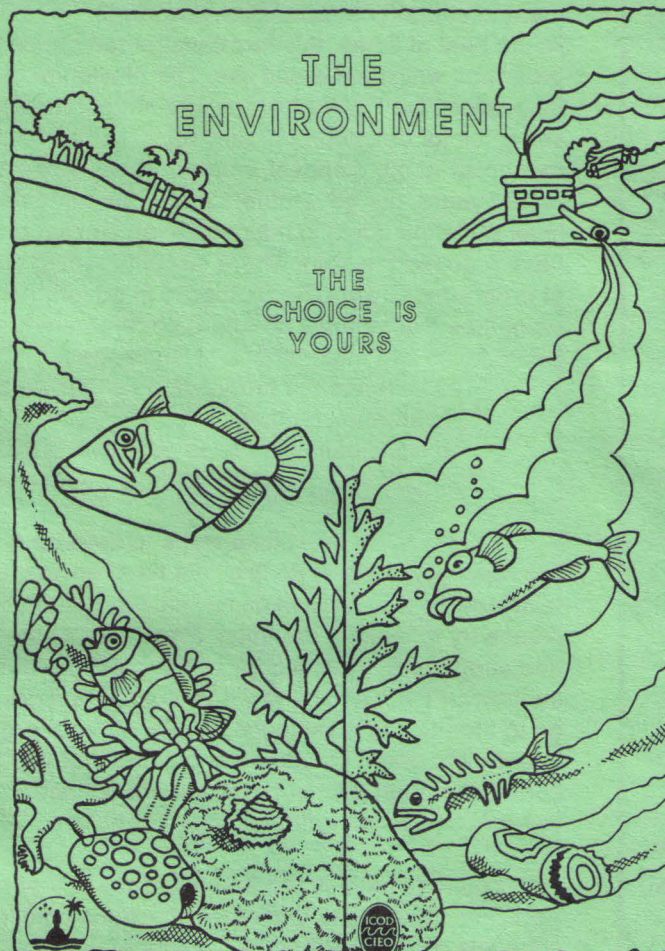


# Tok Blong SPPF

A Quarterly of News and Views on the Pacific Islands

MAY 1992, #39

VICTORIA, B.C., CANADA



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... Global Warming, Waste Management and more

# About this journal...

*TOK BLONG SPPF* is pidgin, a language used in many parts of the Pacific. An equivalent expression in English might be "news from SPPF".

*TOK BLONG SPPF* is published four times per year in English by the South Pacific Peoples Foundation of Canada. SPPF gratefully acknowledges financial support for the publication from the Canadian International Development Agency (CIDA).

SPPF's major aim is to promote awareness of development, social justice, environment, health and other issues of importance to the peoples of the South Pacific. Through this journal, SPPF hopes to provide Canadians and others with a window on the Pacific that will foster understanding and promote action in support of Islanders in their struggles for development.

We welcome readers' comments on the journal, as well as suggestions for articles, selections of clippings, or notices of development education materials of interest. We reserve the right to edit material. Views expressed do not necessarily reflect those of SPPF or of CIDA.

*TOK BLONG SPPF* (ISSN: 0828-9670) is available through a minimum donation to SPPF of \$15/yr for students, \$25/yr for individuals, \$40/yr for organizations and institutions, and \$100 for commercial businesses. Recipients having non-Canadian addresses should remit \$US15, 25, 40, or 100 as appropriate. Our address is 415-620 View Street, Victoria, B.C. V8W 1J6, CANADA. Tel: 604/381-4131 Fax: 604/721-0409 INet:sppf; web:sppf

## SPPF Update

### Please....SPPF needs your support.

Up till now, SPPF has got by on a combination of subscriptions to *Tok Blong SPPF*, occasional donations, small sales of resources and services, and an annual grant from the Canadian government to support our education programs.

At the best of times, this has constrained our ability to offer the range of programs which we would like. The challenge of promoting inter-national awareness about the Pacific Islands and supporting the South Pacific people in their struggles for development and social justice has always been greater than the resources at our disposal. Unfortunately, these are not the best of times. In recent years, our government grant has remained at approximately the same level while our costs to maintain even current programs have been rising. We have reached the point where current funding cannot sustain our present level of programs. Given other cutbacks in government funding, we must also recognize that reliance on future government funding for SPPF is risky. Thus, SPPF faces two major financial challenges:

- To increase our fundraising so that we are less dependent on government funding.
- To significantly increase our funding so that we can expand our educational programs and our support for people in the South Pacific.

Therefore, we must take steps to develop a larger, committed donor base. We need your help to do this. We have enclosed a new brochure about SPPF. It includes a tear-off section for making donations. If you support our aims, please try to make a donation. Please also help us reach new potential donors and supporters. Pass a copy of the brochure to others who you feel might support SPPF. Let us know if you can use more copies of the brochure, to pass on to friends and colleagues, display at your organization, pass around at events, etc. Send us names of anyone that you feel would be worth us contacting. With your support, we are confident that we can take the first steps towards a stronger funding base. Thank you.

You may have noted that this issue is identified as a May issue instead of April. We have found that other programs conflict with our previous publishing schedule of January/April/July/October. We feel that a February/May/August/November schedule will be more manageable. Fear not! Your subscription entitles you to four issues, irrespective of any change in our publishing dates.

Our annual Pacific Networking Conference was a success. Over 50 participants gathered on Vancouver Island for the weekend of April 10-12. We had attendees from Papua New Guinea, Vanuatu, West Papua, many parts of Canada and the Western U.S. An excellent group of resource people addressed our theme regarding the role and impact of transnationals on the South Pacific and Canada. A report will soon be available. Contact SPPF if you'd like a copy.

Now for a *mea culpa*: Our last issue had a short item regarding the addition of Solomon Islands to the United Nations list of "least developed countries" (LDCs). On the basis of a story in the November/December 1991 issue of *Pacific Magazine*, we stated that the only other Pacific Island LDC is Western Samoa. We and *Pacific Magazine* got it wrong. Kiribati also has LDC status.

Stuart Wulff, Executive Director



***In This Issue....***

# **Saving Mother Earth...and Her Children**

The idea for this issue took shape last November, when hopes were high for UNCED, the United Nations Conference on Environment and Development. For Pacific Islanders, the challenge of "sustainable development" (a new phrase for a concept that Indigenous societies have long accepted and practised) is real and immediate. Already grappling with the challenge of providing for the meaningful development of Island societies, Pacific Islanders are confronted with a daunting array of environmental problems and challenges. Some of these, such as global warming and climate change, have origins outside the region but pose significant threats to the South Pacific.

As several of the articles in this issue emphasize, the challenge which we all face is that of saving Mother Earth. The predominant economic development model, with its emphasis on growth at all costs, has brought us far along a dangerous path. The planet cannot cope with further "progress" and "development" based on this model. It is not sustainable. At the same time as we struggle to save and nurture Mother Earth, we must find a way to save and nurture her children. Current models of development have failed to provide for the basic needs and equitable development of large segments of the world's people. It is not only the environment that demands a new model of development; the world's poor and dispossessed require that we find an answer to their needs. This then is the challenge of sustainable development, to achieve equitable development which meets people's needs while at the same time preserving and restoring the environment upon which our future depends. This is the challenge which UNCED was supposed to meet.

Given their modest resources, Pacific Island governments and non-governmental organizations have struggled to make their voices heard through the UNCED process. From an early stage, it was recognized that UNCED provided a unique opportunity to draw international attention to environment and development issues of concern to Pacific Islanders. As with other challenges, Pacific Islanders have found that collaboration is key to achieving their aims vis a vis UNCED. An important player in these efforts has been the South Pacific Regional Environmental Program (SPREP). In addition to supporting the UNCED-related efforts of individual governments, SPREP spearheaded regional input to the UNCED process. The culmination of this effort was "The Pacific Way", the region's collective input to UNCED. We have provided a synopsis of this important document.

## **SPPF NEEDS HELP**

***To address concerns & needs of Pacific peoples***

***To address environmental & social issues in the Pacific***

***To support small scale projects***

### **PLEASE MAKE A DONATION**

***(see enclosed brochure)***

**THANK YOU!**

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## ***In this Issue cont'd....***

Many would argue that the path to sustainable development involves at least a partial return to some important roots, that traditional and Indigenous approaches to development and environmental management still have much to teach us. In this issue, we have gathered several articles which explore this theme and make a strong case for Indigenous and traditional perspectives on the environment and development debate.

Recent years have seen a rapid proliferation of non-governmental environment groups in the South Pacific. You will be introduced to several of these groups, their accomplishments and their thinking in the course of reading this issue.

Big companies have often been portrayed as environmental villains. Is this reputation deserved? The United Nations Centre on Transnational Corporations (UNCTC) recently completed a "benchmark survey" on 200 of the world's biggest and "most environmentally innovative" transnational corporations (TNCs). The survey found that many TNCs had made progress in addressing environmental concerns. However, few TNCs had extended their increased environmental consciousness to their international operations. The survey found that most TNCs did not monitor environmental impacts at operations in developing countries, did not apply standards in effect in their base country to operations in developing countries and were disposing of waste outside the country of origin. In this issue, we feature two articles which look at the environmental and developmental impacts of transnationals in Papua New Guinea. Focusing primarily on logging and mining companies, both articles support the conclusion that transnationals have a long ways to go to become contributors to sustainable development.

It is now clear that governments have not been able to transcend their traditional preoccupations during the UNCED process. The United States in particular has been emphatic in its insistence that UNCED will not be allowed to interfere with the growth-as-usual model of economic development. The concrete results of UNCED are likely to be modest at best. However, the past couple of years have seen a blossoming of interest in environment issues and sustainable development. In the Pacific, there are indications that this interest has spawned new initiatives and a stronger movement for change. If UNCED stands in some ways as a failure, it is a failure of most governments and their imagination. History may record that it also marked the emergence of a stronger global people's movement for sustainable development, a crusade to save Mother Earth and her children.



Graphic drawn by Leslie Filiomae

## ***THE TREES GIVE LIFE....***

**by Leslie Filiomae**

(Leslie Filiomae is a student at the Solomon Islands College of Higher Education. This letter first appeared in the Nov-Dec 1991 issue of Link, a publication of the Solomon Islands Development Trust.)

I was born in a village called Sisifu in North Malaita, a place where you can find the primary forest still preserved. It is just beside the road which is about 50 meters from the sea. I would like to thank my people for preserving the forest. In the forest you can find different types of birds, lizards, insects and animals. It is alive.

I was so sad to see some of our islands that have been destroyed by logging. Men have been cruel to our environment and allowed our land to be destroyed by foreigners. They set up industries and roads in our lands and cut down trees in our forest that have been growing for thousands of years.

The trees give life to human beings as a form of oxygen, shade and protection from the wind. Men do not realize the good things that trees provide to human life. They are influenced by money and destroy our primary forest.

In the sea there are lots of fish. They decorate the coral reefs and provide food for us people. When I first came to Honiara, I made a trip to Rove and we were looking for fish in the sea. The colourful fish were gone. The only things I found were rusted drums, pipes and cans. Is this a dumping place for rubbish? Please let's keep our water clean as it was in the beginning. Remember love of money is the root of all evil and destroyer of the environment.

# FIRST NATIONS OF BRITISH COLUMBIA STATEMENT ON THE ENVIRONMENT

*This statement, developed by the Chiefs of British Columbia, Canada, was presented at the "Protectors of the North" forum on April 23, 1991. It was presented by Albert Saddleman, Chief of the Okanagan Band*



There is a growing awareness throughout the world that ours is an age in which environmental degradation has become commonplace. The deterioration of the earth's

support systems has become a global problem that is causing increasing alarm in the world's population and has governments groping for solutions to fix the various problems. The First Nations of British Columbia have, for many years, despaired at the direction of modern industrial society. Since our initial contact with non-Indians we have suggested that there are other ways to relate to the wealth of our planet than in monetary terms. Yet our philosophy has repeatedly been dismissed as naive or unsophisticated. We are patient people. As environmental degradation becomes a crisis, we offer our views again. The solution to the destruction of the planet lies not merely in fixing the spoilage to Mother Earth's intricate systems. Rather, it depends upon our capacity to understand ourselves in a very different way as we relate to our environment. It requires a new global philosophy. It requires an awakening of mankind's truly human qualities.

## **The philosophy of the First Nations of B.C.**

It is the common spiritual heritage of all First Nations that we are related to all living and non-living things. All life, including our own, springs from sacred Mother Earth. Our identities as peoples make sense only insofar as we can relate to the lands, waters, air and life forms that surround us.

## **The political position of the First Nations of B.C.**

The First Nations of British Columbia share the view that the destruction of our environment violates man's sacred trust and results from a fundamentally narrow, short-term, profit-motivated philosophy. All things in and of themselves, are sacred.

For us, the wealth of nature is spiritual. It is not a commodity for exploitation but a source of spiritual well-being for all people. To the extent that we harvest resources, we do so with respect and recognition that we are taking life. We are keenly aware that the natural resources of our lands have sustained us for thousands of years.

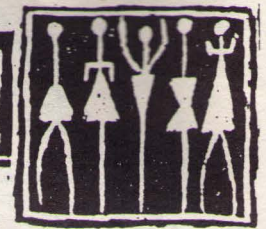
Within this system, we are the stewards of Mother Earth and the protectors of all living things. This has been our responsibility since time immemorial. Our philosophies, our cultures, our customs and laws tie us back to Mother Earth. They speak to our duties to conserve and sustain the earth in perpetuity for future generations.

We believe the consequences of this approach to life threatens all living things, including ourselves. Therefore, we oppose the current economic and political practices that result in the destruction of our lands, waters and oceans, air and the species that inhabit them. We encourage all British Columbians to come to a richer understanding of mankind's role in nature and our relation to all living things.

We call upon the governments of Canada and British Columbia to enact and enforce present, new and tougher environmental protection laws that will better ensure the survival of our world; and

We assert our inherent right and responsibility to protect Mother Earth.





# THE PACIFIC WAY

"THE PACIFIC WAY" is the report to UNCED from the fourteen Pacific Island Developing Countries (PIDCs) who are members of the South Pacific Regional Environment Programme (SPREP). It records issues and constraints for sustainable development and priorities for further action that the island countries see as fundamental to the long-term survival and enhancement of their region. SPPF, in this article, has excerpted highlights from the 51-page document for Tok Blong readers. Photocopies of the document are available from SPPF for \$8.00 plus postage.

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*"The path to sustainable development for the South Pacific will not be possible, however, without the political will and co-operation of countries outside the region. Global environmental problems such as climate change and associated sea level rise, which have their root causes outside our region, threaten the land and ocean resource upon which Pacific island people and economies so heavily depend. Indeed, problems such as climate change threaten the very existence of small island nations in the Pacific. A lack of appropriate legislation, and of human, technical and financial resources will also slow us on the path to sustainable development. These are at the very heart of the difficulties we will face."*

**Ratu Ovini Bokini/Chairman**

Minister for Housing and Urban Development, Fiji

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## Towards UNCED

Our drive towards economic self-reliance is central to the social and economic development of the region. Our co-operative history of development and our consensus approach to problem resolution mean that the goal of sustainable development to which we are committed has every chance of being attained. SPREP, the South Pacific Commission and the South Pacific Forum are intergovernmental bodies in the region that, through this consensus approach, have been important to our preparations for UNCED. But we also appreciate that this is not a goal we can hope to achieve on our own. We recognise that the achievement of our goal will require close co-operation with other regions of the world and the continued assistance of the international community. We are ready to play our part.

Keen for our voice to be heard along with those of our neighbours, we have participated actively in the UNCED process. We see UNCED as a significant step towards striking a balance between the absolutes of protection of the environment on the one hand and the imperatives of economic development on the other.



## PART I. ISSUES AND CONSTRAINTS

The following fourteen issues are seen as those of most concern to our region. The order of discussion of these issues does not imply any order of priority. The discussion of these issues and constraints is based on National Reports compiled by countries of the region in preparation for UNCED.

### CLIMATE CHANGE & SEA LEVEL RISE

Global warming and sea level rise are the most serious environmental threats to the Pacific region. Island countries are particularly vulnerable because they include many hundreds of low-lying islands and atolls, house most of their populations and many important economic activities in coastal zones, depend on scarce supplies of potable groundwater, have limited areas of arable soil, and are at great risk from natural events, e.g. cyclones, droughts, earthquakes, volcanic eruptions and tectonic movements.

The amount and rate of rise in sea level remain uncertain and this adds to our concern, as does the feeling of helplessness in the face of an environmental impact not of Pacific origin. Any attempt to comprehend the possible effect of such estimated increases on our atolls, which have a maximum elevation rarely exceeding five metres above sea level, must take into account the impact on rising sea levels of cyclones and storm surges, king tides, and sea level fluctuations associated with El Nino effects.

The likelihood of sea level rise is basic to any development planning in the Pacific atolls. Even if protective coral reefs continue to grow upwards at a rate equal to that of the rising seas, the coastline will be prone to erosion, coastal engineering structures will be threatened, and the construction of new infrastructures near the shore placed at risk. There will be loss of mangrove forest, of agricultural area and fuel wood resources. Rising temperature would affect coral mortality, sea grass beds would be lost, and inshore fishing productivity may decline. A particularly serious effect of rising sea levels for the atolls is the impact on fresh water lenses underlying the atolls. There are also fears of serious economic consequences; foreign sources of

risk capital are not expected to make long-term investments in low-lying areas of the region.

## POPULATION

Many concerns can be traced to high population densities and the high rate of population growth. For the atoll nations, finding ways to stem overpopulation is fundamental to achieving sustainable development.

The net population growth of the region is high with natural rates of increase over 2%, in some countries over 3% and reaching 5% in Wallis and Futuna. Population is expected to double within 20 years. Problems are generally localised and associated with urbanisation. In capitals of atoll nations, population density is phenomenally high - Tarawa in Kiribati rivals the density of Hong Kong and Ebeye Island in the Marshalls has a density of 23,200 per sq km. Some smaller countries export their problem through special emigration arrangements with metropolitan countries.

## ECONOMIC POTENTIAL, EMPLOYMENT AND POVERTY

Economic characteristics of South Pacific nations vary largely according to resource endowments, consumption patterns and the institutional capacity to support such development. The Melanesian countries are resource-rich; PNG, when compared with the other Melanesian countries, is particularly fortunate in its marine resources and mineral wealth. Gold is an important export for Fiji and has also been discovered in Solomon Islands and Vanuatu. Timber production is significant in Fiji, PNG and Solomon Islands. All Melanesian countries have abundant non-living and living marine resources within their EEZs.

The economic limitations of the atoll nations, and to some extent other Pacific nations are aggravated by rapidly increasing populations with a high and growing proportion of young people unable to find employment. The working age population is growing rapidly but generally lacks needed vocational and technical skills. Unemployed youth are mostly found in major centres where even the prospect of employment in the subsistence economy is denied them. Thus an ever increasing proportion of government funds is earmarked for social services with less available for initiatives to stimulate economic development. Poverty is an emerging issue in some island countries. Urbanisation and the shift to a monetary economy are part of the problem, particularly in the resource poor countries.

## ENVIRONMENTAL HEALTH

Small isolated communities are vulnerable to rapid spread of infection and to adverse effects of environmental degradation. Environmental health problems are strongly linked to the supply and quality of fresh water and to the introduction of contaminants into the general environment. Diarrhoea and other gastro-intestinal problems are prevalent. Major health issues are nutritional disorders and nutrition-related non-communicable diseases. These are due to the deterioration

of traditional wild foods, their replacement by imported "convenience" foods and in some cases a high intake of alcohol, and an increasingly sedentary lifestyle.

The history of waste disposal in the region has led to a growing awareness of the danger to the Pacific environment and the health of its people. The region has no capacity for monitoring pollution from toxic or hazardous substances. Controls of the importation, storage, sale, safe use and disposal of biocides are necessary. The fundamental need for labels to be printed in the local language is rarely met.

## EDUCATION AND PUBLIC AWARENESS

The highest priority in the development strategies of Pacific countries is the education of young people. Literacy is increasing but still far from universal. There are concerns about the quality of formal education and a need for increased effort in vocational training and apprenticeship programmes. Environmental education remains a low priority. The two main problems are low motivation of teachers regarding environmental subject matter and lack of teachers well-informed on environmental issues. Few teaching materials either deal with local issues or are available in local languages.

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*..the object of the exercise of 'sustainable development' is to survive on the atolls forever....Sustainability is the idea that we can survive from day to day, and.....ever after!*

*Hon. Ieremia Tabai, GCMG, Secretary-General,  
South Pacific Forum Secretariat and former President of the  
Republic of Kiribati*

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In many PIDCs, women are traditionally the day-to-day managers of the natural resources. They are also the ones who pass on the environmental knowledge to the young. But the reality is that women and youth are rarely consulted about resource use and environmental information does not flow readily to them. Unless access to information is provided to both groups, sustainable development cannot become a reality.

## INCREASED RELIANCE ON THE GLOBAL ECONOMY

A common feature in the Pacific is the rapid increase of imported goods to satisfy growing demand for consumer goods. Subsistence lifestyles neither meet the needs for cash to pay for children's education nor to purchase those material goods once viewed as luxuries but now seen as essentials. Bureaucracy, aid, social services and remittances from citizens abroad play the dominant economic roles in many Pacific island economies. Throughout the Pacific, with the notable exception of Fiji, there is high dependence on development assistance (or budgetary support in some cases) despite the wish to achieve economic independence. Island countries are not well endowed with the infrastructure necessary for effective transfer of new technology. Even in established technologies, many countries lack the capabilities to provide ongoing maintenance and repair. In many cases the major

requirement is for technology relevant to the ecological-sustainable development of natural resources.

## **ENVIRONMENTAL & DEVELOPMENT DECISION-MAKING**

Long-term environmental concerns are rarely given adequate consideration in planning or decision-making. For example, Environmental Impact Assessment (EIA) procedures are still sometimes considered unnecessary, grudgingly initiated when sufficient pressure is applied. Strong commitments at the government level to environmental planning are not always mirrored in institutional frameworks. Budget allocation to environmental administration is commonly very little. Another major constraint is the lack of trained staff. Detailed information on ecosystems and national resources is rarely available to decision-makers. Resource-focused and environmental protection legislation is outdated, difficult to administer and enforce. In most countries, review of existing legislation is a high priority.

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*...our islands have finite carrying capacity for their human populations. Clearly we need to recognise the physical limitation of our island homes, as well as identifying the unique opportunities which they offer, if we are to attain the social and economic goals which we set for this last decade of the 20th Century.*

**Hon. Berenado Vunibobo**  
Minister for Trade and Commerce, Fiji

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## **ENERGY**

PIDCs' (with exception of PNG) increasing dependence on imported fossil fuel is a major constraint to sustainable development. Smaller countries often pay more for fuel imports than they earn in total from exports. The region's dispersed population and long distances between population centres make efficient energy production and distribution a problem. At a local level, in densely populated areas, fuel wood supplies are becoming scarce. This is contributing to deforestation and the degradation of surrounding lands.

The link between existing forms and levels of energy consumption, particularly by developed countries, and the onset of climate change is clear to Pacific island countries. When this is considered alongside the current regional reliance on fossil fuels, over 80% of the PIDCs placed emphasis on the need for renewable alternatives in their National Reports to UNCED.

## **SUSTAINABLE MANAGEMENT OF LAND RESOURCES**

In the Pacific, land resources are the basis for most subsistence and commercial production. High population growth rates and the displacement of traditional land management systems by introduced agricultural systems, mining and forest utilisation have placed serious stress on land resources and the communities which depend on them. Such trends are particularly serious on smaller islands, especially atolls, with limited land, poor soils and few other land resources.

Land tenure is commonly based on communal ownership, is closely associated with traditional conservation practices and has major impact on environmental management.

The Pacific region is experiencing rapid deforestation due to commercial logging, agricultural plantations, swidden agriculture, cyclones, fire, landslides and massive slumps. The greatest damage has been caused by uncontrolled or poorly managed logging. Reforestation is inadequate. Land degradation is occurring through cash cropping and plantation agriculture.

Environmental degradation is inevitable from mining operations, but the extent ranges from total destruction at the mine site to impacts of varying intensity associated with processing of the ore and disposal of wastes. Most environmental damage is localised; the major problem experienced in the region has been the disposal of tailings containing heavy metals and toxic chemicals. Seabed mining is a possibility as is another form of 'mining', the excavation of coral, sand and aggregate from beaches, which is a problem for small islands with fringing reefs.

## **DETERIORATION OF TRADITIONAL SYSTEMS**

Traditionally certain rules and procedures had to be followed in agriculture, hunting and fishing. Methods evolved to maintain soil fertility. Temporary bans were imposed on hunting and fishing during breeding periods or times of scarcity. Some traditional practices had adverse environmental effects; the excessive use of fire has made large areas of grasslands in Fiji and PNG infertile.

The potential for traditional management systems is unfortunately not reflected in the attention given them by natural resource professionals and management advisers in the region. Local knowledge is eroding at an accelerating rate as a consequence of westernisation, industrialisation, urbanisation and the accompanying alienation of the young from their traditions.

## **CONSERVING BIOLOGICAL DIVERSITY**

The tropical South Pacific is renowned for its high levels of species diversity and endemism. The region also has the world's most extensive coral reefs. Our people rely heavily on these biological resources for subsistence and their economic, social and cultural well-being. However, island biological diversity and its component species are among the most threatened in the world. Implementing policies to conserve fauna and flora in the region remains difficult because of financial and personnel constraints plus the constraint imposed on governments by customary land ownership. Uncontrolled introduction of exotic pests has been responsible for great loss of biological diversity. There is a great need for effective agricultural quarantine systems.



## **SUSTAINABLE COASTAL AND LIVING MARINE RESOURCE DEVELOPMENT**

The small size and narrow natural resource base of many Pacific islands make them particularly vulnerable to inappropriate development and to mismanagement. For some, the ocean is a major part of that resource base. The condition of reefs and lagoons, the prime source of protein for the Pacific, are adversely affected by overfishing and the use of poisons and explosives when fishing, pollution from sewage, fertilizer, and biocides, toxic wastes and spillage, landfill and coastal 'reclamation' for building, mangrove damage through their use as garbage dumps, wood harvesting and improper design of causeways and seawalls, sedimentation from agriculture, mining, forestry, beach mining, lagoon dredging and construction, seepage of contaminated groundwater, and coral and shell collecting by and for tourists. Water quality monitoring is important to the protection of the intertidal zone and reefs near urban or industrial areas, but monitoring capabilities are inadequate. The impact of natural disasters such as cyclones and volcanic eruptions is horrendous.

The Western Pacific has the highest marine diversity in the world with up to 3000 species on a single reef. But there are few marine parks to protect this asset. Coastal zone management programs integrating sustainable resource use and conservation are virtually unknown in the Pacific. Offshore fisheries in countries' EEZs are for some the sole opportunity for substantial economic development. Certain fishing techniques threaten the sustainability of the resources and resource knowledge remains inadequate. Inshore fisheries, essential to subsistence living, are also threatened by overfishing, habitat destruction and the pollution of lagoon waters. The region is not equipped to handle oil spills and dumping of bilge water.

## **SUSTAINABLE MANAGEMENT OF FRESHWATER RESOURCES**

Water quality in the high islands is usually acceptable. On low atolls however, dissolved wastes are not filtered out by the soil because of the low clay content. Low elevation and shallow water tables mean that pollution rapidly reaches the groundwater. Drought may force communities to use polluted groundwater. Hepatitis and diarrhoea are prevalent, outbreaks of typhoid and even cholera can occur, and iodine deficiency diseases on limestone islands. Islands under 400 metres wide have no groundwater. Others have a freshwater lens governed by rainfall, tides, seepage, hydraulic conductivity and rate of abstraction. Drinking water can be contaminated by salt water intrusion, toxic wastes and sewage. Monitoring programs must be instituted to safeguard the public and the water supply.

## **WASTES, TOXIC & HAZARDOUS SUBSTANCES**

The physiological characteristics of some Pacific islands, their isolation and oceanic location, and their

dependence on a marine and limited terrestrial resource base make them vulnerable to contamination by hazardous wastes and radioactive materials.

All countries of the South Pacific share the problem of safe disposal of solid and liquid wastes, particularly as a result of urbanisation. Pollution from industrial wastes and sewage, inappropriately sited and poorly managed garbage dumps, and disposal of toxic chemicals are significant contributors to marine pollution and coastal degradation. There is also growing concern that toxic and hazardous waste disposal is being brought to the region from developed countries.

Much solid waste is generated because of rapid, urbanisation an equally rapid rise in 'standard of living' expectations and the related demand for imported canned, plastic-wrapped or bottled goods. With limited land areas around many urban centres, and with local reefs, lagoons or inshore fisheries particularly vulnerable to pollution, most of our PIDCs have serious disposal problems, few disposal sites being acceptable in social, economic or health terms.

In the larger towns, the search for environmentally safe and socially acceptable sites for garbage dumps has become a perennial problem and, for several towns, seemingly insoluble. In smaller settlements and coastal peri-urban situations, mangrove areas or beaches have become casual dumping grounds for all waste, ranging from derelict cars to household refuse. Expected further urbanisation and industrialisation will make these problems even worse.

With inadequate sanitation systems for the disposal or treatment of liquid wastes, high coliform contamination in surface waters and in groundwater near urban areas is common. Various incidents have also been reported of pollution by toxins from industrial waste, effluent from abattoirs or food processing plants, by biocides, and polluted effluent from sawmills and timber processing areas.

## **PART II. PRIORITIES FOR FURTHER ACTION**

Sustainable development objectives of Pacific Island Developing Countries are to:

- Assist countries in protecting and improving their shared environment and in managing resources to enhance their quality of life for present and future generations.
- Adopt population policies which foster sustainable development.
- Ensure that economic development activities are carried out in an environmentally sound and sustainable manner.
- Integrate health and nutrition considerations into development planning.
- Integrate environmental considerations with economic and sectoral planning.
- Adopt measure which will enable island countries to cope with climate change and rising sea level.

- Manage and plan for multiple-use, ecologically sustainable development and conservation of land, habitats and resources.
- Ensure the retention of traditional knowledge and practices which foster sustainable development.
- Promote sustainable forestry practices even where this requires that existing programmes be changed to ensure that they are environmentally sound.
- Ensure the sustainable use and conservation of fresh water.
- Protect biological diversity and promote ecologically sustainable use of the regions biological resources.
- Manage and plan for multiple-use, ecologically sustainable development and conservation of coastal areas, habitats and resources.
- Prevent, reduce and control pollution which might result from nuclear testing and from importing, transporting, storing and disposal of toxic and hazardous wastes and weapons and implement the relevant international conventions.
- Facilitate access to environmental information for all groups, in particular women and youth, to enhance management of resources and environment.
- Encourage participation of local indigenous communities in planning and management of programs for sustainable resource conservation and use.
- Affirm the right of individuals and NGOs to have access to all available information, to be informed about environmental issues relevant to them, and to participate in the formulation and implementation of decisions likely to affect their environment.
- Ensure effective application of funding from within national budgets and international sources to the protection of the environment and achievement of ecologically sustainable development in the region.
- Facilitate the transfer of affordable and appropriate technologies, along with the associated development of human resources, skills and training, research and information sharing.
- Strengthen national and regional capabilities, institutional arrangements and financial support, to plan and manage sustainable development.
- Increase through education, training and information dissemination the overall awareness and understanding of the environment and cultural heritage, and to promote positive community attitudes towards the environment.
- Provide effective international, regional and national institutions, legal instruments and planning and management mechanisms to ensure protection and environmentally sustainable utilisation of natural resources.
- Encourage research based on national and regional priorities relating to environmental policy, management and planning needs and decision-making.

(Specific initiatives and approaches are identified in the report for each of these objectives.)



## About SPREP

Monitoring changes in climate and sea levels, checking coastal waters for pollution, establishing protected areas and helping to conserve rare species like the dugong and New Caledonia's cagou bird are among the many programs included in the work of the **South Pacific Regional Environment Program**.

**SPREP** is the regional organisation of South Pacific nations which plays a leading role in addressing environmental issues at both regional and global levels. SPREP's primary aim is to ensure that resource development is sensitive to the unique ecology and cultures of the region and with the principles of sustainable resource management. For the past year it has coordinated, with assistance from the Asian Development Bank, UNDP, Australia and New Zealand, the preparations of the Pacific island nations for UNCED. As a result the Island voice was well heard on the road to Brazil.

Established in 1978, SPREP's mandate was set out in the Action Plan for Managing the Natural Resources and Environment of the South Pacific Region. This Plan was endorsed in 1982 at the Conference on the Human Environment in the South Pacific in Rarotonga, Cook Islands.

Originally located in Noumea, New Caledonia at the headquarters of the South Pacific Commission, SPREP moved early this year to Apia, Western Samoa. At the time of the move the staff was expanded from the 7 based in Noumea to around 17. Dr. Vili Fuavao, SPREP's Director, believes that full independence is essential if the organisation is to fulfil its goals. He sees coordination with other regional agencies as the key to SPREP's success and close collaboration with educational, training and research institutions and with government and non-government organisations as vital to the program's effective operation. SPREP's publication, the **Environment Newsletter** appears quarterly.



# LOCAL ACTION AT WORK IN PNG: MELANESIAN ENVIRONMENT FOUNDATION

*SPPF extends its appreciation to MEF and CUSO/PNG for the interviews with MEF staff and volunteers on which the following article is based.*

As environmental problems become more prominent, new groups focused on environmental issues are emerging in the Pacific. Papua New Guinea's **Melanesian Environment Foundation** (MEF) is a non-profit organisation dedicated to community environmental education. MEF was founded in 1986 through the efforts of both Papua New Guinean universities, national and provincial government representatives and the Melanesian Council of Churches. Its programme is carried out by four salaried staff and many volunteers under the direction of its Board. MEF has received support from several international sources including CUSO and the Canadian High Commission.

In 1991 alone MEF visited schools, women's councils, landowner groups and churches in 15 provinces of PNG, speaking to over 25,000 people. It has produced and distributed posters, awareness videos, and information packets for adult literacy workers on logging, mining and dynamite fishing. It's 1989 video, **Brukim Bus**, the first documentary about logging in PNG, was sponsored by both the National Department of Environment and Conservation and the National Department of Forests. Its 1990 video, **From the Mountains to Sea**, was included in the 1990 curriculum for the nation's high schools. MEF works with a range of government departments on projects of joint interest, from the steering committee of the National Tropical Forestry and Conservation Action Plan to local celebrations marking World Environment Day.

**Stephen Pesto**, currently responsible for the financial administration of MEF, was taking a computer course when he met one of the original MEF volunteers in June of 1990. Two years later, he's still there but now as one of the four paid staff. He has seen great changes at MEF from a big increase in the numbers of dedicated volunteers to the expansion of programs and office resources.

Apart from his administration work, he has been taking part in the major awareness campaign that MEF is conducting throughout Papua New Guinea. Stephen first headed for East Sepik Province where he did presentations dealing with logging and also attended a conference for landowners that dealt with the proposed Tiarapi logging in the Egusalom area. Apprehensive at the beginning of his first tour as a "barefoot

environmentalist", as MEF workers call themselves, he is no longer scared of the government or its representatives and speaks out for the rights of the people. Like all the MEF workers, he has found that the MEF-produced videos - **Brukim Bus**, **From the Mountain to Sea** and **Wanpela saw ino inap Dra** - and the posters and information packets are excellent materials for educating people about their land rights.

Looking back he cannot believe the great changes in the people's understanding of environmental issues such as logging since MEF started doing its awareness campaigns. He finds it very exciting to know that while MEF is talking about logging issues and remedies for problems in areas new to its work, villages MEF has already visited are putting the remedies into place. It is a great joy to him to know that his efforts are not wasted.

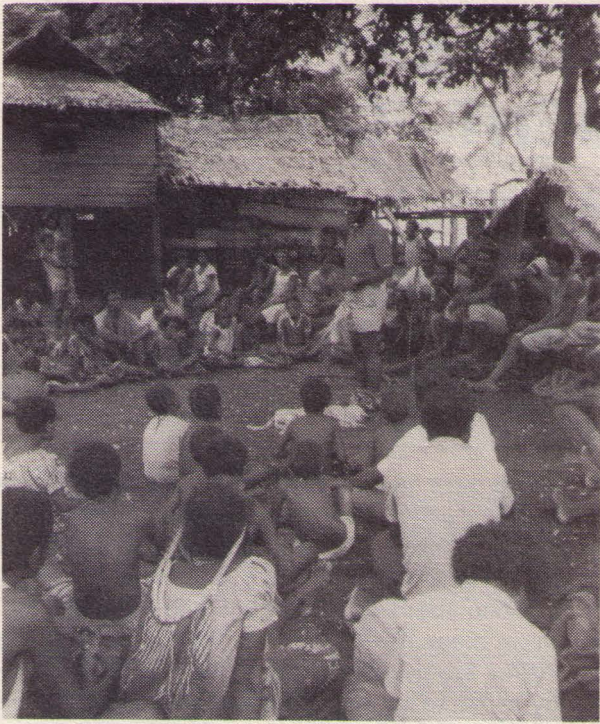
An innovative program that MEF has is the Conservation Club. Its membership comes from people who have promised to look after the environment in their own local areas. When MEF goes on tour, the people are told about the Conservation Club. Those who are interested receive a signed certificate that serves as encouragement for them to stick to their promise of trying to look after things in their own area. Some things they keep in mind are "not polluting rivers, not cutting down trees for no good reason or locking up birds."

**Joseph Ka-au** first ran into MEF when he was working for a newspaper. MEF was doing a lot of awareness work on the environment and used to submit articles for possible publication in the paper. He started by volunteering for 7 months and ended up on staff. During his volunteer days, he was looked after by wantoks [family and clan members] and also did some freelance journalism. Now he participates in meetings,



MEF volunteer, Julius Booyar, signs out a Conservation Club certificate at Tabubil High School, Western Province.

Photo courtesy of MEF



MEF volunteer, Steven Aina, speaking to local people about the effects of logging on Siassi Island, Morobe Province.

Photo courtesy of MEF

workshops and conferences that MEF has been invited to and does media work with radio and newspapers.

Joseph says he sometimes feels ashamed that he is no longer a volunteer. "Most of MEF volunteers come from the streets of Port Moresby. I don't know why they come but after working a while they want to stay on even though it's not a paid job." During his tours and talks he has often been asked how MEF manages to get these volunteers to stick with the work. It's hard for them, he knows. MEF is only able to provide "very basic lunches like bread and butter, cordial or coffee, and a small allowance for bus fare and even that is not enough to cover bus fares for a fortnight. I don't think there is compensation enough for the work being done. And there's something else I want to say. I mentioned that many MEF people were street kids. Most of them have an education level of grade 6,8 or 10. No one is over grade 10. I've been here for almost a year now and I find it very hard to attract people from the universities or national high schools (i.e. grade 11 and 12) to come and work here. It makes me feel very proud when people ask, after we've made presentations, what we studied at University when none of us have...What I'm trying to say is you don't have to go to University to be involved in this kind of work. It comes from the heart and it's an inner dedication of each individual person."

For him, the difficult part is talking to people who think that they can get easy money from the forest and find it difficult to accept what MEF is presenting. "It's not talking about looking after the forest but saying 'yea, it's your tree, you can get money from it but you

are getting very little money for your tree. What you are given for your tree, the company will sell and get 10-20 times more than what you got". He gets comments like "What are you talking about? These are my trees so don't tell me not to cut my trees, go talk to somebody else!" To him, the important thing is to educate the landowners to keep their trees and convince them that there are other ways of raising the money. "If we decide to sell our trees, we should get maximum benefit and maximum profit, and not sell them for 1% or less of the actual cost of the tree. I don't tell people to cut or not to cut their trees. I tell them what will happen if they do. The decision they finally reach is their own. I talk about wokabout sawmill and butterfly farming and other alternatives, about how to get money which is a big question for people."

**Ellen Jerry** is one of the women who work at MEF. Before starting her volunteering, she was 'staying at home doing nothing'. Although she has no salary Ellen stays on because she finds the work interesting. At first, she didn't like being the only woman but found that other women, seeing her there, soon joined up. Ellen originally thought the work was a man's only job but has now changed her mind. Since working with MEF she's learned many things and feels that men aren't the only ones who should work to look after the forests, although many women tend to leave the responsibility to men. "Women must work together, alongside the men, to have a stronger working team."

In her awareness campaign work, Ellen focuses on schools in the National Capital District where she talks with children, and men and women. She feels that the work of MEF has become better known through its strong volunteer participation.

**Julius Booyar**, one of the senior volunteers at MEF, has a background in computers and construction. His first tour with MEF was to Western Province to the Catholic Mission and IDEA Centre at Daru and then on to some small islands in the Kiwai area. Originally his work focused on logging but now MEF is doing awareness workshops on mining, dynamite fishing and toxic waste. On the campaign trail, MEF workers travel to villages and are billeted by people in the community. By being directly in touch with the people, MEF can get their ideas and views. The people take them to the logging and mining sites. He feels the work MEF is doing is tremendous and that the feedback they get is a good sign that the campaigns are working. As well as the videos and posters, he has found drama techniques to be very effective, especially in situations where people are illiterate. He stresses that what MEF is doing in Papua New Guinea about protecting the environment is a good thing that should be supported by those in key positions within government departments. The problems must be addressed before it is too late, before the damage reaches full scale.

# INDIGENOUS PEOPLES AND MOTHER EARTH SHALL PREVAIL!

*Indigenous representatives from a number of countries, including several Pacific Islanders, were in New York in March to attend PrepCom IV of the UNCED process. On April 1, indigenous representatives issued the following statement.*

**We, the indigenous peoples attending the PrepCom IV of UNCED** in New York, wish to express our disappointment with the final outcome of the negotiations on Section III, Chapter 3 of Agenda 21 entitled "Recognizing and Strengthening the Role of Indigenous Peoples".

The final proposal forwarded to the Secretariat by Norway and Denmark, which represented the coordinated efforts of all the indigenous peoples present at the PrepCom, has been watered down.

A statement on the historical fact that many of us have been alienated through colonization from our territories has been deleted. Negotiations are also bogged down on the term "indigenous peoples". The compromise reached was to use the term "indigenous people and their communities". The term "traditional territories" was also deleted and replaced by lands.

All of these are serious setbacks in our struggle for our inalienable rights to self-determination and to our ancestral domain.

We cannot effectively contribute to sustainable development if we do not have control over our territories. Our traditional territory is life to us. The loss of our territories, our ancestral domain, is a continuing reality. Colonization, imposition of unjust land laws, out-right land grabbing, militarism and the imposition of the Western paradigm of development have alienated us from our territories.

Our struggle to have control over these has been consistently undermined by governments, transnational corporations and international financial institutions. Some of us have been completely robbed of our territories. Those which we still maintain are those which we have defended, even at the expense of sacrificing our lives.

Mother Earth is the giver of life and abusing her is equivalent to abusing our own mothers. We are just borrowing these territories from our children and their children. It is our duty to return these territories intact.

The debate over the term "peoples" concerns us greatly. We assert that we are distinct peoples, culturally diverse, who are entitled to the right to self-

determination. We are aware that the basic opposition to this term is because many states are discussing self-government arrangements with indigenous peoples.

We are participating in the UNCED process because we see this as an opportunity to share our knowledge and experience in protecting the environment. We believe that we are the original environmentalists because the defence of our environment, of our ancestral territories, is what we have been doing since time immemorial.

Sustainable development is nothing new to us. Our indigenous economic models ensure sustainable methods of production and consumption. Our spiritual relationship with nature and our sustainable economic models have been looked upon as backward and primitive. The grudging recognition of the value of this relationship has emerged as the development model offered by the industrialized world has proven to be unsustainable and destructive to Mother Earth.

We see the UNCED process as just one dimension of our struggle for our rights to self-determination and to our ancestral territories. Nonetheless, we are disappointed to see the concerted efforts of some delegates to block our efforts to assert our rights and our views. This does not surprise us, because those responsible for the basic changes in the final proposal from the indigenous peoples are representatives of governments which have not been respecting our collective rights as indigenous peoples.

Environmentalism cannot be comprehensive enough if it does not integrate with it the recognition of the rights of indigenous peoples to their traditional territories and to self-determination.

We call on all delegates who understand our struggles to continue speaking on our behalf. We will remember those who stood with us in this process. We call on indigenous peoples who are members of the official delegations to be one with us.

We call on advocates and the NGOs to lobby and educate their delegates on the indigenous peoples' position. We call on the NGO working groups on forests, biodiversity, oceans, etc., to ensure that the present and future perspectives of indigenous peoples are integrated into the texts.

We are determined to continue our struggle for our inalienable rights. We know that in the final analysis what matters is what we are doing in terms of empowering ourselves and heightening our levels of unity. We shall prevail.

# THE NEED FOR CHANGE

## *Forestry Policy and Practice in the Chilcotin*

By Ken Jansen

*Ken Jansen worked in Papua New Guinea from 1986-88. He now lives in British Columbia, Canada.*

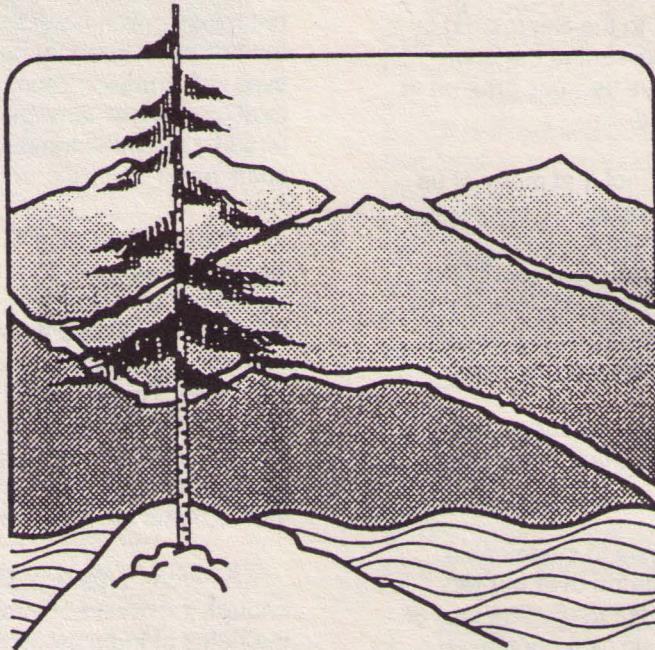
In B.C., logging is the Bull of the Woods". More money is generated from the lumber industry than any other industry. Logging has become a high-tech mechanized process which requires large amounts of capital. We use our non-renewable resources. The individual is being squeezed out.

Have you heard of a worker in the bush clearing \$900 to \$1600 a day? There are opportunities other than logging to make a good wage from the forest. Not all income generating activities have a high overhead, require industrialization, and have a negative impact on the forest.

The Ulkatcho Reserve in Anaheim Lake is all but deserted this time of year. This is the season for pine mushrooms, This low-tech village based industry requires only a bucket, a trowel, and transportation. The Japanese delicacy market will pay up to hundreds of dollars per pound for prime pine mushrooms. Good pickers can earn up to \$25,000 during the six to eight week season. The money goes directly into the picker's pocket.

This budding industry however is in jeopardy. "Pines" grow in the litter of mature forests. They range from Terrace to Boston Bar to Vancouver Island. Older visible mushrooms pay less while buttons, those still under-

ground, pay the most. Pickers simply look for little bumps on the surface of the duff and carefully dig. Too much disturbance can damage future crops. Using a rake is a serious breach of mushroom picking



protocol. Systematic clear-cutting with heavy equipment and mechanical scarification for silviculture is severely limiting the habitat of mushrooms. Pine mushrooms grow in old growth - not in clear cuts nor in plantations.

Canada seems to be experiencing the same dilemma as other developing nations. Traditional forest dwellers are being squeezed out. The tropical rainforests are being harvested, threatening native people's lifestyle. Coffee and cattle plantations are expanding and sweet potato gardens are disappearing. Clear cuts are limiting the diversity of our own forests causing

environmental and societal degradation among First Nation people.

A government survives on taxation. Royalties are paid by companies and landowners. Traditional subsistence livelihoods do not generate taxes. Traditional subsistence lifestyles seem not to have value to industrialized society.

If an underground industry can employ a hundred people with adequate wages, what else is possible? The mushrooms have always been there - now there is a demanding market. The yew tree was considered a rubbish tree but now has been recognized as a potential curative drug source. What else is in the forests? People need to question western ideologies, values, and notions of productivity. When people recognize and articulate common concerns, a proactive stance is created in

personal and public politics. Concerns can be addressed and recognition by government demanded. Changes can be initiated.

In the Chilcotin, the formation of local resource user boards has empowered people. The coming together of natives, ranchers, tourist operators, trappers, and other local residents has caused the government to take notice. The government has invited these outsiders onto their committees and are beginning to make changes in forest use policies. People are making the difference.

[Reprinted from CUSO BC News, Fall 1991]

# FISHERIES AND CUSTOM

A young man in Tokelau sits at the feet of an elder learning how to make a special kind of stick for catching octopus. A chief in Yap prohibits any kind of fishing on a particular reef area for the next 12 months. Turtles caught at Port Resolution on Tanna Island, Vanuatu, are not eaten till many days later, after being carried alive from village to village, with special food offered to their carriers. When they reach their final destination their killing, cooking and consumption follow a ritual procedure laid down countless years ago.

Are traditional practices such as these still valid today? Are they still used? Can they be incorporated into western-style law? Does traditional land tenure (which in most Pacific Islands extends out to sea) hinder or help commercial artisanal fisheries? How can the detailed knowledge of marine life which Pacific Islanders have accumulated over hundreds of years be safeguarded and passed on to young people undergoing a western style of education? Questions such as these were the theme of a one-day Workshop on People, Society and Pacific Islands Fisheries Development and Management held during SPC's annual Regional Technical Meeting on Fisheries this year.

## Looking after resources

Before the advent of commercial fishing, which led ultimately to official recognition of the pressing need for wise and long-term resource management, local fishermen and traditional landowners already knew how to look after the sea and the not-so-limitless bounty that fed them and their families every day. This traditional management of marine resources, as it is now commonly called, ensured that a delicate balance was maintained and that the every-day food supply had to be maintained for the present and future needs of the community (to ensure, as present day fisheries managers would put it, 'sustainable yield'). Traditional management was also a way of preparing for exceptionally large harvests required for special occasions such as the death or installation of a chief or a major customary exchange with another community.

Although fish was sometimes marketed (especially on the larger Melanesian islands, where coastal communities exchanged their fish for inland commodities such as taro), management for commercial purposes was not the main aim of the traditional fisheries manager. Traditional management methods included:

- Complete prohibitions on catching particular species during certain periods or certain seasons of the year;
- Prohibition on consumption of certain species by certain groups (such as clans claiming descent from a particular fish or animal, or pregnant women);

- Closed areas, where no fishing whatsoever was permitted;
- Prohibition of certain fishing methods (such as the use of Barringtonia seeds or other plant toxins which poison living creatures in the area where they are used);
- Restriction of consumption of a species to certain privileged people or groups.

These measures were enforced by the chiefs, elders, the owners of the reefs or specific authorities responsible for fisheries. Penalties were severe, and in extreme cases could include banishment or death. However, because traditional management measures applied only to individual communities, were designed for the benefit of everyone in the community, and because people were less mobile, it is likely that contraventions were not numerous, except in cases where the management turned their powers to benefit themselves, as was sometimes the case.

## Do traditional rights have legal value?

In most Pacific islands, the land and the sea, particularly the reefs, were regarded as a single entity and the people who controlled the land also controlled the adjacent reefs. Some Pacific island constitutions provide for these rights to be maintained today. The Yap State Constitution, for example, recognises traditional rights and ownership of natural resources within the marine space of the State, within and beyond 12 miles from island baselines (Yap State Code, Title 18, Section 27).

The Vanuatu Constitution (Articles 71 and 72) provides that all land (which also includes the reefs adjacent to the land) belongs to the indigenous custom owners and their descendants and that the rules of custom shall form the basis of ownership and use of land. Who has control today? Some countries such as Fiji are fortunate in that the customary ownership of land is clearly defined today. In others, the situation is not so clear. Movements of people, often instigated by colonial governments or churches which grouped their adherents into larger, more accessible communities for ease of worship, have brought inland dwellers down to the coast. This has led to arguments over control and ownership of land and resources which are often extremely difficult, if not impossible, to resolve.

Conflict can sometimes arise with the desire of some members of the community to control resources in order to make money, for while the land was traditionally controlled by an entire clan, money-making projects are often 'owned' by a single individual: other, less enterprising members of the clan may seek to block his project refusing him access to the resource,

either out of a desire to ensure that it is not over-exploited, or for less laudable reasons such as jealousy.

In addition, conflict can sometimes arise between traditional owners and governments or with commercial fishing boats and companies, when the definition and legal recognition of rights is not very clear. It is worth noting, for instance, that the Yap State Constitution, mentioned before, also specifies that no action may be taken to impair traditional rights and ownership of natural marine resources, except that the State Government may provide for conservation and protection within the marine space of the State within 12 miles from the island baselines.

Not all countries are in the same situation and in some recent cases (as in Tiga, New Caledonia), local traditional landowners have come into brutal conflict with commercial companies that have come to fish in their waters. There does not seem to be an easy solution to this sort of situation, as local fishermen/landowners feel that their fragile resources are being endangered by outside commercial fishing concerns and that they have the right to protect, by force if necessary, what is traditionally, if not legally, theirs.

#### **Law versus tradition**

Is there still a role for customary management practices and knowledge? The workshop held during the technical meeting dealt with this question at length. Traditional management practices are not always equipped to cope with today's needs, particularly when commercial exploitation of marine life is involved. However, when both government and traditional owners act wisely to protect resources whilst allowing rational exploitation, conflict does not normally arise. In fact, some of the modern management practices are not dissimilar to those practised traditionally; they are now becoming increasingly common. They include the creation of marine reserves, closed seasons, size limits for crustaceans and shellfish, prohibition of certain fishing methods and provision of advice based on scientific knowledge.

#### **Working hand in hand**

These very similarities can lead to management practices which combine aspects of both customary and western-style law. It is often extremely difficult for hard-pressed fisheries officers to enforce provisions on such matters as size limits of trochus or prohibitions on taking lobsters with eggs. If enforcement were conducted at community level by the authorities traditionally responsible for maintaining law and order in the village, it might be more effective. A paper on traditional marine conservation in Tokelau presented at the workshop suggested that a local person with training in fisheries biology act as technical advisor to the Tokelau elders. This could be extremely valuable not only for enforcement of government legislation, but also for proper management of artisanal fisheries such

as those for which the SPC Deep Sea Fisheries Development Project provides technical training.

#### **The modern value of tradition**

To some extent, particularly in those countries where the Constitution enshrines the rights of traditional landowners, customary management principles could sometimes be incorporated into individual documents drawn up in accordance with government law. Thus, in some leases on the island of Santo in Vanuatu, the traditional landowners have insisted on the inclusion of provisions relating to use of the reef adjacent to land leased for commercial agriculture. These have included complete prohibition of the capture of dugongs and turtles, restriction of fishing to catches for personal consumption (no sales allowed) and restrictions on the types of fishing gear used. Similarly, following consultation with the landowners, the lease of Namenala Island in Fiji for development of a small tourist resort stipulates that the owner is responsible for protection of the reefs adjoining the island, and in particular for ensuring that no live shellfish or turtles are collected.

Probably the most important aspect of all this is the need for government authorities to consult with the people traditionally responsible for management and enforcement. Traditional custom was never fixed in stone. It was flexible - it had to be, to adapt to changing circumstances caused by such uncontrollable events as cyclones. Through consultation, managers with scientific training could assist the traditional authorities to adapt both to the changing pressures of modern life, and to scientific knowledge which is different from, but just as applicable to their communities, as their own.

#### **The loss of traditional management practices**

Regrettably, traditional management practices are being lost or neglected. Younger people, educated in schools at which they spend most of their daylight hours - sometimes far away from their home islands - often have neither the time nor the interest to acquire traditional knowledge. Indeed, they may feel that their knowledge is superior, and this leads not only to a loss of traditional knowledge but to a weakening of traditional authority. While it is important for the elders to appreciate the value of western scientific knowledge, it is equally important for the younger people to learn and respect the lore of their forefathers. How? And when?

The brightest young Islanders today tend to spend the major part of their lives out of the traditional context. They are at high schools in the capital, at universities in Fiji, Papua New Guinea, France or New Zealand. And they are there at exactly the same period of their lives when they would normally be absorbing customary knowledge. The paper presented to the Workshop by the Tokelau delegation highlighted the need for traditional knowledge to be introduced into the



formal school system. Here the information collected by surveys could be extremely useful. Alternatively, people with the traditional skills and knowledge could be asked to come into the schools and impart what they know.

The way is not easy. As the Tokelau paper noted, 'There is a perception of the superiority of the western curriculum and that the educated elite might lose some status when having to rely on formally uneducated master fishermen'. There is also the problem that traditionally, knowledge was passed on only to certain selected people. However, if a wealth of knowledge is not to be lost or to remain buried without practical effect among a heap of dusty papers, the attempt should be made.

### **Knowledge, the key to management**

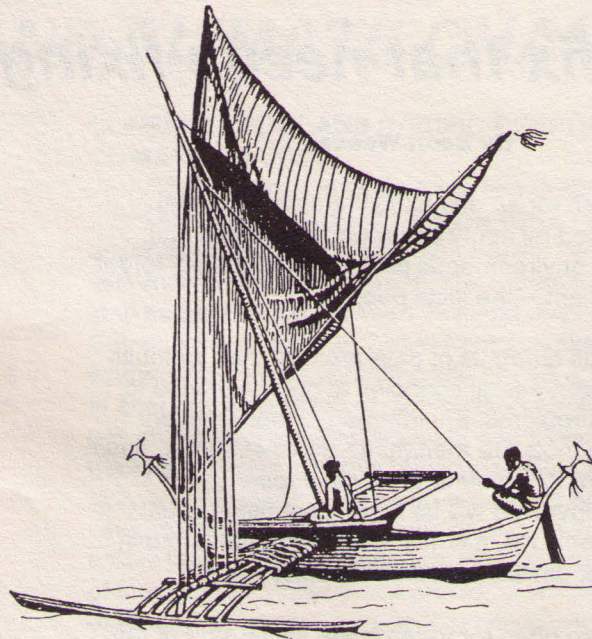
The combination of the elders' lore and authority with western scientific knowledge is likely to be far more effective than any attempt to include customary management practices in legislation and therein seems to lie the solution. Indeed, in the larger Melanesian countries in particular, it would be quite impossible to incorporate custom into law in any detail at all, because of the immense variety of custom tenures and management practices that exist.

The workshop drew attention to the great diversity of customary tenure systems in the SPC region and the way in which they operate, and recommended that the SPC Inshore Fisheries Research project assist in the design and use of questionnaires to discover more about them. These questionnaires, it suggested, should build on the experience of Solomon Island, where 43 different marine tenure systems have recently been surveyed. It also recommended the establishment of a Special Interest Group which would be the focus for collection, discussion and dissemination of information on traditional marine resource management.

An immense quantity of information on marine tenure and customary resource management already exists in writing, buried in scientific and anthropological reports going back to the days of the first European explorers. A similarly immense quantity of knowledge also exists among coastal Pacific islanders today. Women, who are the main harvesters of the reef and who are also responsible for cleaning and cooking the fish caught further afield by the men, are a particularly valuable and hitherto too often neglected storehouse of knowledge.

### **The future**

The recommendations of the Workshop focus upon the collection of knowledge and its dissemination. They do not, however, go into the question of who is to



collect the knowledge, who will be on the receiving end, or what use will be made of it after dissemination, and by whom. These essential questions will need to be addressed in the near future.

Most professional fisheries workers tend to have a scientific background, which may not fully fit them for eliciting information from others. Professional ethnologists, on the other hand, often have a deeper interest in such esoteric matters as cross-cousin marriage, to the detriment of enquiries into the more practical matters of everyday life. In addition, people are often unwilling to divulge their knowledge to 'outsiders', be they people from overseas or from a neighbouring island or village.

Perhaps the solution would be to make use of senior high school students, who could be trained in the use of the questionnaire and fill it out by sitting at the feet of their elders, as they might have done in the past. This would have the added advantage of instilling into the students some respect for their elders' knowledge and skills.

Information and knowledge are the key to the future and the Pacific islanders are determined to work together and find a way of preserving their resources whilst developing their economies. The solution, everyone agrees, lies in a harmonious balance between tradition and the modern world, so that marine resources are managed and protected in such a way as to ensure rational development of the islands and their people.

[Reprinted from *Pacific Impact*, September 1991]

# Eco-fix that needs fixing

By Sean Weaver

In the rush for an eco-fix to the environmental problems faced by many countries, advocates and managers of environmental protection frequently forget a vital ingredient -- the local people.

Enormous amounts of data are collected by multinational environmental agencies at great expense to quantify the problems. Environmental management and planning tools are then made and distributed, amid much concern for whether the local people or the government involved will be capable of using such tools. If the tools fail, it tends to be attributed to the inadequately educated people in the host nation.

What is so often forgotten is the social side of the environment equation - the need to understand the local social environment so that appropriate tools can be made and used by local people and by their government departments. Many opportunities for environmental management currently exist within the context of traditional cultures and customs - if only the planners took the time to look.

## Traditional wisdom

One of the problems, of course, is that in the deluge of western values, products, and philosophies exported to Pacific island countries, much of the value of tradition is being lost.

Many environmental management professionals are quick to complain of the lack of good environmental education. What they often mean is a lack of western-styled environmental education to which they themselves are accustomed.

Through a brief look at the very foundations of the traditional world view of indigenous Fijians, one can find much in the way of ecologically benign philosophies. The concept of *vanua* formed the core of the traditional pantheon and the basis for social and economic existence. A close look at the notion of *vanua* reveals many similarities with the philosophies that lie at the leading edge of western environmentalism. In fact the most enlightened western environmental philosophies have borrowed much from eastern world views and those of traditional cultures, which the west has done so much over the centuries to destroy.

## The vanua

The *vanua* is the Fijian version of an inherently ecological notion of existence that can be traced throughout the Pacific. In Hawaii it is known as *aina*, in Tonga and Samoa it is *fanua*, and in Aotearoa it is *whenua*. To many it simply means land. In reality it means much more. The physical aspects of the *vanua*

could be approximated to mean "ecosystem", but the word *vanua* also encompasses a spiritual dimension. It represents an extension of the individual, encompassing one's physical and social surroundings into a greater whole that is inherently woven into the fabric of life itself. It also incorporates the past, present, and future genealogical relationship between people and their ecosystems, as well as forming the basis for local political organisation.

The English language did not possess words representing holistic concepts such as "ecosystem" until late in the 19th century. Even today the word ecosystem is misunderstood by most of the people who use it, to a large extent because the western world view is simply too narrow. A mechanistic world view that fails to incorporate ecology into its economics will inevitably be confronted with ecological problems, hence the various national and international ecological disasters that have their roots in western economic imperialism.

A lot of indigenous knowledge, philosophy and wisdom has been eroded since the arrival of western religions, but much still is used every day in the context of traditional village life. Some of it has been transferred into the context of the new Christian religious order that presently prevails. It is within this local social and philosophical framework that environmental management in Fiji should fit. If it does not, it is likely to be discarded by the people who are the guardians of the nation's valuable ecological resources.

## Social alienation

A conservation project that becomes a social failure is also likely to become an environmental failure because, in the long run, the local people are the ones who are going to live with the environmental management. If the benefits of environmental management cannot be perceived by the local people in their own terms it becomes another form of social alienation.

In Fiji most of the land that would fall into a system of protected areas is tribally owned. To many villagers, who own these sensitive ecosystems, the western styled methods of indigenous forest conservation on their land endowment is just another form of oppression. Environmental management which ignores the needs of the local people simply translates into messages like "no health services", "no housing improvements", "no church" or "no school". Conservation becomes synonymous with hardship, social impacts begin to outweigh ecological gains, and at the end of the day the local people seek different ways of using their resources. For this to be reversed the needs of local people must be catered for in the design of conservation projects, and the designers must understand the people, and their social and cultural character. [Pacific Islands Monthly, January 1992]

# GLOBAL WARMING AND CLIMATE CHANGE

## MOUNTING EVIDENCE FOR GLOBAL WARMING

1990 was the warmest year on record worldwide, the fourth time in ten years that the global temperature record was broken. Despite that, there are those who still challenge assumptions of global warming. However, scientists working in and around the Pacific have been amassing evidence to support its existence.

Recent satellite images have confirmed ground observations of an unusual hot spot called the **Western Pacific warm pool**. The warm pool has developed over the past ten years and covers a large part of the Western Pacific with hottest temperatures to the north of Papua New Guinea. Temperatures in the area are several degrees warmer than elsewhere in the oceans. Scientists have attributed the warm pool to a combination of global warming and trade winds. They also believe it is related to the El Nino phenomenon.

The most striking evidence of global warming and climate change has been obtained by French and Russian scientists. They analyzed a 2,000 meter deep ice core from Antarctica covering ice deposits over the past 160,000 years. The analysis shows a consistent correlation between rising and falling levels of greenhouse gases and temperature. When compared with other measurements kept since 1958, the results are also in agreement, providing strong evidence for a clear relationship between rising levels of greenhouse gases, current global warming and predicted climate change.

Meanwhile, a Jamaican scientist doing research on coral reefs in the Caribbean and Pacific has drawn a link between global warming and damage to coral reefs. Thomas Goreau says that, while he does not yet have proof of a causal link, sea temperatures have been rising at the same time as coral reefs have been increasingly showing signs of "bleaching". Every reef he has examined has been much warmer than previous trends suggest they should have been. This warming, which Goreau attributes to global warming, creates environmental stress for the corals which shows up initially as bleaching. Goreau's recent studies in French Polynesia indicated that Acropora, the second most common family of corals in the area, have been almost wiped out.

[From: *Pacific World*, No 21, Nov /91; *New York Times*, Apr 28/92; *Crosscurrents*, No 8, Aug 28/91.]

## CONFERENCE PLANS PACIFIC RESPONSE TO CLIMATE CHANGE

An April meeting in Noumea has drafted a plan for a two-three year **Climate Change Work Program** under the auspices of the South Pacific Regional Environment Program (SPREP). Delegates from eight island nations, Australia, New Zealand, France, New Caledonia and the U.S. heard from scientists who warned that Pacific islands could expect a wide range of changes as a result of global warming. Such changes include increased frequency and severity of extreme weather conditions (cyclones, droughts, etc.), increased damage from rising sea levels and higher tides, salt water contamination of groundwater, loss of arable land, damage to coastal infrastructure and loss of biodiversity. While these problems will develop gradually, delegates agreed that action should be initiated now to mitigate problems rather than waiting to respond to disasters. The Climate Change Work Program includes a range of relevant goals and activities, focusing particularly on the most vulnerable atoll and small island nations. A key feature of the plan is a new form of environmental management, Coastal Zone Management, that integrates a number of previously separate planning areas.

[From: *Pacific Report*, Vol 5 No 7, April 16, 1992.]

## EL NINO AFFECTS PACIFIC WEATHER

Recent months have seen a range of severe weather patterns affecting the South Pacific, much of it attributable to the El Nino effect and potentially to global warming. An above average number of cyclones have occurred during this past season, several of them causing extensive damage to a number of countries. Variation from expected climatic conditions has also seen severe drought visiting some islands while others have experienced torrential rains and severe flooding. New Caledonia and PNG have been hit by severe rains, causing widespread flooding in some areas. PNG Prime Minister Rabbie Namaliu suggested that



flooding in the East Sepik region might become the country's worst natural disaster and appealed for international assistance. Further north, the Federated States of Micronesia and Marshall Islands have been hit by severe drought. Ships have been used to transport water to affected islands and rationing is in effect. So severe is the situation in Micronesia that President Bush has been persuaded to declare the area a national disaster area, allowing U.S. funds to be used to combat the drought.

[From: Pacific Report, Vol 5 No 7-10, April 16 and 23, May 14 and 28; Vanuatu Weekly, 11/04/92 and 09/05/92.

### INSURANCE INDUSTRY CONCERNED WITH EFFECTS OF GLOBAL WARMING

Major insurance companies such as Lloyds of London have faced huge losses in recent years, with much of the cause being climatic natural disaster related. Given global warming predictions of worse to come, insurers are becoming concerned. Suggestions are already being made that insurers should impose higher premiums or even refuse coverage in areas that are subject to climatic change related disasters (eg. low lying areas subject to flooding from rising sea levels). A particular and immediate concern for insurers is the increasing frequency and severity of cyclones that is already occurring and is predicted to get worse with global warming. In the Pacific, several insurers are already insisting that buildings be built cyclone-resistant before they will be insured. Companies have recently withdrawn coverage to many buildings in Western Samoa and American Samoa.

[From: National Business Review, May 1, 1992; unpublished commentary by Jeremy Leggett, 5 April 1992.]



## SPACHEE NEWS

SPACHEE, the South Pacific Action Committee for Human Ecology and Environment, has a new co-ordinator, revised objectives and a new look. Isoa Korovulavula, a graduate in geography/economics from the University of the South Pacific, began his new job as SPACHEE Co-ordinator on March 30. Meanwhile, a Future Directions Subcommittee has been examining options for SPACHEE's future. Revised objectives for SPACHEE include:

- to facilitate the exchange of information and resources between organizations concerned with environment issues in the South Pacific.
- to work with local NGOs to address environment issues of common concern.
- to create community awareness of environment issues in the South Pacific and encourage appropriate action.

The new look comes with a new title, ENVIRONWatch, and revised format for the SPACHEE newsletter.

For more information and/or to become a SPACHEE member (and receive ENVIRONWatch), contact:

**SPACHEE**  
USP  
P.O. Box 1168  
Suva, FIJI

### CANADA TERMINATES INTERNATIONAL CENTRE FOR OCEAN DEVELOPMENT

The 1992 budget of the Canadian Government contained a surprise announcement regarding closure of the International Centre for Ocean Development. ICOD was established in 1985 to provide support to ocean development programs of maritime developing nations. At any one time, it was supporting up to 150 projects, including many in the South Pacific. South Pacific island governments have frequently noted the value of ICOD and its programs to the Canadian government. Canadian government officials had also emphasized their commitment to the ocean development program. Thus, few had anticipated the closure move, which apparently is linked to the government's desire to consolidate aid programs and reduce costs.

In an April 13 letter to SPPF, Monique Landry, Canada's Minister for External Relations and International Development, stated that the Canadian International Development Agency "will be bringing ICOD's active projects to completion. For the longer term, CIDA will review its approach to ocean development activities in the context of the limited resources available. Your concerns will be taken into consideration in developing an approach to supporting ocean development activities in the South Pacific." In discussions with aid officials, SPPF was told that delivery of current ICOD projects will likely be contracted to private companies. In the longer term, some form of ocean development assistance will likely continue but in a more restricted fashion than that of ICOD.

### VANUATU PROVIDES FREE HEALTH SERVICES

Seeking to at least partially fulfil a campaign promise, the Vanuatu government has announced that free medical treatment will be provided to the following people: the president and prime minister; all children under age 16; all full time ni-Vanuatu students in public, private and mission schools; people over age 55; all cases of malaria, tuberculosis, leprosy, high blood pressure, asthma, cancer, sexually transmitted diseases and mental disorders; and sick prisoners and corps. (From: Vanuatu Weekly, 11/04/92.

# WASTE DISPOSAL CRISIS THREATENS PARADISE

by Kerrie Strathy

*Kerrie Strathy is a Canadian working in Fiji with SPACHEE, the South Pacific Action Committee for Human Ecology and Environment. Her work is in the area of women and the environment, with a focus on education about waste management.*

The postcard image of Fiji and other South Pacific countries is generally one of paradise. But paradise, like the rest of the world, is facing a life threatening assault on its environment. Plastic rubbish litters mangroves and shorelines, raw sewage is dumped into rivers and the sea, and pesticides and toxic wastes contaminate food and water. These wastes cause health problems and damage the environment. The situation is not hopeless, but urgent action is required to protect fragile island ecosystems.

A major concern identified by Pacific Island governments and non-government organizations is waste disposal. A recommendation from the recent Regional Conference of Pacific Women (Guam, Dec/91) urged Pacific governments to "make adequate arrangements for safe waste disposal systems and the re-use and recycling of waste at all levels of production." Pacific governments were urged to "ensure that the Pacific is not a dumping ground for waste and poor quality food and medicines."

*The Pacific Way* report to UNCED indicated that "all countries of the South Pacific share the problem of safely disposing of solid and liquid wastes, particularly as a result of urbanization." The small size of most islands and their physiographic characteristics often mean that few, if any, sites suitable for rubbish dumps exist. The report also states there is growing concern about toxic and hazardous wastes being brought into the region from developed countries for disposal.

The Mineral Resources Department in Fiji released a report on *Waste Disposal in Fiji* in 1991. Prior to its publication, there was no information compiled on rubbish dumps, pollution from rubbish dumps or waste treatment in Fiji. The report noted dumps "are badly maintained and most are located in environmentally vulnerable areas. Smoke smell, insects, water pollution and loss of natural beauty are the main problems created by the dumps." The study showed a need to develop good waste disposal practices before the situation worsens. While the study amassed much information, it is incomplete. The condition of communal and private pits used by villagers is unknown. There is also no official information about waste handling on smaller islands or about how waste producers such as resorts and industries deal with wastes.

The report advises that a collection system be started for rural areas since the current practice of communal or individual pits results in waste being spread over a wide area. Mangrove swamps are frequently used as dump sites, but these areas are important breeding grounds for sealife. Since sealife is an important food and nutrition source for the country, it is necessary to protect these areas to avoid contamination or decline of sea resources. The type of waste being generated in rural areas is changing and volume is increasing rapidly. Rural wastes must be properly dumped at known and controlled places.

In order to deal with the problem of waste disposal, the Fiji government enacted an Anti-Litter Decree in March 1991. In order to warn people about the penalties for inappropriate disposal of rubbish or littering, a National Litter Prevention Committee was established to undertake an anti-litter campaign. Posters, bumper stickers and plastic bags (ugh!) were distributed and advertisements put in newspapers and on billboards, radio and television. Key messages of the campaign were "only lazy people litter" and "keep Fiji clean and beautiful".

The Pacific Islands can no longer afford to ignore environmental problems, like waste disposal, that threaten their very existence. Public education campaigns, directed at the grassroots and decision makers, are essential to create an awareness of the problems and to develop appropriate responses. As wise consumers, concerned about the condition of the islands their children will inherit, people need to take steps that will reduce rubbish output. People and governments must make choices that will protect fragile island ecosystems, and they must make them now, if sustainable development is to be a reality in the Pacific.



# MAKING A PROFIT SAVING THE SOIL IN WESTERN SAMOA

By Mary Lynn Hanley

Lama and Fituri Masofa carefully arrange strips of plastic around the neat rows of beans and sweet corn in the small, contoured plot overlooking the lush, wooded hillsides.

The plastic will keep down weeds while the plants mature and eliminate the need for harmful chemical herbicides. In just eight weeks, the vegetables will be ready to eat. "I will sell them in the market," Mrs. Masofa says. "We like to put money in the bank."

The Masofas are tending an agro-forestry plot that was set up to demonstrate cultivation techniques that farmers need to apply to protect the soil and forest in the Vaisigano watershed.

Covering 3,300 hectares (8.154 acres), this watershed is in the north central region of Western Samoa's Upolu Island, only a few kilometers from Apia, the capital. Drained by three branches of the Vaisigano River, it provides both drinking water and hydroelectric power to Apia and the surrounding villages, home to about one-quarter of the country's 166,000 people.

The vegetable plot is part of the Vaisigano Pilot Watershed Management Project, supported by the United Nations Development Programme and the Food and Agriculture Organization of the UN. Although the watershed is still largely covered with trees and tropical vegetation, there's already evidence of decline. Brown patches of barren soil on some slopes attest to erosion. "People say that taro grows very well in the forest," said P.M. Baisyet, chief technical advisor for the project. "They don't consider the damage to the slopes."

Clearing land to plant taro, a root crop that is the country's staple food, is one of the main reasons for the erosion. The farmers practice shifting cultivation, clearing trees from a two-acre plot of land, working it until the soils are depleted and then letting it lie fallow while they move on to strip a new area.

It's estimated that Western Samoa has lost between 800 and 1,000 hectares of forest to agriculture since 1978. Only some 150,000 hectares - a little over one-half the country's total land area - remain forested.

The steep hills and river banks in the Vaisigano watershed are farmed without any buffer zones between the cultivated areas and the river. The felling of trees has led to rapid flooding of streams when the heavy rains come. Silt washing down the mountainsides has discolored water supplies and disrupted power production before sweeping out to sea. There it poses a threat to marine life.

Further problems are caused by farmers' use of harsh fertilizers and herbicides. "People use chemicals to control weeds, which grow like anything in this tropical climate," Baisyet said. Residues remain in the soil. Carried along with the silt, they have contaminated Vaisigano reservoirs.

Western Samoa's soil and forests can only be saved by motivating the local people to adopt

appropriate land use practices. The village chiefs are the main target group for UNDP and FAO activities, since they decide how 80 percent of the country's total land area of 284,000 hectares will be used. Farmers to whom the chiefs entrust the land also are being reached by the project, as are women's committees, youth groups and students.

Baisyet realized communities would be unlikely to change their ways unless they were offered some incentives. "While the whole concept of forestry conservation is long-term," he said, "we brought a short-term benefit." The advantage is the prospect of earning income through the cultivation of vegetables and fruits while simultaneously maintaining the Vaisigano watershed's forest cover.

Various kinds of plants are incorporated within the mixed farming system recommended for long-term protection of the watershed. Trees are planted at the top most borders of a plot. The types chosen have the ability to fix nitrogen in the soil and can also be used for fuel.

Just below the forest species, fruit trees are planted, including mango, banana and papaya. The remainder of the plot is devoted to crops such as maize, corn, beans soybeans, cabbage and tomatoes, some of which will be ready for harvest after just eight weeks. Baisyet has calculated that a farmer can easily earn an extra \$870 a year by applying the recommended system.

Mixed farming has nutritional as well as environmental advantages. Samoans traditionally don't eat many vegetables, relying instead on taro, bananas, fish, chicken and high-fat cuts of meat. Consequently, many are overweight and there is a high incidence of hypertension and diabetes.

Terracing also is being introduced on the hillsides. A variety of techniques are used to get the environmental message to the people. A colorful poster graphically contrasts a view of a thriving, productive area of managed watershed with the bleak and barren vision of what would become of the same area if no management was applied. A comic book on conservation has been produced for use in schools.

Western Samoa's agricultural extension service also is promoting the techniques. "Rather than explaining the concept myself, I ask the farmers to explain," Baisyet said. Those interested in trying out the system receive technical assistance, but must agree to help clear the land, pay half the cost of seedlings from the project nursery and be responsible for all maintenance.

But, the demonstration plots - and the farmers who maintain them - are the most persuasive motivators. Visitors who speak with Ata Tataloa, for example, can hardly fail to be convinced. "In the beginning, Mr. Baisyet came looking for a piece of land.," she said. "This was suitable and he did terracing and planted vegetables and fruit trees. He put money in my pocket." [*Pacific Magazine*, December 1991, p. 51]

# THE CASE OF PAPUA NEW GUINEA: TRANSNATIONAL CORPORATIONS AND THE CRISIS OF DEVELOPMENT

by Powes Parkop

*Powes Parkop is a Papua New Guinean lawyer with an interest in social justice, development and environmental issues. He is a member of Melanesian Solidarity (MELSOL), a PNG non-governmental organization that addresses local and international social justice and development issues.*

There is a crisis of development. Transnational corporations (TNCs) have failed as the vehicle for global "development", especially in developing countries. "Development" induced by TNCs has proven to be inappropriate, causing underdevelopment, dependency, poverty and misery for people. TNCs are in fact means by which resources, especially non-renewable resources, are transferred out of developing countries, to be followed by the capital they initially bring plus the profit they make. Countries are left with devastated cultures, economies and environments.

The current environmental crisis is a result of TNCs and the global structure they represent. Solutions to the environmental (and therefore developmental) crisis require a redefinition of development, its goals and means, rather than just an exercise in conservation. The economic and environmental problems (not to mention social, political and cultural problems) caused by TNCs require local and international action as they are global problems.

In the case of Papua New Guinea, apart from redefining development, greater democratization of decision making is essential. The concept of "sustainable development" remains a myth without genuine democracy. Governments have become part of the problem. The people therefore must come to centre stage to determine their future and the future of our planet.

## PAPUA NEW GUINEA: A COUNTRY IN CRISIS

Papua New Guinea today is racked by civil war and strife. Since 1988 civil war has been waged in the island province of Bougainville. What began as a localized landowner conflict over compensation for mining-induced damages to the environment and life of the people had developed by 1989 into a war for secession. At the centre of this conflict is the giant copper mine at Panguna, owned largely by Conzinc Riotinto Zinc of Australia, a subsidiary of RioTinto Zinc of the U.K.

Even before this conflict, civil strife had been increasing in PNG. It seems that the more "development" occurs the greater the civil strife. By 1988, law and order had become the major subject of the day with the government and TNCs identifying it as the major obstacle to development. The government, under pressure from foreign investors, applied the classic "solution" to these problems - more arms and powers for the police, army and judiciary. Instead, this approach only aggravated the problems. By 1988, youth crime had increased to dangerous and sophisticated levels; curfews and special police operations had become a major feature of society. On the other hand, white collar crime, corruption by politicians and big business and the devastation being brought upon the people by state policies hardly got a mention.

A small group - political circles, bureaucrats and the small but growing group of local businessmen - had no reason to complain. Since they were the ones making decisions, there was no perceived need to change policies and direction. To anyone but this small group and their corporate friends, by 1988 the strategy of foreign investment led growth was in crisis. This crisis was to explode in their face in what is now referred to as the "Bougainville Crisis".

## BOUGAINVILLE: TESTIMONY TO THE CRISIS

The Bougainville conflict is not an isolated incident as claimed by the government. It represents the failure of the development model pursued by the state since political independence. As the centre piece of this model, foreign investment through TNCs has proven itself to be inappropriate. This development model, while initially granting several years of substantial economic growth from mining, cash crops and logging, has in the long run proven to be destructive for most people. While there was economic growth, distribution of benefits was highly unequal. Mining, logging and plantation industries had little local participation in equity, management control and benefits. On the other hand, cultures were disrupted and changed. The environment was destroyed, disrupting the life support system it provided, with disease and poverty the only reward for many people.

Bougainville is a province where this model of development has been pursued more extensively than most. By 1988, Bougainville had the privilege or

misfortune of having one of the biggest mines in the world and some of the largest plantations in the Pacific Islands. The social system had been transformed from self-supporting subsistence to dependence on the cash economy. Before the revolt, nine licenses to prospect for mineral deposits had been issued. With the possibility of more Pangunas in the interior surrounded by huge foreign owned plantations on the plains, conflict seemed only a matter of time.

Unfortunately the lessons of Bougainville have not dawned upon those who manage the state. Instead of reviewing this strategy of development, PNG has deepened its reliance on the model under an IMF-World Bank sponsored "structural adjustment programme" (SAP) of austerity measures ostensibly designed to bail PNG out of the mess created by TNCs and their local allies. Using the closure of the Bougainville mine as a pretext, this SAP is simply a means of making profits at the expense of the people and environment. No nation has been able to repay all its debts through adopting such measures and to suggest that PNG can do this is a fraud.

### THE FIVE FORGOTTEN GOALS OF DEVELOPMENT

Upon attaining political independence, PNG initially tried to chart a path of development that embraced principles of social justice, economic equality, self-sufficiency and ecological balance. Well before the world began to realize the importance of ecological balance, PNG had already acknowledged this need. The environment had been our life support system, supporting an entire social system independent of the cash economy. These principles are clearly expressed in the five "National Goals and Directive Principles" in the Constitution of Papua New Guinea:

- a) Integral human development;
- b) Equality and participation;
- c) National sovereignty and self-reliance;
- d) Conservation and protection of national resources and the environment; and
- e) Preservation and development of Papua New Guinea ways (meaning to use our social, political and economic forms as a means of development).

State policies were initially designed to maintain some consistency with these goals and principles. Of particular concern was the role of TNCs in PNG. Suspicious of TNCs and wanting to chart a path of development different from the colonial model, the post-colonial government set up the National Investment and Development Authority. One of NIDA's roles was to monitor and regulate the involvement of foreign investors, particularly TNCs, in the country's economy. These and similar initiatives were seen by the government as the new model of development, a means of rejecting the colonial system and its legacy.

However, contradictions were apparent from the beginning, not only in practice but in theory. In the constitution, the five Goals and Directive Principles were made non-justiciable so there was no means to enforce them against the state. Hence the roots of the contradiction and therefore defeat of these Goals were imbedded in the very instrument by which the state had been created and empowered itself. NIDA, while empowered to monitor and regulate foreign investment, was also charged with promoting investment. Eventually and as a testimony to the complete turn around that has taken place since political independence, NIDA has been abolished as part of the structural adjustment programme in place since 1988. In its place, a new agency will be established for the sole purpose of promoting foreign investment, since it is the IMF's wisdom that the solution to our problems is to liberalize our economy, opening it up to more foreign investors.

### THE TNC LED MODEL OF DEVELOPMENT

By the 1980s, all pretence of an alternative had been shed. PNG ways were perceived as an obstacle to development and destruction of the environment was viewed as the price for "development". Thus began to emerge the new ideology of development: As there can be no social, cultural or political development without economic development, everything must be sacrificed for economic development. Constitutional concerns about environment, culture and dignity were set aside. Pragmatism became the order of the day, with TNCs and the World Bank in the driver's seat.

The case was made for TNCs. Since the people lack capital, skills and technology to develop themselves, foreign investors who have these resources must be allowed in so development can take place. Taxes on companies' profits and earnings made by the State through equity participation could be used to finance state services and development programs. Concerns for the environment and other abuses could be addressed by passing new laws. This would make TNCs more socially responsible and environmentally friendly. Papua New Guineans could directly and indirectly benefit through wage employment, spin-off businesses, use of infrastructures built from investors, skills acquired and royalties received from this "development".

The reality however has proved to be something else, as attested to by the Bougainville Crisis and the findings of the Barnett Commission of Inquiry into the logging industry (see January 1991 issue of Tok Blong SPPF for report). What has transpired under this model of development, instead of foreign investment benefiting the people, is the transfer of our vast non-renewable resources out of the country forever. In the process, social and cultural structures have been destroyed. Most serious has been destruction of the natural environment, causing other problems such as soil erosion, dislocation of people, loss of protein sources, and increases in disease and poverty. Contrary to



their promises, capital invested by these companies do not remain in the country to fund State services or development, but eventually find their way back to these investors. This happens through a number of ways: profit repatriation; loan repayment by both investors and State; capital goods and maintenance costs; and other hidden costs such as transfer pricing, "service fees" paid to parent companies overseas and misdeclaration or undervaluing of exports as for example in the case of logging.

While Papua New Guineans do benefit by wage employment and some royalty payments, this is often a meagre amount compared to that which is repatriated back to TNCs and foreign investors. In any case, most of the pay packets and royalties paid to Papua New Guineans eventually find their way back to the TNCs through trade in goods and services. In the case of PNG, foreign trade is in favour of foreign partners on an average ratio of 4:1. With almost all goods and services being imported, any left over capital and profit is scooped back by TNCs through trade.

### THE BUDGET DEFICIT AND DEBT TRAP

The crisis of this model of development can be further illustrated by the increased budget deficit and debt servicing payments being faced by the country. While the strategy of TNC induced development was able to maintain a budget surplus in the immediate post-colonial period due to early economic growth, by 1980 the budget had moved into a deficit and the government was forced to borrow to make up for the shortfall. The 1990 budget for example was made up of 923 million kina in envisaged revenue but spending of 1,250 million kina. The deficit was covered by grants and borrowing from abroad. Between 1980 and 1990, public debt rose almost threefold from 480 million kina to 1,380 million. The proportion of external debt rose by almost three-quarters of the total (1,015 million kina), hence consuming a substantial share of foreign currency earnings for debt servicing and repayment.

While external loans accounted for 5% of revenue in the 1992 budget, loan repayment accounted for 20% of expenditures. When public debt is combined with private debt, total foreign indebtedness climbed fourfold during the 1980s. Today PNG has an extended debt/GDP ratio of over 66%, making it one of the most indebted countries in the world.

### SOCIAL, CULTURAL AND ENVIRONMENTAL COSTS OF DEVELOPMENT

While it is difficult to quantify the social, cultural and environmental costs of this development model in the absence of thorough study, the limited study to date and obvious facts makes it possible to illustrate such costs to society. The Bougainville conflict itself illustrates the extent to which activities of TNCs have devastated people's lives. The dried rivers of Kerawong and Jaba in Panguna and the dead valley of

Gogol-Naru in Madang Province are the living icons of the failure and crisis of this model of development.

In the Gogol-Naru valley, the giant Japanese paper company, Honshu Paper, has destroyed more than 37,000 hectares of tropical forest leaving the valley unable to adequately support food or cash crops. Species hunted for protein by local people have all but disappeared. Imported food and Japanese tinned fish have become alternatives. Diseases such as malaria are known to have increased. In the twenty years in which Honshu Paper has been in the valley; not a single aid post, school, church building or community centre has been built for the people. In other recent projects such as the Ok Tedi, Porgera and Misima gold mines and the new oil wells, the same trend prevails.



Porgera Mine in Enga Province

Photo: World Rainforest Report/G. Marshall, Jan-Mar/92

### THE IMPLICATIONS OF THE CRISIS

Instead of TNCs and the State changing course as a result of the failure of their development model, they have become more entrenched and defensive about their practices. Under the IMF sponsored structural adjustment program in place since 1988, the trend is to push more of the same policies and practices. In order to resolve the crisis, all obstacles are to be cleared as they are deemed to be the causes of the crisis. Laws are being passed to restrain people from taking action against TNCs coming to mine or log on their land. Recourse to compulsory acquisition of communally owned land has become an easy means of enabling TNCs to commence their activities. Import bans, levies and taxes are being lifted to encourage more investors. More seriously, arms and money are being pumped into the army and police so that they can do their work more efficiently. The future therefore seems to point to intensification of the crisis and conflict in Papua New Guinea.

# PERIL IN PNG

by David Minkow and Colleen Murphy-Dunning

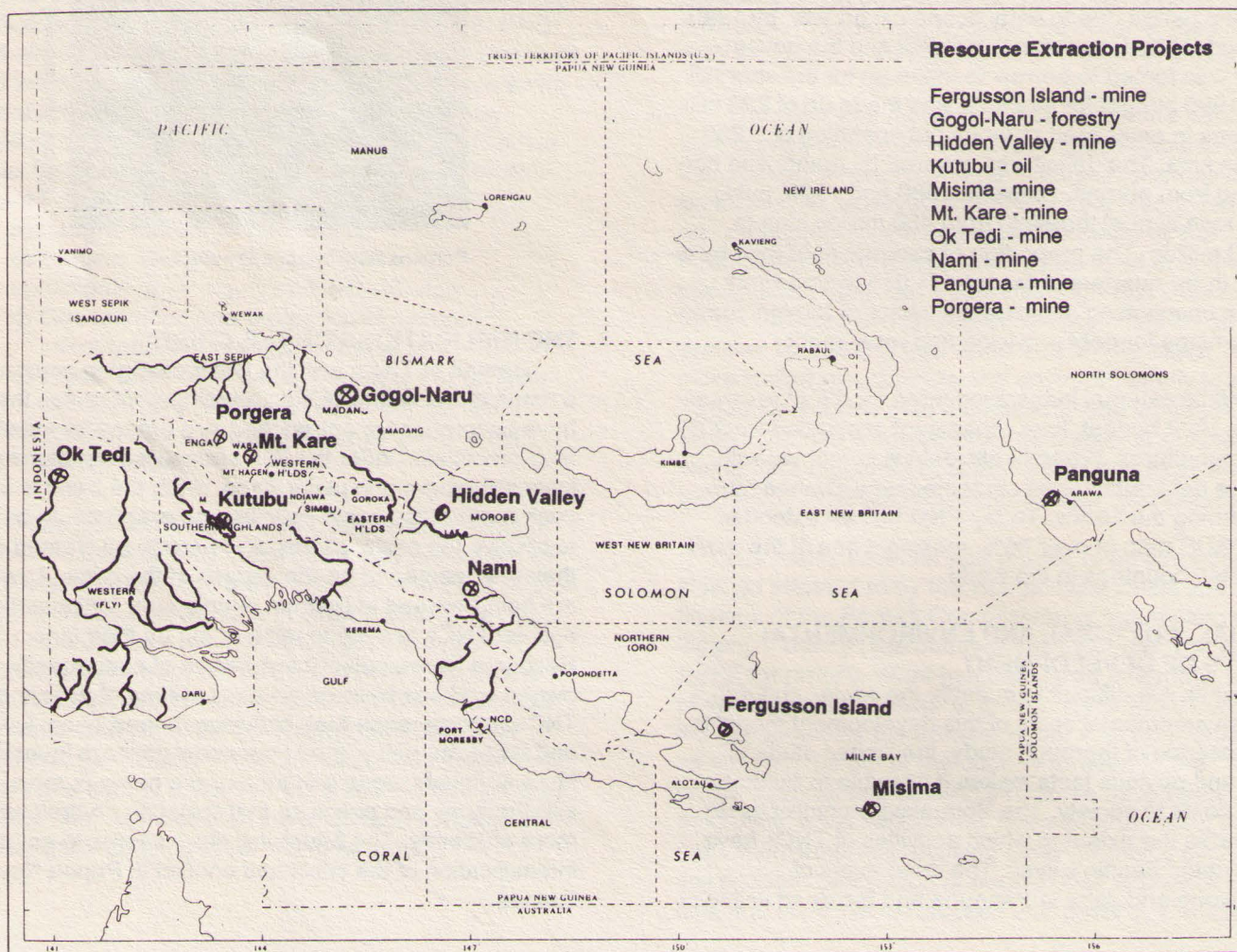
*Colleen Murphy-Dunning is the New Guinea Campaign Co-ordinator for the Rainforest Action Network of San Francisco, California, and David Minkow is a San Francisco-based freelance writer.*

Outsiders didn't "discover" Papua New Guinea until the 16th century and didn't begin "developing" the area until the 19th century. But foreign companies, realizing the opportunity to exploit one of the world's last great natural treasures, have made up for lost time. They are well on their way to destroying the largest rainforest left outside the Amazon and putting enormous stress on hundreds of distinct cultures.

These transnationals have the approval of the PNG government. That's because crippling foreign debt has driven the government to trade in its natural resources for short-term gains. Raw materials such as minerals, timber and oil account for almost all of the country's export earnings.

"The interests of our people is paramount and any decision to conserve forests must be weighed against their need for development," Forests Minister Jack Genia once rationalized.

The government encourages development in the mining and forestry sectors despite increasing opposition. The International Water Tribunal determined in February that the Ok Tedi mine is guilty of killing a river system. Discontented landowners from Bougainville violently closed the Panguna mine in 1989, angry over pollution of their rivers, loss of rainforest and an unfair distribution of the mine's profits. People living near Chevron's oil pipeline, now under construction, are losing patience with the company's unfulfilled promises and may follow in Bougainville's footsteps. Other projects have experienced attacks and protests in recent months. In October 1991, the PNG government hosted seminars in Canada and the United States for potential investors interested in developing PNG's resources. The seminars attempted to restore investor confidence following these violent reactions to large scale development projects.



Map adapted from PNG Atlas: A Nation In Transition

## Forests Beset by "Robber Barons"

In 1987, the government asked Judge Thomas Barnett to oversee a commission of inquiry into the timber industry. He found that Japanese companies (90 percent of timber companies in PNG) had bribed PNG officials to allow them to export more logs. In addition to cheating landowners of royalties and benefits, these companies defrauded the government of royalties, export duties and taxes.

"It would be fair to say, of some of these companies, that they are now roaming the countryside with the assurance of robber barons, bribing politicians and leaders, creating social disharmony and ignoring laws in order to gain access to, rip out and export the last remnants of the province's valuable timber....It downgrades Papua New Guinea's sovereign status that such rapacious foreign exploitation has been allowed to continue with such devastating effects to the social and physical environment, and with so few positive benefits," the Inquiry concluded. The Inquiry led to the resignation of Deputy Prime Minister Ted Diro.

In July 1990, PNG placed a two year ban on new logging permits. The moratorium was announced at a roundtable of the Tropical Forestry Action Plan (TFAP). Sponsored by the World Bank and Food and Agriculture Organization, the TFAP report for PNG ignored the Barnett Inquiry, the traditional land tenure system and alternatives to logging. The PNG government has made many exceptions to the moratorium and has permitted guilty companies to return to PNG under new names.

A resident of Bernal village in Madang described his decimated surroundings: "We have no water to wash in and hardly any water to drink that is not polluted. We have no good ground on which to grow food. We have no mushroom ground, no good trees for fruit, no clay pot ground. Our secret places and wild animals are gone and all our ancient big trees are being destroyed."

## Bougainville: Worst Case Scenario

What happened with the Panguna copper and gold mine on Bougainville Island is a tragedy. From 1972 to 1989, the Conzinc Riotinto Zinc (CRA) mining company discharged mine tailings directly into the Jaba and Kawerong rivers, killing most aquatic life. In some places, waste rock raised the Jaba River bed by 40 meters. The PNG government let this happen, ignoring a long list of landowners' grievances. Landowners were upset that they received less than 1 percent of mining profits, while the PNG government got



Logs ready for shipping on the north coast of Madang Province

Photo by Mike Mullins

58 per cent. In 1988, the landowners demanded \$11.5 billion for environmental and social damages.

After waiting a year for a response, mine employee Francis Ona formed the Bougainville Revolutionary Army, waging a bloody sabotage campaign that closed the mine and left the island in ruin and political chaos. A declaration of Bougainvillian independence has been opposed by the PNG government and the conflict continues.

The Bougainville fiasco deprived PNG of 17 percent of its total revenue, compelling the government to step up other projects and devalue the kina by ten percent. CRA also owns 51 percent of Mt. Kare, a gold mine violently shut down by landowners in January 1992.

## Ok Tedi is not O.K.

The Ok Tedi mine, near the border with Indonesia, is increasing its output of copper, silver and gold at the encouragement of the PNG government, struggling to make up for Bougainville. Thus the output of waste rock released directly into the Ok Tedi River is increasing. The mine had a temporary tailings dam, but a 1989 landslide destroyed it. Mine owners Ok Tedi Mining Limited (OTML) contend that the area is too unstable and it is uneconomic to build another dam, so they dump 80,000 tons of sediment into the river each day. Even more hazardous, large quantities of sodium cyanide have twice been accidentally spilled into the water. Periodic flooding has deposited polluted sediment onto the river banks, making them unsuitable for farming. OTML officials admit that Ok Tedi River water is too polluted for consumption and are trying to provide alternative water supplies.

When PNG environment group Wau Ecology Institute took their case against Ok Tedi to the International Water Tribunal earlier this year, the government responded by denying research visas to visiting

## Who Owns Ok Tedi Mining Ltd. (OTML)?

Amoco (U.S.)	30%
Broken Hill Properties (Australia)	30%
Government of Papua New Guinea	30%
German Consortium	20%
Degussa	7.5%
Metallgesellschaft	7.5%
German government	5.0%

the government have the facilities to deal with it."

Seeking higher royalties from the government, landowners complain that promises of roads, jobs, tree compensation, schools and health facilities have not been met by Chevron. In January, a leader from Wasemi village said, "We've just about had it. We want our services before Chevron pumps out oil." Fears of Bougainville-like disruptions have prompted security measures at the project.

scientists. Foreign Affairs Minister Michael Somare has warned WEI to "stick to research and desist from any environmental activism."

The Amsterdam-based Tribunal recommended that OTML study the mine's long term social and environmental effects and find a safe way to store and treat the wastes. "If no such storage or cost-effective storage is feasible, the jury believes that the externalized costs of the project grossly exceed the benefits and consequently the activities of OTML should be phased out." The Tribunal concluded that the mine's foreign shareholders must ensure that OTML meets environmental standards comparable to those in their countries as well as those appropriate to the Ok Tedi region. A German parliamentary delegation has called upon the German government to sell its 5 percent stake in OTML because of the mine pollution.

As part owner, the PNG government has an inherent conflict of interest in policing the operation. The Tribunal recommended that monitoring the compliance of environmental regulations should be done by a state institution not involved in managing the mine.

### Chevron: False Saviour

The PNG government is banking on the Kutubu oil project, run by U.S.-based Chevron, to help overcome the Bougainville loss. Chevron expects this venture to produce 170 million barrels over ten years. The project is located in the pristine area near Lake Kutubu. Chevron expects to spend about U.S. \$1.4 billion before any oil is extracted from a pipeline extending through one of the largest expanses of mangroves in the world.

Chevron did an environmental impact assessment, but environmentalists are calling for an independent one that assesses the potential impact of pipeline leaks. George Marshall, director of the U.K.'s Rainforest Action Group, criticized Chevron's environmental impact statement, "The chances of a major accident are suspiciously played down....Were there to be a major accident, neither the company nor

### What Now?

One way out of this cycle of exploitation is to look inward and take advantage of the country's land tenure system. With local clans owning 97 percent of the land communally, the situation is ideal for local sustainable development. Papua New Guinean non-governmental organizations (NGOs) are trying to raise landowner awareness of environmental threats and promote sustainable development alternatives. One innovative alternative to corporate logging, the wokabout somil (a portable sawmill), need not involve large scale cutting, is uniquely suitable to the land tenure system and keeps the profits in PNG. Local and international NGOs can demand accountability by corporations and create guidelines and a monitoring system for wokabout somil produced "eco-timber". The development of non-timber forest products, farming of insects, traditional craft-based industries and ecologically oriented tourism are other alternatives.

As Lafcadio Cortesi of Greenpeace International notes, "From our perspective, it is locally-based initiatives that will lead to genuine development, rather than initiatives of transnationals or the pre-determined spin-off opportunities created by resource extractive projects."



Volunteers from the Melanesian Environment Foundation, a PNG non-government organisation, leading an awareness session on deforestation for village people.

Photo courtesy of MEF.

### FRANCE SUSPENDS NUCLEAR TESTS

In April France announced the suspension of its nuclear testing program for 1992. Anti-nuclear activists and South Pacific governments welcomed the decision. While the long and continuous campaign in the region against testing undoubtedly contributed to the decision, immediate causes can probably be attributed to developments in France. Recent polls show French public opinion shifting against the tests (60% favouring a test halt). A European campaign for a moratorium on French testing, launched January 1, included French groups opposed to testing. The final shove came with recent French regional elections, in which the governing Socialists suffered serious losses while three ecology parties made major gains. Facing national elections next year, the government moved quickly to appeal to supporters of the ecology parties by announcing the testing moratorium. However, the French have tied continuation of the moratorium to a stop in testing by other nuclear powers. In response, both the U.S. and U.K. announced they will continue their testing programs. If this remains the case, France has already stated that it will resume testing in 1993. The conservative French opposition parties, which have a good chance of forming the government after the 1993 elections, also condemned the moratorium.

The testing halt stirred up a political tempest in French Polynesia. Pro-independence parties pointed to the moratorium as a step towards a French pullout and eventual independence for French Polynesia. They are demanding new elections citing the moratorium and recent conviction of Territorial President Gaston Flosse on charges of authorizing an illegal land deal as reasons. It has also been suggested that a process similar to New Caledonia's Matignon Accords, culminating in a referendum on independence, be introduced for French Polynesia. The economic impact of any reduction in the French presence due to a halt in testing has caused consternation for other leaders. Flosse claims an end to testing will result in poverty for French Polynesia. [From: Pacific Report, Vol 7 No 5, 16/04/92; Washington Pacific Report, Vol 10 No 14, 15/04/92; Vanuatu Weekly, 11/04/92; Pacific News Bulletin, Vol 7 No 4, Apr/92.]

### BRITISH COLUMBIA DECLARED A NUCLEAR WEAPONS FREE ZONE

On April 23, the B.C. Legislative Assembly approved a resolution declaring the province a nuclear weapons free zone and calling on the Canadian government to conduct an "environmental review of the dangers involved by the presence of nuclear weaponed and nuclear powered vessels in British Columbia's harbours and waterways." All 3 parties supported the resolution by a vote of 51-1. The resolution comes at a time of increasing concern about the presence of U.S. nuclear powered and armed vessels in B.C. waters, including the passage of nuclear submarines through Canadian waters en route to the new testing facility in Alaska. The Vancouver Island Peace Society is suing the Canadian government in Federal Court, hoping to force the government to conduct an environmental review of nuclear powered and armed ship visits to Canadian ports. In response to the resolution, the federal governments of both Canada and the U.S. took rapid steps to emphasize the presence of U.S. nuclear powered and armed vessels in Canadian waters would continue. [From: B.C. Official Report of Debates of the Legislative Assembly, 23/04/92; Victoria Times-Colonist, 24/04/92.]

### JAPAN PLANS SHIPMENTS OF PLUTONIUM

The Japanese government announced plans to ship plutonium for use in nuclear power generation from France and the U.K. to Japan. Starting in September, 30 tons of plutonium will be shipped over 18 years. This is despite projections that Japan will soon have a plutonium surplus and thus no need of plutonium for the stated purpose. Shipment by sea is via three possible routes, all passing through the Pacific: through the Panama Canal; around Cape Horn; around Cape of Good Hope. Criticism has come from many directions including the Japanese Citizens Nuclear Information Centre, Governor John Waihee of Hawaii, the U.S. Nuclear Control Institute, the Nuclear Free and Independent Pacific Movement and Greenpeace. Concerns include the possibility of an accident involving the ship, hijacking of the ship or future diversion of the plutonium to weapons production. The Japanese government insists these fears are groundless. The U.S. government stated its intention to work with Japan in implementing the shipments. Japan, the U.S., and France have been actively blocking attempts in the UNCED process to draft environmental safeguards to ban such shipments. [From: Japan Times, April 9, April 11, May 23, May 24, 1992; Washington Pacific Report, Vol 10 No 15, May 1, 1992; Pacific Concerns Resource Centre Action Alert, May 15, 1992]

### ELECTIONS COME DOWN TO THE WIRE

The long awaited Fiji election takes place May 23-30. Predictions are that the main Fijian political party, the SVT, will win the most seats but will need to build a coalition to form the government. Given rivalries in the SVT, it is not clear who will be the new prime minister, to be appointed by President Ratu Sir Penaia Ganilau using his discretion as to which Fijian MP has the support of a majority of MPs. While there have been divisions in the SVT, opposition parties are even less united. After insisting that it would boycott the vote, leading to a split between moderate and hardline

members, the Fiji Labour Party decided to contest the election. Moderates in the FLP had already announced their intention to participate in the vote as the New Labour Movement. Meanwhile, the FLP has been feuding with its former coalition partner, the National Federation Party. The FLP plans to boycott any seats won in the election as a protest against the new constitution. The NFP has refused to agree to this strategy. Meanwhile in April, the Great Council of Chiefs reappointed Ganilau to a new 5 year term as president. Outgoing prime minister, Ratu Sir Kamisese Mara, was appointed as one of two new vice presidents. Speculation continues that Ganilau will resign during his term and be replaced by Mara.

Papua New Guineans will go to the polls in June for what promises to be a hotly contested election. Over 1,600 candidates are challenging 109 seats. Corruption in government is the major campaign issue. With 8 current or former government ministers having faced or facing corruption charges and Prime Minister Rabble Namaliu himself under investigation, there is speculation that disillusioned voters will make their anger known at the polls. Predictions are that over half the current MPs will lose their seats, including prominent leaders in the Pangu Pati government. The role of transnationals has become an election issue thanks to recent attacks by Foreign Minister Sir Michael Somare who suggested that a Pangu Pati government renegotiate all agreements with mining and oil companies. Namaliu disassociated himself and other coalition leaders from Somare's statements. Somare's attacks are seen as an attempt to unseat Namaliu as Pangu Pati leader and regain the prime ministership. [From: Islands Business Pacific, May/92; Pacific Report, Vol 5 No 10, 28/05/92; Vanuatu Weekly, 30/05/92; Washington Pacific Report, Vol 10 No 16, 15/05/92]

### TENSIONS RISE OVER BOUGAINVILLE

Relations between PNG and Solomon Islands further deteriorated as a result of the Bougainville conflict. As a result of two PNGDF incursions in March into Solomons' territory on search-and-destroy missions and PNG's delay in apologizing, Solomons' Prime Minister Solomon Mamaloni boycotted a planned April summit of the Melanesian Spearhead Group of countries hosted by PNG. While PNG has since apologized and offered compensation for the raids, relations between the two countries remain uneasy. As the PNG government claimed it did not approve the raids, concerns have been renewed regarding the degree to which the PNGDF is controlled by the elected civilian government.

The PNGDF established a toehold in southern Bougainville in mid-May. Prime Minister Namaliu expects government authority to be re-established in all of Bougainville by the end of 1992. Namaliu also warned the Red Cross to stop negotiating with the Bougainville Revolutionary Army for access to BRA-held areas and to confine its activities to government controlled areas.

Meanwhile, Solomon Islands continues meeting with other Pacific nations and the Commonwealth Secretariat in hopes of gaining international support for a negotiated resolution to the Bougainville crisis. The Pacific Council of Churches has also called for a humanitarian solution to the current situation. [From: Pacific News Bulletin, Apr & May/92; Pacific Report, Vol 5 No 7-10, Apr 16, Apr 23, May 14, May 28/92.]

### BELAU SAGA CONTINUES

Belauans vote on July 13 in another attempt to overturn the anti-nuclear provision of their constitution and secure approval of the Compact of Free Association with the U.S. To date, Belau has had seven plebiscites on the Compact. All have failed to obtain the 75% majority needed to change the constitution. In a new approach pushed by President Ngiratkel Etpison, Belauans will vote on whether a simple majority can be sufficient to approve the Compact. If this is passed, there could then be a vote on the Compact itself, following which the U.S. and Belau would negotiate the terms of the Compact. The outcome regarding the conflict between the anti-nuclear constitution and provisions of the Compact regarding U.S. military rights in Belau is unclear. These latest moves are a response to the U.S.'s refusal to renegotiate the Compact prior to another vote by Belauans. In an April 7 letter to Etpison, Deputy Assistant Secretary of State Richard English emphasized that approval of the existing Compact is necessary for any future modification to terms of the Compact. English also stated that without an agreement, Belau might have to seek independence as an alternative to its current trust territory status.

In other news, 7 arrests were made in March regarding 2 assassinations linked to the long controversy over Compact status. The Office of the Special Prosecutor in Belau issued warrants for 4 men wanted for the 1987 murder of Bedor Bins, father of Roman Bedor, a longtime anti-Compact activist and the likely assassination target. Three more, one of whom was prominent Belau politician John Ngiraked, were arrested for the 1985 assassination of Haruo Remeliik, Belau's first president. [From: Ollemelele a Belau, Jun/92; Washington Pacific Report, Vol 10 No 16, 15/05/92; Pacific News Bulletin, May/92; Pacific Magazine, May-Jun/92.]

(Continued on page 32)

# SPPF RESOURCES

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## PRINT MATERIALS & BOOKS

**Mining, Politics and Development in the South Pacific.** Michael Howard. Westview Press, 1991. 251 pp. An excellent study of mining in the region. Looks in detail at Fiji, PNG, Solomon Islands, New Caledonia and Nauru; includes an appendix on seabed mining. Bibliography, tables, index.

**Mining and Indigenous Peoples in Australasia.** John Connell and Richard Howitt (Eds.). Sydney University Press, 1991. 205 pp. "Provides a detailed review of the relations between mining and indigenous peoples in diverse political and cultural settings. Draws examples from 5 Pacific countries. Covers gold, diamonds, uranium and copper and looks at dispossession, land rights and compensation."

**Corporate Greed & Human Need: Striving for Balance in Papua New Guinea.** Colleen Murphy-Dunning & John Moriarty. Rainforest Action Network, 1990. 38 pp. A brief review of the environmental, development and social impacts of transnational corporations in PNG.

**Environmental Issues in the Pacific Islands: an SPPF Fact Sheet.** Renee Harper (Ed.), 1990. 4 pp pamphlet. Provides an overview of environmental issues in the Pacific. Available from SPPF for \$1.00.

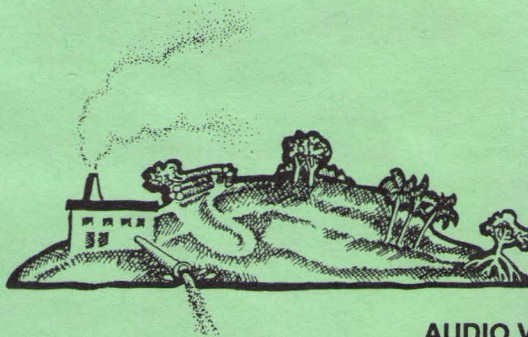
**A Climate in Crisis: Global Warming and the Island South Pacific.** P. Hulm for SPREP. 22 pp. The Association of South Pacific Environmental Institutions, Port Moresby, Papua New Guinea. 1989.

**Nauru 1990: An Environmental Challenge for Australia and the Pacific.** Produced for the Government of Nauru by H. Bogdan and Associates, Melbourne, 1990. 20-page booklet outlining Nauru's history as a phosphate producer. Photos.

**The Course of Empire: The United States in the Pacific.** Frank Brodhead and Christine Wing. AFSC, 1992. 56 pp. A critical examination of U.S. military and economic expansion in the Pacific and Eastern Asia. \$4 plus postage from SPPF.

**Living with the Land: Communities Restoring the Earth.** B.C. Environment & Development Working Group, Christine Meyer and Faith Moosang (Eds.). New Catalyst Publishers, 1992. 131 pp. Approaches to sustainable development from around the world. \$13 plus postage from SPPF.

**Environwatch.** Quarterly publication about environment issues of concern to the Pacific. Published by South Pacific Action Committee for Human Ecology & Environment. Subscription rates are \$US10-for individuals, \$US15-family, \$US50-corporate/institutions. Contact SPACHEE, USP, PO Box 1168, Suva, Fiji.



## AUDIO VISUALS

**Brukim Bus.** 53 min. 1989. Melanesian Environmental Foundation, Boroko, PNG. VHS/NTSC. Tok Pisin with English subtitles. An excellent documentary concerning the impact of logging in Papua New Guinea. Rental bookings through SPPF.

**From the Mountains to the Sea, Papua New Guinea's Threatened Environment.** 140 min. 1989. Melanesian Environmental Foundation. A slide-video in 10 parts designed for highschool audiences throughout PNG and focusing on environmental problems including mining, logging and endangered wildlife. Rental bookings through SPPF.

**Coral Reefs in the South Pacific.** Slide show with audio tape(58 slides). Produced by M. King for SPREP. Suitable for school use (ages 8-12) Rental bookings through SPPF.

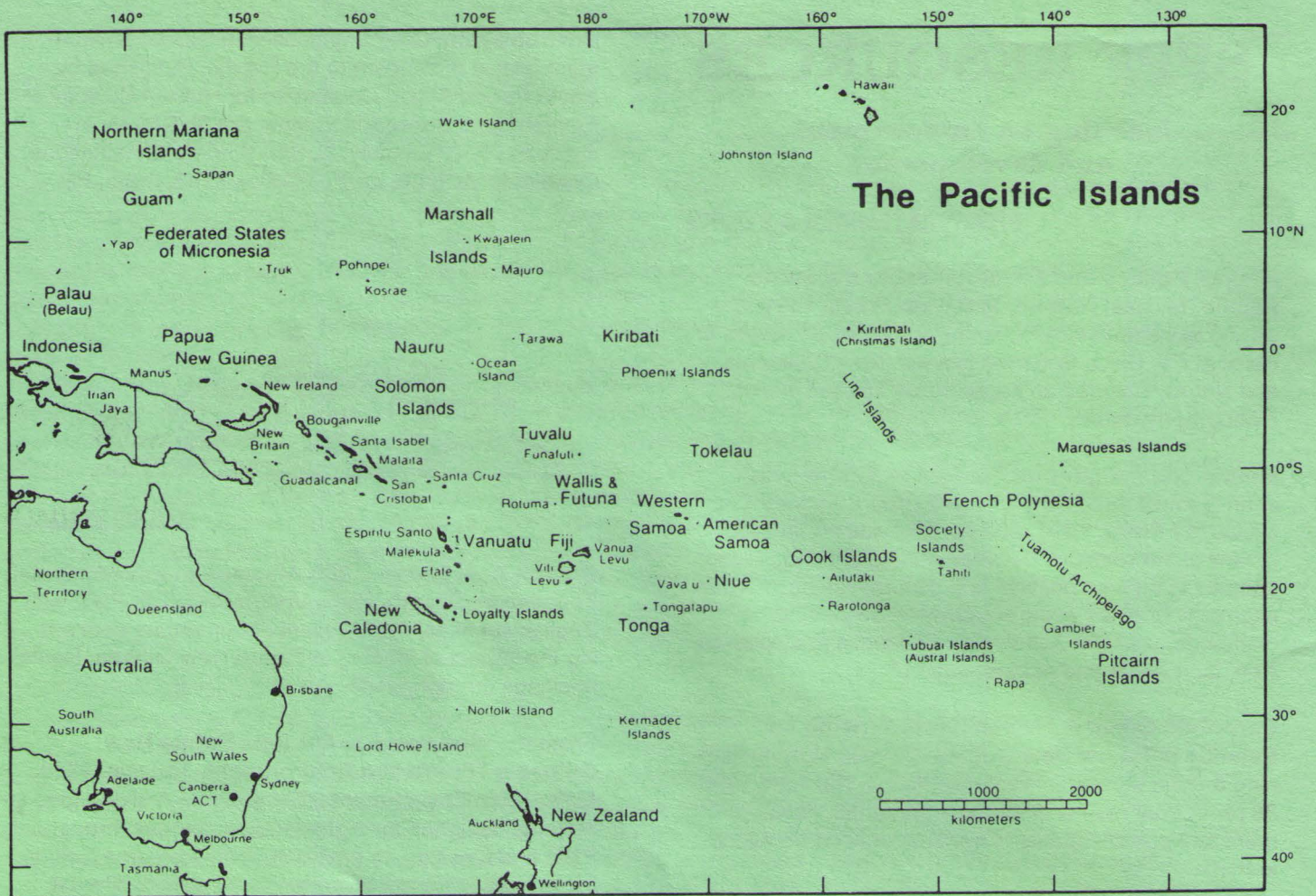
**Drowned Islands: The Effects of Global Warming in the Pacific.** Slide show with script (48 slides). From ICCO, the Dutch Pacific Working Group. Suitable for ages 12 onward. Rental bookings through SPPF.

## EVENTS

### **Dreamspeakers '92: the First Peoples World Film Celebration - September 22-27/92**

Scheduled to be held in Edmonton, Alberta, the agenda, besides films, includes workshops and professional development, visual arts, performing arts, traditional skills and craft demonstrations. For further information, contact Dreamspeakers '92, 9914-76 Avenue, Edmonton, Alberta, Canada T6E 1K8. Tel:403/439-3456, Fax: 403/439-2066.

**Conflicts & Continuities: Pacific History Association Conference 1992.** 2-5 December 1992. Contact the Macmillan Brown Centre for Pacific Studies, University of Canterbury, Private Bag, Christchurch, New Zealand. Tel:



**"SLAVE LABOUR " SCANDAL ROCKS NORTHERN MARIANAS**

The garment manufacturing industry in Saipan has been under attack in recent months. The U.S. Labour Department's Occupational Safety and Health Administration (OSHA) has charged that migrant workers, mostly from China, have been kept under "appalling living and working conditions". OSHA announced that it would be levying fines against 15 factories. The Labour Department has also launched a lawsuit against the Tan family, owners of five factories on Saipan, for paying substandard wages. The Northern Marianas' commonwealth status with the U.S. (thus allowing goods to be imported to the U.S. duty free) and low wages has made it an increasingly attractive option for offshore garment factories, now numbering 21. However, the negative publicity given to the scandal by U.S. media has led several companies, including such industry giants as Levi Strauss, to cancel contracts with the factories. The scandal has also created concerns for the CNMI government regarding damage to the CNMI economy. The \$157 million industry generates \$20 million in annual government revenue. CNMI politicians and business leaders have attacked the media for irresponsible reporting and have blamed the Labour Department for "persecution". [From: Pacific Magazine, May-June/92; Washington Pacific Report, Vol 10 No 13, 1/04/92; Washington Pacific Report, Vol 10 No 16, 15/05/92]

**GUAM STATUS TALKS COME TO AN END**

The Guam Commission on Self-Determination (CSD) and Bush Administration Task Force on Guam (BATFOG) concluded negotiations on Guam's future status without agreement on many points. CSD pushed for mutual consent regarding the application of federal laws to Guam and the right of the indigenous Chamorros to self-determination. BATFOG opposes these positions. The battle over Guam's future status now shifts to the U.S. Congress. Several Guam participants warned that a continued negative U.S. response could lead to unrest. [From: Washington Pacific Report, Vol 10 No 14, April 15, 1992.]



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