Tok Blong SPPF

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photo by Elaine Briere

grocery store, Tonga

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SPPF Update

As readers of our January 1989 issue know, I will be leaving SPPF on September 29 after spending over 8 years building the organization into a credible resource and information centre which serves local, national and international audiences.

It is a long way from the kitchen table, five books and a contact list that I started with July 1, 1981, and the process of leaving—especially over a nine month period—is at times what I feel a separation must be like: both exhilarating and mixed with a little sadness to leave a friend.

It is the time to move on though, and time to allow fresh ideas to blow through the organization. The process of finding a replacement has also felt like a relationship analogy: giving up a child for adoption!

I and the SPPF Board of Directors are very pleased to announce that commencing September 3, 1989 the new SPPF Executive Director will be Randy Garrison. Randy brings a wealth of skills to SPPF. He has a post graduate degree in Political Science and taught in community colleges; he has several years experience as a political researcher in Ottawa and in British Columbia. For three years he served as Executive Assistant to a political leader, giving him excellent experience in tough situations, dealing with media, etc. Randy has lengthy experience working on aboriginal issues in Canada, as well as knowledge of these issues in New Zealand and Australia. Finally, Randy is—and perhaps most importantly—an organizer. He has experience running national speaking tours, networking, corresponding, and in solidarity work.

One couldn't ask for a better foster parent! Randy has just finished a trip to "French" Polynesia, Fiji and New Zealand, and I know he will thrive and grow with SPPF, and vice versa.

I, and I'm sure you, wish him well.

Phil Esmonde

About this newsletter. . .

TOK BLONG SPPF is pidgin english as used in many parts of the Pacific. It might literally be translated as "this talk belongs to SPPF" or, SPPF Newsletter. TOK BLONG SPPF is published four times per year by the South Pacific Peoples Foundation of Canada, 409–620 View St., Victoria, B.C., Canada V8W 1J6, and is available to donors of SPPF (minimum $10/yr. individuals; $25/yr. groups). SPPF exists to raise critical issues in the South Pacific to a Canadian audience through a variety of public education methods, and to assist in getting relevant Canadian financial, technical and other assistance into the South Pacific to assist islanders in their self-development. Partial financial support for this newsletter from the Canadian International Development Agency (CIDA) is gratefully acknowledged. We welcome readers' comments on items carried in this newsletter, as well as suggestions for articles and copies of Pacific news clippings, etc., which would be of use to our work. TOK BLONG SPPF reserves the right to edit material. Views expressed do not necessarily represent the South Pacific Peoples Foundation.

MOURNERS HONOUR TJIBAOU'S VISION

Just days before they died, HELEN FRASER spoke separately to Jean-Marie Tjibaou and to Tjibaou's killer, Djoubelli Wea. Here she relfects on the political slayings in New Caledonia.

The assassination of Kanak leaders, Jean-Marie Tjibaou and Yeiwene Yeiwene is not only a loss for the Kanak independence movement but also for the French government and New Caledonia - for above all it was widely felt that Tjibaou had been responsible for the eleven months of peace and stability that the territory has enjoyed since the signing of the Matignon peace accord.

Tjibaou surprised many within the independence movement with his decision to accept a ten year plan of intensive development of the neglected countryside, where the majority of Kanaks live, and the widespread training of Kanaks in all spheres of New Caledonian life.

Under the plan profound reforms are to be undertaken in all of the territory's principal institutions - education, media, justice, police etc - and the eventual poll on independence in 1998 is to be restricted to long-term residents of the territory.

Within the mainstream independence movement, the Kanak Socialist National Liberation Front (FLNKS), the shock of what at first seemed an extraordinary compromise - particularly after the 19 Kanak deaths at the hands of the French military - was soon replaced by Tjibaou's vision of independence success through the Matigonon Accord.

Returning from the Paris peace talks to meetings of confused and sometimes angry militants in the New Caledonian countryside, Tjibaou's confidence in a path to independence involving Kanak economic independence and experience at running parts of the country through provincial governments quickly took hold.

The vast majority of "independentists", as the Kanak militants are called, transformed the anti-colonial struggle into what Tjibaou like to refer to as "the green revolution".

This meant transforming the place of Kanaks in New Caledonia's economy (in which they largely have no role except as subsistance farmers) and at the same time working in industry and agriculture with Europeans and setting an example for the non-Kanak population of what Kanak independence could mean.

As the June elections for the provincial governments approached, Tjibaou and his supporters grew impatient to "get on with the job of governing...of translating our objectives into realities", as Tjibaou put it.

"What is incredible is that things are now 'en route', but it's up to us to get the results from it," he told this reporter just days before his death.

But for some the war was not over.

Djoubelli Wea was a former pastor, schoolteacher and Kanak militant, though not aligned with any political party. He did not directly take part in the attack on the gendarme brigade of Ouvea Island and subsequent taking of 27 gendarme hostages during the FLNKS campaign against the Chirac government 12 months ago.

Yet "Ouvea", as the bloody events are now simply called, was to profoundly affect Wea and eventually kill Tjibaou and Yeiwene.

Days before he killed Tjibaou and his accomplice shot Yeiwene and he himself

photo by David Robie

died from a bullet fired through his heart by Tjibaou's personal bodyguard, Djoubelli Wea came to tell me his confused and irrational story.

His father, an elder in the Ouvea tribal village of Gossanah, was allegedly stripped naked by the French military and tortured with electric shocks in front of his fellow villagers, in the frenzied bid by the French to discover the location of the FLNKS and their hostages.

He did not survive the experience.

Djoubelli was rounded up, as an FLNKS Ouvea committee member, after the rescue operation by the French and detained in a Paris prison before release through lack of evidence of any involvement in the FLNKS action.

His release coincided with the start of the Matignon peace talks, in which the new, socialist, French government of Michel Rocard sought to bring Kanak leader Tjibaou and his European settler foe, Jacques Lafleur, to an agreement for the sake of the small country of 145,000.

Wea was convinced that on his release from prison in Paris he should have formed part of the negotiating team - clearly impossible, but as one who had lived through the nightmare of "Ouvea" he felt it was his right. His bitterness at his exclusion from these talks became directed at Tjibaou and Yeiwene.

He also said he held Tjibaou responsible for the death of his father, since the FLNKS, and in particular Tjibaou's party, had not warned Gossanah village that the hostages would be kept in nearby caves, and had thus made his father and other villagers vulnerable to the French interrogators.

Djoubelli said that his aim was to "discredit Jean-Marie Tjibaou, smash the Matignon Accords and force (French Prime Minister) Rocard to come to Ouvea and netotiate a new deal which would guarantee an immediate independence."

If Djoubelli had been alone with his on-going nightmare and bitterness, New Caledonia might not now be in mourning. For there were more like Djoubelli on Ouvea - all people unable to come to terms with the enormous and ugly tragedy that had befallen the island.

But more significant, the bitterness of Djoubelli found comfort in the political stance of the small pro-independence party, the United Front for Kanak Liberation (FULK) and its leader, Yann Celene Uregei.

For many years the FULK party has generally not been taken seriously within the independence movement. With only several hundred signed up members, it has gained publicity through acceptance of invitations to Libya - although money from Gaddafi has yet to be seen in the territory.

Two decades ago FULK leader Yann Celene Uregei was a significant figure in New Caledonian politics, and though his importance and influence has waned steadily since then, this has not affected his determination to be the one who leads the Kanak people to independence.

In 1982, 1984, and twice in 1985 he attempted to force the independence movement to accord him positions of power - without success. The remainer of his time was spent as a roving ambassador for the cause - in the South Pacific region, at the United Nations, in Algeria, Iran and Europe.

photo by David Robie

Kanak militants during election boycott

As the "cause" became more complex under French Socialist governments, Uregei was somewhat pushed aside, but leaders such as Tjibaou went directly to the South Pacific or the UN with what was the real respect and authority of the independence movement.

At home, Uregei is known as the Kanak leader who has never been present when political violence was the order of the day, yet the Libyan connection served well to give his party a radical image.

Uregei's disapproval of the signing of the Matignon Accord and his desire that the independence struggle continue until France negotiates a new, immediate independence timetable, was sure to attract the Djoubelli Weas of Ouvea.

All the more so when Uregei told them, according to Djoubelli, that Tjibaou and the Matignon Accords had led the South Pacific Forum to withdraw New Caledonia from the United Nations Decolonisation Committee - a lie but one which further fuelled Wea's bitterness against Tjibaou. In fact, the entire FULK political program, could be called a campaign of disinformation.

A link between FULK and the killers of Tjibaou and Yeiwene has not been established, but FULK has not helped its cause within Kanak circles by issuing a statement which neither condemned the killings nor offered condolences to the bereaved families.

Instead the statement warned the French and the rest of the FLNKS that the deaths were a consequence of the Accord, and said a new plan would now have to be worked out.

Yet the reality of New Caledonia is that the Accords were working - the country had been transformed, and while for many, particularly Kanaks, it was a surface level transformation only, there was the knowledge that peace was easier to live with than war, and that eventually the rhythms of peace could gain a momentum capable of withstanding many shocks.

In the eyes of Jean-Francois Denis, economic advisor to the French High Commissioner and a French official with great knowledge and experience of the territory and its problems, the progress in one year has been considerable.

Through the consultative Committee which brings together the anti-independence Rally for Caledonia in the Republic (RPCR), the FLNKS, a Centrist and the French government, Denis has observed that despite differences there has been a determination to keep up a dialogue by the parties.

"We've dealt with at least 500 different dossiers and each time we've found a solution. Not once has someone said, 'No, I won't accept this', and left slamming the door." Denis felt that what was happening amongst the political leaders on the committee was also to be found among the wider New Caledonian public.

Said High Commissioner Grasset: "Mutual fear doesn't melt away quickly in a few months. But people in the countryside, Kanaks or Europeans or other races, have been aware that for almost a year they've been able to move around the country, that there are no guns, no houses burned down. The're aware that things advance."

The advances that have been made could only be cemented by last Sunday's funeral services for Tjibaou and Yeiwene when well over 20,000 people turned out in silence to pay their respects. Amongst the weeping mourners were Europeans, Polynesians, Wallisians and Asians mingling with the thousands of grieving Kanaks.

The violence of Ouvea one year ago shocked New Caledonia's leaders and led to the Matignon Accord. The tragic assassinations of Tjibaou and Yeiwene could well have shocked the people of New Caledonia into greater determination to see the peace plan through.

[Reprinted from an unknown Australian paper with permission of the author.]

RESOURCES

MICRONESIA HANDBOOK A new, updated edition of this excellent guidebook has just been released by Moon Publications. Written by Canadian David Stanley, Micronesian Handbook covers the obvious and remote islands of this widespread area in good, practical detail, and with sensitivity. 300 pages, approx. $US10 at bookstores.

RENAISSANCE IN THE PACIFIC This is a special double issue of ETHNIES, the review of human rights and tribal peoples published by Survival International (France), and is available in both English and French. This work contains interviews and articles by several key Pacific Islanders concerning issues of cultural identity, threats to same, and affirmations of islander identities. Included are articles by Jean-Marie Tjibaou, G. Tetiarahi, Subramani, Francis Bugotu, and Pilioko. Non-Pacific islanders can order from Survival International (France), 45, rue du Faubourg-du-Temple, 75010 Paris for $US12 plus postage. Pacific Island readers please note that a special rate is available to you by ordering from IPS, USP, Box 1138, Suva, Fiji. (English version only.)

THE CONTEMPORARY PACIFIC: A JOURNAL OF ISLAND AFFAIRS This is a new biannual journal due out July 1989. It will focus on current issues and concerns. Information: University of Hawaii Press, U of HI, Honolulu, HI 96822.

LANDOWNERS BATTLE BOUGAINVILLE COPPER

Undeterred by a strong military presence in their North Solomons province, traditional landowners have stepped up their campaign for compensation from Bougainville Copper Ltd (BCL). In a dawn raid on April 15, villagers dynamited a power pylon at the Panguna mine site, halting production for two days at an estimated cost of $A4 million to the company.

As in earlier raids, company property and installations, not personnel, were targetted.

Traditional landowners are determined to win compensation from the company for the environmental damage and social dislocation caused by the large open cut mine.

They are demanding BCL to pay 10 billion kina ($A14 billion) compensation, that the company significantly increase spending on health and education on the island and that villagers receive 50 percent of the profits from the mine operations.

Their campaign attracted international attention last December when two power pylons were blown up simultaneously and the mine was paralysed for 11 days.

In the past four months more than 500 soldiers and police have been flown to Bougainville Island with orders to "shoot to kill" the saboteurs.

In what has become an increasingly embarrassing episode for the PNG government of Rabbie Namaliu, all attempts to smoke out former BCL employee and acknowledged leader of the Bougainvillean landowners, Francis Ona, have failed.

For months a dawn-to-dusk curfew has been enforced and an unremitting media campaign launched to discredit the landowners, yet the authorities have failed to isolate the militants.

If anything, "Ona and his men" - as they are commonly referred to - have emerged as folk heroes and their demands against BCL have prompted villagers in other provinces to demand a renegotiation of mining agreements.

Resistance

The landowners' grievances with the foreign-owned company are long-standing. Yet BCL has consistently ignored their demands.

Even before the first gold and copper was dug out of the Panguna mine in 1972 there were reports of passive resistance by villagers. When geologists came to survey the area, villagers pulled out the stakes and in one village women lay down in front of bulldozers that were clearing the road.

The first mining agreement at Panguna was drawn up by the Australian administrators of Papua New Guinea and the mining company. Not only were the landowners not consulted, their resistance to the mining operations was met with police repression.

In the 1980s the Papua New Guinean government and BCL came under increasing pressure to recompense the traditional landowners.

Landowners formed into an association and by the middle of 1988 threatened to close down the mine unless the company granted monetary compensation.

When BCL refused to even consider their demands, landowners began attacking mining installations.

The PNG government has a 20 percent equity in the mining operations, which provides 16 percent of all budget revenue. Fifty-six percent of Bougainville is owned by Australia's CRA.

Since 1975 the annual profit to the company from its mine at Panguna has averaged $A144 million. Yet a breakdown of the cash benefits of the mine over the last 10 years tells the whole story. Sixty-two percent of the profits went to the PNG government, 32 percent to foreign investors, 5 percent to the North Solomons provincial government and 0.2 percent to local landowners.

Yet the effects of BCL mining operations on Bougainville Island have been detrimental to the traditional landowners.

The sheer size of the mine - the third largest open cut mine in the world - necessitated the clearing of immense tracts of land and the dislocation of villages - irreversible damage for a people dependent on subsistence agriculture.

Even by 1974 it was called the "largest hole in the southern hemisphere," and the hole has grown substantially since then. For those who thought they could return to their land when the mine ceased operation, it has become all too evident that all that will be left to return to will be a quarry.

The landowners were forced off their land into resettlement villages. Although some monetary compensation was paid to them, at best it amounted to $A200 per person, obviously not enough to secure the Bougainvilleans a livelihood.

At the same time there could be no returning to the traditional way of life the landowners had enjoyed for centuries. The environmental effects of the mine have proved catastrophic. Tailings have blocked tributaries, and chemicals and industrial waste have killed off much of the island's native wild-life. Fish in the coastal waters have died out quite dramatically as have flying foxes and wild pigs.

The enforced relocation of villagers and the massive migration to Bougainville in the late 1960s and 1970s of laborers to work at Panguna or on nearby plantations have created untold social problems, including alcoholism, poor housing and unemployment.

The failure of BCL to adequately compensate Bougainville's traditional landowners only serves to fuel ethnic rivalry and encourage the view that life would be better for Bougainvilleans if migrant workers left the island.

And certainly the media has sought to paint the Bougainville dispute as one of ethnic discontent.

Ethnic tensions flared on the island last month when the murder of a Bougainvillean nursing sister was blamed on two migrant workers from the Western Highlands. Two Highlanders were subsequently killed in what was considered a "a payback". In clashes that followed more than five people died, shops and offices were looted and the island's airport at Aropa was burnt down.

In its reporting of these events the press sought to encourage the view that the outburst of ethnic violence on the island and the long-standing dispute with BCL were one and the same - that it was villager fighting villager.

Conclusion

The difficulty for BCL, its Australian corporate backers and the Namaliu government is that the traditional landowners at Bougainville have placed on the agenda the whole question of land ownership and land rights.

Increasingly the question asked by villagers is: If we own the land, why don't we own what's beneath the land?

Located on the South Pacific volcanic ring, PNG has huge mineral deposits, particularly of gold, copper and silver. Gold has become the country's most valuable export and production is worth more than $A620 million annually.

According to the Business Review Weekly, PNG is tipped to be one of the world's biggest gold suppliers over the next 20 years.

One of the new mines, near completion, at Porgera in Enga province in mainland PNG is believed to have access to the worlds' biggest gold lode.

The people in Enga province have learnt from BCL's operations at Bougainville. Until recently traditional landowners and provisional government ministers in Enga province have threatened to put the mine up for open tender worldwide unless their demands for a more equitable distribution of mining revenue were met.

Finally, on April 18, the Namaliu government announced it was changing its position on mining agreements. Under the Porgera agreement, the national government will allocate 49 percent of its 10 percent equity in the project for division between the Enga government and the landowners with this paid from dividends.

Porgera landowners will also get a bigger cut of the royalties that go to the province - 20 percent instead of 5 percent.

According to Patterson Lowa, the Minister for Mines and Energy, the principles of the Porgera agreement would apply to all future and all present mining operations in PNG including Bougainville and Ok Tedi.

[From: Direct Action, April 25, 1989]

UPDATE: BOUGAINVILLE IN STATE OF EMERGENCY

The Papua New Guinea government declared a state of emergency for Bougainville Island on June 29. This follows mounting violence, and the failure of the PNG government to locate or even talk with Francis Ona, leader of the disgruntled landowners.

Ona is now calling for secession of North Solomons province from Papua New Guinea, escalating this major crisis for Rabie Namaliu's government.

The large copper mine at Bougainville has been shut since May 15 at a loss of $A2 million per day. Given that the PNG government derives 17% of all its revenue from this one mine, it can be correctly stated that the government will go broke if the mine stays closed.

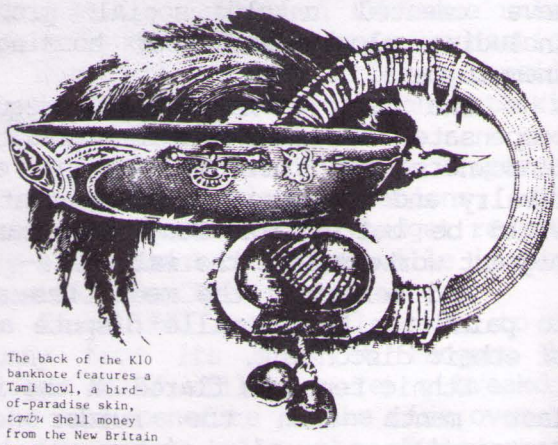
The latest increase in trouble started in early June after a two week truce by the PNG government ended. The truce was an attempt to get Ona to give himself up. When this failed, further troops were sent in with orders to do what was necessary to find Ona.

PNG troops started using unauthorized violence in their task. According to *Pacific Report* (June 22, 1989) they burned 25-30 huts, harassed Australian business people and a senior diplomat and launched a violent attack on four local buses and their passengers.

It seems that ongoing events are starting to cloud the initial issues (just compensation to landowners from the copper mine). The events since last December have also intensified ethnic strife between Bougainvillians and others. Reports are that Bougainville students at campuses throughout PNG are coming under threat.

The usually unstable political system in PNG (with votes of no confidence the rule of the day) is challenged in a drastic manner by the Bougainville situation. The first two PNG soldiers to die did so on Bougainville. Prime Minister Namaliu said it is sad that, while PNG did not have to fight for its independence, the first soldier to die would be from fighting their own people.

A vote of no confidence in the Namaliu government is due this month.



The back of the K10 banknote features a Tami bowl, a bird-of-paradise skin, *tambu* shell money from the New Britain area, and boar's tusks from the Highlands.

TRADITIONAL NAVIGATION SKILLS: A MICRONESIAN EXAMPLE

The following article is excerpted from Atlas of Micronesia (1988) by Bruce G. Karolle, with permission of the author and the publisher, Micronesian Area Research Center (MARC), at the University of Guam. Dr. Karolle is Associate Professor of Geography at MARC.

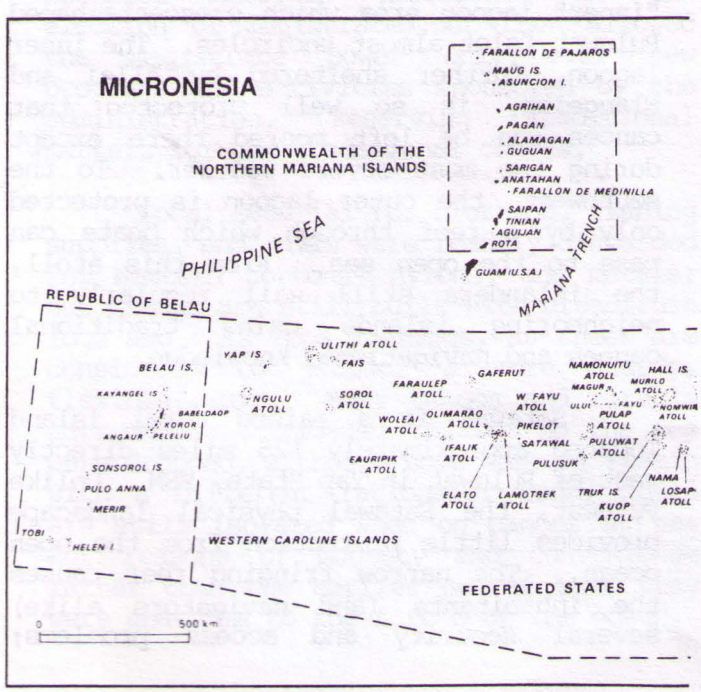
Prehistoric Settlements of Micronesia

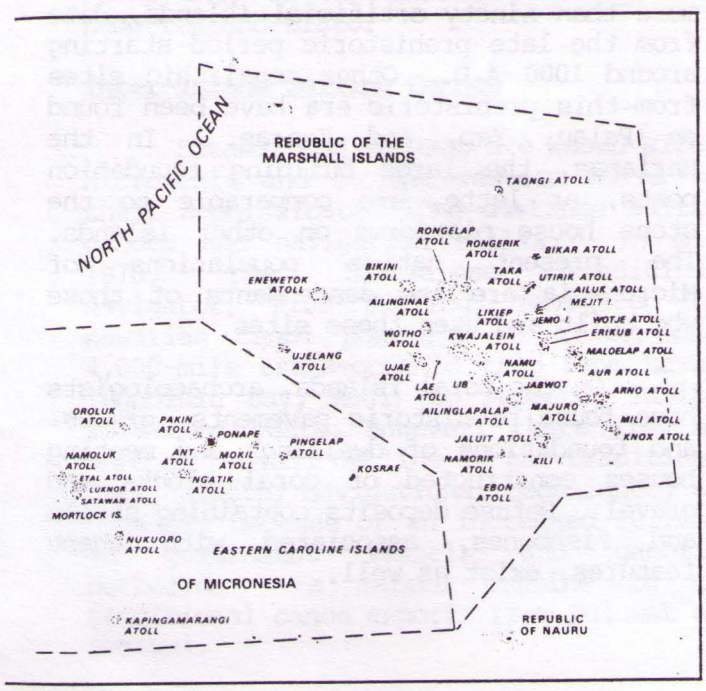
The first human settlers in Micronesia probably were maritime-horticultural peoples migrating eastward from the Philippines and Indonesia. Some scholars have suggested that the peopling of Micronesia began around 3500 years ago, but the initial period of human settlement is just beginning to be explored by archaeologists; and remains of very early island occupation have thus far not been found. Current archaeological research indicates that all the high volcanic islands (Palau [Belau], Yap, Truk, Pohnpei, Kosrae, and the Marianas) were inhabited at least a thousand years before the beginning of the first century B.C. The prehistory of the Micronesian coral islands (Carolines, Gilberts, Marshalls, and Nauru) is even less known than the high islands.

The high islands and many of the coral islands were densely populated when first visited by European explorers in the 16th century. Successful cultural adaptations by the islanders had resulted in a diversity of languages and socio-political organizations throughout the region.

Linguists divide the languages of the area into a "nuclear Micronesian" group - referred to here as the Oceanic group (Carolinian, Trukese, Ponapean, Kosrean, Gilbertese, Marshallese, and Nauruan) - and the more diverse and possibly older languages of the Rimlands or the "Western" group: Palau (Palauan), Yap (Yapese), and the Marianas (Chamorro). The latter three are thought to have had their origins in an ancient language called proto-Austronesian.

Socio-political organization in Micronesian societies varies from flexible kinship groupings, with simple ranking of





clans, to less flexible and more stratified chiefdoms with hereditary social classes. Some of these socio-political organizations encompassed more than one island and linguistic group, such as Yap and several of the coral islands to the east.

Micronesian native technologies are specifically adapted to local conditions. Living in villages and homesteads, the islanders are successful tropical farmers and fishermen, as well as frequent sea-voyagers and traders using outrigger canoes. The inhabitants of the coral islands are more mobile than those of the high islands, in response to droughts, storms, population pressures, and food gathering needs.

Archaeological remains found on many Micronesian islands in recent times represent the late prehistoric and early historic period populations. On the high islands, there are remnants of stone house platforms and compounds, public and private ceremonial and religious sites, and many acres of canals, ditches and modified stream-courses, as well as numerous garden terraces and pondfields. Some of these features are still in use although most were abandoned sometime after European contact in the 19th century.

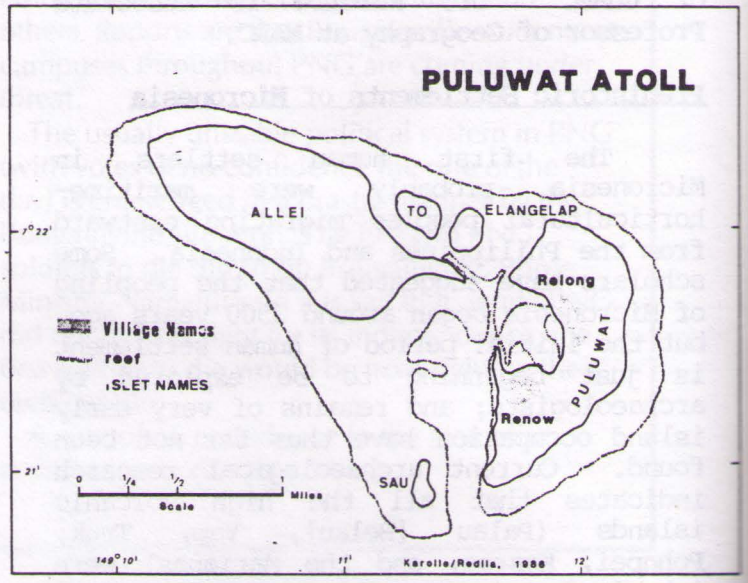
The famous ruins of Nan Madol in Pohnpei, a sacred residential and ritual complex built of large basalt "logs" on more than ninety artificial islands, date from the late prehistoric period starting around 1000 A.D. Other megalithic sites from this prehistoric era have been found on Palau, Yap, and Kosrae. In the Marianas, the large building foundation posts, or latte, are comparable to the stone house platforms on other islands. The present native populations of Micronesia are the descendants of those who built and used these sites.

On the coral islands, archaeologists have found prehistoric pavements, graves, and foundations of dwellings and meeting houses constructed of coral blocks and gravel. Refuse deposits containing shells and fishbones, associated with these features, exist as well.

Canoes and Navigation in the Central Carolines

The Caroline archipelago stretches some 1800 miles east-west [across Micronesia]. Today, there exist only two major sailing communities on Puluwat and Satawal.

Puluwat Atoll is situated on the western edge of Truk State in the Federated States of Micronesia (FSM). This atoll is composed of five islets: Puluwat, Elangelap (Elangelab), To, Sau and Allei (Alet). It is just over two



miles in length. More than two-thirds of this surface area is land. Between islands are a small "outer" lagoon area within the fringing reef and a second "inner" lagoon area which crescent-shaped Puluwat Islet almost encircles. The inner lagoon, further sheltered by Allei and Elangelap, is so well protected that canoes can be left moored there except during the most severe weather. To the southwest, the outer lagoon is protected only by a reef through which boats can pass to the open sea. From this atoll, the islanders still sail regularly to neighboring islands using traditional canoes and navigational knowledge.

Satawal is a raised coral island located approximately 125 miles directly west of Puluwat in Yap State, FSM. Unlike Puluwat, the Satawal physical landscape provides little protection from the open ocean. The narrow fringing reef causes the inhabitants (and navigators alike) several security and access problems;

nevertheless, traditional navigation has survived into the present.

The low coral islands of the central and western Carolines share a similar culture and language. According to a Puluwatese legend, the low islands were settled from Truk to the east, which, in turn, was settled from Pohnpei and Kosrae. More recently, the islands have been visited by explorers, traders, missionaries, and foreign administrators who have stayed for relatively brief periods of time, intermittently, and have consequently influenced community life very little.

Although both are basically conservative, one notable aspect of the Puluwat and Satawal societies is their willingness to adapt by accepting or rejecting new ways of doing things with confidence and very little agonizing. In general, these people are raised from birth with immense tolerance, acceptance, and affection; and they are quite self-confident both as individuals and as a group. They accept some new ways because they are easier, more useful, more sensible to them, and they reject other innovations for the opposite reasons. Thomas Galdwin, in East is a Big Bird, gives the following Puluwatese examples.

They disregarded determined German efforts to vest title to land in individuals, keeping it instead in matrilineal clans and smaller kin groupings with female descent. They accepted American insistence on the election of magistrates,but then allowed the magistrate power only over new programs and activities sponsored by the administration, reserving traditional matters for the traditional chiefs.

Local material for clothing, fishing supplies, and sails were readily discarded for Western cottons, nylons, and metals; but canoes are still built with breadfruit logs and coil rope lashings, as these are considered to produce a more sturdy, flexible craft. Many taboos and rituals surrounding activities related to the sea were dropped, although some customs remain with a different rationale: today women are still isolated when on canoes at sea for reasons of modesty and convenience rather than the earlier belief that they were anathema to the forces of the ocean.

Puluwat and Satawal are forested with such useful trees as breadfruit, coconut, and pandanus. There are also gardens and taro swamps on both islands. People live close to their boats in houses clustered near the shore.

There are probably enough canoes of all types to carry more than the total population (between five and seven hundred people each on Satawal and Puluwat in the 1980s). This canoe excess assures that transportation is readily available to most anyone, especially in the case of Puluwatese, wishing to go by water across the lagoon on errands to the neighboring islands or even to the state capitals (former district centers). Borrowing customs are flexible: one need only ask the owner/owners of a canoe for permission, a formality hardly necessary with close relatives and friends.

The majority of the canoes in Puluwat are small, single outrigger craft for use within the lagoon area. Made from a single breadfruit log, their design and ornamentation are uncomplicated. They are from 9-24 feet long and can carry from one to twelve people and their possessions. All canoes are individually owned; but they are usually kept in or near a canoe house - which is more than a club - and they are available to all the members. There are a few larger, usually by two or three feet, paddling-sailing canoes. Some of the smaller canoes are imported from the neighboring islands of Pulusuk and Pulap and, in the case of Satawal, from Lamotrek and Elato.

Inter-island Sailing Canoes

Satawal and Puluwat are known within Micronesia and to the western world for their sophisticated long distance sailing canoes and navigation skills. In mid-1976, the Satawalese traditional navigator, Pius Piailug, navigated the Hawaiian canoe Hokule'a on a one-month 4,000-mile trans-oceanic trip from Hawaii (Honolulu Bay, Maui) to Papeete, Tahiti. In recent years, however, there also has been an overall decline in the traditional arts, crafts, navigational techniques, and - mainly because of an increased reliance on government vessels and gasoline outboards - a marked decline in the traditional canoe exports from Puluwat and Satawal.

Long distance outrigger sailing canoes range between 24-30 feet in length. As in earlier times, they are built by master canoe builders and their apprentices who know and learn the theory and practical skills of their craft as well as many magical rituals and spells. They also observe taboos against sexual activity and the eating of certain foods. Today, with the whole procedure less secret, all the members of a canoe house may help build a a boat. These large canoes are used for open sea fishing, inter-island travel, and trade. In earlier times, they carried tribute to Yap and colonists to other islands. Saipan, for example, was colonized from Satawal in the early 1800s. Warriors in sailing armadas were much feared in the central Carolines, and the Puluwatese still make claims in Pulusuk based on ancient conquests.

All sailing canoes are carefully maintained. Unless they are in constant use, they are beached and covered with mats to protect them from the drying heat of the sun which can warp or crack the hull planks. When not in use, the canoes are kept off the ground on blocks inside canoe houses that shield them further from the weather. When they are left on the beach, they generally rest on palm fronds. Even inside the canoe houses, mats are tied around them to prevent drying by the wind. Sails are dried and stowed in the eaves of the canoe houses.

As art anthropologist Marvin Monvel Cohen has observed, the canoe house itself is more than just a shelter for these vessels. It functions as a meeting house and workshop for the production and repair of fishing and sailing equipment. It is the center of the men's activities, and the canoes are visible symbols of their intertwined roles in society as fishermen, sailors, navigators, and builders of canoes. (The most important subsistence tasks of men and women, respectively, are fishing and gardening.) Unmarried young men often sleep in the canoe houses and learn about their future roles. Many of the vital skills necessary for living in an island environment are taught at the canoe house. Informal court is held there to settle disputes, and news and gossip are also exchanged. Membership in a particular canoe house is usually determined by matrilineal ties.

The master canoe builders are often navigators as well; hence, they have more prestige than those with only one skill. The status of navigators is traditionally based on experience and ritual knowledge. According to Thomas Gladwin, the seniority of new navigators in Puluwat today is somewhat ambiguous since the traditional initiation ceremony was discontinued at the urging of a Catholic priest in the late 1940s who objected to some of the sensual chants and prayers. These new navigators have less prestige than the older "initiated" ones, as do the men who would have gained honor by having trained them. This ceremony marked a man's total acceptance by his society and recognition as a master navigator by others in the elite group.

The Christians also belittled other traditional practices. Many taboos and rituals no longer exist because of the experiences of one of Puluwat's foremost navigators, Winin. He decided that the only way to verify the priest's claim that the rituals and supernatural beliefs would not change the outcome of events or influence them would be to take a long voyage after ignoring all the traditional practices and taboos. He returned after a wonderful trip, and the islanders followed suit in discarding practices that were something of a nuisance anyway.

The Navigator and His Craft

Young men still apprentice themselves to a master, usually a relative. Training is rigorous, prolonged over many years, and involves instruction both ashore and afloat. It includes remembering and patiently observing the natural signs. The confidence at sea this schooling gives and the pride of the navigators is such that they will reportedly not even ask what island they have landed on when blown off-course, as they feel they should know!

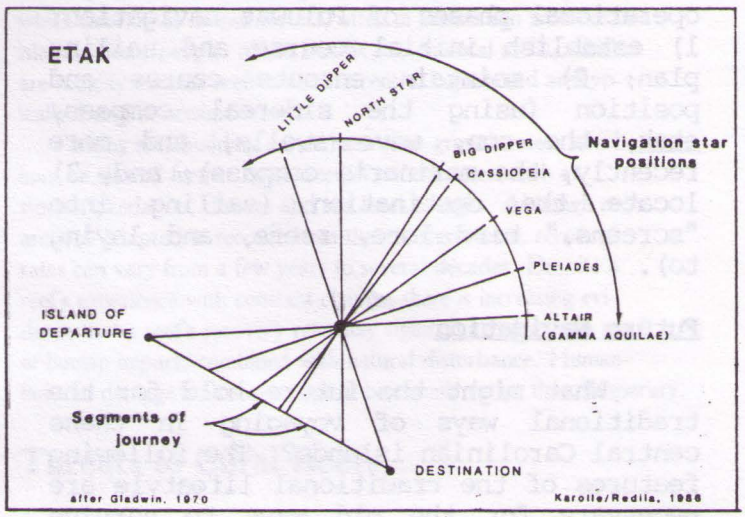
Satawalese and Puluwatese navigators see the ocean as being full of islands arranged in blocks or groups rather than widely spaced isolated specks of land. The sea is viewed as a road, not a barrier, and one can journey forth confident that islands are sure to appear. There is no element of conquest in the attitudes of the navigators, and the lack of fear for generations in studying the

conditions of the sea have made it a familiar, friendly place. These Carolinians respect the ocean, but feel confident that they can handle any situation by using their training and skill. Even drowning at sea is not viewed negatively, except perhaps by the families back home.

Navigation is characterized by its technological and cognitive dimensions. In the Carolinian system, the sidereal (star) compass is an abstract system of orientation by the horizon points where chosen stars rise and set. This "star" compass generally has thirty named points with the north star, Polaris, at the top of the compass circle, and the Southern Cross at the bottom. The bearings of stars at rising and setting are symmetrical; hence most of the stars used in the "compass" indicate those two positions. The exception is Polaris, known to the Carolinians as the "star that does not move". Position, not magnitude, of a star determines its inclusion in the compass. The function of the stars is to indicate points around the horizon's rim. These points remain fixed whether the stars are visible or not, or currently in the appropriate position. The cardinal compass point and basis of the system is the point where Altair rises in the east. Altair passes very near the zenith of the Carolines, and while not in true east-west alignment, its use is solely as a reference. Everything is conceptualized with it, not with imaginary lines as in the western system of parallels and meridians. Polaris and the Southern Cross upright are North and South. The Southern Cross is actually used for five of the positions on the sidereal compass; and constellations, not just stars, are used in the northern positions.

Etak is a concept of dividing up a voyage into stages or segments by the star bearings of a referent island. A navigator's position at sea is defined in etak terms. Carolinian training includes learning under which star (the direction) every known island is from every other one. One has travelled one etak (or segment of a journey) when the referent island has "moved" backwards by one star point (from one to the next) on the sidereal compass.

The canoe is conceived as stationary beneath the equally fixed position of the stars and sun. The sea flows past, and the islands move astern. The Carolinian navigational system includes the memorization of all the bearings of islands to be visited from the point at which the navigator finds himself; he is always pictured at the middle of the action. If the canoe strays off course, the canoe is viewed as moving and the movements of the islands become temporarily irrelevant. Once back underway and heading along the correct seaway, the islands again slide by under the immobile stars.



Tacking uses the etak concept of invisible referents: the etak island referent is dropped and the destination substituted. Initial tacks are long; successive ones become shorter at each change so that near the destination the canoe is assured of intercepting the island. Tacks are made so many etak in one direction, then so many in the opposite. Most compensations for variables such as wind and wave interference are introduced early in each trip so that navigation enroute can get the canoe close enough to its destination to find land signs or other visual sightings.

The concept of islands being located in blocks or "screens" is used by the Puluwatese navigator to adjudge journeys easy or difficult. Deep reefs are important for extending the screens between and around islands. Wave patterns vary over a reef, and the color of the sea alters as well. Wave interference phenomena and normal wave patterns of the ocean swells are noted too.

Homing birds - noddies, white and sooty terns, and boobies - all act as reliable indicators of land between 10-25 miles off. (At five miles you can often, weather permitting, see an island without any kind of instrument.) According to David Lewis, birds are found in the folklore of the Carolines too. On Pulap Atoll, just north of Puluwat, it supposedly was a magic kuling (species of plover) that first revealed the secrets of navigation to mankind.

In addition to the villagers provisioning the canoe about to set out on a voyage, there are three major operational phases of Puluwat navigation: 1) establish initial course and sailing plan; 2) maintain enroute course and position (using the sidereal compass, etak, the sun, wave swells, and more recently, the mariner's compass); and, 3) locate the destination (sailing into "screens," bird lore, reefs, and laying to).

Future Navigation

What might the future hold for the traditional ways of voyaging in these central Carolinian islands? The following features of the traditional lifestyle are necessary for the old ways to survive beyond the current generation: retention of a social structure where voyaging is an integral part; keeping the Carolinian art and navigation intact; and the availability of trained navigators to teach new men their art.

The economy of Puluwat is gradually changing as more people leave subsistence living on the island for cash jobs elsewhere and new business and trade with others increases. Changes are being introduced by the emigrants. In the early 1960s, the head of Lefatu canoe house and his younger brother introduced motorboats to Puluwat for the first time. Also at that time, tin and cement were introduced for construction purposes. Both changes were initially criticized, but soon they were copied by several families on the atoll, particularly those with members on government payrolls. As of August 1979, two of the approximately twenty canoe houses on Puluwat were roofed in tin; the others were still covered in the traditional, locally available thatch. Inter-island sailing canoes were still going to other islands, but people were beginning to use the irregularly scheduled administration boats as well. There were about as many mechanized craft as traditional ones, and cement houses outnumbered thatch.

What will happen to the Carolinian navigational technology? Based on David Lewis's We, the Navigators, we could say:

As the magnetic and sidereal systems of orientation are so nearly incompatible, and since charts and compasses are far easier to master than sea lore requiring half a lifetime of laborious study, it seems certain that the Carolinian system will ultimately disappear and be replaced by the European. The use of a magnetic compass for secondary orientation is probably about the limit of modification the Carolinian concept will stand; in default then of the possibility of incorporation, it must eventually be supplanted.

The abandonment of the initiation ceremony for new navigators marked a decline in the formal recognition of the society concerning its special heroes. As the older master navigators die, it is these new, uninitiated men who must carry on the training. It may be that this diminished prestige will further erode the already limited respect for them as teachers. The ancient arts of navigation have died out in most parts of the Pacific. Perhaps cultural pride of the people of Satawal and Puluwat and their navigators can prevent the same thing from happening there.

NOTE: The Atlas of Micronesia is available from MARC, University of Guam, UOG Station, Mangilao, Guam 96923. In its own words, the Atlas "covers the portion of the western Pacific Ocean called Micronesia. Emphasis is placed on the archipelagic areas of the Mariana, Caroline, and the Marshall Islands with special regard for the major characteristics of the region's natural, man-made, and human resources. A thematic map presentation includes population distributions, fish and marine resources, political and economic boundaries, climate and rainfall, and historical and cultural developments. The book is comprised of maps, graphs, photographs, drawings, and text designed to reveal the complexity of the area." Price is around $US20.00.

CORAL REEFS UNDER THREAT

Coral reefs are among the earth's most biologically productive and diverse ecosystems. Reefs provide critical habitat for an abundance of sedentary and migratory sea life and in turn, yield fish, shellfish and crustaceans on which many Pacific islanders depend. The presence of reefs and sandy beaches (which corals help form), have made tourism the leading economic sector in several Pacific islands. Of foremost importance for humans however, is a reef's ability to protect a coastline, preventing erosion and creating sheltered harbors.

Although they are one of the planet's most long-lived natural communities, only recently has progress been made in understanding their importance on a local and a global scale. In the tropical Pacific where coral reefs are a dominant feature, these fragile ecosystems are facing unprecedented destruction.

Throughout their range in the South Pacific, vulnerable coral reefs are showing signs of stress and damage. Many human activities, both inland and in or near the coastal environment, have impacts which harm coral reefs thus rendering them incapable of fulfilling their vital role in the ecology of the Pacific.

What Are Coral Reefs?

Coral reefs are tropical, shallow water ecosystems, largely restricted to the area between the latitudes 30 degrees south and 30 degrees north. In the tropical Pacific, warmth, sunlight and clear, well-circulated water help promote the growth of corals, which generally have very specific requirements for temperature, water clarity, light, salinity and oxygen.

Reef-building corals or stony corals are animals (polyps) that collectively deposit calcium carbonate to build colonies. The coral polyps have symbiotic algae (zooxanthellae) within their tissues which process the polyp's waste products, thus retaining nutrients. A reef is a population of stony corals which continues to build on products of its own making, however not all reefs are constructed solely of corals. In particular, certain types of red algae also contribute to the formation of the reef framework.

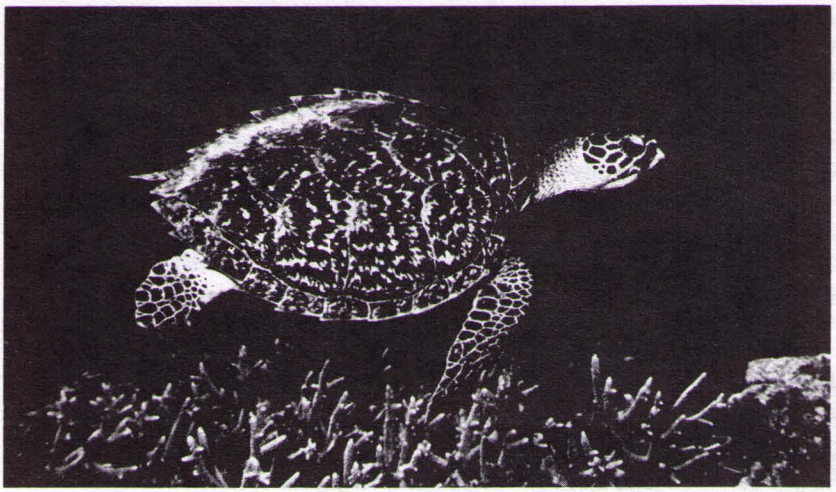
Reefs fall into two main categories: shelf reefs, which form on the continental shelf of large land masses, and oceanic reefs, which develop in deeper waters, often in association with oceanic islands. Some peoples of the Pacific live on coral atolls, which are roughly circular reefs around a central lagoon and are typically found in oceanic waters.

Many reef-building corals have slow growth rates, which may be slowed further by sources of natural stress such as storms, predation, disease and sea level changes. Although reefs are well adapted to recover from these disturbances, recovery rates can vary from a few years to several decades. Despite a reef's experience with constant change, there is increasing evidence that a reef's recovery rate may significantly slow as a result of human impact, combined with natural disturbance. Human-induced damage is also more apt to be chronic rather than temporary.

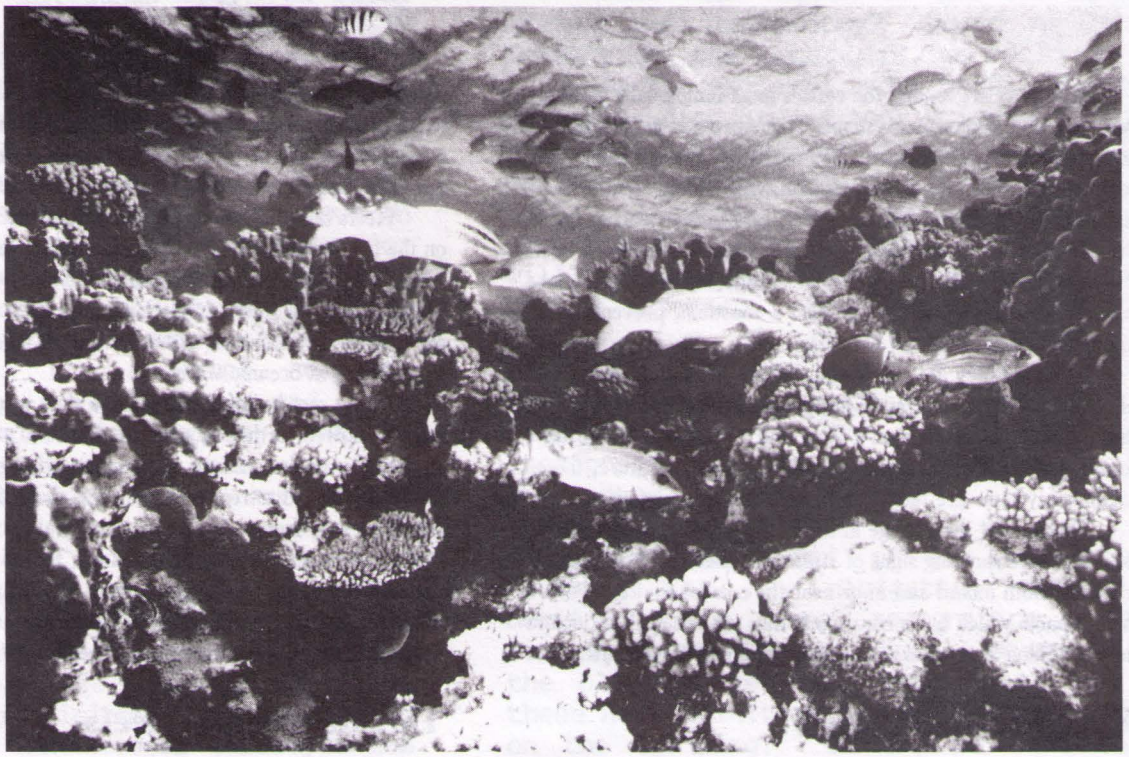
Threats to Coral Reefs

Sedimentation

Soil run-off substantially increases the sediment load of coastal waters and is one of the most widespread problems in the region that has damaging effects on corals. The reefs most affected are fringing (nearshore reefs) around high islands where the soil is eroded after deforestation, slash and burn agriculture, mining and mangrove destruction. Once removed from the land, soil can be carried to the sea by a nearby river and deposited on coral reefs. Severe damage results when corals can not tolerate the



Hawksbill turtle. Coral reefs are important habitats and feeding grounds for some endangered sea turtles. (Douglas Faulkner)



The productivity and immense diversity of coral reefs have been compared to their terrestrial counterparts, tropical rainforests. (Carl Roessler, 1988)

level of sediment or do not have the behavioral or physiological responses to remove sediment. When the coral reef community is damaged, the diversity and abundance of fish decreases. Increased silt load could act indirectly, for example, on a tuna fishery by killing planktonic larvae of coral reef fish upon which tuna feed. Siltation is also caused by harbor dredging (commercial and military), oil drilling, and construction work.

Domestic, Industrial and Agricultural Pollution

The problem of soil run-off is often compounded by the input of sewage, pesticides, and other pollutants. The uncontrolled discharge of generally untreated sewage and industrial effluents into coastal waters, is a common practice in many Pacific islands. These pollutants accelerate the growth of algae which smothers corals and depletes oxygen. If the pollution source is not removed, a reef can rapidly deteriorate and the fish and invertebrates dependent on the reef, either leave or perish. In addition, serious health hazards are posed to humans who swim in polluted waters or consume fish/shellfish contaminated with fecal bacteria or toxins.

Deleterious Fishing Methods/Over-fishing

Over-fishing and destructive fishing methods (DFMs) are responsible for reducing the abundance of reef fishes, disrupting spawning and feeding grounds, and reef degradation. In heavily-populated islands, catch rates of shallow water reef fish have fallen drastically due to heavy exploitation. The problem of overfishing is exacerbated by DFMs and by increased runoff and siltation.

Although prohibited in most Pacific nations, the practice of blast fishing, commonly referred to as "dynamiting," and the use of fish poisons or intoxicants are widespread. In addition to the physical damage these inflict on a reef, they are indiscriminate and wasteful 'fishing' methods. Blast fishing simply involves dropping one or more charges from a boat into the water, then the boat moves off to one side and later returns to retrieve the dead fish. This practice results in a high kill rate of many species of fish, only a portion of which are harvested. Fish are also killed or stunned (for easy capture)—by fishermen and aquarium fish collectors—with the use of bleach, cyanide and pesticides. These toxic substances pollute the marine environment and pose a serious threat to marine life, and because these substances are incorporated into the reef food chain, humans who consume contaminated harvested fish/shellfish are also at risk.

Another human health problem associated with areas of damaged coral is *ciguatera poisoning*. This distinctive type of food poisoning is caused by the consumption of tropical fish, that have been contaminated with a marine toxin. It has been demonstrated that the ciguatoxin adheres to dead or damaged coral surfaces and algae which fish species graze on. While doing no ob-

A coral reef damaged due to destructive dynamite fishing. (Carl Roessler, 1988)

vious harm to the fish, the toxin becomes concentrated in humans by way of the marine food chain. Ciguatera outbreaks often occur after the disturbance of coral reefs by human activities or natural causes. Ciguatera poisoning is a widespread concern, prevalent in French Polynesia, Australia, New Caledonia, and some smaller island nations.

Nuclear Weapons Testing

The majority of nuclear weapons testing in the South Pacific has taken place in, over or under low-lying coral atolls. Consequences of nuclear testing are two fold—direct blast effects and long-term radiation effects. Nuclear detonations extensively damage fragile coral reefs by leaving behind deep craters and creating fissures in the limestone substrate. In some instances, nuclear weapons tests have caused the total vaporization of atolls! Nuclear detonations and storms are responsible for depositing tons of radioactive mud, scrap and waste into the marine environment. The consequences of radiation exposure to coral reefs and marine life are more subtle (biochemical and genetic changes) and need to be further investigated.

Exploitation of Reef Species

The extraction of coral from reefs for profit and possession is an increasing and ill-monitored problem. Souvenir-collecting tourists and commercial coral operations can both be agents of a reef's demise, as can a company which mines large quantities of coral and sand for building materials. The over-exploitation of many reef fishes, molluscs and invertebrates (particularly black and stony corals, collected for the marine curio trade), may result in an ecological imbalance of a reef and a decrease in its diversity.

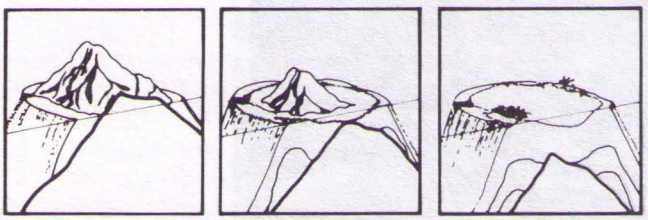
Climate Change

For coral reefs and in particular low-lying atolls, a growing concern is the potential impact of climate change on sea level. The 'greenhouse effect,' a gradual increase in the temperature of the Earth's atmosphere as a result of a buildup of carbon dioxide and other gases, may cause physical expansion of the ocean. Studies indicate that a one meter rise in sea level—enough to drown many Pacific atolls entirely—could occur in the next 50 to 100 years. It is doubtful that reef growth could keep up with sea level rise.

Reefs may also be affected by changes to weather patterns and world-wide oceanographic conditions which are predicted to occur also as a result of the greenhouse effect. The phenomenon of coral "bleaching" (loss of symbiotic zooxanthellae) and subsequent mortality is becoming far more extensive. Bleachings may be caused by unusual meteorological and oceanographic events such as the abnormally high sea-water temperatures which accompanied the severe 1982–83 El Niño event.

Preserving Coral Reefs

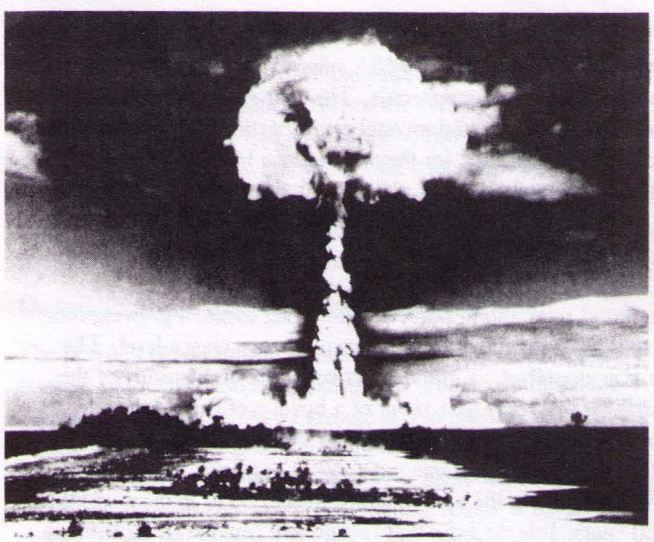
The preservation and management of coral reefs is an international concern. Like their terrestrial analogs, tropical rainforests, coral reefs are very productive and diverse ecosystems that are being seriously threatened at a faster rate than the rate of progress being made in our ecological and scientific understanding of how they work. No one program can reverse the current trend of widespread reef degradation, but actions can be taken on local and international levels to help halt further degradation and facilitate the recovery of devastated areas.



It has been theorized that if a high island with a fringing reef subsides slowly enough to allow the reef to keep growing, it will eventually form an atoll, a chain of reefs enclosing a lagoon.

The knowledge and technology to avoid much human-induced destruction to reefs is now available. For example, reforestation of rainforests and mangroves can substantially reduce soil run-off and waterless waste treatment practices can replace direct discharge into coastal waters. To slow the surge of damage to reefs caused by ill-planned development and ill-managed activities, coastal zone management programs are now being developed in many Pacific countries. Evidence supports the concept of placing coastal management in the control of local coastal communities. Public support for conservation of reefs is essential where enforcement is often minimal. A more direct attempt at reef management involves the establishment of marine protected areas.

Many human activities associated with development do not have to be in conflict with coral reef preservation and management, but in some cases the two are not compatible. Activities such as nuclear weapons testing and the disposal of radioactive and hazardous wastes are incompatible with the protection of low-lying coral atolls. A low-lying coral atoll cannot be distinguished from its marine environment and must be thought of as an inherent part of that marine environment. It is unrealistic to imagine that toxic materials (from testing and storage) can be kept on an atoll—a land area subject of typhoons and tsunamis—and separated from the ocean environment. Therefore, low-lying atolls should be designated as "specially protected areas" deserving of protection and careful planning.



The coral atoll of Moruroa in French Polynesia, has been one of the sites of France's nuclear weapons testing program. There is now evidence of underground subsidence, deep cracks and fissures in Moruroa.

GREENPEACE Pacific Campaign

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STRANGERS IN PARADISE

Indians are fleeing Fiji, under threat from its tidal wave of nationalism. Simon Winchester reports.....

The small advertisement buried in the personal columns of the Sydney Morning Herald the other day offered an unwitting insight into the tragedy of modern Fiji. "Shining Pearl," it began, "Trapped in a Stormy Sea."

"Pretty, talented young Indian girl," it continued, "frustrated by evident lack of future in her troubled country, and seeking new life in Australia, hopes to correspond with and meet young man with a view to friendship and possible marriage. Write Box 1234, Suva."

Thus has life in modern Fiji become apparently intolerable for yet another wretched Miss Patel or Miss Chatterjee or Miss Singh who, a year or so ago, might reasonably have expected to live out her days in one of the 300 western Pacific islands - the Fiji Group - that many Indians have long thought of as their own.

One of the untidier legacies of the British Empire is being ruthlessly tidied up, as the Fiji islands begin to return to the ownership of the Fijians themselves. Fiji's Republican - and now non-Commonwealth - government issued figures a month ago which claimed to show that, thanks to the emigration of so many Indians, there was now an actual majority of ethnic Fijians in the islands. It was probably not quite true - the last credible count showed 330,000 Fijians and 347,000 Indians. But the figures caused great celebration among the Fijian community.

"Pssst!" hissed an old man as I wandered through the Finance Department in Suva on the day the figures were announced. "Want some grog?" And he beckoned me into a room where 10 middle-aged civil servants had taken some time off from their paperwork to get mildly mellowed-out on yaqona - the local version of that slightly narcotic and very Pacific loving-cup, kava. "Have some grog with us, man. Hear the news? We've got the numbers now, you know." And the men, all dressed in shirts, sulu skirts and sandals, passed around the half-coconut shell with its frothy grey contents.

The policies that have led Fiji to this have their origins, of course, in Colonel (now General) Rabuka's infamous double coups of May and September 1987. Up until that moment the Indians, whom British colonial sugar planters had shipped in on short-term contracts a century ago to do the work the reputedly lazy Fijians would not, had assumed, like Miss Shining Pearl, that they could remain in the Pacific eternally. General Rabuka changed all that, with his battle-cry of "Fiji for the Fijians!" and his backing of policies that placed ethnic Fijians in all sensitive and senior positions of authority.

Now today there are dismaying indications that the spirit that prompted all the eruptions of excess - the summary removal of the democratically elected government, the imposition of punitive laws, the abrupt abandonment of the relationship with the Commonwealth, the declaration of Fiji's new status as a Republic - is growing ever more extreme.

Indians could face a wave of racialist threats, forcible expulsion, even of pogroms; and the placid life of these rich and pleasant islands could be dislocated by an upsurge of a new kind of religious fundamentalism.

Fiji, its people once enthusiastic cannibals, was essentially tamed and brought to heel (as imperialists liked to put it) by the heroic efforts of 19th-century Wesleyan Methodist missionaries. By the end of the last century the island people were almost wholly Christian.

Once the British left in 1970, so the Methodist Church became a vitally important policy-making body. So long as moderate Methodism flourished, so the tone of government remained moderate.

In the past weeks, however, there has been something of a palace revolution within the ranks of the church itself. A rebel fundamentalist pastor, the Reverend Manasa Lasaro, has had himself declared official head of the Methodist Church. The legally elected head of the church has spluttered and called for Lasaro's removal and arrest - but thus far nothing has happened.

The Lasaro view of the Fiji Sabbath - a matter of great symbolic importance to modern Fiji - is an uncompromising one: no work should be performed, he says, nor should there be fun. No planes should fly in or out of Nadi airport. No taxi cabs should ply the roads. And no shops should open, nor any hotels offer any facilities to customers. It is a view which is increasingly taking hold - General Rabuka has already insisted that most of the country shuts down Saturday midnight until Monday morning.

And it is a view that hurts the Indians. "Why may we not run our cars on Sunday?" asks Krishna, one of the Nadi airport taxi-drivers. "All taxi-drivers are Indians, mainly because we are the ones willing to get up at dawn and go to collect passengers from the planes."

The official government view of the Methodist rebels is one of great distaste. Mr Josefa Kamikamica, the Finance Minister, and one of the wiser and more moderate figures in the cabinet, calls them "madmen". But are not the fundamentalists linked, spiritually if not officially, with the old and discreditable Fiji Nationalist Party - and is not that party linked, spiritually if not officially, with your own Home Minister, General Rabuka? The Finance Minister looked uncomfortable. "You will have to ask those people. The official policy of this government is not anti-Indian. I will not be a member of any government that was."

And that, in a nutshell, is the problem. For the new right-wing, the fundamentalist, pro-Fijian, anti-Indian, nationalist, call-them-what-you-will groups, all seem to have as their common denominator some links with the Fiji army and with the former playboy and now new-testamentalist pastor, Sitiveni Rabuka. And "Steve Rabuka watches everything like a hawk," remarked a Commonwealth diplomat. "He watches the government to make sure it keeps in line with his wishes, with the wishes of the church and the army. And if it steps out of line - well, that's when you hear talk of a third coup d'etat. You hear it all the time. This poor government - people like good, old Joe Kamakamica, who are fundmentally decent men - must be very nervous, always looking over its shoulders to see if the troops are coming back. Rabuka runs this place. Rabuka and the mad Methodists. And the madder they get, the worse life gets for the outsiders."

"We are finding problems in getting licences to import rice," says wealthy Indian businessman Kanti Lal Punja. "In 20 years I've never had a problem. Now all of a sudden these new Fijian bureaucrats are running things, and I can't get to import rice, machinery, spare parts - if you have an Indian name, there are delays, import permissions are denied, my factories get into trouble."

"I won't leave. I'm rich enough and settled. But the ordinary Indians, the ones who have no opportunity of leaving - for them life in Fiji will be very unpleasant."

Life for most ordinary Indians is dire enough anyway. The shacks in which so many thousand of the canefield workers live are mean by any standards - a leaking tin roof, a few square yards of mud for a garden, a two-hour walk to the fields, hours of back-breaking work under the sun.

"And now the landowners are under pressure not to renew leases to Indian cane-field operators," said Mr Punja. "If that happens, and the poor Indians are driven away from the very canefields that brought them here - then they have no work and, since the Fijians have no work ethic at all, Fiji won't have any sugar. Then everyone loses - the Indians, the Fijians, Fiji - everyone. It could be a pretty terrible situation."

General Rabuka goes on the radio these days to say the island republic is "a Pariadise Lost", and it is up to us, the ethnic Fijians, to reclaim that Paradise. The fact that almost every business in Fiji is Indian-owned is, Rabuka believes, due to Indian cunning and duplicity, not to Fijian incompentence or naivety.

Few non-Fijians believe his view to be realistic: but Rabuka, they say, is a dangerous figure to have such influence in so potentially troubled a country. But he is, from his position in the wings, a figure of enormous influence - and so long as he, and men like the Reverend Lasaro, have the reins of Fiji firmly in their hands, so the Shining Pearls will continue to seek a way out of a country that once was Paradise for them too, but is on the verge of turning into something very different indeed.

[Manchester Guardian Weekly, Apr. 2, 1989]

TABAI - big heart in a small country

by Rowan Callick

The South Pacific's longest continuous serving leader is also its most genuinely modest. He is often to be seen strolling in shorts and islands shirts along the lagoon, or waiting in a queue to catch a bus.

Some would say his tiny nation has much to be modest about. Kiribati has a population of only 65,000.

Yet its problems are as large as the area its islands encompass, the size of the United States of America. Its islands have a land area of only 690 square kilometres, spread over a sea area of 5 million sq kms.

President Ieremia Tabai has demonstrated, over ten years at the top, a rare determination to face those problems squarely in the eye.

After independence in 1979 (as half of the former Gilbert and Ellice Islands; the latter became the even smaller state of Tuvalu), the colonial power, Britain, continued to subsidise the recurrent budget by several million dollars per year.

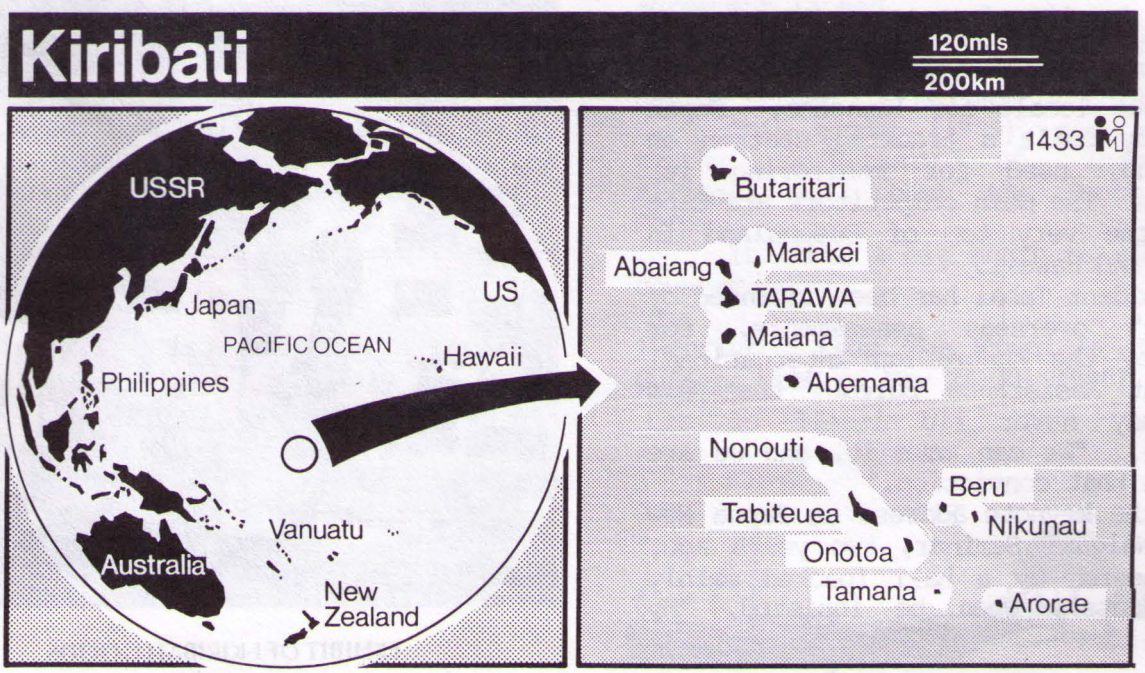
Then four years ago, when the British representative arrived at Tarawa for the annual aid discussion, President Tabai politely told him, "Thanks, but no thanks." The Government of Kiribati had decided to curtail its spending rather than continue in dependence. "There was nothing to discuss," said the President. "So he left on the next plane."

Kiribati had developed a unique fund, which astute economic observers such as former Fiji Reserve Bank Governor Savenaca Siwatibau, now based in Port Vila as director of a UN programme, regard as offering a potential model for the region.

TAXES

This Revenue Equalisation Reserve Fund consists of the proceeds of taxes on phosphate production at Ocean Island, managed by the London Merchant Bank and supervised by a Kiribati committee chaired by the Finance Minister. Its aim is to maximize income while avoiding exchange losses, with most of the interest reinvested.

Until this year, the fund has been totally invested in government bonds. But when it reached $A200 million (Australian currency is used in Kiribati), 20 percent was shifted to equities as advised by London broker James Capel. Statute forbids the principal from being applied for financing deficits. Of the country's 1988 (calendar year) $80 million budget, $7 million has been contributed from the



funds, the rest of revenues deriving chiefly from customs and other domestic taxes.

Other income comes from fisheries licenses permitting refuelling at sea and pursuing chiefly migratory tuna (negotiated bilaterally with the Japanese and Koreans) and via the Forum Fisheries Agency's multilateral deal with the Americans.

The country's capital works programme, of about $20 million, is chiefly funded by aid. This year, a significant amount is being spent on refrigeration to help develop a locally based fishing industry. Two boats were recently launced in Fiji, intended for Kiribati, funded out of European Community grants.

Up to 1,000 Kiribati sailors are working, at any one time, on ocean going ships around the world. Their remittances provide 8.6 percent of the country's gross domestic product. In an attempt to turn this skill to more direct local benefit, an extension of the country's marine training school is being funded by Japan to train Kiribati fishermen to work on Japanese fishing vessels. This programme is being conducted in the expectation that the current fracas between the South Pacific Forum countries and Japan over an attempt to conclude a multilateral treaty will be resolved satisfactorily.

CHALLENGE

Kiribati is also planning to challenge for the site of a regional space centre. The government has already suggested to the Japanese space agency MASDA, the use of Christmas Island, virtually on the Equator, the most advantageous locale for launches. Japan has already built a tracking station on the island, used for monitoring its satellites. The main competitors are Cape York at the very top of Queensland in Australia and Hawaii.

President Tabai has been incensed by "realistic" overseas assessments, for instance by the Australian International Development Assistance Bureau, that his country may never rid itself of aid dependence. "We can make it, and we are working on that conviction."

In the keynote address at Papua New Guinea's Waigani Seminar, two years ago, he was cheered by a hall (packed mainly with students), when he insisted, "My country would rather be poor and independent than wealthy and dependent."

He said, "We are trying to improve our way of life in a way that doesn't cost a lot.

PHILOSOPHY

We are looking towards subsistance affluence. There are a lot of things people can make in small industries, without going to universities: garments, shoes and so on. In Kiribati we don't accept dismissive assessment of people.

"We accept that ours is a marginal case, but we only need a small shift on the side of viability. It means being realistic about wages. It means leaving protection behind."

President Tabai, aged 38, married with three children, is a graduate in accountancy from Victoria University in Wellington, New Zealand. In keeping with the rest of his down-home philosophy, he is not part of the South Pacific have-ticket-will-travel, flying set more commonly encountered in Sydney or Honolulu than in their own countries.

"The Commonwealth Secretariat has a fund to pay for representatives of small states such as ours, to go to the United Nations General Assembly meetings. But I would have felt uncomfortable, so I declined. I'd rather the money be spent at home on development."

EXHIBIT OF I-KIRIBATI GOODS

For similar reasons, Kiribati has been reluctant to accept a partol boat on offer from Australia under its regional project, because the maintenance cost will be too high.

Communication has been a huge problem for the country, especially during the recent travails of Air Nauru afflicted by a pilots' strike. That left only Air Marshalls serving Kiribati. "It's a vicious circle. We don't generate enough traffic, so we can't attract more flights." And since Kiribati is a very long way from potential export markets, one of its new hopes is to attract foreign exchange to come to it in the form of tourists.

There is a tiny national domestic airline, Air Tungarus whose three planes fly huge distances, including 3,000 kms from the capital, Tarawa, to Christmas Island, in turn two hours flight from Honolulu. Christmas Island, with a small hotel ripe for expansion, receives a weekly tourist flight from Aloha Airline. The island was used as a base for UK and US nuclear testing in the 1950s and 1960s.

Kiribati receives a monthly shipping service from Australia, the source of much of its imports, and a less frequent Japanese service as well as the Pacific Forum Line which services the region.

"It's difficult to attract foreign investment because of our lack of economic infrastructure," said the President, who was pleased to see the Forum's permanent arm, now retitled the Forum Secretariat, upgraded at the annual meeting in Tonga in August [1988]. "But such bodies can never be a substitute for our own capacity to mature."

He pointed out that the Forum's free trade agreement between the islands and Australia and New Zealand, SPARTECA, "will only help those already in a position to help themselves, if they already have goods to export."

PRIVATISATION

Kiribati is working towards encouraging more privately owned companies, said the President. "I am converted to the idea of privatisation. It makes sense. In the last year, we have privatised telecommunications. Next will be the government-owned shipyard. American consultants have prepared a report on all government enterprises.

"But politically, it's difficult. The people expect the Government to own everything. so it has to be done in stages. Without political acceptance, such a policy is useless."

Kiribati has registered a claim that remains outstanding for $50 million that it claims it is owed by Australia, Britain and New Zealand under their administration through the British Phosphate Commission of the Banaba (Ocean Island) mines exhausted in 1979 after 73 years. "Our argument is that the market price was never paid for the phosphate, sold at a subsidised price to their farmers. We have asked for arbitration but they have not agreed."

Rural development is focussed on improving access to resources through building causeways and bridges to link islands so that people can easily cross to plant taros, and use more of the marginal land; and blasting reefs to enable people to leave the lagoons to fish in the ocean without having to wait for high tide.

CONCERN

Westpac, in a joint venture with the Government to form the Bank of Kiribati, provides the only commercial bank. Only Australia and Britain have resident missions in Kiribati.

Despite his modest demeanour, President Tabai has not shirked controversy. In 1985, he signed a one year fisheries agreement with the Soviet Union for $US1.6 million. But the catch did not justify the fee, said the Russians and the agreement lapsed.

Under the Kiribati constitution, President Tabai must retire in early 1991, having served the maximum of three terms.

This August [1989], soon after the tenth anniversary of Independence, Kiribati will host the South Pacific Forum.

It takes a big heart to run a small country.

[Reprinted from The Times of Papua New Guinea, week of Nov 24-30, 1988]

BRIEFINGS

HOW ONE RAINFOREST WAS SAVED

LAST JULY, WHEN ETHNOBOTANIST Paul A. Cox arrived in the Western Samoan village of Falealupo, he was shocked to find loggers shearing off the forest's prized trees. He rushed to the village chiefs to ask them why this desecration was taking place. "They simply had no other choice," says Cox. "They had resisted the loggers' requests for years, but finally had to succumb."

Because the Western Samoan government had condemned the local children's school and demanded the village build another one, Falealupo chiefs found themselves an agonizing choice: cut the rainforest or forego their children's education. Says Cox, "these high chiefs literally cried when they saw their trees being felled."

The 30,000 acres of rainforest surrounding Falealupo village on the island of Savai'i comprise one of the world's last surviving paleotropical rainforests, says Cox, an associate professor of ethnobotany at Brigham Young University who has conducted research in Samoa for more than a decade.

"The government of Western Samoa estimates that if logging continues at the present rate, the entire country will be logged out within 20 years," Cox says. Samoa, about halfway between Honolulu and Sydney, is divided into American Samoa (77 square miles) and Western Samoa (1,093 square miles). On the island of Savai'i, the largest of nine islands making up Western Samoa, about 80 percent of the lowland tropical rainforest has been replaced by plantations or logged. In American Samoa, 95 percent of lowland rainforest and 40 percent of the primary rainforest is gone, Cox says.

Not enough money was coming in from the village's cash crop, cacao, because the season had been too wet and the harvest poor. So the village chiefs reluctantly signed a licensing agreement with a local logging company that allowed the firm to cut trees until the school debt was paid off. "We were really in bondage to this school, and we didn't know how in the world to pay off our debt," says High Chief Seumanutafa Siosi. "We support efforts to preserve the rainforest 100 percent."

By Western standards, Falealupo's debt for building the school was small, only $55,000, but it was a huge amount of money for the community. Raising money became Cox's first project. He forwarded about $500 to the Bank of Western Samoa to cover that month's bill, personally guaranteed payments for the next six months and began making plans to raise the money to pay for the school and preserve the rainforest. "If you can believe this, I figure it costs about $1.83 to save an acre of rainforest on this island," Cox says. "What an incredible legacy we can leave the world with such a small amount of money."

Cox quickly convinced Verne Read of Bat Conservation International to take over payments for the next several months while he searched for other sources of money. He told potential donors that "it's crazy to kick these people off their land by buying up the rainforest." Foreign ownership of rainforest land may be a good idea in some countries, Cox believes, but it is culturally or politically unacceptable in others. Better to work with indigenous cultures by helping them economically, and support their natural desire to preserve tropical rainforests.

In December 1988, Cox convinced Rex Maughn of Forever Living Products and Ken Murdoch of Nature's Way, both manufacturers of natural products, to support the project. And in February, Maughn and Murdoch traveled to Western Samoa to present checks totaling $45,000 to the chiefs of Falealupo. The donors also signed a unique document conceived, negotiated and written by Cox that required the donors to relinquish any rights to the rainforest. Each Falealupoan high chief cosigned the covenant and promised in return to preserve the land for 50 years. They pledged to protect the indigenous flora and fauna, including endangered species such as the "flying fox," a fruit-eating bat that is the forest's main pollinator.

The covenant provides for limited use of the rainforest by local people, thus preserving their right to collect plants for medicinal purposes and select certain woods for carving ceremonial kava bowls and building canoes, homes and meeting houses. Small, traditional garden plots are allowed if they are planted along the edge of the forest and do not involve clearing any primary rainforest land. Cox and other scientists will also be permitted to continue their scientific research in the forest, which includes harvesting plants for pharmacological testing.

For his efforts, Cox has been recognized in Samoa—the chiefs made him an honorary "high chief"—but also in places as far away as Sweden, where the king and queen invited him to discuss his work on forest preservation in March, and the king donated $1,000 to the Falealupo project. —*Nancy Perkins*

Nancy Perkins is National News Coordinator for Brigham Young University. She recently visited Western Samoa.

© MARK PHILBRICK

The children of Samoa can have their school and the rainforest, thanks to some creative thinking and financing from conservationists.

possible sites for the dumping of nuclear waste from plants in the US and elsewhere. His proposal was conveyed to the State Department in December 1987 and Congress instructed the Reagan Administration to consider the islands as a nuclear dump site in return for "big money".

Marshall Islands' chief of mission in Washington, Wilfred Kendall, says that the uninhabited islands are forever contaminated. Why not turn a liability into an economic asset!

Senator Debrum, a former Foreign Minister, disagreed saying that the idea of turning the liability of radioactive islands to a commercial advantage was ridiculous. "It's just a sad story", he says. "First you get nuked, then you turn round and offer to store nuclear waste. It is one thing to do something out of ignorance and fear but to do it again for money would be inexcusable."

Debrum disclosed that the people from the affected atolls - Bikini and Enewetok - are among the most enthusiastic about the idea. "They see an opportunity to turn a bad situation into an advantage and to hell with the rest of the islands".

Press editorials strongly condemned the Kabua offer when the story broke in the islands' newspapers. The Pacific Daily News said, "All of the Pacific islands should protest strongly and loudly any further contamination of the Pacific through nuclear dumping. Pacific islanders are very conscious of the fragile environment of their lagoons and islands. We simply don't want any nuclear wastes dumped or stored in the Pacific. We have to make that clear to the US government. We should also tell the Marshallese leaders how we feel."

The Marshall Island Journal wrote, "In late 1986 the government signed with other Pacific nations, the treaty to protect the Pacific environment. The Marshalls joined the South Pacific Forum which has been resolute in opposing nuclear dumping. The government cannot have it both ways. Are the Marshalls going to be part of the Pacific community that has shown its power in regional cooperation or a nation that is viewed as one that will 'sell' its islands to the highest bidder?"

The Journal went on to say: "The Marshalls has business ties with Asia. It doesn't need dirty money from nuclear waste dumping. Indeed, the government says it wants investments to promote tourism. Imagine tourists wanting to vacation in the vicinity of a waste dump. It is bad enough that the Marshalls must live with a legacy of American nuclear tests. But there is no reason to add to that, the US produced the waste, let it keep it."

The Federated States of Micronesia, to the west of the Marshall Islands, like most others in the Pacific, is also opposed to nuclear waste dumping.

Its president, John Haglelgam said, "We hope it won't materialise because the livelihood of the small islands out here depends on the ocean. When you put nuclear waste in the ocean, the potential for contamination is very great. Maybe not in our lifetime but in the future."

Marshall Islands Finance Minister, Henchi Balos, believed that if the study showed that such nuclear waste disposal would be safe and leakproof, "it is likely that the people will consider it favourably." Personally he added, he opposed the whole idea.

Last March, most of the nations which met in Switzerland, agreed on an international treaty to control the export of hazardous waste. The meeting was called to curb what African countries termed "garbage inperialism" or dumping of waste by the West in Third World countries.

The Marshall Islands have to realise there is no future in importing US trash. It will only bring misery, danger and ill-health in the future. The islanders should not sacrifice long-term benefits for short-term gains. The lives of coming generations are at stake because once the hazardous garbage gets into the Marshalls, it would be well-nigh impossible to get it out.

[From **APPEN (Asia-Pacific People's Environment Network) Features #14 1989.**]

GARBAGE IMPERIALISM REARS ITS UGLY HEAD IN THE PACIFIC

By APPEN FEATURES

The Marshall Islands in the Pacific has accepted a scheme for an American waste disposal company to ship millions of tons of non-toxic household rubbish to the archipelago. The waste is to be used as landfill to enlarge the chain of remote and low-lying atolls. In return, the archipelago will also receive millions of dollars.

Speaking during the parliamentary debate in the Marshall Islands on the issue, Senator Hiroshi Yamamura asked, "Do we really trust the Americans? How can we know that the so-called household rubbish is non-toxic?" Another senator, Tony Debrum said the company "may hide toxic waste in order to get money. More than 40 nations have turned down the US offer. Why should the Marshall Islands accept it?"

The Marshall Islands are a double chain of low-lying atolls that the United States used as a nuclear testing site in the 1950s. Some 66 nuclear weapons were exploded at Bikini and Enewetok atolls and some of the areas are still uninhabitable due to radiation contamination. The former United Nations Trust Territory was later administered by Washington and gained semi-independence in 1986. About 90% of the government budget comes in the form of aid from the United States. The atolls cover 73 square miles and are inhabited by 43,000 islanders.
Amata Kabua, president of the Marshall Islands, who first endorsed the scheme in October 1988 wanted the garbage for the money and a badly needed landfill in the archipelago. Few of the atolls rise more than 1.5 m (5 ft) above the sea. It was felt thqat the people have to build land higher with garbage because if predictions of the environmentalists prove correct that the "greenhouse" effect could raise the sea level by 5 metres over the next 60 years, the Marshalls would be totally submerged.

The Majuro parliament hotly debated the resolution on the non-toxic garbage plan on March 10 and passed it by a 20 to 3 majority. Speaking during the parliamentary debate, Senator Hiroshi Yamamura asked, "Do we really trust the Americans? How can we know that the so-called household rubbish is non-toxic waste?"

Senator Tony Debrum said the company may hide toxic waste in order to get money [in order to get the project approved]. More than 40 nations have turned down the US offer. Why should the Marshall Islands accept it?" he asked.

According to Giff Johnson in Majuro, Admiralty Pacific Inc., a waste disposal company based in California, hopes to begin transporting the garbage sometime in mid-1990. Eventually it hopes to ship tens of millions of tons a year.

Greenpeace, which is seeking a global ban on the trade of all wastes has accused the company of trying to evade American regulations on waste disposal produced in the US west coast. The environmentalist group estimates that a ton of American household garbage contains 9 kg (20 lbs) of toxic material such as cleaning fluids, lead-based paints and pesticides, and their removal would make a deal like the one proposed by Admiralty Pacific unprofitable.

President Kabua expects to earn US$56 million a year importing US trash. He says that Majuro can hire scientists to evaluate the safety of the plan and he has been authorised by parliament to negotiate a deal with Admiralty. Dan Fleming, owner of Admiralty says that they will respect Majuro and Washington shippings laws when transporting the waste. The operation will be cheaper than conveying it by land to other parts of the US. Under the proposal, up to 3.5 million tons of waste would be dumped at Bokak Atoll the first year and 25 million tons by the fifth year.

President Kabua previously had suggested that some of the islands be studied as

'Wall of death' sweeps Southern Pacific tuna fishery

from Charles P. Wallace, in Auckland

IN THE SOUTH Pacific, they call it simply "the Wall of Death."

Every evening at sunset during the summer fishing season, boats from Japan, South Korea and Taiwan unfurl spidery nets up to 50 km long and 8 metres deep. In the morning, the nets are hauled in with a huge catch of albacore tuna and swordfish — but also sharks, seals, turtles, whales, dolphins and hundreds of birds.

"In the seemingly endless expanse of clear blue," an environmentalist who filmed the process said recently, "hundreds of fish hung strangely suspended in the water, like a wall of motion that had been suspended in time and space, the nets that held them all but invisible."

The nets are called driftnets, or gillnets. The technology behind them was pioneered by a UN agency to help

Gillnet technology was pioneered by a UN agency

impoverished Asian nations turn a profit from what had been subsistence fishing.

But driftnet fishing has produced a region-wide outcry in the Pacific. Governments have looked on helplessly as their precious fishing resources have been vacuumed from the sea.

Environmentalists say the damage to sea life caused by driftnets is as great a threat as the depletion of the ozone of the atmosphere, or the so-called "greenhouse effect."

"We are witnessing the destruction of a precious resource in our region," said Phillip Muller, head of the Forum Fisheries Agency, a group representing Australia, New Zealand and the Pacific Island nations. "It couldn't be worse. It's as bad as we can imagine."

The driftnet problem also threatens to create new friction in the already strained trade relationship between the United States, which imports most of the tuna, and Japan, Korea and Taiwan, where the main driftnet fleets originate.

Japan and the U.S. announced an agreement Friday to allow observers on driftnet fishboats in time to beat a June 29 deadline that would ban fish imports to the U.S. The status of similar negotiations with Korea and Taiwan was not known.

In the North Pacific, a vast fleet of 1,500 fishing vessels puts out an estimated 36,000 kilometres of driftnets every day, ostensibly to catch squid. But fishermen in the North America contend that the driftnets are intentionally catching huge quantities of salmon and steelhead trout — and this is illegal.

The Japanese have offered as a first step to station 32 observers aboard their driftnet fleet, but the proposal has been sharply criticized as inadequate by environmentalists and the U.S. Department of Commerce.

Driftnet fishing has proved so economically successful in the South Pacific that the fleet has been expanded from 30 vessels last season to 160. At the end of the North Pacific season last year, many of the boats moved to the South Pacific, where the primary fishing season is in the Southern Hemisphere summer of December through March.

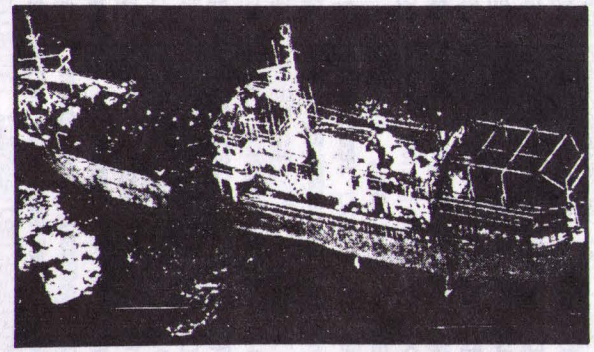
"The concern of the island nations is the impact this will have on the fishing stock," said Talbot Murray, a scientist with the New Zealand Ministry of Agriculture and Fisheries. "With just these 160 vessels, the take will be four times the sustainable

"It couldn't be worse. It's as bad as we can imagine."

yield from surface fishing. If we can't solve it very quickly, we've lost the key fishery for the South Pacific."

The driftnet boats target two-year-old tuna by keeping the nets near the surface and fishing in the relatively narrow feeding belt on the tuna migration route from south to north. Because tuna do not begin reproducing until age five, the fear is that the depletion of two-year-olds could destroy the South Pacific fishery's ability to be self-sustaining.

At the end of May, New Zealand became the latest Pacific state to ban driftnet fishing from its waters, preventing the fishermen from refuelling or transshipping their catches.



■ TYPICAL driftnet pirate boat (top); "ghost" netting keeps killing

"The Pacific as a whole has about 30 per cent of the world's tuna stock," New Zealand Deputy Prime Minister Geoffrey Palmer said in announcing the ban. "We know that gillnet fishing could collapse the tuna fishery if it is not controlled. If we let that happen, it is an indictment of all of us."

The Pacific island states last year banned driftnet fishing boats from their Exclusive Economic Zone, an area extending 200 miles (320 km) from their shores, and refused to resupply the vessels.

But the fishing is done in international waters 1,600 km south of Tahiti, far from the prying eyes of individual governments. Within weeks, the Taiwanese fleets had circumvented the ban by arranging for mother ships to take off the catches and for tankers to provide fuelling without the need to go into port.

Island nations are hoping that a comprehensive ban on driftnet fishing can be adopted at an international level, perhaps in the United Nations. Environmental groups such as Greenpeace have also called for economic measures by consuming nations in North America and Western Europe against the countries using drift nets.

"The way to deal with them is to cut their marketing legs off and see them hobble," said Mike Hagler, the ocean ecology campaigner for Greenpeace in New Zealand. Hagler said his group was studying a range of options that include attempting to interfere physically with the nets in the South Pacific if a ban is not adopted.

Although the driftnet has been widely used for two decades, little is known about the consequences of its use over a long period. Driftnet fishermen have been understandably shy about attracting publicity. Because most of their activities take place at night, it can be difficult to determine what occurs.

Much about the driftnet was learned from the captain of a vessel that foundered after taking supplies to a group of driftnet fishing boats. De-

Greenpeace may attempt to interfere physically with the nets

spite his pleas for help, the fishermen refused to aid him, and he took his revenge by reporting to the authorities.

The arguments against driftnet fishing include suggestions that up to 40 per cent of the catch is simply wasted as the nets are hauled in and that huge quantities of fish not caught in the nets are damaged by them.

Peter Stevens, president of the New Zealand Federation of Commercial Fishermen, said members of his group, hundreds of kilometres from the scene of driftnet operations, are catching "a lot of fish that have been damaged by the drift nets."

Murray, the New Zealand fisheries expert, said that between 12 and 19 per cent of last year's catch had been damaged by driftnets. In addition, the tuna caught in the nets are so damaged that the price for the driftnet catch is apparently slumping.

Less clear is the environmental impact on marine mammals, which are caught up in the nets unintentionally and are either taken with the rest of the catch or discarded.

A Department of Commerce study submitted to Congress in May detailed the impact of just three commercial driftnet fishermen studied in 1982, 1986 and 1988. The three vessels caught 111 marine mammals, including 85 dolphins, 18 seals and eight porpoises.

A U.S. National Marine Fisheries study cited by Greenpeace said the number of dolphins caught accidentally in the North Pacific varied from 11,193 in 1982 to 5,797 reported in 1981. It said an average of 164,500 birds were caught in the driftnets each year from 1981 to 1984.

One of the few people to have witnessed driftnet fishing in the South Pacific at close hand is Robert Goldblatt, an American Peace Corps volunteer in Micronesia, who served as observer on a Japanese driftnet vessel for a month.

Goldblatt reported that the Japanese vessel caught one dolphin, an endangered species, for every nine tuna it landed. It caught 11 whales and 10 sea turtles.

"A large number of fish were killed and then discarded because they were not marketable, were spoiled or had been bitten by sharks," Goldblatt said. "These 'trash fish' made up 16 per cent of the total catch."

He recommended that the states of Micronesia ban further driftnet fishing.

Another problem mentioned by Goldblatt and others in the region is "ghost fishing." When a net becomes snagged or entangled, it is cut loose and drifts for days or weeks, until the fish and sea mammals caught in the net cause it to sink. These "ghost" nets are not only a threat to sea life, they can also endanger small craft.

There has been extraordinary political cohesion in the South Pacific on the driftnet question, but the ban

16 per cent of the total catch is 'trashed'

on processing fish from the nets has placed considerable economic pressure on tiny island states that have invested heavily in fish processing plants.

"Canneries in the region would have to close down if there is no constant supply of quality fish species throughout the year, and this would mean loss of jobs and revenue," Mitieli Baleivanualala, general manager of Fiji's Pacific Fishing Co., told local reporters last month.

But as Muller of the Forum Fisheries remarked, if the driftnet fishing is allowed to destroy the South Pacific fishery, the canneries, along with everyone else, will be harmed even more.

Los Angeles Times

SOUTH PACIFIC FORESTS

All over the Pacific, forested areas are being cut down, burnt or destroyed by development. In most cases, the forest will never return and many unexpected problems have occurred, affecting island people in many ways.

A summary of some of these problems includes:

Soil erosion, land slips and decline in soil fertility resulting in poor garden yields or lack of new areas for gardens;

Flooding of lowland areas;

Loss of areas with special plants and animals;

Loss of local foods, building materials and medicinal plants;

Disruption of island weather patterns resulting in drier and hotter climate;

Loss (depletion) of tree resources resulting in unemployment and decline in export earnings;

Increase in storm damage to villages and gardens due to loss of forest protection;

Silting and pollution of rivers, streams and village water supplies;

Damage to coral reefs from silt washed down by rivers leading to the eventual loss of fishing areas;

Increase in coastal cyclone from loss of mangroves or coastal forest;

Increase in social problems due to disruption of village life caused by loss of the forest, rapid development and lack of concern for the future;

Loss of water supplies for village areas because of drier climate and removal of forests water holding ability.

Forestry is an important export earner for many Pacific countries. It produces money for development projects and creates needed employment. To completely cut down the forest would mean the loss of an important industry.

Pacific islanders need to learn how to manage forest resources in a way that will provide the social and material needs of people without destroying the environmental well-being of the forests themselves.

Some ways to do this are:

Ensure that the forest surrounding rivers, streams and water supplies is protected from damage by logging, gardening or mining;

Limit the removal of timber from natural forest areas to a level at which the natural forest growth can replace the trees removed;

Replant areas of forest that have been destroyed by mining, agriculture, logging or fires. Ensure that areas are conserved for the benefit of valued birds, animal,s fish, insects, plants and trees;

Stop lighting fires in grassland or forest areas. Fires destroy young trees and seeds that would grow again and enrich the soil. The land is laid bare by fires and soil loss is rapid, if there are no plants to hold the soil;

Examples of Forest Destruction

French Polynesia

On the high islands, the main problem has been caused by the large population density on the coast which has resulted in the replacement of the valuable local forest by agriculture and villages. As a result of bush fires and overgrazing, loss of soil (erosion) is rapid. Vegetation on the lower slopes has been completely destroyed by uncontrolled

fires. The rapid erosion of soils is preventing regrowth of the original forest, and is either polluting or drying up water supplies on the smaller islands. Some lagoons have been silted and the number of fish caught in local fisheries has dropped as a result.

Fiji

Natural forest covers just under half the total land area of the country. Since the most accessible areas were harvested first, almost all the commercially valuable rainforest has been removed. New roads have opened up hardwood forests in central Viti Levu and Vanua Levu and the protected forests higher up are now threatened. Other problems include grassland burning, silting of waterways, flooding, cutting down the mangroves and extensive removal of vegetation during construction projects and agriculture causing much soil loss.

Solomon Islands

Timber resources at present rates of export are expected to last another 9 years. There will be a timber shortage after 1998 when the Solomons will have to import timber. Many areas are now experiencing soil erosion, a decrease in fertile agricultural land, silting of rivers and reefs, loss of wild food and building materials, destruction of ancient custom sites, pollution of water supplies, destruction of unique forest and changes in weather patterns towards a drier climate. In many cases, social problems have rapidly emerged. Selling the forests for immediate cash by the land owners who own the forests has brought much stress to traditional village culture. Gardening activity due to population pressure is placing severe stress on forest areas in the island of Malaita and Reef Islands.

[Adapted from information published by the South Pacific Commission]

Palau heads for another vote on relations with United States

Palau could be heading for another vote—its tenth in as many years on the Compact of Free Association and related issues.

United States State Department and Palau Government officials signed an agreement in Guam in late May that ups the US financial aid package in the Compact to meet several key demands of the Palauan negotiators.

US Congressional Representative Ron de Lugo, whose committee had held up the compact for more than a year, said his committee would probably endorse the plan.

The State Department hopes the new agreement will bring approval from Palau voters for a pact that has plunged Palau into internal political turmoil and stymied development.

The new agreement reportedly adds funds to the Compact for the construction of a new hospital and prison, and would assist Palau to pay off foreign medical referral bills and a $US48 million debt from a British-built power station.

But it still must be approved by Palauan voters, who have refused through numerous referenda to provide the 75% endorsement required by Palau's Constitution.

The Constitution provides that any agreement allowing nuclear arms or reactors entry to Palau—which the Compact does—must be approved by 75% of the voters.

The Compact, if approved, would give Palau $US460 million over 15 years in return for giving the United States military base rights for 50 years. Palau's proximity to the Philippines has heightened fears in the islands that they will be used as a fall back if the US loses its installations in the Philippines.

As the possibility of a plebiscite in July loomed, State Department official James Berg announced that the US had no current plans to use military options on Palau land that are allowed in the Compact. The State Department has issued these claims in advance of earlier votes on the Compact in Palau.

From: *Pacific Report*, Vol. 2, No. 11

SCOTT PAPER: QUICK TO CUT TREES AND SLOW TO ANSWER QUESTIONS

On April 28, 1989 we wrote to Scott Paper in Philadelphia expressing deep concern with its proposal to turn 500,000 acres (900,000 hectares) of West Papua into a fast growing eucalyptus plantation. In so doing, Scott will likely bring about serious environmental and ecological damage, and will remove three tribal groups from their homelands. It is doubtful these tribal groups have been given a choice in the matter.

We asked Scott to respond to the points raised by Indonesian environmentalist George Aditjondro in the article we carried in the last issue of **Tok Blong SPPF**. As of late June, Scott had still not responded to our request for information. We have, however, come across further information from Survival International and the Globe and Mail as published in the International Studies Newsletter, Sydney, Nova Scotia (June 1989).

According to these sources, tribal landowners have neither been consulted about the project nor are their land rights being recognized. It seems legal steps to ensure that the project is not environmentally damaging are being avoided.

A number of joint Indonesian and multinational ventures are getting underway to convert the coastal forests of West Papua into pulpwood and woodchip for export. It appears some 60% of West Papua's forests have been applied for as logging concessions.

The Scott Paper-PT Astra project covers an area half the size of Wales. Indonesian groups are outraged that the concession was granted before the legally necessary environmental impact study had been carried out. Moreover, no steps were taken to consult with or even consider the needs of the tribal peoples who are the traditional land owners. Foreign investment for the $US 653.8 million project received the required Indonesian government approval in October 1988.

Scott's clear felling of the forests of the Digul Valley will spell the end of the tribal peoples' way of life. A complex tropical forest ecosystem, which provides all their needs, will be replaced with a vast monoculture of eucalyptus trees, from which they will get nothing. Scott has offered assurances that the local people will benefit by getting jobs on the estate but both government documents and an Astra spokesperson have indicated that the plan is to bring in transmigrants from Java to work on the plantation.

In response to criticism from Survival International, a spokesperson from Scott has claimed that the company is now initiating a three year assessment costing US$8 million to examine the feasibility of the project, including the social and environmental aspects. The company claims that the project provides "a win-win situation", with both the local people and the investors likely to benefit, and asserts that the company will "pack up and withdraw" if it feels the project cannot be successfully carried out. When questioned more directly, however, the company refuses to confirm that it will pull out if the local people are opposed to the project. In fact, all the evidence is that the project is already going ahead. In January the company set up its base camp in Bade and staked out an 80 hectare test plot.

Your letter of concern to Scott Paper asking for information and assurances would be helpful. Write: Mr. Philip E. Lippincott, Chief Executive Officer, Scott Paper, 1 Scott Plaza, Philadelphia, PA. USA 19113.

Tropical Rainforest

Extensive areas of tropical rainforest exist in the South Pacific region, especially in the Melanesian countries.

Country	Forested Area (Sq. Miles)	% of Land Area
PNG	160,000	86
Fiji	4,800	65
Solomon Islands	10,000	90
Vanuatu	3,488	73

In each of these countries, logs and timber are major exports, and the conservation of tropical rainforests is a major concern.

FROM: U.S. Agency for International Development (USAID) *Regional Development Strategy Statement* FY1990-FY1994, June 1988.

BOOK REVIEW

WEST PAPUA: THE OBLITERATION OF A PEOPLE, by Carmen Budiardjo and Lien Soei Liong. Published by TAPOL, the Indonesia Human Rights Campaign, Surrey, U.K., 1988. Reviewed by Susan Yates.

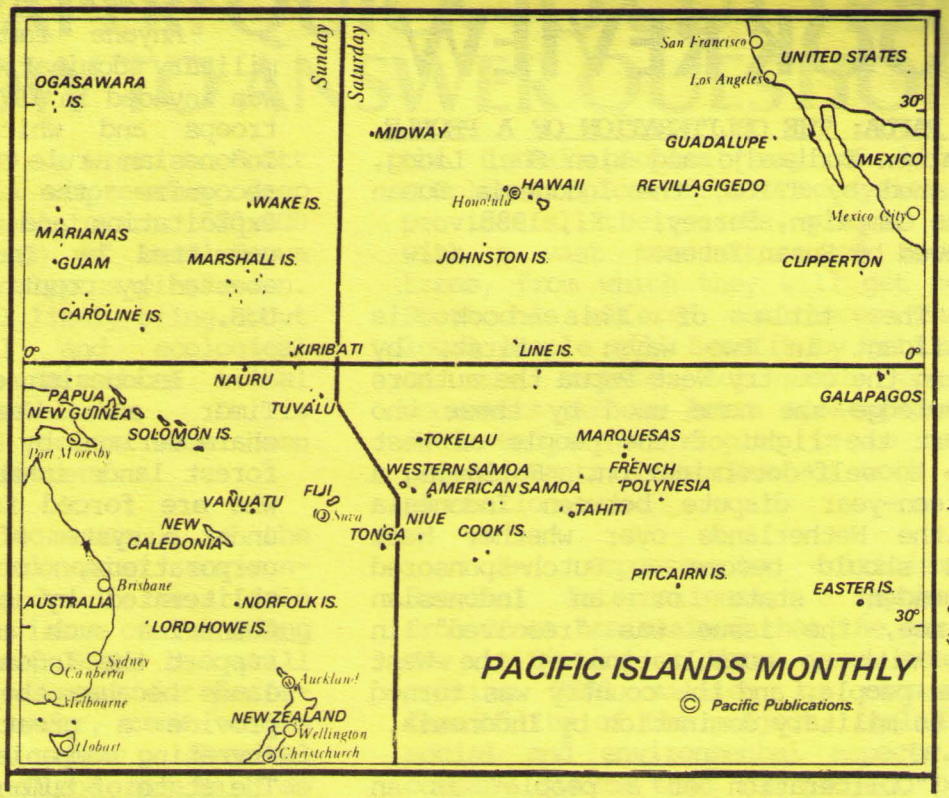
The title of this book is significant in two ways: first, by calling the country West Papua the authors acknowledge the name used by those who support the right of the people of West papua to self-determination. Following a thirteen-year dispute between Indonesia and the Netherlands over whether West Papua should become a Dutch-sponsored independent state or an Indonesian province, the issue was "resolved" in 1962, with no consultation of the West Papuan people, and the country was turned over to military domination by Indonesia.

"Obliteration of a people" is an accurate description of what the Indonesian domination has meant for the people of West Papua. Since the 1960s, West Papuans have suffered terrible violations of their basic human rights: expropriation of their land, racial discrimination, arrest and detention without charge, torture, disappearances and massacres. The most significant of Indonesia's methods in the genocide of West Papuans is probably the Indonesian transmigration program; the largest in the world. Indonesia is re-settling peasants from Java and other areas of Indonesia to West Papua. Survival International calls this program the largest colonisation effort in history, with devastating effects on the tribal peoples of West Papua, whose rights to their traditional lands are being violated on a massive scale.

WEST PAPUA: OBLITERATION OF A PEOPLE documents the history of foreign intrusions and Papuan resistance with chilling reality. Personal accounts of torture and murder illuminate information that has also been well-documented by Amnesty International and Survival International.

Anyone familiar with Indonesian military domination in East Timor which was invaded in 1975 by Indonesian military troops and which has suffered under Indonesian rule since that time, will recognize the pattern of resource exploitation and human rights atrocities committed by Indonesia and aided and abetted by countries like Canada and the U.S.

Indonesian domination of both East Timor and West Papua has been characterized by intense exploitation of forest lands inhabited by tribal peoples, who are forced from their land to work under a system of debt-slavery for large corporations, or who are literally obliterated by starvation and disease. Countries such as Canada and the U.S. support the Indonesian takeover of these lands because they are resource-rich and provide a great deal of wealth for investing companies in the western world. The state of humanity is purposely ignored by western media and by our own representatives abroad and in the United Nations. Indonesia is Canada'a second-largest export market; Canadians are also the third largest foreign investor in Indonesia, following Japan and the U.S. "Business as usual" is conducted with blatant disregard for the people of East Timor and West Papua, and one of the best documentations of this state of affairs is **WEST PAPUA: OBLITERATION OF A PEOPLE.**



RESOURCES

SPACHEE Newsletter This is the newsletter of the South Pacific Action Committee for Human Ecology and the environment.

SPACHEE, an active campaigner and promoter of environmental issues, was established early in 1982 in response to the emphasis placed by the governments of the small island states of the Pacific on social and environmental issues arising out of the South Pacific Regional Environment Programme (SPREP) Action Plan.

SPACHEE's main aim is to improve communication and encourage co-operation between those bodies involved and interested in the areas of environmental and human ecological research and education in the University of the South Pacific (USP) region.

Since receiving a grant, SPACHEE has been able to provide funding for activities on environmental issues by other organizations and host a conference.

A membership of $5 per year will bring you the SPACHEE newsletter. Address: SPACHEE, CRU, University of the South Pacific, P.O. Box 1138, Suva, Fiji.

WANTED: Poems and Short Stories for—*Pacific Island Voice: a literary newsletter.* This is to be a new vehicle for islanders' poetry, short stories, commentary, etc. and will be made available throughout the islands. For further information: Melissa Miller, 2228 Ho'onanea Street, Honolulu, HI 96822.

Know someone who would be interested in *Tok Blong SPPF*? Send us his/her name, address and interest in the Pacific Islands (if known) and we will send a complimentary copy. Let us know if we can use your name as a reference. Send to SPPF, 409-620 View St., Victoria, B.C., CANADA V8W 1J6.