

ENVIRONMENT NEWSLETTER

Quarterly Newsletter of the South Pacific Regional Environment Programme

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Editor's Note (from Neva Wendt):

This edition of the SPREP Newsletter combines several back-issues to bring us up to date with our quarterly publication schedule. The extremely busy and increasing work programme activities of SPREP undertaken by a handful of people has meant that the Newsletter had to temporarily sit in semi-retirement - but it is now back on line.

South Pacific Regional Environment Programme

(SPREP)

South Pacific Commission



The Environment Newsletter is produced by the South Pacific Regional Environment Programme (SPREP), South Pacific Commission, Noumea, New Caledonia and reports on the various activities of the programme together with news of general environmental interest to readers in South Pacific countries.

SPREP's activities are co-ordinated by a member government Steering Committee with advice from the United Nations Environment Programme (UNEP), the Forum Secretariat, the Economic and Social Commission for Asia and the Pacific (ESCAP) and SPREP's host organisation, the South Pacific Commission (SPC).

The United Nations Environment Programme, through its Oceans and Coastal Areas Programme Activity Centre (OCA/PAC) based in Nairobi has, since SPREP's inception, given considerable financial support to the programme's activities.

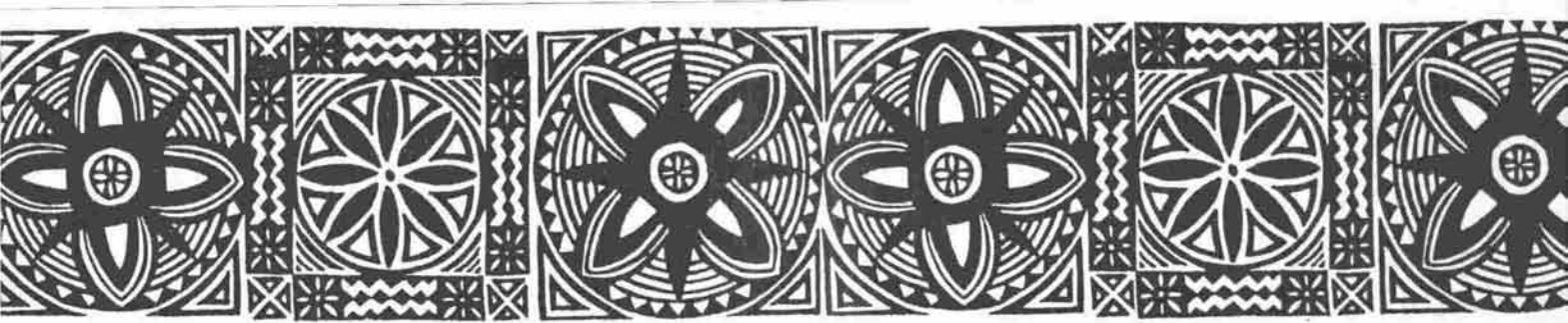
Much of the work undertaken by SPREP and supported by UNEP involves utilising skills of the Universities and Training Institutions within the South Pacific, members of whom have recently formed an Association of South Pacific Environmental Institutions (ASPEI) to facilitate this work.

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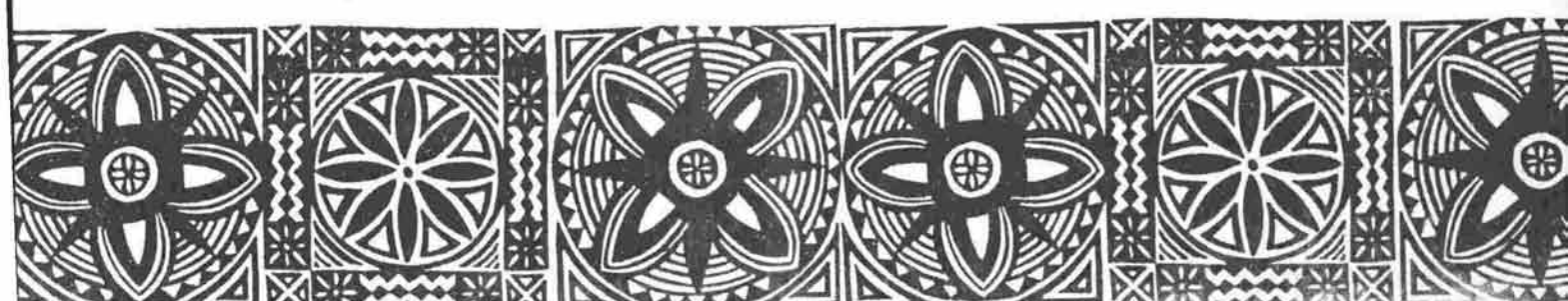
NEW CO-ORDINATOR FOR THE SOUTH PACIFIC REGIONAL ENVIRONMENT PROGRAMME (SPREP)

After four years of very effective leadership which saw a vast expansion of the programme, Mr Iosefatu (Joe) Reti, has returned to head the new Environment Division of the Government of Western Samoa. He is replaced by Dr Vili Fuavao, originally from Tonga, but who has for the last five years been lecturing in Chemistry at the University of the South Pacific (USP), Suva. Dr Fuavao brings to the Programme considerable experience in one of the major areas of SPREP's work programme, namely studies associated with pollution monitoring, as well as an extensive knowledge of the environmental problems of the region and a strong personal commitment to ensuring that sound environmental management and protection becomes a priority of the governments of the South Pacific.



Dr Vili Fuavao (left) enthusiastically preparing a 'feast'

The SPREP team were sad to see Joe leave but pleased that he has continued to maintain close contact with the programme and that the past and present Co-ordinators (Joe and Vili) have developed a very effective working relationship which is benefitting the whole region. Often to be found at his desk on weekends, Vili nevertheless finds time to roast the occasional pig and is fast developing a reputation among SPC colleagues and visitors as a 'master cook', converting many to the Tongan style of roast pig.



NEWS IN AND AROUND THE REGION

SPREP CO-SPONSORS WITH UNDP, WORKSHOP ON ENVIRONMENTAL MANAGEMENT AND SUSTAINABLE DEVELOPMENT IN THE SOUTH PACIFIC

SPREP staff were actively involved at the **UNDP Regional Workshop on Environmental Management and Sustainable Development in the South Pacific** held in Suva, Fiji during April. This well-attended meeting, with representation by several member governments and a number of international organisations, addressed the dilemma faced by most Pacific Islands of trying to encourage development and associated economic prosperity whilst at the same time ensuring protection of the valuable assets of the island countries, namely their natural environment.

In an overview presented by Mr Iosefatu Reti, former SPREP Co-ordinator and the person who assisted UNDP in the organisation of this major meeting, it was stated that most of the environmental problems now facing South Pacific island nations are the result of **poor resource management and unplanned development**. The failure to use island resources in ways that will sustain them in the future is the greatest threat to the well-being of the region. The trend for island nations is for total island productivity to decline as natural areas are developed, and developed areas become degraded through over-use and misuse. Since islands are inherently limited, such trends can only lead sooner or later to the bankruptcy of island natural systems. While accepting that small islands have unique problems different from those for larger land masses, there are major issues facing the region.



Opening session of Workshop

Some of these problems, particularly those related to the marine environment, were well drawn out in the presentation by the SPREP Coordinator, Dr Vili Fuavao, who referred to the number of reviews over the last 10-15 years that have concluded that the priority marine pollution problems are:

- . destruction of coastal ecosystems,
- . lowering of water quality,
- . changing ocean processes and properties,
- . climate change and sea level rise.

He identified the major causes of the problems as:

- . disposal of domestic waste (sewage and solid),
- . disposal and management of non-domestic waste,
- . increased sedimentation due to land use changes,
- . mining and construction,
- . coastal development activities,
- . over exploitation of living marine resources and
- . natural disasters.

Other SPREP officers spoke on the impact of industrial development on marine ecosystems and the importance of environmental education and awareness raising activities in ensuring sustainable development.

In focussing on sustainable development, the Workshop stimulated discussion of how best the governments of the region should proceed with ensuring that their increasing tourist and industrial development is undertaken in a way that ensures protection of the fragile South Pacific environment.

MEMBER OF ASPEI RECEIVES AWARD FOR CONSERVATION SERVICES



Dr Lawrence Hamilton of the East-West Center's Environmental Policy Institute and a close associate of the SPREP Secretariat through his work as part of the ASPEI team, recently received the R.E. Sherwin Award from the Sierra Club 'for his far-sighted and sustained leadership in the protection of forest lands...combining the discipline of an ecologist with the intelligent care of a conservationist.' From the SPREP Secretariat's close collaboration with Larry in a number of joint SPREP/EWC projects, we are aware that this is a well-deserved award in recognition of the valuable and ceaseless work undertaken by him in assisting the environment of the South Pacific Region.

FOURTH SOUTH PACIFIC CONFERENCE ON NATURE CONSERVATION AND PROTECTED AREAS - A GREAT SUCCESS

Port Vila, Vanuatu was the venue during September 1989 for the well-attended fourth in the series of conferences specifically aimed at protecting the biological diversity of the South Pacific region. The overall theme of the Conference was **'The Role of Protected Areas in Sustaining Pacific Island Societies'** with sub-themes, on which an impressive array of papers were presented, covering:

- . Planning for Resource Conservation and Sustainable Development,
- . Achieving Protected Area Establishment and Species Conservation Goals in the South Pacific,
- . Legislation and Policy Framework for Resource Conservation and Sustainable Development,
- . Public Education and Training,
- . Traditional Resource Knowledge and its Relationship to Sustainable Development Today,
- . Economic and Social Benefits of Nature Conservation and Protected Areas, and
- . Marine Protected Areas and Conservation of Marine Resources.



A short break before the delegates arrive ...

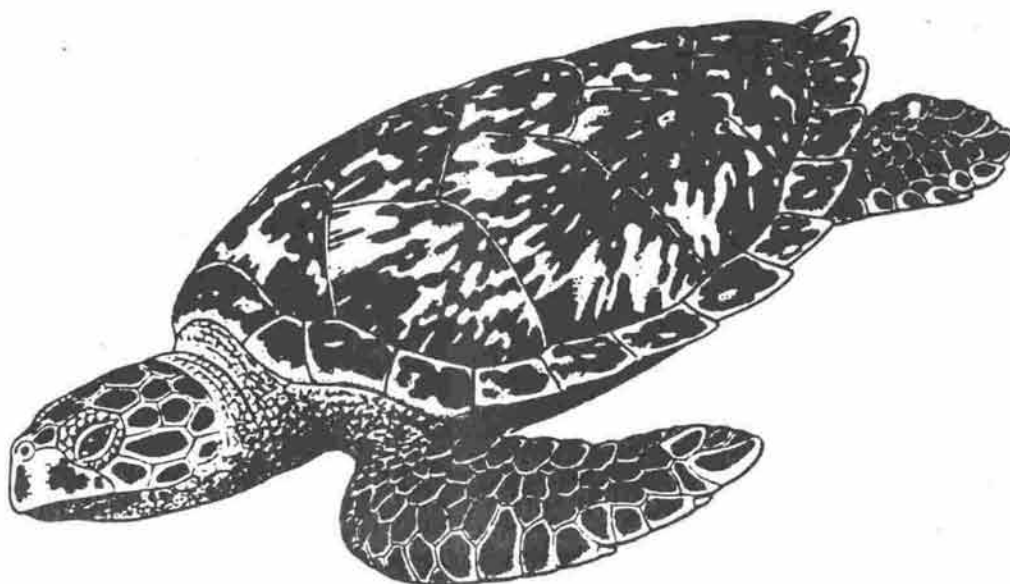
Emanating from this Conference was an **Action Strategy for Nature Conservation for the South Pacific Region** which will guide activities aimed at ensuring the protection of biological diversity within the region, until the strategy's review at the next in this series of Conferences to be held in 1993.

This Conference was also the venue for the signing by the Government of the Republic of Fiji of the *Convention on Conservation of Nature in the South Pacific* (the APiA Convention) signed on behalf of his government by the Honourable Tomasi Vakatora.

This Convention, which came into force in 1990, provides an important international legal backing for activities under the Action Strategy.



Marine turtle conservation and management became an important topic of discussion at the Conference resulting in the development of a special Steering Committee which subsequently met in Noumea in August 1990 and planned the implementation of a **South Pacific Regional Marine Turtle Conservation and Management Programme** to be run over the next three years.



**SPREP AND NEW SOUTH WALES (AUSTRALIA)
NATIONAL PARKS AND WILDLIFE SERVICE (NPWS)
CO-OPERATE IN PROTECTED AREA MANAGEMENT**

A Memorandum of Understanding has been signed between the NSWNPWS and SPREP setting out the general principles, roles and responsibilities relating to co-operative projects to assist with protected area management in the South Pacific.

Activities will focus on:

- training of Pacific islanders in protected areas and wildlife management through secondment to the NSW National Parks and Wildlife Service (NPWS);
- provision, on short term secondment, of NPWS officers to undertake specific projects in Pacific island countries, such requests being channeled through SPREP;
- assistance to SPREP by the NPWS in preparation and printing of protected area and wildlife management educational material;
- training of protected area managers from South Pacific island countries at the Riverina College of Advanced Education (NSW);
- additional information relating to these co-operative activities can be gained by contacting the SPREP Secretariat.



CANADA PROVIDES CONSIDERABLE SUPPORT FOR SPREP



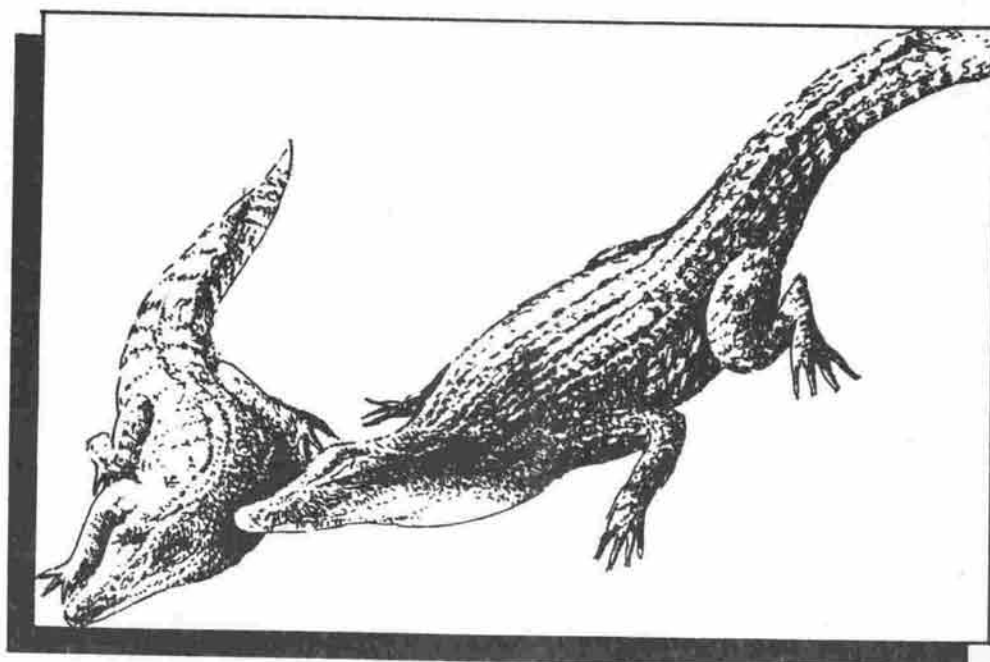
Through both the Canada South Pacific Ocean Development Project (CSPODP) and the International Centre for Ocean Development (ICOD), SPREP has signed agreements relating to considerable assistance to several aspects of the Work Programme, namely Environmental Education, Marine Turtle Conservation and Coastal Resource Management. This support firmly cements the already existing association between ICOD (who will also administer the CSPODP funding) and the region's Environment Programme (SPREP).

STATUS OF ESTUARINE CROCODILE EXAMINED IN VANUATU

With financial assistance from SPREP, Marcus Chambers and David Esrom of the Vanuatu Environment Unit undertook work on the status of the estuarine crocodile (*Crocodylus porosus* Schneider 1801) in Vanua Lava, the only island in Vanuatu known to have a breeding population. Chambers' and Esrom's study was carried out by a combination of a site visit, coupled with interviews with villagers and distribution of a questionnaire.

The estuarine crocodile is found in Sri Lanka, Bangladesh, Burma, Thailand, Malaysia, Cambodia, Vietnam, Philippines, Indonesia, Brunei, Papua New Guinea, northern Australia, Palau, Solomons and Vanuatu. Thus Vanuatu is at the easternmost limit of this crocodile's extensive range. It is classified by the International Union for the Conservation of Nature as endangered, meaning that it is liable to become extinct unless effective protective measures are taken. Throughout much of its range, the crocodile has disappeared or become severely depleted in areas where it was formerly abundant. It has disappeared completely from west India, Singapore and southern China. The causes of these reductions are hunting, mainly for its valuable skin, and loss of coastal habitat through land reclamation schemes. At the present time, there are considered to be adequate and secure population numbers only in parts of northern Australia and New Guinea.

The estuarine crocodile occurs mainly along sea coasts, especially in brackish areas such as mangroves and around river mouths. It may, however, be found upstream in major rivers and in freshwater swamps. Females lay from 25-90 eggs in large mound-nests which they build from a variety of living and dead leaves, branches, and twigs. The hatchlings eat mainly crustacea, insects and small fish whilst adult animals consume successively larger animals and vertebrates as they become older; large crocodiles being known to attack and kill cattle and horses. Males become sexually mature at around a length of 3.2 metres, whilst females reach maturity at around 2.2 metres. These sizes correspond to ages of about 16 and 10 years respectively. The largest crocodile recorded apparently reached nine metres. In Vanuatu, the crocodile has been recorded sporadically from Malakula, Santo and Malo. The only breeding population recorded has been from the Port Patterson area of eastern Vanua Lava.



The study shows conclusively that there are very few crocodiles remaining on the island, perhaps only two or three. No young ones have been seen for several years. It thus appears that breeding has ceased and if this is the case then the crocodile will become extinct in Vanuatu. Previously high numbers of crocodiles appear to have been decimated by a severe cyclone in 1972. Some survivors of this event were subsequently shot, and coupled with natural mortality perhaps increased by later cyclones, this sequence of events appears to have brought the crocodiles down to a non-viable population size. The available habitat for the crocodiles appears to be extensive and in good condition.

There is a strong belief in Vanua Lava that crocodiles were accidentally introduced to the island in the mid-19th century. There is no independent corroboration for this. However they came to be there, they are not popular. They undoubtedly eat domestic animals and have recently begun to attack people. In view of the expense and difficulty of attempting to build up the crocodile population, and that it would be unpopular amongst the islanders, the report recommends that nothing be done to attempt to save the crocodiles from probable extinction. If they were to become extinct this would mean a shrinkage of the crocodile's extensive range, as Vanuatu is the easternmost limit of this range.

(Source: The Status of the Estuarine Crocodile
[*Crocodylus porosus* Schneider 1801] in Vanuatu,
M. R. Chambers and D. Esrom, Environmental Unit, Ministry of Lands,
Port Vila, Vanuatu. Currently under preparation as SPREP Topic Review No. 39).

NEW SPREP FOCAL POINT IN PALAU



The Government of the Republic of Palau has announced the appointment of Mr Demei Otobed as the new SPREP Focal Point. Well known to SPREP for his extensive knowledge of the environment and his enthusiasm for its protection, Demei is regarded by SPREP as a real asset to the strengthening band of in-country focal points one of each in the 22 island countries and territories of the South Pacific who are responsible for ensuring that information from SPREP is well disseminated in-country and that relevant support is obtained for country requirements.

With a Bachelor of Science degree in Agriculture and Entomology from the University of Hawaii, Demei has more than 25 years experience in the National Government including four years as a Delegate in the House of Delegates, First Olbiil Era Kelulau (Palau National Congress). He is presently involved in the Ngerukewid Wildlife Reserve project as well as overseeing and monitoring conservation and inshore surveillance at the Ngerumekaol Grouper spawning area. He is also very active in environmental education and awareness raising activities and very recently was one of the main instigators in the production of a film soon to be released, called 'Palau - Conserve our Precious Environment'.

VIDEO ON PALAU'S ENVIRONMENT

For one hectic week during April, it was not an unusual sight to see Tina Rehrur, Noah Idechong and Demei Otobed (and a borrowed turtle) all being filmed by SPC Media Centre's Aren Baoa and Guam Cable TV (KGTF)'s Dennis Reyes assisted by Fustino Robert and Simion Ulechong as they moved around Koror and other parts of Palau to film an important new video called 'Palau - Conserve Our Precious Environment'.

Significant input was also provided by a traditional dance group, local women's chanting group, wood carver, weavers and a local village to ensure that Palau's rich culture was well represented in the film.

With financial assistance secured from the MacArthur Foundation by East-West Center's Dr Larry Hamilton, SPREP was able to undertake the initial co-ordination of this film which very quickly became a Palauan undertaking drawing on the expertise of people like Demei (Palau's Chief Conservationist), Noah (Head of the Division of Marine Resources), David Idip (Director of Bureau of Resources and Development) and Tina (Director of the Belau National Museum). Additional support was provided by the Palau Community Action Agency (PCAA) and the Bureau of Education, all working together to make a strong local team utilising the skills available in Palau. Aimed at a Palauan audience, this 30 minute video focusses on the beauty of Palau's natural environment and its special cultural heritage and aims to strengthen an appreciation of the Republic's unique qualities.

This video production is the forerunner in a project being co-ordinated by SPREP which aims to assist member governments and administrations in strengthening their own in-country capabilities in environmental awareness raising, particularly through the use of video.



Filming underway in Palau

SOLOMON ISLANDS - WESTERN PROVINCE DEVELOPS POLICY ON THE ENVIRONMENT

The Honourable Magellan Polosovai Provincial Minister for the Environment of Western Province, Solomon Islands has announced the passing by the Western Province Assembly of their policy on the Environment.

The implications of this policy are far reaching having an effect on future development in the Province through the requirement of new business and development proposals which utilise natural resources, to incorporate reports on likely environmental impact. The formulation and passing of this policy is just a starting point from which the Province will use its best endeavours to slowly but surely proceed with the implementation measures described in the policy and as a matter of priority, to prepare provincial legislation to prevent or minimise pollution of the environment.

This far-reaching environmental policy recognises:

- . the need to understand the intrinsic value of ecosystems,
- . that resources are limited,
- . that the population of Western Province and Solomon Islands is increasing at an alarmingly fast rate putting physical pressure on the natural resources,
- . that cultural and traditional values and the way of life of rural communities depend and rely on the forest and reef ecosystems,
- . that there is a risk to communities if their natural resources are not sustained and renewed,
- . that the ecological link between upland, coastal and marine systems and usage and land, air and water resources demand an integrated approach to environmental planning and management,
- . that whilst all development involves change, it can be planned, regulated and monitored to minimise detrimental effects,
- . that unplanned utilisation of natural resources today may restrict or remove future development options,
- . that community and customary land owners must be responsible for, and participate in planning, management and monitoring the use and conservation of natural resources for their benefit and that of future communities. Conservation and development must not be imposed on communities by governments or developers,
- . that environmental conservation in Western Province must be compatible with traditional customary and cultural practices, respecting customary ownership rights and utilising local customary knowledge.

The policy gives specific guidance in the management of coral reefs, mangroves, marine species/fisheries, and, flora, fauna, water and minerals as well as guidelines to avoid and minimise pollution.

MARSHALL ISLANDS EPA TACKLES MAJOR ENVIRONMENTAL PROBLEMS



Abel Anien, EPA Education Officer

A small but active team of people at the Marshall Islands Environmental Protection Authority (EPA) are currently faced with two major environmental problems. - extensive soil erosion of already limited land resources around Majuro and domestic waste disposal. With financial assistance provided by SPREP, an erosion expert will soon visit Majuro in an attempt to determine the cause of this massive and accelerating erosion and to suggest potential ameliorative measures. At the same time, the EPA is actively tackling its other major problem - domestic waste disposal - through an environmental education and awareness campaign being undertaken by Environment Education Officer, Mr Abel Anien and utilising local television for public announcements.

The newly appointed EPA Manager, Mr Kasuo Helgenberger is actively pursuing SPREP support especially through the provision of awareness-raising material produced in the Marshallese language.



Eroded shoreline near Majuro

POTENTIAL FOR ALUMINIUM CAN RECYCLING INVESTIGATED IN COOK ISLANDS

SPREP recently provided financial support to enable a feasibility study to be undertaken to determine the viability of establishing an Aluminium Can Recycling Project on Rarotonga and Aitutaki, Cook Islands. Following a request from the Government of the Cook Islands, SPREP engaged the services of David Wyler of The Foundation for the Peoples of the South Pacific (FPSP) who has previously been instrumental in planning and implementing aluminium can recycling projects in Tuvalu, Solomon Islands and Kiribati.

Worldwide approximately 100 billion all-aluminium cans are produced annually mostly to package beer and soft drinks. To make these cans, about 50,000,000 tons of aluminium are required each year. The advantages of aluminium cans relate to their convenience (easy opening end), their sturdiness against breakage, their ability to chill quickly, their light weight (reducing transportation and handling costs), their shape (enabling high speed filling at the factory at rates of up to 2,000 cans per minute).

The disadvantages of aluminium cans relate to the length of time they take to break-down, or oxidize, in the environment (twenty-times longer than the 'tin can'). Discarded cans, as well as being unsightly and contributing greatly to the problem of providing enough space for solid waste disposal (being experienced by many countries), also are an ideal breeding ground for disease borne insects, especially flies and mosquitoes.



Waste disposal problem common on
many South Pacific islands

Part of the solution to the disadvantages of the proliferation of aluminium cans, is **RECYCLING**.

Aluminium cans are easily and endlessly recycled without their inherent properties being changed and because the metal is so valuable, an economic recycling scheme works well.

SPREP is actively encouraging and assisting member governments and administrations to investigate **RECYCLING**, not only of aluminium cans but of other packaging materials.

ASSISTANCE GIVEN TO SOLOMON ISLANDS FOR PREPARATION OF ENVIRONMENTAL LEGISLATION

SPREP was instrumental in facilitating support from the Economic and Social Commission for Asia and the Pacific (ESCAP) to the Government of the Solomon Islands, following a request for legal assistance to produce a national draft Environmental Management Act.

Ms Elizabeth Harding, currently the Legal Counsel to the Environmental Protection Authority, Republic of the Marshall Islands, was able to provide valuable assistance to the Solomon Islands in a three-week mission in which she consulted with appropriate bodies and reviewed existing legislation under the guidance of the Environment and Conservation Division of the Ministry of Natural Resources of the Solomon Islands. The resulting draft Environmental Management Bill 1990 provides a comprehensive legislative framework for the management, conservation and protection of the environmental resources of the Solomon Islands. The draft bill establishes an Environmental Management Board within the Ministry of Natural Resources, requires the Ministry to develop a national Environmental Management Plan, allows for submission of Environmental Management Reports, sets out licencing procedures for development activities, and provides for the making of regulations.

The draft Environmental Management Bill is currently being distributed to a wide selection of governmental and non-governmental entities for comment.

Environmental policy in the Solomon Islands

As with the majority of Pacific countries, Solomon Islanders' traditional respect for the land and those things living on it has not yet translated itself into comprehensive national legislation aimed specifically at protection and conservation of the environment. However, there is movement towards an overall environmental management scheme that has become clear in recent years. Environmental protection provisions appear in a number of new legislative initiatives, most notably in proposed fisheries, mining, and forestry bills. In 1981, the Solomon Islands Ministry of Natural Resources supported the need for environmental assessment as a basis for appropriate economic development in a report titled 'Environmental Management for Sustainable Development in the Solomons' and in 1985 the Ministry of Natural Resources established an Environment and Conservation Division. The government's request this year for national environmental legislation, emanating from the Ministry of Natural Resources, indicates that on behalf of the people of the Solomon Islands, the government has recognised the fundamental importance of a preserved and managed environment to the quality of life in the Solomon Islands.



ENVIRONMENTAL INITIATIVE BY NEW ZEALAND AID PROGRAMME



In April 1990, Associate Foreign Minister Fran Wilde announced new environmental guidelines for New Zealand's official development assistance programme. 'A central and stated policy objective of the New Zealand aid programme will in future be to promote development which is environmentally sustainable and consistent with the priorities of recipient countries', Ms Wilde said.

New Zealand already has a good reputation in the third world as providers of well designed, environmentally sensitive aid projects and they now aim to strengthen their reputation further by helping to develop new innovative solutions to environmental problems. They plan to work closely in developing countries with local environmental agencies - both government and non-governmental and are thus extending environmental assessment procedures within the programme.

'Sustainability has become something of a buzzword in international development. In 1987 the World Commission on Environment and Development (called the Brundtland Commission after its chairperson, the Prime Minister of Norway) offered a global challenge to economic and development policy-makers in terms of this concept. 'Brundtland's challenge was to apply economic and development policies which meet the needs of the present generation without compromising the changes of future generations to meet their needs. This responsible concept of sustainable development is at the forefront of our foreign aid policy', the Minister said. 'We have a responsibility to the many communities and individuals that the New Zealand aid programme affects, to see that our aid is responsive to their knowledge and wishes and that, in introducing new opportunities into people's lives, our aid is holistic, integrating, technical, environmental, economic, makes social considerations.

'In addition, we are committed to seeing that the interests of women are advanced in our development programmes... Thus, sustainable development in the context of our aid programme means, first and foremost, adequate community consultation and inter-disciplinary planning of projects and programmes'.

The Development Assistance Division of the Ministry of External Relations and Trade has developed planning and appraisal procedures to facilitate this process on all new aid projects. To keep this process cost effective, the Division has been able to commission some general studies which are relevant to several projects. For example, the Zoology Department at the University of Auckland is currently completing a scientific assessment of the environmental impact on coral reefs of construction projects, such as the construction of boat passages through reefs. This is the first study of its kind ever undertaken in the South Pacific, and it will be relevant to a wide range of projects which affect the marine environment in Pacific nations.

Another study, about to commence in the Solomon Islands will examine the social, environmental, financial and technical requirements of small scale forestry plantations. This study, which will involve extensive consultation with local communities, and draw on the experience of a pilot project, will be relevant to a wide range of small scale forestry activities on customary owned land in Melanesia.

Most of New Zealand aid project involve poor countries and poor communities within these countries. There is a strong link in the third world between poverty and environmental degradation. This link can be seen over time in many parts of the South Pacific, and elsewhere, in terms of increasing pressure on agriculture land, deforestation, soil erosion and declining agricultural yields. Our aid programme is seeking to help address both poverty and environmental degradation with, for example, appropriately designed forestry projects. New Zealand aid is currently supporting reforestation projects and related activities to reduce the pressure on tropical rain forests in eight countries.

'In agriculture, our Development Assistance Division is planning new strategies to facilitate more sustainable forms of agricultural development', Fran Wilde said. 'A significant new area of assistance is in working with developing countries to develop particular forms of tourism which protect the environment and give local communities good social and economic development opportunities. Although tourism has great potential for the Pacific, it can be environmentally and socially destructive. Careful planning and controls are therefore needed. An example of this sort of project is a proposal from the Solomon Islands to develop appropriately designed nature and wildlife tourism. The Solomon Islands have a dramatic ecology and landscape. Two sites being considered in this proposal are Marovo Lagoon and Rennell Island, both places of considerable national importance and possibly world heritage value. Marovo lagoon is the largest tropical lagoon of its type in the world, with numerous tiny islands, coral underwater forests, turtle beaches, etc. The northern end of the lagoon is already modified by the logging of tropical forests and associated siltation. Rennell Island is one of the largest uplifted coral atolls in the world, and one of the few remaining preserves of the early ecology of the Pacific, thousands of years old. It has many unique birds, animals and plants - the sort of biodiversity worth conserving. But the Rennellese, like most remote island communities, have an extremely small, vulnerable economy based on subsistence. Logging and mining - there are bauxite deposits on the island - have been considered. Nature tourism may prove to be a more sustainable alternative, provided it is controlled by the local community. This is the sort of development challenge that our new policy seeks to address', Fran Wilde said.

(Source: Press Release, 3 April 1990
from Honourable Fran Wilde,
Associate Minister of Foreign Affairs and Trade)



SPREP AND APIA CONVENTIONS NOW IN FORCE

Sufficient ratifications/accessions have now been obtained to enable the entry into force of both the *Convention for the Protection of the Natural Resources and Environment of the South Pacific Region* (the SPREP Convention) with its two protocols on combatting pollution emergencies and prevention of pollution by dumping, and the *Convention on Conservation of Nature in the South Pacific* (the APIA Convention). These two Conventions will give international legal support and backing to the activities undertaken by SPREP on behalf of its member governments in ensuring that the environment of the region receives adequate protection.

It is hoped that other countries, eligible to become Parties to the Conventions, will soon join the list as shown below:

STATUS AT 30 JULY 1990 OF THE APIA CONVENTION AND
THE SPREP CONVENTION AND RELATED PROTOCOLS

Parties	<i>ApiA Convention</i>		<i>SPREP Convention</i>		<i>Protocol on Dumping^a</i>		<i>Protocol on Pollution Emergencies^b</i>	
	Signature	Ratification/ Accession	Signature	Ratification/ Accession	Signature	Ratification/ Accession	Signature	Ratification/ Accession
Australia	-	28 March 1990	24 Nov 1987	19 Jul 1989	24 Nov 1987	19 Jul 1987	24 Nov 1987	19 Jul 1989
Cook Islands	-	24 Jun 1987	25 Nov 1986	9 Sept 1987	25 Nov 1987	9 Sept 1987	25 Nov 1986	9 Sept 1987
Federated States of Micronesia	-	-	9 Apr 1987	29 Nov 1988	9 Apr 1987	29 Nov 1987	9 Apr 1987	29 Nov 1988
Fiji	-	18 Sept 1989	-	18 Sept 1989	-	18 Sept 1989	-	18 Sept 1989
France	12 Jun 1976	20 Jan 1989	25 Nov 1986	17 July 1990*	25 Nov 1986	17 July 1990*	25 Nov 1986	17 Jul 1990*
Kiribati	-	-	-	-	-	-	-	-
Marshall Islands	-	-	25 Nov 1986	4 May 1987	25 Nov 1986	4 May 1987	25 Nov 1986	4 May 1987
Nauru	-	-	15 Apr 1987	-	15 Apr 1987	-	15 Apr 1987	-
New Zealand	-	-	25 Nov 1986	3 May 1990	25 Nov 1986	3 May 1990	25 Nov 1986	3 May 1990
Niue	-	-	-	-	-	-	-	-
Palau	-	-	25 Nov 1986	-	25 Nov 1986	-	25 Nov 1986	-
Papua New Guinea	12 Jun 1976	-	3 Nov 1987	15 Sept 1989	3 Nov 1987	15 Sept 1989	3 Nov 1987	15 Sept 1989
Solomon Islands	-	-	-	10 Aug 1989	-	10 Aug 1989	-	10 Aug 1989
Tonga	-	-	-	-	-	-	-	-
Tuvalu	-	-	14 Aug 1987	-	14 Aug 1987	-	14 Aug 1987	-
United Kingdom	-	-	16 Jul 1987	-	16 Jul 1987	-	16 Jul 1987	-
United States of America	-	-	25 Nov 1986	-	25 Nov 1986	-	25 Nov 1986	-
Vanuatu	-	-	-	-	-	-	-	-
Western Samoa	12 Jun 1976	20 July 1990	25 Nov 1986	19 July 1990	25 Nov 1986	19 July 1990	25 Nov 1986	19 July 1990

^a Protocol for the prevention of pollution of the South Pacific Region by Dumping.

^b Protocol concerning co-operation in Combating Pollution Emergencies in the South Pacific Region.

* This instrument of Ratification is accompanied by the following reservation: "The Government of the French Republic, in signing the present Convention declares that, insofar as it is concerned, the prescriptions of the aforesaid Convention will not cover wastes and other matter entailing a level of pollution caused by radioactivity to a degree less than that prescribed by the recommendations of the International Atomic Energy Agency (IAEA)" (Unofficial translation received from Forum Secretariat).



THEATRE BRINGS ENVIRONMENTAL MESSAGE TO VILLAGES

In Vanuatu, even in some relatively remote areas, environmental awareness is being raised through the work of a small theatre group, called Wan Smolbag (literally 'one small bag'). Using very few props, this group goes out into villages and performs The Tale of Mighty Hawk and Magic Fish to audiences who are encouraged to participate in the action. Through the medium of 'grassroots theatre' environmental themes such as concern over forest destruction, water pollution and driftnet fishing are shown to a large number of children and adults. Enthusiastic audience response and acclaim for this small ni-Vanuatu group has been widespread, this success encouraging SPREP to seek additional financial assistance to enable The Tale of Might Hawk and Magic Fish (the play originally produced following a small influx of funds from SPREP) to reach wider audiences within the South Pacific region.



Enthusiastic audience participation - Wan Smolbag Theatre performance

GOVERNMENT OF CHILE SUPPORTS ENVIRONMENTAL ACTIVITIES IN SOUTH PACIFIC ISLAND COUNTRIES

The Government of Chile has been a consistent supporter of the South Pacific Regional Environment Programme (SPREP) through which it channels an annual contribution to the South Pacific Commission specifically to assist SPREP in its environmental activities on behalf of its South Pacific island member governments.

This support to SPREP commenced in 1987 when Chile's funding was used to purchase a Laser Printer, essential to the SPREP Secretariat's administrative work and still being heavily used on a daily basis coping with the increasing work load of the office. Last year, 1989, the Chile contribution was directed to specific in-country Environmental Education Week activities.

This environmental protection support from a country on the other side of the Pacific is fostering valuable links between Chile and South Pacific island countries and territories. The Government of Chile increased its support to SPREP in 1990 and has directed this contribution to a project on SPREP's Work Programme involving Yam Cultivation in Pohnpei.

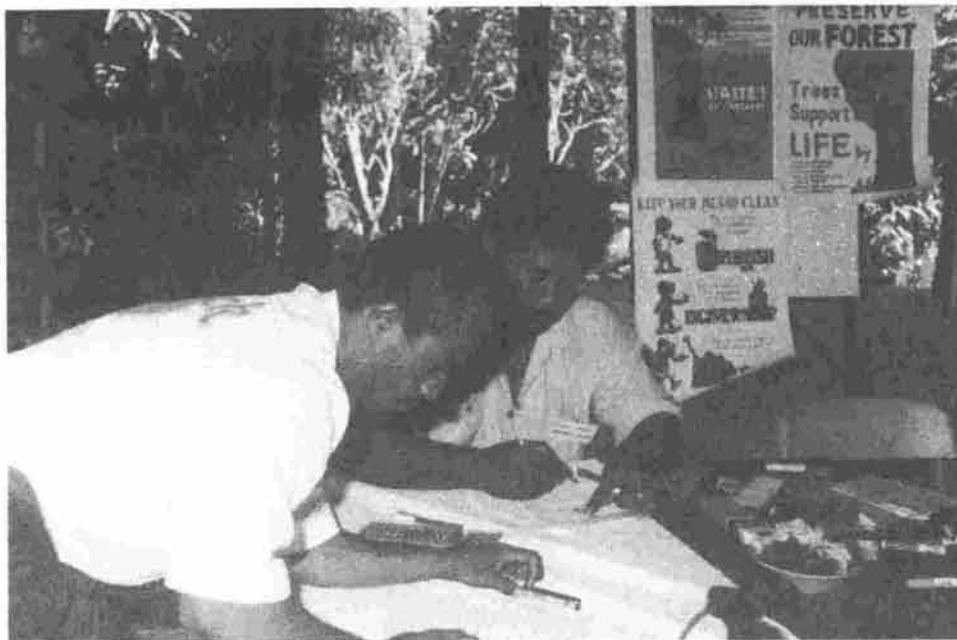
WESTERN SAMOA HOSTS ENVIRONMENTAL MEDIA WORKSHOP

Despite the effects of Cyclone Ofa which were still being felt in Western Samoa in July, the country hosted the region's first Environmental Media Workshop organised by SPREP with valuable assistance provided by resource people from the SPC's Media Training Centre.

This ten-day workshop which gave introductory training in video, radio and print material production attracted a wide range of participants from 17 member governments who, in acclaiming the success of the workshop, called upon SPREP to include additional regional and in-country environmental media training in their 1991-92 Work Programme.

As well as personnel from the region's increasing number of Environment Units, participants came from Education Departments and from the growing band of environmental non-government organisations within the region. In opening the Workshop, the Minister for Lands and the Environment, the Honourable Sifuiva Sione stated:

"Our environmental education programmes must have a clear focus. The means of teaching and communicating programme concepts and ideas must be directly applicable and adaptable to situations in the areas where they are to be applied. The use of the radio, the print and more recently the video have found wide use and application in our South Pacific countries. They will undoubtedly continue to play a major role in future years in the teaching of environmental concepts and the promotion of environmental awareness and consciousness. The media is a powerful tool we must use to rebuild and protect our environment. It is for this reason that I am particularly pleased to note that this workshop will provide you all with an opportunity to learn about the use and application of the media in the promotion of environmental awareness and understanding. A well-informed public will be supportive of our cause - for only when people understand their special relationship with nature can we count on their support in efforts to save our environment."



The importance of training people in-country to produce their own environmental education and awareness raising material is regarded as extremely important by SPREP especially as this ensures that material is produced in local languages and with appropriate cultural relevance. It is hoped that over the next biennium, a considerable number of people from the region will have benefitted from this training.

Workshop Recommendations

1. Specific in-country assistance in environmental print, radio and video production be provided to member countries. Requests for such assistance to be included in SPREP's Work Programme as joint SPREP/SPC Media Training Centre projects.
2. SPREP be requested to investigate the provision of Scholarships for training in environmental media production.
3. SPREP undertake a 'Needs Assessment' of assistance with environmental material production amongst the increasing number of non-government organisations (NGOs) currently undertaking environmental awareness raising activities.
4. SPREP investigate a scheme for training attachments for environmental education, such attachments being with both SPREP and the SPC Media Training Centre.
5. SPREP convene a further Regional Environmental Media Training Workshop as Stage II of the existing workshop and, where possible, involving consistency of participation so that skills learnt at this introductory workshop can be further developed. Stage II to be a concentrated workshop on one of the three mediums (i.e. video, radio or print).
6. A series of sub-regional Environmental Media Training Workshops be organised to cater for the growing environmental awareness-raising needs within the region.
7. In-country environmental song competitions be organised with assistance from local broadcasting corporations, prizes being sought through SPREP's funding channels. It was suggested that the Pacific Islands Broadcasters Association (PIBA) be approached to facilitate assistance of broadcasters. The winners of the in-country competitions would become contestants in a South Pacific Regional Environmental Song Competition.
8. Environmental Theatre be encouraged and that SPREP actively seek funding to enable assistance to existing groups to reach wider, and particularly village-based audiences.
9. SPREP investigate the holding of an Environmental Poster competition.
10. As well as the convening of Regional and Sub-regional workshops on environmental media production techniques, SPREP also investigate the convening of a Regional Media Workshop specifically aimed at techniques for getting the message across and involving a journalistic approach, the holding of public meetings, panel discussions, etc.

ASIAN DEVELOPMENT BANK ASSISTS REGION WITH MAJOR ENVIRONMENTAL INITIATIVE

As this Newsletter goes to press, a major joint activity between SPREP and the ADB has been cemented. Referred to as the SPREP/ADB Regional Environmental Technical Assistance (RETA), the project incorporates several of the proposals submitted by countries for environmental management assistance and will provide approximately US\$ 900,000 over a two and a half year period. You will be hearing more of RETA soon.

FEATURE

CLIMATIC CHANGE AND POTENTIAL SEA LEVEL RISE - SOUTH PACIFIC RESPONSE -

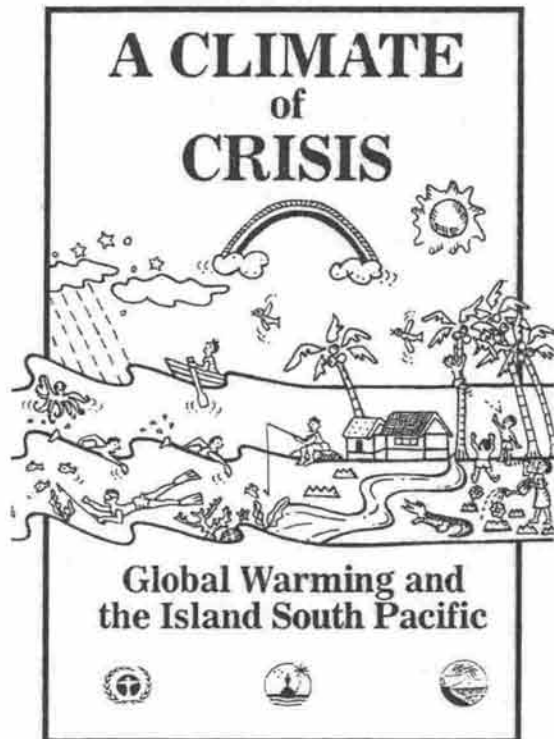
Worldwide, considerable concern has been expressed relating to the global threat posed by the 'greenhouse' effect. As the Australian Prime Minister, the Honourable R.J. Hawke, stated:

"Greenhouse cannot be dismissed as just another environmental problem. It has the potential to change fundamentally, within a single lifetime, the way all nations and people live and work". (Ecolife, Vol. 6, No. 2, Winter 1989).

In the South Pacific, the vulnerability, particularly of some of the smaller coral atolls is well understood and concern over climatic change and potential sea level rise has resulted in a specific SOUTH PACIFIC RESPONSE.

In late 1986, the United Nations Environment Programme (UNEP) proposed to the Association of South Pacific Environmental Institutions (ASPEI) the formation of a regional task team to investigate the potential impacts of global warming on the island countries of the South Pacific. By early 1987 a small task team had been formed and commenced identifying impacts and assessing their importance through reviews of available data and individual, site-specific case studies of wider regional applicability. The task team report is available through SPREP as is the popularised version of this contained in A Climate of Crisis.

In 1988, at the Intergovernmental Meeting on the SPREP Action Plan held in Noumea, New Caledonia a preliminary report of the task team's work was presented and it was recommended that, following completion of the work of the team, a further intergovernmental meeting should be held specifically to inform the governments and administrations of the region of likely impacts and to plan future courses of action.



Subsequently, the Meeting on Intergovernmental Meeting on Climatic Change and Sea Level Rise in the South Pacific was held in Majuro, Marshall Islands in July 1989 which recommended various courses of action including the preparation of eight country studies. The meeting also passed a strong resolution calling on the industrialised Nations of the world to provide technical and financial assistance to countries such as the smaller Island Nations of the Pacific, which have contributed little to the greenhouse problem but which are likely to be severely effected.

Financial assistance has been forthcoming particularly from UNEP who give a considerable proportion of their annual contribution to SPREP specifically for work on Climatic Change and Potential Sea Level Rise. As well, the neighbouring governments of Australia and New Zealand have actively encouraged and supported the participation by South Pacific island representatives to a series of international meetings organised by the Intergovernmental Panel on Climate Change (IPCC) - the major body established to analyse the state of knowledge about the science and potential impacts of global climate change and to consider a range of possible response strategies.

Already there is a strong core of SPREP National Focal Points who, through their participation of IPCC meetings, are keeping all abreast of the response strategies being developed world-wide. These strategies on energy and industry; agriculture and forestry; coastal zone management; and resource use and management have adopted a multidisciplinary approach involving legal measures, technology transfer and development; financial measures (especially assistance to developing countries); public education and information; and economic measures.

The SOUTH PACIFIC RESPONSE rests not just on concern but on active participation by member governments in studies and activities that will assist with appropriate response strategies in the eventuality of a crisis.



COURSES IN ENVIRONMENTAL SUBJECTS

GRADUATE DIPLOMA IN DEVELOPMENT ADMINISTRATION
National Centre for Development Studies
The Australian National University
CANBERRA ACT
Australia

The Graduate Diploma in Development Administration has been designed as a joint venture by the National Centre for Development Studies and the Public Policy Programme at the Australian National University to train administrators from Australia's Pacific neighbours to rethink the role of the public sector. It is vital to good government in the area that administrators be able to think broadly, critically and imaginatively about choices of policy direction. The programme provides training for Pacific islanders working in public sector administration who have the potential to become senior policy advisers and public managers.

The programme offers its students skills to devise and analyse alternatives as well as to present different options to their governments, the public, or to donor agencies. Training provides an opportunity to improve the students' personal and professional development. They will be able to update existing analytical skills as well as acquire new ones that will allow them to contribute more effectively to policy-making. Their qualifications and ability to assume senior positions will be improved.

Most of the students in the course will have completed an arts, science, economics or business degree or some similar training some years ago and have already worked in public administration.

For further information and application forms write to:

The Programme Director
 Graduate Diploma in Development Administration
 National Centre for Development Studies
 Research School of Pacific Studies
 The Australian National University
 G.P.O. Box 4
 CANBERRA ACT 2601
 Australia

Telephone : (062) 49 4699
 Cable : NATUNIV
 Telex : AA 61364 AJRC
 Fax : (062) 57 2886

COASTAL ENVIRONMENTAL TEACHING AND TRAINING

**Université française du Pacifique
P.O. Box 4635, PAPEETE, Tahiti, French Polynesia**

1) Post-graduate teaching and training

Two years ago, the Université française du Pacifique started a ten-month post-graduate course entitled 'Knowledge and Management of Coral Reef Ecosystems' containing two segments:

(a) Advanced courses (five months) with:

- basic teaching: oceanography, chemistry, geology, geodynamic, biology,
- specialised teaching: management and reclamation of coastal ecosystems, bioerosion, sedimentation, geochemistry, remote sensing,
- technical teaching: presentation of the tools used in oceanographic and coastal research.

(b) Training (five months) including:

- scientific applied research, in laboratory and in fields devoted to specific subjects chosen by trainees.

Courses will be given in English language if there are sufficient students (about 6-8).

For further information contact:

Université française du Pacifique
P.O. Box 4635
PAPEETE
Tahiti
French Polynesia

CALENDAR OF EVENTS

SCIENCE OF THE PACIFIC ISLANDS PEOPLES
Conference to be hosted by the
University of the South Pacific (USP),
Suva, Fiji

December 1990

Themes include:

- Traditional Science and Technology in the Pacific
- The Impact of External Contact on Pacific Science
- Modern Value of Traditional Knowledge
- Science Policy and Traditional Science

For further information, contact:

Professor John Morrison
 SPAS, USP
 P.O. Box 1168
 SUVA
 Fiji

Telephone : (679) 313900
 Telex : 2276 FJ USP
 Fax : (679) 302548

XVII PACIFIC SCIENCE CONGRESS
'TOWARDS THE PACIFIC CENTURY:
THE CHALLENGE OF CHANGE,
Sheraton Waikiki Hotel,
Honolulu, Hawaii,
United States of America

27 May - 2 June 1991

Contact:

XVII Pacific Science
 Congress Secretariat
 2424 Maile Way, Fourth Floor
 HONOLULU
 Hawaii 96822
 United States of America

TENTH WORLD FORESTRY CONGRESS
'FORESTS: A HERITAGE FOR THE FUTURE'
Paris, France

17 - 26 September 1991

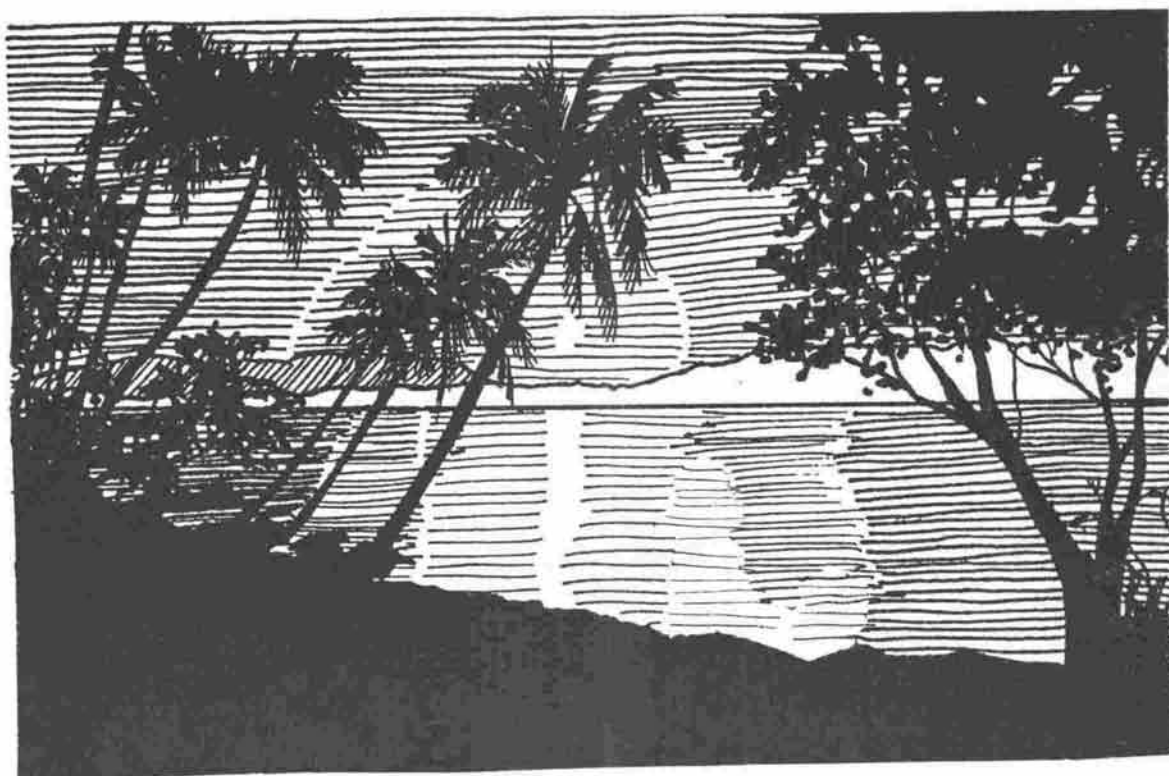
The Congress will be divided into six discussion areas, namely:

- (a) The Forest, a Protective Heritage
- (b) Protection of the Forest Heritage
- (c) Trees and Forests in the Management of Rural Areas
- (d) Management and utilisation of Forest Resources
- (e) Forest Production, and
- (f) Policy and Institutions

For further information contact:

Centre technique forestier tropical
45 Bis, Avenue de la Belle Gabrielle
94736 NOGENT SUR MARNE CEDEX
France

Telephone : (1) 43 94 44 95
Fax : (1) 43 94 44 96
Telex : CETEFO 264 653 F



PUBLICATIONS

SPREP - A full list of publications available through SPREP can be obtained from the SPREP Secretariat.

OTHER - Useful publications which have come to our notice but are not available from SPREP include:



- **THE NEW ROAD**, Bulletin of the WWF Network on Conservation and Religion. Available from Patricia Chable, WWF International, CH-1196 GLAND, Switzerland.
- **UNDERSTANDING GREENHOUSE AND OZONE**, H.K. Garland, Palms Press, 1989. Available from Palms Press, 87 Newport Road, DORA CREEK NSW 2264, Australia. Approximate Cost: A\$ 10. A very useful, informative easy to read book.
- **ASIAN-PACIFIC REMOTE SENSING JOURNAL**. Useful journal covering Remote Sensing application, technology, theory and training issued by the ESCAP/UNDP Regional Remote Sensing Programme, Economic and Social Commission for Asia and the Pacific (ESCAP), United Nations Building, Rajadamnern Avenue, BANGKOK 10200, Thailand.

PESTICIDE PUBLICATIONS

- *Guidelines for Quality Control of Pesticides.*
- *Guidelines for the Safe and Effective Use of Pesticides.*
- *Guidelines for Safe Warehousing of Pesticides.*
- *Guidelines for Emergency Measures in Case of Pesticide Poisoning.*
- *Guidelines for the Safe Transport of Pesticides.*
- *FAO International Code of Conduct on the Distribution and Use of Pesticides.*
- *Guidelines for the avoidance, limitation and disposal of pesticide waste on the farm?.*

(Available from: GIFAP, Avenue Albert Lancaster 79A,
1180 BRUSSELS, Belgium)