* Pollution of seas and inland (subterranean) waters;
* Oil spillages etc;
* Prevention of littering;
* Regulation-making powers in respect of a broad range of matters.

The Act is intended to bind the Crown.

The policy behind the Act, through the establishment of a Conservation Service and full-time Conservation Officer, is to give conservation a higher profile in the community, and to provide the Service with means to enforce policies. The policy recognises the importance of conservation not only from the need to protect the environment for future generations of Niueans, but recognises also the value of Niue's natural features as a tourism resource.

Future Priority Actions

(a) Legislative

The enactment of a new *Conservation Act* is seen as a matter of high priority.

(b) Administrative

A Conservation Officer has been appointed within the Department of Community Affairs in anticipation of the coming into force of the *Conservation Act*. The passing of the Act will strengthen the function and powers of the Conservation Officer.

PAPUA NEW GUINEA COUNTRY REPORT

Guy Kula and Titi Nagari

Introduction

The responsibilities of the Department of Environment and Conservation includes:

(a) environmental policy development and advice to Government;

(b) environmental assessment of development projects including forestry and mining proposals;

(c) social impact assessment;

(d) pollution control and the regulation of hazardous substances;

(e) conservation of flora and fauna;

(f) management of water resources;

(g) establishment and management of national parks and protected areas;

(h) species management;

(i) administration of Papua New Guinea's international environmental agreements and responses to global environmental issues such as ozone layer depletion;

(j) provision of environmental information and advocacy of the Government's environmental policies.

Major environmental concerns

In recent years, major demands have been placed upon the Department, largely as a consequence of the country's boom in mineral, petroleum and forestry developments. The implementation of the National Forest Conservation Action Programme will lead to major changes in the way Papua New Guinea's forests are managed, and places an increased emphasis on forest conservation, alternative forms of development, environmental assessment and monitoring.

(a) Minerals and Energy

Exploration for, and development of, large mineral and petroleum resources which have substantial local impacts on the physical and social environment will continue to expand. These enclave developments require careful assessment of their physical and social impacts and a continuing need for monitoring.

(b) Agriculture

Continued development of the agriculture sector so that production increases to meet domestic needs and to contribute to foreign exchange earnings is central to the Government's development plans. Strategies need to be pursued to ensure that the harmful effects of agriculture on the environment are monitored and minimised.

(c) Forestry

The continuation of logging development and the implementation of new structures and legislation for the management and protection of forests as a renewable natural asset will

be a feature of the next decade. New approaches to management will require careful consideration of environmental factors and extensive knowledge of forest resources. Destruction and modification of Papua New Guinea's forests means that greater efforts are required to work with landowners to find alternative and less damaging forms of development and to see that important ecosystems are protected.

(d) Fisheries and Marine Resources

Marine and fresh water products will remain important for subsistence and local trade. Small scale commercial fisheries will continue to develop and there is the probability of greater domestic processing of fish caught in Papua New Guinea's declared Fishing Zone. The water quality of river systems can be harmed through mining and soil erosion, creating a threat to the sustainable management of fisheries and the welfare of the communities which depend on these fisheries.

(e) Urban Development and Population Growth

While the urban population of Papua New Guinea is small compared with many developing countries, it will continue to grow steadily through natural population increase and movements of people from rural areas. Urban growth and the development of associated activities and services will require careful planning if the environment is to be protected. Population growth, which is rising at almost 3 percent per annum, will also put pressure on the carrying capacity in some areas.

(f) Infrastructure

The government is committed to the provision of infrastructure to facilitate transport and improve the welfare of people. The expansion of the road network will be through difficult country where the impact on the environment is potentially significant.

New responsibilities have recently been given to the Department of Environment and Conservation by the National Executive Council, and there are also proposals relating to coastal management that have important resource implications for the Department.

Major international treaties and other agreements in the field of the environment

The date of accession by Papua New Guinea is in brackets.

(1) *International Plant Protection Convention* 1951 (1/6/76).

To maintain and increase international cooperation in controlling pests and diseases of plants and plant products and in preventing their introduction and spread across national boundaries.

(2) *International Convention for the Prevention of Pollution of the Sea by Oil* 1954 (as amended on 11 April 1962 and 21 October 1969) (12/6/80).

To take action to prevent pollution of the sea by oil discharged from ships.

(3) *Plant Protection Agreement for the South-East Asia and the Pacific Region* 1956 (as amended) (8/1/76).

To prevent the introduction into and spread within the region of destructive plant diseases and pests.

(4) *The Antarctic Treaty* 1959 (16/9/61).

To ensure that Antarctica is used for peaceful purposes, and for international cooperation in scientific research, and does not become the scene or object of international discord.

(5) *Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Underwater* 1963 (27/10/80).

To obtain an agreement on general and complete disarmament under strict international control in accordance with the objectives of the United Nations; to put an end to the armaments race and eliminate incentives to the production and testing of all kinds of weapons, including nuclear weapons.

(6) *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space Including the Moon and other Celestial Bodies* 1967 (16/9/75).

To establish an international legal regime for the exploration and use of outer space.

(7) *International Convention on Civil Liability for Oil Pollution Damage* 1969 (as amended) (10/6/1980).

To ensure that adequate compensation is available to persons who suffer damage caused by pollution resulting from the escape or discharge of oil from ships. To standardise international rules and procedures for determining questions of liability and adequate compensations in such areas.

(8) *International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties* 1969 (10/6/1980).

To enable countries to take action on the high seas in cases of a maritime casualty resulting in danger of oil pollution of sea and coastlines; to establish that such action would not affect the principles of freedom of the high seas.

(9) *International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage* 1971 (as amended) (10/6/1980).

To supplement the International Convention on Civil Liability for Oil Pollution Damage, 1969;

(10) *Convention on the Prohibition of the Development, Protection and Stockpiling of Bacteriological (Biological) and Toxin Weapons, and on Their Destruction* 1972 (27/10/1980).

To prohibit the development of biological weapons and eliminate them, as a step towards general disarmament for the sake of all mankind.

(11) *Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter* 1972 (as amended) (9/4/1980).

To control pollution of the sea by dumping, and to encourage regional agreements supplementary to the Convention.

(12) *Convention on International Trade in Endangered Species of Wild Fauna and Flora* 1973 (11/3/1976).

To protect certain endangered species from over-exploitation by means of a system of import/export permits.

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

To take action for the conservation, utilisation and development of the natural resources of the South Pacific region through careful planning and management for the benefit of present and future generations.

(14) *United Nations Convention on the Law of the Sea* 1982 (28/10/1980)

To set up a comprehensive new legal regime for the sea and oceans and, as far as environmental provisions are concerned, to establish material rules concerning environmental standards as well as enforcement provisions dealing with pollution of the marine environment.

(15) *International Tropical Timber Agreement* 1983 (10/12/1982).

To provide an effective framework for cooperation and consultation between countries producing and consuming tropical timber, to promote the expansion and diversification of international trade in tropical timber and the improvement of structural conditions in the tropical timber market, to promote and support research and development with a view to improving forest management and wood utilisation, and to encourage the development of national policies aimed at sustainable utilisation and conservation of tropical forests and their genetic resources, and at maintaining the ecological balance in the regions concerned.

(16) *South Pacific Nuclear Free Zone Treaty* 1985 (12/12/1986).

To establish a nuclear free zone in the region and to keep the region free of environmental pollution by radioactive wastes.

(17) *Convention for the Protection of the Natural Resources and Environment of the South Pacific Region* 1986 (SPREP Convention) (18/8/1990).

To protect and manage the natural resources and environment of the South Pacific Region.

(18) *Protocol for the Prevention of Pollution of the South Pacific Region by Dumping* 1986 (18/8/199).

To prevent, reduce and control pollution by dumping of wastes and other matter in the South Pacific.

(19) *Protocol Concerning Cooperation in Combating Pollution Emergencies in the South Pacific Region* 1986 (18/8/1990).

To enhance co-operation among the Parties to protect the South Pacific Region from threats and effects of pollution incidents.

(20) *Convention on Biological Diversity 1992.*

Yet to be ratified. Signed during the United Nations Conference on Environment and Development.

(21) *Convention on Climatic Change 1992.*

Yet to be ratified. Signed during the United Nations Conference on Environmental and Development.

(22) *Vienna Convention for the Protection of the Ozone Layer and Montreal Protocol on Substances that Deplete the Ozone Layer 1987.*

Recently endorsed by National Executive Council 19/8/92.

(23) *Convention on the Prohibition of Military or any other Hostile Use of Environmental Modification Techniques* (28/10/1980).

To prohibit the military or other hostile use of such techniques in order to consolidate world peace and trust among nations.

Current national legislation for Papua New Guinea.

(1) *Environmental Planning Act 1978*

The Act addresses development projects within the environment and should provide for a uniform and effective system. It requires the preparation of Environmental Plans taking into consideration: the long and short term objectives of the proposed project; the identification of alternatives to the project; the costs and benefits that may accrue from the project and the social, economic and ecological implications of the project.

(2) *Environmental Contaminants Act 1978*

This Act relates to the prevention, abatement and control of environmental contamination and is to provide protection of the environment in accordance with the Four National Goals of the Constitution.

(3) *Fauna (Protection & Control) Act 1966*

Provides for the establishment of sanctuaries, "protected areas" and wildlife management areas on land held under customary ownership. Wildlife management areas allow major species to be utilised by traditional owners under an approved management and cropping programme for the benefit of traditional owners. Sanctuaries protect the wildlife of an area except for specified species which may be hunted. "Protected Areas" allow hunting of wildlife except for specified species.

(4) *National Parks Act 1982*

The *National Parks Act (1982)* allows for the reservation of land for parks, reserves or sanctuaries and deals only with Government land, or land gifted to the Government. The *Fauna (Protection and Control) Act* allows land ownership to remain with landowners, but its application is restricted to the protection of wildlife.

(5) *Conservation Areas Act 1980, 1992*

The Act has potential to be the most useful instrument of all for developing new conservation management methods uniquely suitable to Papua New Guinea. This Act applies to all categories of land ownership and to all conservation purposes.

(6) *International Trade (Fauna & Flora) Act 1979*

Regulates the export of fauna and flora recognised as being under some threat. It gives effect to the Convention on International Trade and Endangered Species.

(7) *Crocodile Trade (Protection) Act 1974*

Provides for the control of crocodile farming and export.

(8) *Water Resources Act 1982*

Regulates the use of water

(9) *OK Tedi Empowering Act* (Environmental Section)

Regulates the environmental impacts of OK Tedi.

(10) *Forestry Act 1991*

Management and protection of the nation's forest resources as a renewable natural asset and utilisation of the nation's forest resources to achieve economic growth, employment creation, greater Papua New Guinea participation in industry and increase viable onshore processing.

Principal objectives as approved by the government.

The principal objectives for environmental management are to implement sustainable development systems by using the provisions of the Papua New Guinea Constitution, in particular Objective 4 of the Directive Principles, National Executive Council Directive No. 183/91, the Objectives of the *World Conservation Strategy, Caring for the Earth* and the requirements of *Agenda 21* by preparing and implementing a National Environment and Conservation Strategy. However, as a result of a recent post-United Nations Conference on Environment and Development (UNCED) seminar for Sustainable Development in Papua New Guinea, a substantive policy submission to the National Executive Council will be made on the implications and appropriate implementation procedures for a Strategy for Sustainable Development in Papua New Guinea.

Future priority actions

The Sustainable Development Seminar mentioned above recommended the following:

(1) The departments of the Prime Minister, Finance and Planning, Environment and Conservation and Foreign Affairs be directed to prepare, for the National Executive Council, the essence and principles of the four elements of the framework developed during the workshop:

(a) Social and Economic Dimensions

(b) Conservation and Management of Resources for Development

(c) Strengthening the Role of the Major Groups

(d) Means of Implementation

and that these be endorsed as the principal environmental and development priorities in Papua New Guinea.

(2) Coordinated environmental and conservation policy direction and performance measures at national, provincial and local levels;

(3) The *Convention on Biological Diversity* and the *Convention on Climate Change* be ratified at the next session of Parliament.

(4) Development and promulgation of techniques to secure cooperation from landowners for implementing sustainable management systems;

(5) Conservation and Environmental values are integrated in sustainable land use management practice;

(6) The UNCED Steering Committee be maintained in the interim to provide oversight and coordination of all necessary arrangements for the establishment of the National Sustainable Development Strategy (NSDS) and its Steering Committee.

SOLOMON ISLANDS COUNTRY REPORT

John Houriae

Introduction

At present, environment law in Solomon Islands is still in its development stage. At the moment, the country still does not have any national law governing the management of the environment. This is not to suggest that the Government is unaware of this serious inadequacy in the law. The Government, through the Ministry of Natural Resources, has over the past years engaged a number of consultants to do studies into various aspects of the environment with the view to formulating a national environment policy that would form the basis of environmental legislation. In this regard, discussions are proceeding both at the national and provincial levels.

In April 1992, a workshop was held in Honiara under the auspices of the SPREP, through the Regional Environment Technical Assistance Project. The workshop, known as the National Environment Management Strategy for Solomon Islands, came up with numerous proposals. All these proposals and findings were compiled in the *Solomon Islands National Environment Management Strategy*, and in the *Review of Environmental Law in Solomon Islands*. The reports are a major breakthrough for Solomon Islands in terms of forming a sound basis for any environmental law discussion.

Various reports and drafts have been in the Ministry for some time but no action has been taken to date. It is hoped that in 1993 Solomon Islands should have an *Environment Bill* before the National Parliament.

There are, however, other pieces of legislation that are connected with the environment that are already in force. These are:

1. *Forest Resources and Timber Utilisation Act 1972* (this Act repeals the *1969 Forestry Act*);
2. *Mines and Minerals Act 1990*;
3. *Petroleum Act 1987*;
4. *Town and Country Planning Act 1979*;
5. *Fisheries Act 1972*;
6. *Continental Shelf Act 1970*;
7. *Lands and Titles Act 1970*.

The above are some of the main pieces of legislation dealing with the environment. Some of the subsidiary legislation is in various stages of drafting, whilst some is already in force. It is going to take some time before all the subsidiary legislation is in place.

Recent awareness and appreciation of the importance of the environment can be seen in this legislation and how it is drafted. Legislation such as the *Mines and Minerals Act* and the *Petroleum Act* have provisions dealing with the environment. Similar provisions are expected to appear in other forthcoming legislation covering Water Resources, Public Health, Fisheries etc.

Despite the lack of national legislation Provincial Governments have responded to the importance of environment issues. A number of Provincial Ordinances dealing with

various aspects of the environment are already in place. The Western Province's *Protection of Wrecks and War Relics Ordinance, 1990* for example aims at protecting these war relics. The *Wildlife Management Area Ordinance 1990* is another example. More and more Provinces are enacting their own environmental ordinances rather than waiting for the National Parliament to legislate.

TOKELAU COUNTRY REPORT

Hosea Kirifi and Suia Gaualofa

Introduction

Tokelau, a non self-governing territory under New Zealand's administration, consists of three small atolls in the South Pacific with a total land area of approximately 12 square kilometres and a population of nearly 1,700.

The atolls of Tokelau - Atafu, Nukunonu and Fakaofo - lie between latitudes 8^{o} and 10^{o} south and longitudes 171^{o} and 173^{o} west. The central atoll Nukunonu is 92 kilometres from Atafu and 64 kilometres from Fakaofo, with the nearest sizable neighbour, Western Samoa, being 480 kilometres to the south.

Each atoll consists of a number of reef-bound islets encircling a lagoon. These islets, known as *motu*, vary in length from 90 metres to six kilometres, and in width from a few metres to 200 metres. At no point do they rise higher than five metres above sea level.

Main environmental concerns in the country

Being only a small island country, Tokelau does not have the kind of environmental concerns that developing countries have. However, it has very limited resources and the introduction of Western foods and other products have brought not only many changes but many problems too, for example, pollution and disease.

Waste disposal was never a problem in Tokelau. Biodegradable wastes such as leaves, coconut husks, wood etc were used as compost material. But since the introduction of aluminium cans, plastic, polystyrene etc, people have become careless in managing waste disposal. And because living quarters have become over-populated in a short period of time, there is no longer enough space for compost heaps or plantations nearby. Rubbish is thrown in the sea to go out with the tide, but it comes back to the shores, thus causing problems along the coast. Broken bottles, used car and torch batteries are dumped, their contents leaching into the soil, thus polluting the ground water.

Priorities for action

Because the Environment Unit for Tokelau is new, these problems have just been brought to the public's attention, and not much action has been taken on them yet. The only action has been the taking of the wastes from Tokelau to Samoa for recycling e.g. batteries, bottles and aluminium cans are sold to a company in Samoa for recycling. Steps have been taken to bring to the public's attention the disposal problems caused by the types of food they eat.

International Conventions

Tokelau has not signed any international Conventions, as New Zealand signs on Tokelau's behalf, but with consultation with Tokelau. However, it does have the ability to sign conventions on its own if authority is given from New Zealand. Tokelau has not yet been consulted by New Zealand on the outcome of the Rio Summit, so we are still unaware as to whether or not Tokelau is a signatory to any of the Conventions or other documents coming out of the Rio Conference.

Legal arrangements for environmental management

Tokelau does not have any legal arrangements for environmental management although each atoll has its own cultural practices for protecting and conserving natural resources.

Policies approved by Government

A list of proposed policies has been approved by the government of Tokelau (Elders). Following this, three strategies - Environmental Education and Training, Environmental Health, and Waste Management - have been written but are still being amended.

Future priority actions

There is a need for a national legislation if Tokelau is to improve its environmental management.

TONGA COUNTRY REPORT

Netatua Fifita

Introduction

Tonga is no different from other similar small Pacific countries that have a small resource base and a fragile environment. Sustainable development in that context is not an easy task, unless commitment and integrated approaches are adopted by all levels, and at all stages of the development.

The current situation of environmental management in Tonga is stagnant. Well-formulated and written environmental policies and guidelines are not being followed because of the long delay (eight years) in passing into law the draft Bill entitled *Land Use, Natural Resources and Environmental Planning Act.* So-called economic growth takes precedence over proper planning and sustainable utilisation of the small resource base.

Main environmental concerns

The Sixth Development Plan has, as a national objective, the continued protection and management of natural resources for sustainable development. In accordance with that objective, the Government aims to implement policies to prevent depletion of the Kingdom's natural resources. At the same time, the overriding development objective is that of achieving sustainable economic growth, recognising that this objective may on occasion conflict with other objectives, such as the protection of natural resources.

Economic growth is seen as a pre-condition for other economic objectives, and in the pursuit of this imperative, some damage to the environment will be unavoidable. The aim is to ensure that there is no irreversible damage to the prospect of long-term economic sustainability which is intimately bound to the Kingdom's natural environment.

Prime concerns of Government are:

* sound management of lands and natural resources to avoid degradation of the ecology and the environment, and to minimise long-term contamination of the soil with chemical fertiliser which could also harmfully pollute the underground water and acquifers;

* coastal zone management to minimise pollution or siltation of reefs, lagoons and building materials (sand, aggregates);

* marine resource management, particularly overfishing in lagoons and fringing reef, and over-exploitation of the black coral (and other ornamental corals) on which the jewel trade is based;

* climate change and sea level rise, particularly with respect to low-lying areas of the main islands and also of the atolls; and

* the maintenance of the remnant biological diversity.

Current institutional framework

1. Policies

Environmental quality and protection has been a long-existing policy in the Government of Tonga. Evidence of this is the *Birds and Fish Preservation Act* which existed in 1934 and

was amended much later in 1974 to include other elements of the environment such as mangroves.

During the Fourth Five-Year Development Plan period, (1981-1985) the Government of Tonga specifically outlined, under the Section dealing with Land and Natural Resources, its concern with preservation and enhancement of the environment with particular consideration being given to: the establishment of national parks and reserves; conservation and management of typical and unique ecosystems and natural areas; protection of endangered species; water quality and the improvement of sewerage and drainage of urban and rural areas to acceptable standards (Fourth Development Plan, p 18).

In the Fifth Development Plan (1986-1990), there is a clear indication of concern about the effect of resource utilisation on the ecology and environment for future generations. This is reflected in the overall national objective, where it aims "to ensure that land and natural resources of the Kingdom are managed and utilised in such a manner that the ecology and environment are not destroyed for future generations."

The Sixth Development Plan (1991-1995) further emphasises the need to: safeguard the natural resources and heritage of the Kingdom, preserve the social and cultural functions that relate to the environment; enhance the contribution of natural resources to economic and social progress; improve the management of natural resources in order to attain optimum levels of exploitation and sustainable environment. (Sixth Development Plan, page 75)

Another indication of Government initiatives was the formation of the Interdepartmental Environment Committee (IDEC) to compile the Environment Management Plan (EMP) for the Kingdom of Tonga, which was completed in 1990. The EMP is a valuable first step in the process of moving to implementable environment management strategies and programs.

2. Institutions

Institutional constraints have always impeded optimum resource use in Tonga, as each Ministry pursues its own objectives, with little coordination and integration between sectors.

The Ministry of Lands, Survey and Natural Resources (MLSNR) is the main environmental policy-making body and works in close cooperation with a range of Ministries such as Health, Agriculture, Forestry, Fisheries, and Central Planning. Responsibility for environmental matters is concentrated in the Environmental Planning Section in the MLSNR. Environmental responsibilities also lie with other Government Ministries.

Responsibilities of some governmental agencies

Ministry of Agriculture and Forestry

Responsible for exploitation, marketing and conservation of natural resources through the various divisions of: Livestock, Research, Extension, Quarantine, Quality Management and Forestry.

Fisheries Department

Has responsibility for the conservation, management and development of fisheries.

Ministry of Health

Responsibilities for public health, sanitation and solid waste disposal and monitoring of rural water supplies and water quality.

Central Planning Department

Responsible for passing on all development proposals for assessment by the Ministry of Lands, Survey and Natural Resources and Environmental Planning Section (Environmental Impact Assessment Policy, 1985).

3. Legislation

There is a large body of legislation containing provisions of environmental importance, some going back more than 50 years, such as the *Birds and Fish Preservation Act 1934*. Legislation of greater environmental importance includes:

(1) *Parks and Reserves Act* 1976 and 1988 provides for the establishment of a Park and Reserves Authority and for the establishment, preservation and administration of parks and reserves, primarily with the goal of preserving wildlife and forest species.

(2) *Forest Act 1961* provides for the setting aside of areas as 'forest areas' or reserved areas.

(3) *Birds and Fish Preservation Act* 1915, (as amended) provides for protected areas and for declaration of complete protection, or closed seasons for specified species; prohibits the cutting or removal of mangroves in any area.

(4) *Fisheries Act 1989* is a new Act. It repeals the *Fisheries Regulation Act 1923*, the *Fisheries Protection Act 1973* and the *Whaling Industry Act 1935*. The Act supports a sustainable development approach to the Kingdom's fisheries and also contains special environmental provisions governing fishing methods, including prohibition of the use of poisons and explosives.

In addition the following legislation contains environmental provisions:

(1) The *Land Act 1903* as amended controls land use, while section 22 of the *Land (Timber Cutting) Act* regulates cutting and taking of trees, removal of sand and quarrying;

(2) The *Public Health Act 1913* covers water supply, tanks and wells, health dangers, infections, disease control, food inspections, facilities, building regulations, litter and inspections of public facilities;

(3) The *Minerals Act 1949* sets conditions for permits for mineral exploration and mining for protection and restoration of forest areas;

(4) The *Pesticides Act 1975/1981* regulates the registration, manufacture sale and use of pesticides;

(5) The *Plant Quarantine Act 1981* provides for control for importation of plants and their internal movement within Tonga to protect agriculture from the introduction and/or spread of exotic plant, pests and diseases;

(6) The *Noxious Weeds Act 1903* provides for the eradication of plants harmful to agriculture;

(7) The *Garbage Act* provides for garbage control and dumping;

(8) The *Customs and Excise Act 1983*, as amended prohibits importation of toxic or hazardous wastes into the Kingdom, and provides for coral protection;

(9) The *Polynesian Heritage Trust 1984* provides for cultural preservation;

(10) The *Preservation of Objects of Archaeological Interest Act 1969* protects historic sites from excavation;

There are also three pieces of draft legislation that have significant implications for the environment:

(1) The draft *Land-Use and Environmental Planning Act* provides a framework for development planning, planning schemes and for development applications and the detailed information required for environmental impact assessment;

(2) The draft *Marine Pollution Act 1992* provides for discharge of oil or pollutants outside and inside Tongan waters and as well as discharge of garbage and sewage from ships and platforms into the marine environment;

(3) The draft *Territorial Sea and Exclusive Economic Zone Act 1978* includes provisions for the protection and preservation of the marine environment of the territorial sea;

Legislative problems

All of the laws mentioned above and those based on the Regional Environmental Technical Assistance Legal Review conducted by Mere Pulea reveal that environmental concerns cut across sectoral boundaries. For example, the protection of marine parks and reserves under the *Parks and Reserves Act* is administered by the Ministry of Lands, Survey and Natural Resources. The *Fisheries Act 1989* s. 22 (1) and the *Forestry Act* also make provisions for Protected Areas and are administered by the Ministry of Agriculture and Forestry.

Further, the (*Birds and Fish Preservation Act*) *1943* is grossly inadequate in the present circumstances. If the sanctions imposed for various offences found in the principal enactments and the subsidiary legislation are to act as a deterrent, adequate enhancement of the penalties and fines would be essential. Similarly one of the main difficulties is the inadequacy of some of the environmental provisions found in the existing laws to meet present-day circumstances. The legislative protection for the National Heritage should be broadened to cover those items of Natural Heritage that are exported out of the country. There is also no legislation to protect buildings that are of historical architectural significance. The other problem lies with the transfer of protective provisions existing in one statute to another when amendments are made to older legislation. For example, the protective measures on the *Whaling Industry Act* were lost when the Act was repealed by the *Fisheries Act 1989*.

Where adequate environmental laws and provisions exist, there are problems nevertheless with enforcement, or lack thereof, due to lack of knowledge regarding the operation of a law, uncertainties or ambiguities concerning powers, functions, authorities and jurisdictions; lack of by-laws and institutional limitations; lack of mandate on environmental quality standards; lack of reliable and long-term policies in certain sectors; and a lack of trained personnel and technical resources for proper surveillance and monitoring activities. It is noteworthy that there is no environmental impact assessment legislation currently in place. Environmental impact assessments are done on an ad-hoc basis, and that is one of the reasons why the draft *Land Use and Environmental Planning Act* should be seriously reviewed and considered by the Government of Tonga.

Future priority actions

(1) Public participation

In order to manage the natural resources of Tonga on a sustainable basis, it is necessary to have a broad understanding and appreciation of the limitations of those natural resources. It requires that both managers and the general public should be aware of and sensitive to regulatory requirements. To improve on these, public participation in policy making as well as legislation is very important.

(2) Education and public awareness

The need for public awareness and education is urgent and a priority in order to ensure the success of environmental programs. Similarly, awareness of existing legislation is equally urgent.

(3) The draft *Land Use and Environmental Planning Act* is an important piece of legislation which contains provisions for Environmental Impact Assessment. It was recommended by Pulea (Regional Environmental Technical Assistance, Legal Reviewer) that Environmental Impact Assessment guidelines be developed to secure the integration of environmental measures in the decision-making process for projects.

(4) Institutional strengthening (Environmental Planning Section) is one of the priority areas. The environmental section has the administrative and technical capacity to effectively implement policies and enforce relevant legislation.

(5) Hazardous material handling and storage is not adequately covered by existing legislation. The Environmental Management Plan for Tonga recommended a *Hazardous Materials Act* to control the importation, handling, storage, use, production and disposal of hazardous materials.

To protect the environment in Tonga, legislation and rigour in the implementation of the procedures are important. It is the implementation of environmental management practices which is paramount. Where one has to compete for scarce resources, people's participation could make the task easier and more cost-effective.

Environmental management in Tonga can be greatly assisted by better coordination between Government departments and committees such as Interdepartmental and Non-Government Organisations. This does not require new legislation, only goodwill, for a common cause.

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TUVALU COUNTRY REPORT

Alefaio Semese

Geography

Tuvalu is comprised of nine extremely small low-lying coral atolls, rising only a few metres above sea level. Tuvalu extends over 560 kilometres from north to south with a land area of 255.9 square kilometres. The estimated population is 9,250. Approximately 32% of the total population live on the capital island of Foundation.

Environmental concerns

(a) These issues require assistance from outside the country:

* the threat from sea level rise;
* dangers associated with nuclear pollution
* disposal of hazardous waste by industrial nations in the oceanic environment;
* management and protection of Exclusive Economic Zone

(b) the high population and growth rate which has an adverse impact on the scarce terrestrial and marine resources and the environment.

(c) Due to the limited land area and high population density, sea-side coastal erosion is a major problem on all the islands. In 1985, a protection program was launched with the assistance from the European Economic Community to do land reclamation and sea-wall construction on five of the worst affected islands.

(d) Establishment by the Government of a special unit within the Meteorological Division to collect information in cooperation with the regional and international organisations.

(e) Refuse disposal is of concern on the main island, where there is greater use of imported, wrapped food. There is a need for a collection and disposal system.

Environmental conservation and protection

The Government has a policy that assistance be sought from development partners, including non-governmental organisations in assessing the impact of development projects on the environment. The South Pacific Regional Environment Program has been given the task of developing a plan working towards the realisation of the country's environmental goals, and preparation of a status report on the domestic environment.

In addition, an administrative, legislative and policy review should be undertaken with the aim of formulating an overall management strategy, covering issues such as eliminating or counteracting domestic pollution, harmful fishing practices, use of sand and gravel on foreshores, urbanisation and population control; monitoring of sea level rise as a result of global warming and related issues.

International conventions to which Tuvalu is a signatory, or has acceded

* *South Pacific Nuclear Free Zone Treaty*
* *Nuclear Non-Proliferation Treaty*
* *Convention for the Protection of the Natural Resources and Environment of the South Pacific*
* *Prohibition of Fishing with Long Driftnets*

* *Framework Convention on Climate Change* 1992
* *Convention on the Conservation of Biodiversity*
* *London Dumping Convention*

Laws of Tuvalu pertaining to the environment

Name of Act	Long Title
Constitution of Tuvalu	to repeal and replace the Constitution
Native Land Act	relating to native land and registration of title thereto
Neglected Lands	to provide for the purchase of neglected land and to regulate the sale thereof to indigent natives
Mineral Development Licensing	to make provision for the grant of licences to search for and win minerals
Foreshore and Land Reclamation	declaratory of the ownership of the foreshore and regulating certain reclamation projects
Quarantine	relating to quarantine
Plants	to provide for the protection of plants within Tuvalu
Water Supply	to make provision for water supplies
Petroleum	to regulate the importation, storage and sale of petroleum
Importation of Animals	to regulate importation of animals
Fisheries	to make provision for the promotion and regulation of fishing and fisheries industries in Tuvalu and its fisheries limits
Wildlife Conservation	to provide for the conservation of wildlife
Closed Districts	to provide for the declaration of closed districts
Prohibited Areas	to provide for certain islands and their territorial waters to be declared prohibited areas
Wreck and Salvage	to provide for wrecks and salvage
Supplement Merchant Shipping (Tuvalu) Order 1975	to apply provisions of the UK *Merchant Shipping (Oil Pollution) Act 1991*
VIII Nuclear Installation	to make provision in respect of the

(Gilbert & Ellice Is. Order 1972)	internal waters, the archipelagic waters, the territorial sea, the exclusive economic zone and the contiguous zone of Tuvalu
Livestock Diseases Act 1984	to control the spread of disease amongst livestock
Pesticide Act 1990	to control the importation and use of pesticides
Marine Pollution Act 1992	to make provision for preventing and dealing with pollution of the sea

VANUATU COUNTRY REPORT

Hamlison Bulu and Ernest Bani

Background

Vanuatu does not have comprehensive legislation specifically related to environmental control and management. Legislative controls do exist, but they consist of fragmentary provisions scattered among enactments dealing with a variety of subjects, including public health, town planning, mining rights, fisheries, public works, forestry etc. The consequences of this pattern are threefold. First, legislative control does not address every aspect of environmental protection. Some of the major omissions in the existing legislation are those concerned with protected areas, pollution and control of toxic substances. This piecemeal approach leaves gaps which result in inadequate treatment of some aspects of the environmental problem. Second, environmental controls are frequently incidental to the main purposes of existing legislation and are highly sectoral in their application. Third, the Ministries and other public bodies having responsibility for the implementation of such environmental controls are so numerous and disparate that any form of coordinated activity is extremely difficult. The institutional arrangements for enforcement of the legislation are particularly weak.

Main environmental concerns in Vanuatu

Generalisations about environmental issues in Vanuatu include concerns about agricultural practices, the wide extent of agricultural land use, the impact of the land tenure system on environmental management, localised population pressure and high national population growth rate, damage to ocean or reef resources, sea-level rise, soil erosion, and loss of forest and associated biodiversity soil fertility in the subsistence sector, pasture degradation, water pollution, waste disposal, rapid urbanisation and depletion of trochus shells (*Trochus niloticus*), coconut crabs (*Birgus latro*) and the mangrove resource.

Priorities for action on these problems

Vanuatu has made good progress with these problems during its decade of independence. The institutionalisation of environmental management into the Government sphere has proceeded about as quickly as it could, given the size of the country, the scarcity of trained personnel and the many other jobs that faced the Government at the time of Independence. Vanuatu has clear policy statements regarding the protection and healthy maintenance of the country's environmental heritage. The legal apparatus to implement the policy is currently undergoing expansion and refinement to make it more adequate to the task.

Attempts to order priorities for the issues on the basis of which most urgently require a response face the usual predicament - that the best way to deal with environmental issues is all together. The pressures that arise from human needs entwined with increasing densities of population and efforts to achieve economic growth, manifest themselves as a great variety of activities that affect the many components of the environment, in direct and indirect ways, as well as known and unknown ways.

In Vanuatu, logging affects the birds, endemic orchids, reef fish and trees. Tourism increases the eutrophication of the reefs, whose beauty helped to attract the tourists. The development of local industry and fast transport threatens the survival of wildlife species.

Existing policy for environment and conservation in Vanuatu

The 1980 constitution of the Republic of Vanuatu contains an obligation with regard to what can currently be termed sustainable development. Two of the seven National

Development Plans (1987-1991) refine and expand that obligation. Article 7 (d) of the constitution states:

> Every person has the following fundamental duties to himself and his descendants and to others:
>
> (d) to protect Vanuatu and to safeguard the national wealth, resources and environment in the interests of the present generation and of future generations.

The National Development Objectives relevant to the environment are to:

* increase productive utilisation of the country's natural resource base as a means of generating viable and sustained economic growth; and

* ensure that Vanuatu's unique environmental and cultural heritage is not damaged in the process of economic development and change.

This objective is to conserve all that is positive in the many diverse cultural traditions of Vanuatu, and to ensure that the environment of the country is not damaged in the process of economic growth and development.

A number of Ministries and departments have sectoral responsibilities assigned under law for conservation and environment in their areas of interest. The Agriculture Department is responsible for wildlife protection under the *Wildlife Protection (Birds) Regulations*, 1962, which gives total protection to 16 species, provides a closed season for 11 species, and places an export ban on 11 species. The Forestry Department is responsible under the *Forestry Act 1982*, for forest plantations and conservation in forest areas. The Fisheries Department implements the *Fisheries Act 1982* with provisions for fisheries management, marine reserves and species protection. A Bill for a *National Parks Act* was tabled by the Minister of Natural Resources, who is also responsible for the environment, in Parliament in November 1992.

International agreements

With regard to international conventions, Vanuatu became a party to the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES) in 1988 and ratified the Convention in 1989. The *International Trade (Fauna and Flora) Act* was gazetted in 1991. At the recent Earth Summit in Rio de Janeiro, Vanuatu signed the *Biodiversity Convention* and the *Framework Convention on Climate Change* which it hoped to ratify before the end of 1992. Other than these, Vanuatu is not yet party to any of the international conventions or programmes directly promoting the conservation of natural areas such as:

* the *Convention for the Protection of Natural Resources and Environment of the South Pacific* (the SPREP Convention);

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

* the *World Heritage Convention*;

* UNESCO Man and the Biosphere Programme; or

* the *Convention on Wetlands of International Importance Especially as Waterfowl Habitat* (the *Ramsar Convention*).

Present environmental management activities in government

General responsibility for environment and conservation in Vanuatu is vested in the Environment Unit within the Ministry of Lands and Natural Resources. The unit advises the government on the environmental impacts of development projects, undertakes environmental surveys and monitoring, initiates environmental awareness and education programmes, identifies and establishes protected areas, and serves as the national focal point for Vanuatu's participation in international environmental programmes and organisations.

Conclusions

There already exists a substantial body of environmental law in Vanuatu. This consists not only of sectoral legislation specifically referring to environmental issues, but also other parts of the general law which have considerable potential for use in ensuring the protection of the environment and the wise use of natural resources.

In the field of specific environmental law, there are major gaps in the sectoral coverage. The most striking are in the areas of waste management, water resources and dangerous substances. Recent escalation of development pressures in Vanuatu, especially in the coastal zone, has also rendered urgent the extension of planning control to the littoral zone and the setting of environmental impact assessment for major projects on a statutory footing.

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WESTERN SAMOA COUNTRY REPORT

Kosimiki Latu, Samuela Sesega and Roger Cornforth

Environmental context

In the 1990s, Western Samoa finds itself with an environment that in many ways is showing considerable stress and which is seriously degraded in some areas. Although much of the country comprises large islands of volcanic origin, resources are nonetheless extensively exploited. Some particularly important environments, such as lagoons and reefs, are very over-exploited. Most natural environments have little resilience left to absorb the effects of the two devastating cyclones experienced in 1990 and 1991.

Samoa has a Westminster-style parliamentary system superimposed upon a system of customary decision-making operating at the village level. The village system of decision-making is paramount in all villages outside Apia, the capital. The laws of Parliament have limited effect in such villages, where village councils of chiefs or fono make and enforce all rules. Approximately 80% of all lands are in customary ownership and under the jurisdiction of village fono. Of the remainder, 11% is Government land and 9% privately owned.

A number of environmental issues are recognised in Samoa. In general, however, six principal problems can be identified:

(a) **Population** - Samoa has a population of 163,000. This is between five and six times the population at the time of the arrival of the missionaries in 1830. The rate of population increase before migration is 2%. But the actual rate of population increase is relatively low (between 0.6% and 1.06%) because of a particularly high rate of emigration. This rate is heavily dependent on the economies of the principal countries receiving this migration - traditionally New Zealand, Australia and the United States, and is thus somewhat volatile.

(b) **Deforestation** - on average 7,500 acres of rainforest is cleared each year. The rate is approximately the same on both Savii and Upolu. Only 20% of the deforestation is attributable to logging, with the rest being the result of agricultural clearance. At this rate, all lowland forests will be cleared within 10 years, or sooner, if recent logging industry reorganisation continues. Currently only 28% of Upolu (the most populous island) is forested, and 46% of Savaii.

(c) **Lack of Complementarity between Customary and Parliamentary Law Systems** - results in lack of compliance with environmental laws, considerably weakening the ability of the central government to protect the environment. Statutory laws and village rules are not generally linked, and may often be contrary to each other. The laws of Parliament are thus often neither complied with nor enforced, particularly outside Apia.

These three problems can together be considered the primary ones. The following three are largely consequential, but nonetheless most significant in their own right:

(d) **Loss of biological diversity** - with the clearing of the forests, many lowland and some upland ecosystems are being lost and degraded. With the recent cyclones, the remnant areas have not been sufficient or resilient enough to absorb further damage. Many notable species are now threatened, including the fruit bats, many bird species and tree species such as the ifelele. Other less well known species are similarly likely to be under

threat. The presence of exotic birds and weed species is making the recovery of some indigenous species and habitats very difficult.

(e) **Damage to reefs and lagoons** - Samoa's reefs and lagoons are considered to be among the most severely degraded in the South Pacific. They are, in general, considered to be in the late stages of ecological collapse due to several causes. The major causes are attributable to deforestation (sedimentation from soil erosion), nutrient pollution from increasing population, overfishing, the use of damaging and unsustainable fishing practices (dynamiting, poisoning, use of large fish traps), loss of productive tidal margins - particularly mangrove habitat - for settlement, and pollution from urban and agricultural sources. In addition, the effects of Cyclones Ofa (1990) and Val (1991) have been very significant and full recovery will take some years. Because of the other ecological problems, this recovery will take much longer than it would in a less degraded environment. In many places, full recovery cannot be expected.

(f) **Protection of the quality and supply of water** - deforestation and settlement of key catchment areas is having a severe effect on the quality and quantity of fresh water. Most of Samoa, in particular some northern districts, is seasonally short of water. Climate change predictions support this situation.

Priorities for action

(a) **Population** - A programme towards the preparation of a National Population Policy was initiated by the Division of Environment and Conservation (DEC) of the Department of Lands, Survey and Environment. A draft policy has been prepared and slow progress is being made under the coordination of the Western Samoa Family Health Association Inc. This policy should receive priority attention.

(b) **Deforestation** - A National Forest Policy is presently being prepared, although Cyclone Val has caused some delay in its completion. Reorganisation of the forestry industry has also made the picture more difficult, in that salvage logging and the importation of portable saw mills, along with the relaxation of controls on logging companies by the Government, have increased the activities of this sector. It is important that the policy is completed, and a matter of priority that the controls are reinstituted and enforced according to the policy. In addition, a land use policy or national agriculture policy is needed to manage the clearing of forests for agriculture.

(c) **Law and compliance** - It is important that appropriate mechanisms are found to bridge the gap between Government and customary law-making and enforcement. Existing laws such as the *Village Fono Act* should be enforced, monitored and assessed. New mechanisms such as that proposed as an amendment to the management planning provisions of the *Lands and Environment Act* should be pursued and enacted.

(d) **Loss of Biological Diversity** - Ecological survey work needs to be completed, particularly for the higher altitude forests and the reefs and lagoons. Follow-up to ecological surveys already undertaken needs high priority, particularly in the area of village liaison. The Global Environment Facility Biodiversity Projects for Samoa, once approved, should have high priority.

(e) **Damage to reefs and lagoons** - Coordination with Fisheries Division efforts is required, particularly in the area of public information, education and village liaison. The first of Samoa's Biodiversity projects under Global Environment Facility funding is for an area of mangroves. The results of this project will be applicable to other coastal areas.

(f) **Protection of the quality and quantity of water** - Water catchments are now the subject of considerable government effort by the coordination of Forestry and DEC programmes, increased government funding and the approval of a major Asian Development Bank project.

It is the nature of environmental problems that they are all inter-related. Two major programmes are underway to bring about coordinated and planned responses. These are:

* **Development Plan 7 Follow-Up** - DP7 development plan sets the direction and overall policy for government based, strong sustainable development themes.

* **Public education and information programme**

* **Waste management Strategy**

The next phase is for the completion of Government sector policies. These policies are then to direct programmes and set priorities. Their development is critical.

National Environment Management Strategy - The development of a National Environment Management Strategy (NEMS) is a major step towards sustainable development. The coming together of DP7 and NEMS should result in a comprehensive blueprint for sustainable development.

Existing legal arrangements for environmental protection, management and conservation of natural resources

In concert with gathering environmental awareness of the past two decades, Western Samoan environmental policy initiatives and statutory language have grown more comprehensive. Today, a number of national statutes directly or indirectly aid the pursuit of environmental protection.

1. Natural resource protection legislation

a) *Agriculture, Forestry and Fisheries Ordinance 1959*

When enacted in 1959, this Ordinance was the primary vehicle for natural resource conservation, protection and management in Western Samoa.

The Ordinance established the Department of Agriculture, Forests and Fisheries (DAFF) under the control of a minister who was empowered to carry out a number of functions. It must be noted that some of these functions have been transferred to the *Department of Lands, Surveys and Environment Act* e.g. promoting the conservation, producing a development plan of the natural resources of Western Samoa, especially soil, water and forestry pursuant to s. 148 of the *Lands and Environment Act 1989*. This function is now carried out in conjunction with the Department of Lands, Surveys and Environment.

Under the Ordinance, the Minister was also granted various powers such as carrying out economic surveys into any aspect of agricultural, pastoral forestry, or fish production, establishing experimental and demonstration

farms; devising and promoting research related to health of livestock, trees, soil management etc.

These powers, granted in 1959, were development-oriented and not particularly sensitive to environmental issues. Such a conflict between development and conservation in one ministry is not an uncommon phenomenon.

To overcome this, the Legislature passed the *Lands and Environment Act 1989*, which is an important move in the direction of planning comprehensive oversight within one organisation.

(b) *Forest Act 1967*

This detailed Act, drafted after Independence, sets out revised and expanded law relating to the conservation, protection and development of the natural resources of Western Samoa, especially soil, water and forests. DAFF administers this Act.

(c) *Fisheries Act 1988*

This Act provides for the conservation for the conservation, management and development of Western Samoa Fisheries and for the licensing and control of foreign fishing. Pertinent Environmental Sections are included in Part II of the Act. The Act is administered by the DAFF.

(d) *Animals Ordinance 1960*

The primary purposes of this Ordinance are to register, improve and control livestock, to control impounding and importation of animals and to protect game. The Ordinance is administered by the DAFF.

The Regulations regarding species protection have also been enacted since the Act took effect. The *Animals (Protection of Wild Birds) Regulations 1981 and 1989* list certain absolutely and partially protected wild birds; the Regulations are administered by DAFF. They are presently under review for further modification.

(e) *Taking of Land Act 1964*

Article 101 of the Constitution provides for three types of land tenure: Customary, freehold and public lands. Pursuant to Article 102, customary land may not be alienated, although such lands may be leased or taken for public purposes. Article 14 of the Constitution requires that any taking be accompanied by timely and adequate compensation. The *Taking of Land Act 1964* covers all aspects of compulsory acquisition of land. Section 7 of the Act empowers the Head of State, acting on the advice of the Minister to take customary or freehold land for any public purpose. (definition of 'public purpose' as that which includes a great many purposes that are protective of the natural environment).

(f) *Alienation of Customary Land Act 1965*

This Act permits the Minister of Lands, Surveys & Environment to grant a lease or licence of any customary land, as trustee for the benefit of customary owners of the land, for an 'authorised purpose', defined as a public, hotel, industrial, commercial or business purpose. The Act most

directly affects the environment by allowing the lease of customary land for forestry. 'Forestry' is broadly defined in section 2 as:

> the application of business methods and technical forestry principles to operations on land for the establishment, culture, protection and maintenance of forests, ...

This Act is jointly administered by the Department of Lands, Surveys and Environment and the Department of Agriculture, Forests & Fisheries.

(g) *Alienation of Freehold Land Act 1972*

Administered in the Department of Lands, Surveys and Environment, this Act tightly regulates a long term transfer of freehold lands by requiring written consent by the Head of State within 3 months after the date of certain transactions (section 6). These land transfers are closely monitored by Government for the purpose of maintaining the integrity of the Western Samoa Land Tenure System.

2. Pollution controls

(a) *Health Ordinance 1959*

This venerable Act, administered through the Department of Health, controls public health matters. As environmental pollution frequently is linked closely to public health and sanitation problems, there is a great deal of overlap between these two fields of endeavour. The Department of Health oversees such environmental concerns as village sanitation, siting of dumping facilities, and public water quality sampling programs. The Department has also prosecuted cases involving human waste disposal in Apia streams.

(b) *Water Act 1965*

This early Act was generally more concerned with the use and supply of water than its conservation. Pollution of waterworks is prohibited in Section 43. Pollutants may not enter any water or watershed used for supplying water to any waterworks. A "pollutant" is defined as any substance that contaminates the water so as to change its condition to unclean, noxious, offensive or impure, or to make it detrimental to the health, safety or welfare of human water uses. Fines for non-compliance are minimal. They may not exceed WS$100, plus WS$20 per day for every day on which the offence continues.

Currently, fresh and marine water conservation and anti-pollution efforts are divided between the Department of Works, Agriculture, Forests and Fisheries, Lands and Environment, and Health. Perhaps the eventual growth of the DEC within the Department of Lands, Surveys and Environment will permit that unit to control this aspect of environmental oversight. If not, DEC could still play a vital coordinating role.

(c) *Petroleum Act 1984*

Negligent transport, transfer and storage of petroleum often poses grave danger to the marine and terrestrial environment. Oil spill contingency plans are scarce, and materials to contain oil spills are frequently not available during emergency situations. This Act makes provision for the

supply, transport and storage of petroleum. The Minister of Finance administers the Act, and appoints the place of entry of petroleum into Western Samoa. The Act authorises the Head of State, acting on the advice of Cabinet, to prescribe the rules to be observed in any place where petroleum is kept, stored, used or conveyed (Section 14(2)(f)).

(d) *Agriculture, Forests and Fisheries Amendment Act (1989)*

This Amendment Act is treated separately from its parent Act because it refers specifically to the treatment of pesticides, an area generally placed under the category of pollution control. The recent Amendment Act expands DAFF functions by including a fourth Departmental requirement: "to regulate, control and supervise the manufacture, importation, storage and use of pesticides" (Section 3). Pesticides control was formerly the provenance of the Department of Public Health.

The parent act is further amended to allow for pesticides regulations to be drafted. Such regulations should provide "for the control of the manufacture, importation, storage, and use of pesticides, for the appointment of a Registrar of Pesticides, for the establishment of a pesticides technical committee and for the exercise by the Minister of his powers.

(e) *Draft Shipping Act 1991*

This detailed draft Act contains 9 elaborate provisions relating to marine pollution. Essentially these provisions introduce into domestic legislation a number of International Maritime Organisation international conventions for the control and prevention of marine pollution, namely the *1973 International Convention for the Prevention of Pollution of Ships (MARPOL)* and the *1969 Convention on Intervention on High Seas in cases of Pollution Casualties.* It is hoped that this Bill will be passed by Parliament sometime in 1993.

(f) *Ports Authority Bill 1989*

Section 57 of this Bill is the only marine pollution provision relating specifically to the pollution of waters of a port.

(g) *Lands and Environment Act 1989*

The *Lands and Environment Act 1989* is now the pre-eminent legal environment instrument in Western Samoa. The Act expands the *Land Ordinance 1959* and enlarges the functions of the Department of Lands, by creating a Division of Environment and Conservation (DEC) within the Department, and empowering that Division with wide-ranging functions and duties. The name of the Ministry and Department of Lands has been changed to "Land and Environment" to reflect its new environmental powers and duties.

Unlike many Pacific environmental units, whose legislative authority entitles them to handle only natural resources protection, or pollution control, or sanitation, the DEC is given responsibility for all aspects of environmental control. Combining disparate environmental functions under an umbrella authority is vital for purposes of consistency, clarity, and efficient use of scant human and fiscal resources.

(h) Draft EIA Regulations

These regulations for environmental impact assessment are presently in the final stages of preparation.

4. International conventions concerning environment

(a) *Law of the Sea Convention 1982*

Western Samoa signed the *Law of the Sea Convention in 1984*, however it is still in a process of considering ratification.

(b) *Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and Their Disposal*

Western Samoa signed on 22 March 1989. The Convention is in force and Samoa is presently considering accession.

(c) *Vienna Convention* and *Montreal Protocol*

Proposal for ratification has been put forward to Government for approval.

(d) *United Nations Framework Convention on Climate Change* 1992.

The Prime Minister signed this Convention on 12 June 1992 for Western Samoa, at the UNCED Meeting in Brazil. We have yet to ratify.

(e) *Convention on Biological Diversity* 1992.

Samoa signed this Convention at the conclusion of the UNCED Meeting. We are presently considering ratification.

(f) *International Monetary Organisation Conventions on Marine Pollution*

A number of pieces of domestic law make reference to various *International Monetary Organisation Conventions* relating to marine pollution. For example, the draft *Shipping Act 1991* makes reference to the international conventions for the control and prevention of marine pollution, namely the *1973 International Convention for the Prevention of Pollution of Ships* (*MARPOL*) and the *1969 Convention on Intervention on High Seas in Cases of Pollution Casualties.*

(g) *Possible membership of Western Samoa with the International Oil Pollution Compensation Fund*

If accepted, membership with the *Fund Convention* would require Western Samoa to accede to the *1969 International Convention on Civil Liability for Oil Pollution Damage* (*Civil Liability Convention*) and the *1971 Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage* (*Fund Convention 1976*).

Summary

A significant body of environmental law is already in legal effect or in draft form in Western Samoa. Various Government Departments are mandated with administrative environmental responsibility. No single Western Samoa Government Department has final responsibility or authority for the full range of necessary initiatives.

To remedy this situation, the legislature passed the *1989 Land and Environment Act* establishing a Division of Environment and Conservation within the Department of Lands, Surveys and Environment.

A number of existing pieces of legislation require some amendment in one form or another to take into consideration the environmental problems and concerns facing Western Samoa.

There are also other international conventions under the same auspices of the International Maritime Organisation relating to the protection of the marine environment, which Western Samoa is presently considering implementing as part of its domestic legislation. Undoubtedly a combination of domestic and international legislation would enhance the protection and management of the marine environment.

Environment policies of government

The Government of Western Samoa has only recently begun to issue formal policies. Two have been passed:

(i) **Seventh Development Plan** - The principal policy document released to date is the Seventh National Development Plan. This is a new approach to national development planning in that it is a strategic Plan which sets the policy directions for the Government sector agencies to follow in the preparation of their policies and programmes. It has a strong sustainable development thrust, with environment being included in the economic sector as a consequence. The next phase of the national development planning programme is the preparation of Government sector policies which must be integrated not only with the sustainable development direction of the Plan, but also with each other.

(ii) **Logging Quota Policy** - This policy was passed to provide an easier transition from present unsustainable indigenous logging to plantation forestry. In practice, the policy has been undermined by Cyclone Val (6-10 December 1992) and subsequent salvage logging, along with reorganisation of the logging industry.

In addition, a number of initiatives have been taken to protect water catchment areas. While not resulting in a formal policy as such, Government has recently passed Watershed Management Regulations and provided for Water Supply Authorities.

A number of policies with relevance to sustainable development are under preparation:

(i) **National Environment Management Strategy**

(ii) **Sector Policies for Seventh Development Plan**

(iii) **National Population Policy**

(iv) **EIA Regulations**

The concept of sustainable development has been accepted in differing degrees by the departments. Some, such as Forestry, are actively seeking the implementation of sustainable programmes. Others, such as Agriculture and Fisheries appear not so clear. The message is spreading though. It is a function of the new Division of Environment and Conservation to undertake public education and information programmes and to advocate environmental management and sustainable

development within Government. Clearly this is an on-going task both at a departmental and political level.

Future priorities

Priorities for Western Samoa are:

A. Planning

(i) Completion of The National Environment Management Strategy

(ii) Policy development under the Seventh Development Plan.

(iii) Government commitment to the application of environmental planning and assessment to its own projects and policies, as well as to meaningful linkage with village authorities.

B. Management

(iv) Biodiversity programme

(v) Water catchment conservation programme

(vi) Establishment and implementation of Environmental Impact Assessment process

APPENDIX 1

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APPENDIX 2

WORKSHOP PROGRAMME

Day 1 23 November 1992

8.30 Registration

9.00 Chairperson: *Vili Fuavao*, Director, SPREP
Welcome and Introductory Remarks

Opening of Workshop
Leaupepe S. Muliaumasealii, Attorney-General, Western Samoa

9.15 Morning tea break

9.30 **Workshop outline and expectations**
David Sheppard and David Farrier

9.45 **Overview of global and regional legal and policy developments, including the United Nations Conference on Environment and Development, the Rio Declaration, the Convention on Climate Change, the Biodiversity Convention, Agenda 21, the Forestry Principles and the concept of sustainable development**

Ben Boer

10.15 **Overview of South Pacific Region Environment Programme and National Environment Management Strategy Projects:**

Neva Wendt and David Sheppard

10.30 **Environmental Concerns in the Pacific Region**

Iosefatu Reti

11.00 **Social, public health and environmental concerns in the Pacific**

Sitaleki Finau

11.30 Discussion

12.00 **Projection of video prepared for the United Nations Conference on Environmental Development: The Pacific Way**

12.30 LUNCH

2.00 Chairperson: Sam Sesega

The role of international environmental law, with particular reference to the Pacific region

Lothar *Gündling*

2.30 The role of United Nations Environment Programme in the development of regimes for sustainable development, with special reference to the Pacific region

Lal Kurukulasuriya

3.00 Discussion

3.30 AFTERNOON TEA

4.00 **Introduction to environmental law concepts; environmental planning, pollution, environmental impact assessment, protection of natural and cultural heritage; how law can assist with the achievement of environmental objectives**

David Farrier

4.45 Discussion

5.00 **Closing remarks**

Ben Boer

Day 1 concludes

Day Two 24 November 1992

8.00 Chairperson: *Clark Peteru*

The law and environmental decision makers; strategies for implementation of environmental law in the Pacific; licensing and other regulatory mechanisms; civil and criminal enforcement

David Farrier

8.45 **Presentation on problems of implementation of environmental regulation in Pacific Island countries:**

Selected participants, based on their Country Papers and Special Assignments; 10 minutes each

Discussion on difficulties with current regulatory systems and how they can be improved

10.15 MORNING TEA

10.45 Chairperson: *Teariki Rongo*

The role of custom in environmental management and law in the Pacific: how customary practices and requirements can be incorporated into contemporary environmental legislation

Iosefatu Reti

11.15 **Presentations on customary practices and law**

Selected participants - 10 minutes each

11.45 Discussion on customary law

12.00 LUNCH

1.30 **Drafting environmental legislation: aims and techniques; the use of definitions; plain legal language; introduction to Working Group Session 1**

Ben Boer

2.15 **Discussion of drafting problems**

2.30 Working Group Session 1

Participants will be divided into four groups, to be led by resource persons. This session will be directed to basic questions of definition and scope of environmental regulation. The rapporteur will be expected to present any findings or concerns raised by the group to the plenary session

3.30 AFTERNOON TEA

4.00 **Working Group Session 1 continues**

5.00 **Report back from Working Groups**

5.30 **Closing remarks**

Ben Boer

Day 2 Concludes

Day Three 25 November 1992

8.00 Chairperson: Bernard Moutou

Institutional structures and requirements for the implementation of multilateral environmental conventions with special reference to the Pacific region

Paul Szasz

8.30 **The implementation of environmental conventions in the South Pacific**

Kilifoti Eteuati

9.00 Discussion

9.30 **Implementing the United Nations Framework Convention on Climate Change in the Pacific Region**

Peter Lawrence

10.00 Discussion

10.30 MORNING TEA

11.00 **Institutional structures and requirements for implementation of environmental legislation; analysis of institutional structures currently existing in various Pacific countries, with specific reference to the National Environmental Management Strategies and Legal Reviews of the NEMS and Regional Environment Technical Assistance projects**

David Sheppard and Neva Wendt

11.40 Discussion

12.00 LUNCH

1.15 Chairperson: *Elizabeth Harding*

Drafting a modern Environment Act

1. **Cook Islands** - *Teariki Rongo*

2. **New Zealand** - *Tim McBride, Bronwyn Arthur*

2.30 Working Group Session 2

Introduction to Working Group Session 2:

David Farrier

2.40 **Working Groups begin**

3.30 AFTERNOON TEA

3.45 **Working groups continue**

5.00 **Closing remarks**

Ben Boer

Working groups conclude

8.00 **Special Lectures: Open to the Public and Media**

VENUE: IRETA Fale, Alafua

Chairperson: *Vili Fuavao*

1. **A South Pacific Non-Government Organisation perspective of the need for institutional and legal change**
   Clark Peteru

2. **The role of international environmental law; discussion of the Biodiversity Convention and the Climate Change Convention and their implications for the Pacific Region**
   Lothar Gündling

3. **The international law concerning nuclear testing and the disposal of nuclear wastes and implications for the Pacific region**
   Paul Szasz

9.00 **Discussion**

9.30 Supper

10.00 Day 3 concludes

Day 4 26 November 1992

8.00 **Introduction to Working Group Session 3:**

David Farrier and Ben Boer

8.10 **Working Group Session 3**

10.00 MORNING TEA

10.30 **Working Groups continue**

12.30 LUNCH

2.00 **Introduction to Working Group Session 4**

David Farrier and Ben Boer

2.10 Working Group Session 4

3.15 AFTERNOON TEA

3.45 **Report back from Working Groups by Working Group Rapporteurs: presentation and discussion of problems raised, formulation of recommendations**

5.00 **Closing remarks**

Ben Boer

Day 4 Concludes

Day 5 27 November 1992

8.00 Chairperson: *Tim McBride*

The role of the Global Environment Facility in the promotion of national and international law for sustainable development

Ralph Osterwoldt

8.30 Discussion

9.30 **Working Group Session 5**

10.30 MORNING TEA - continue with session - no formal break

Working Groups Session 5 continued

11.30 **Working Group Session 5 Report back**

12.00 LUNCH

1.30 **Future initiatives in environmental law and policy: formulation of recommendations**

2.30 Chairperson: *Iosefatu Reti*

Report back on future initiatives

3.00 AFTERNOON TEA

3.30 **Evaluation and review of workshop: filling in of Evaluation Form; discussion of achievement of workshop objectives**

4.00 **Summing up of Workshop**

David Sheppard

4.15 **Concluding Remarks**
Participants
Workshop Coordinators - *Ben Boer* and *David Farrier*

4.45 **Close of Workshop**

Vili Fuavao

5.00 Day 5 concludes

APPENDIX 3

REQUIREMENTS AND GUIDELINES FOR SHORT PAPER AND SHORT PAPER AND ASSIGNMENT WHICH WERE REQUIRED TO BE PREPARED BY PARTICIPANTS BEFORE THE COMMENCEMENT OF THE WORKSHOP

1. The representatives from each country are asked to jointly prepare a short Country Report.

   In addition, participants are asked to prepare a short Special Assignment in draft form before the workshop.

2. The Country Report and the Special Assignment will be commented on where necessary by the Workshop Coordinators and Resource Persons. They may also form the basis for presentations by participants on specific topics. Those participants requested to make brief presentations will be notified before the workshop begins.

3. Both the Country Report and the draft Special Assignment are to be typewritten.

4. Please remember to include your name, address, fax and telephone numbers on the material you send.

5. Please also keep a copy of the County Report and the Special Assignment, and bring them with you to the workshop.

6. It will be very useful to bring with you to the workshop the legislation and other material on which you have relied for the Country Paper.

7. Date expected to be delivered to SPREP (by fax if necessary: 15 november. fax number (685) 20231).

A THE COUNTRY REPORT

WORD LENGTH FOR COUNTRY REPORT: 1500 WORDS MAXIMUM

This Report should be written, if possible, by the country representatives on a collaborative basis. For those countries that have had a recent Legal Review carried out through the SPREP RETA and NEMS projects, this paper can be based on that Legal Review if it is available to you.

THE REPORT SHOULD INCLUDE:

1. A brief description of the main environmental concerns in the country.

2. Identification of priorities for action on these problems.

3. A list of international Conventions relating directly to the environment which the country has signed, and the date of those Conventions coming into force in the country.

4. The existing legal arrangements for environmental management, conservation of natural resources and the achievement of sustainable development. (For some countries, it will be necessary to include both national and state or provincial legislation). This section should contain:

   a list of the current and proposed environmental legislation, including the dates of enactment and amendment (if applicable),

   a brief outline of any problems with the legislation currently in place.

5. A brief description of any policies approved by government in the past two years to address environmental problems. In particular, the extent to which notions of sustainable development have been incorporated into government departments would be useful.

6. Future priority actions you feel are needed in your country to achieve improved environmental management both legislatively and administratively.

B THE SPECIAL ASSIGNMENT

WORD LENGTH: NO MORE THAN 2000 WORDS

This assignment is expected to be completed in as final a form as possible by each participant before the workshop. The assignment will form the basis for further discussion during workshop sessions.

Each participant is asked to choose an area of particular environmental concern to their country, which requires legislative attention, in one of the following categories:

1 Pollution control and waste management

2 Environmental impact assessment

3 The management of natural resources (fisheries, forestry, mining, as appropriate)

4 Conservation of places of special heritage significance (cultural or natural heritage sites)

For those countries which have recently had a Legal Review done through one of the SPREP RETA and NEMS programmes, or by any other means, you should refer to the relevant draft Legal Review if it is available to you. If you have difficulty in completing the Special Assignment, you should initially consult with colleagues in your department or organisation. If necessary, you can also consult with Ben Boer by Fax in Sydney: 61 2 225 9324.

IN WRITING THEIR SPECIAL ASSIGNMENTS PARTICIPANTS MIGHT FIND THE FOLLOWING GUIDELINES HELPFUL:

1. LEGISLATION: List the legislation and administrative guidelines (if any) to regulate the area that you have chosen from the above list.

2. INTRODUCTION: The introduction should set out briefly the main problems encountered in the legal regulation of the field you have chosen. These problems may include political, economic, cultural or social matters which hinder effective regulation.

3. CUSTOMARY LAW OR PRACTICE: where appropriate, you should analyse the use of customary law or practice in relation to the area you have chosen.

4. BRIEF ANALYSIS OF LEGISLATION: if there is legislation covering the field, an analysis should be done of that legislation, setting out its inadequacies and how it should be improved. If there is no legislation covering the area, set out any plans for the introduction of legislation.

5. DRAFTING NOTES: where appropriate, brief drafting notes should be included for amendment of any existing legislation or for new legislation where none exists to cover the area. You may wish to concentrate on regulations under existing enactments, rather than on the Act itself.

   The drafting notes can contain a short list of definitions to be included for the purposes of interpretation, a statement of the objectives of the Act, and the main elements of the legislation.

6. RECOMMENDATIONS AND CONCLUSIONS: You should set out any recommendations or conclusions they may have in relation to the field or activity you have chosen.

IUCN
The World Conservation Union

Australian Centre for Environmental Law