

Tok Blong Pasifik

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The Traditional
Knowledge
of Pacific
Peoples



SPECIAL 1998 CONFERENCE ISSUE

Our Knowledge — Our Rights

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ABOUT THE MAGAZINE

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We welcome contributions to **Tok Blong Pasifik** and readers' comments. A priority is placed upon contributions from Pacific Islanders and others living in the Islands. As an issues focused magazine, **Tok Blong Pasifik** often includes material that is contentious. Views expressed are those of the contributors and do not necessarily reflect the views of SPPF or financial supporters of the magazine. We reserve the right to edit material.

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Tok Tok

Indigenous Peoples' Knowledge and Intellectual Property Rights

by Lopeti Senituli

I cure styes, inflammation of the eyelids. I 'got' it from my maternal grandmother through my mother. I did not realise that I 'had' it because I had not seen any male in my family applying the cure. It was always the women of my family whose services were sought by the 'stye-eyed'.

I only realised I had it some years ago when I was back in my village in Tonga. A distressed family brought their young daughter to our house with her left eye almost shut, the inflammation in an advanced stage. None of the women of my family were home, so I made the family welcome and told them that they would have to wait until one of my women-folk came home. We waited for quite awhile. As dusk approached I could sense that the family was keen to return to their home many villages away. In an attempt to offer some comfort, I suggested that maybe I could 'perform' the cure as a temporary measure. Then

they could come back the next day when the women of my family were home for the real thing. They reluctantly agreed. The 'performance' involved rubbing the palms of my hands together until they were quite hot, then placing one of them over the inflamed eyelid. This was done three times, each time repeating an incantation which I heard my grandmother sing when 'performing' these cures. The family left soon afterwards and when my own folks returned I told them jokingly about what I had done.

The distressed family didn't return the next day or the day after. It was perhaps a week later that someone brought a basket of yams to our home, saying that the family said thank you for curing their daughter's eye. Ever since then I have been curing the stye-eyed wherever I see them - on the buses, in aircraft, on the street, at conferences, in public bars. I never see most of them again, but

SPPF thanks the many organisations and individuals whose support made the 15th annual Pacific Networking Conference and Tour a success.

Margaret Argue, the multi-talented conference organizer, and **Antonieta Pincheira**, her assistant and volunteer extraordinaire.

Ake Lianga for the conference t-shirt design.

Funders and donors of food, space and equipment: Anglican Church of Canada, Big Apple Bagel Company, Breadstuffs, Canadian International Development Agency, Fiji Canada Association, Government of British Columbia, International Development Research Centre, Inter Pares, LGL Limited, Pepper's Foods, Rent-a-Wreck, United Church of Canada, Viti Fiji & South Seas Cultural Society of BC.

Special thanks to Tsartlip Chief Curtis Olsen for his welcome and opening comments, to Elder Theresa Smith of the Tsartlip First Nation for her opening prayer and Elder Daniel Sam of the Tsartlip First Nation for his participation, and to Elder Ellen White of the Snuneymuxw First Nation for her opening and closing prayers for various sessions and her role as a resource person.

Special thanks as well to the resource people: Seini Fiu, Edward Hammond, Francis Hickey, Terri Keko'olani-Raymond, Nelson Kile, Michelle Lam-Kile, Clark Peteru, Soane Puamao, Ralph Regenvanu, Mutang Urud & Maggie Vuadreu.

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those that do usually bring another sty-e-eyed along.

Within my village I know of at least five other families that have 'cures' for ailments ranging from stomach ulcers to broken limbs to schizophrenia. Each 'cure' had its own incantation and concoction of leaves, tree-barks or marine algae and sometimes the performance involved physical pain from pummeling. More often than not, the 'holders of the cure' are women who 'wash-it-on' to their daughters. Sometimes the 'cures' work; sometimes they don't. In all cases however the 'cure' is given without charge and the 'holders of the cure' do not use it for personal aggrandisement.

Within each village throughout the Pacific and the territories of Indigenous Peoples everywhere are families and individuals charged with certain functions of healing, of agriculture, of construction, of fishing and into whose kin whether by experimentation or inheritance comes the knowledge associated with their calling. This knowledge is 'washed-on' to the next generation through informal instruction. It is only in recent times that efforts are being made to record or preserve this Indigenous knowledge for posterity.

Traditional/Indigenous Peoples' knowledge relating to medicinal plants has always been of particular interest to the biotechnology and pharmaceutical industries. Such information increases the chances of isolating genetic material from plants and marine flora that can be manufactured into useful drugs. It is estimated that 75% of all plant-derived prescription drugs were discovered because of their prior use by Indigenous Peoples as medicine. The annual world market value for these plant-derived medicines is estimated at US\$43 billion.

The Pacific region is an 'unknown quantity' as far as bio-prospectors are concerned. They do not yet know what it holds in terms of land and marine based plants and animals, lesser still of which ones are used by Indigenous Peoples for daily sustenance and medicine. But that is fast changing with pharmaceutical companies and research institutes sending bio-prospectors into the 'wilderness' or recruiting scientists from institutions such as the University of the South Pacific and the University of Papua New Guinea. The Pacific is still very much 'open season' territory because few countries have national legislation that regulates the removal of flora and fauna samples; if they do, such regulations are not enforced.

None of the regional governmental bodies that are supposed to be involved such as the Pacific Community (former South Pacific Commission), South Pacific Regional Environment Programme and South Pacific Forum Secretariat have the political will or finances to give priority to safeguarding Pacific peoples' rights and

pecuniary interests. Even the fact that repatriated biological resources have included human genetic material from the Hagahai people in Papua New Guinea has not moved the regional bodies into developing a regional set of guidelines or an agreement in relation to the repatriation of biological resources and traditional knowledge outside of the region.

The fact that ex-situ collections of biological resources are exempt from the UN Convention on Biological Diversity (CBD) is another reason (but no excuse) for the lack of interest from regional organisations. While Pacific governments opposed the exemption, that defeat should not mean the war is over. A possible rallying point is to support the campaign led by the Rural Advancement Foundation International (RAFI) to strengthen the International Undertaking on Plant Genetic Resources of the UN Food and Agriculture Organisation (FAO) and the Material Transfer Agreement between FAO and the Consultative Group on International Agricultural Research (institutions that hold ex-situ collections of plant genetic resources for food and agriculture) regarding the transfer and use of genetic material in these collections. If FAO imposes more stringent regulations on the transfer of food-plant genetic material in ex-situ collections, especially the intellectual property component, then it would only be a matter of time before the CBD will be forced to review the exemption of ex-situ collections.

The protection of our rights over our traditional knowledge of our biological resources and our rights over resources is an extension of our right to self-determination and independence.

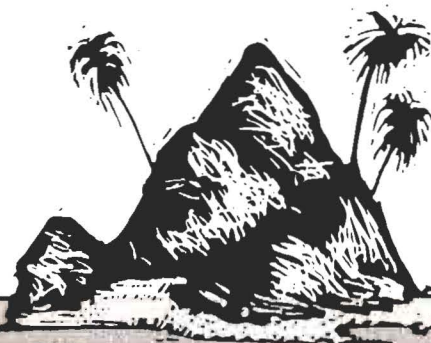
Lopeti Senituli is the director of the Pacific Concerns Resource Centre.



THE (IN)EQUITABLE SHARING OF BENEFITS



Cartoon: Gavino/BioTalk/RAFI



PACIFIC NEWS UPDATES

Regional

Churches Raise Development Concerns

The Pacific Council of Churches has reiterated its stand against development practices that are destructive to the environment, natural resources and cultural values of the Pacific. A statement released during the PCC annual meeting cited unsustainable levels of logging in Melanesian countries and tourism practices that are insensitive to the cultural values of Pacific Islanders as significant problems. With the nuclear arms race in South Asia in mind, the churches emphasised their continuing opposition to nuclear weapons testing.

[From: Radio Australia, Oct 20/98]

Australia Challenged on its Aboriginal Policies

Aboriginal leaders in Australia are claiming that the Howard Government's policies are taking Indigenous rights in Australia "back to the period before the 1960s" and that the new Native Title law "legitimises the biggest land grab since 1788". The United Nations has also weighed in, with the UN Committee on the Elimination of Racial Discrimination asking Australia to explain how the Native Title Act fits with Australia's obligations under the International Convention on the Elimination of All Forms of Racial Discrimination.

The Native Title Act reduces Aboriginal land rights, increases the rights of non-Aboriginal people in land use and makes it easier for state tribunals and governments to overrule Aboriginal rights in favour of economic development activities by non-Aboriginal people. Aboriginal leaders have decided on a three pronged strategy to oppose Native Title Act and the Government's policies: a constitutional court challenge; case-by-case battles over "unworkable" aspects of the legislation; and international action.

[From: *Pacific New Bulletin*, Sep/98]

Kava Council to be Established

Delegates attending a second Kava Symposium at the South Pacific Forum Secretariat have agreed to establish a Kava Council to work towards maximising the benefits to Pacific Islanders from the increasingly important cash crop. The market for kava as a herbal medicine is rapidly growing in the US and Europe. Delegates also agreed on a plan of action for development of the industry and to seek protection for Pacific rights to kava.

[From: *Pacific Report*, Nov 12/98]

Changing Chinese Hats

The continuing struggle between the Peoples Republic of China and Taiwan for diplomatic recognition and influence in the Pacific

continues. The Marshall Islands Government recently established diplomatic relations with Taiwan, prompting China to sever relations with the Marshalls. Balancing the books, Tonga recently switched its allegiance from Taiwan to China. A Chinese donated statue of King Taufa'ahau Tupou IV was unveiled on the grounds of the Tongan palace to mark the new relationship.

[From: *Pacific Report*, Nov 30/98; *Pacific Report*, Dec 14/98]

Melanesia

Bougainville Leaders Press Ahead despite PNG Political Setback

Reacting to the failure of the PNG Parliament to pass legislation that would have allowed the establishment of a Bougainville Reconciliation Government, Bougainvillean leaders from all sides of the conflict have vowed to press ahead with the peace process. PNG politicians, especially the Opposition, have resisted passing legislation that would set up the special reconciliation government in Bougainville, preferring to force Bougainvilleans to accept the same government structure existing in other parts of PNG, i.e. a provincial government with sitting MP John Momis as governor. Representatives of the PNG-established Bougainville Transitional Government, the rebel Bougainville Interim Government, the Bougainville Revolutionary Army and pro-PNG Resistance Forces were united in condemning the PNG plan and vowed to press ahead with plans to establish a Bougainville People's Congress and prepare for election of a reconciliation government.

[From: *Pacific News Bulletin*, Dec/98; *Pacific Report*, Dec 14/98]

Fiji Drought Takes High Toll

While recent rains have eased Fiji's long El Niño caused drought, the human and economic costs have been enormous. The government has had to provide food rations to 240,000 people, 25% of the population, and water rations to twice that number of people. In the hardest hit western part of Viti Levu and the Yasawa Islands, 90% of the population was receiving food aid and water rations as of November and health problems were increasing. As a result of the lack of vegetables due to the drought, anaemia among pregnant women and malnutrition among children is on the rise. The agriculture industry has lost an estimated F\$125 million as a result of the drought. The government and the Fiji Sugar Corporation have put together a F\$43.7 million aid programme for the sugar industry.

[From: *Fiji Daily Post*, Nov 21/98]

Another Political Shuffle in Vanuatu

Vanuatu Prime Minister Donald Kalpokas, leader of the Vanuaaku Pati (VP), has expelled Fr Walter Lini's National United Party (NUP) from the governing coalition. Kalpokas claimed that the NUP was trying to form a new coalition government excluding the VP. The NUP role in the Government has been replaced by a faction of the Union of Moderate parties led by Willie Jimmy. Jimmy replaces Lini as deputy prime minister.

[From: *Pacific Report*, Oct 26/98]

Report Criticizes Vanuatu Police

An Amnesty International report released in September is critical of the actions of police and paramilitary forces during the state

of emergency following January 1998 riots in Port Vila. The report documents severe abuse and torture of people arrested following the riots. Some 20 officers of the Vanuatu police and military are facing criminal charges of "intentional assault". The report is also critical of the "appalling conditions in Vanuatu's prison system", citing unsafe and overcrowded buildings, insufficient food and a lack of safe accommodations for women prisoners. The report commends the Vanuatu authorities for taking action against police and military officers suspected of abusing their powers during the country's first state of emergency and makes recommendations for improvements to policing and prisons.

[From: *Vanuatu: No safe place for prisoners*, Amnesty International Report, Sep 28/98]

Polynesia

Genetic Research Confirms Maori History

Score one for Maori oral historians over their academic doubters. Maori have always maintained that they are descended from ancestors who deliberately settled Aotearoa (New Zealand) in a fleet of 8-10 canoes some 800 years ago. Some academic sceptics have argued that New Zealand was more probably settled either by a single lost canoe or over a period of time by several small groups of lost Maori. New Zealand geneticists have recently studied the mix of genetic characteristics among modern Maori and models of different starting populations. The result: The founding group

arriving 800 years ago most likely consisted of 50-100 women, with 70 being the most likely number. Assuming a similar number of men, one arrives at a group size that corresponds to the Maori's oral history and that supports their claim that this was no small number of people lost on the seas.

[From: *Globe & Mail*, Sep 5/98]

Cooks Commission Recommends Smaller Parliament

The Cook Islands Commission of Political Review has made recommendations for downsizing the country's government. The key recommendation is to reduce Parliament from 25 members to 17.

[From: *Pacific Islands Report*, Nov 15/98]

Micronesia

Marshalls Confirms No Nuclear Waste Policy

The Marshall Islands Cabinet has issued a declaration that foreign nuclear waste will not be let into the country. The declaration was in response to speculation that the establishment of diplomatic relations with Taiwan was a prelude to a nuclear waste deal. Taiwan and the Marshalls Government have previously discussed disposal of nuclear reactor waste on a Marshallese atoll.

[From: *Pacific Report*, Dec 14/98]

Our Knowledge, Our Rights

SPPF Conference Focuses on Traditional Knowledge

by Margaret Argue

The growing concerns of Indigenous Peoples in the Pacific and Canada about the critical issues surrounding intellectual property rights and patent law, and the threats they bring to the traditional knowledge and culture of Indigenous Peoples, motivated SPPF to choose the theme — ***Our Knowledge, Our Rights: Traditional Knowledge and Pacific Peoples*** — for its 15th annual Pacific Networking Conference. The theme gripped the attention and hearts of the delegates and set the scene for great discussions, excellent networking and good times.

Co-sponsored by the Pacific Concerns Resource Centre (PCRC) and Rural Advancement Foundation International (RAFI), the conference was held September 18-20 at the LAU'WELNEW Tribal School, sited on the traditional territory of the Tsartlip First Nation. This was the second year at the tribal school for the conference, a venue that was enthusiastically endorsed by the participants. About 125 delegates — representing ten First Nations and ten countries, attended over the weekend. The opening ceremony began with a prayer in the Tsartlip language offered by Tsartlip Elder Theresa Smith, followed by the official welcome from Chief Curtis Olsen, who recounted some history of the Tsartlip people. In response, Pacific Islanders, both from overseas and living in Canada, conducted a yaqona (kava) ceremony.

SPPF was pleased to host 11 resource people for the workshops and keynote presentations. From across the Pacific came: Seini Fiu and Maggie Vuadreu, both associated with WAINIMATE, a Fijian traditional medicine organisation; Ralph Regenvanu, the director of the Vanuatu Cultural Centre and his co-worker, Francis Hickey; Michelle Lam and Chief Nelson Kile from Solomon Islands; Terri Keko'olani-Raymond from Hawaii; and Clark Peteru from Samoa. From closer to home were: Mutang Urud, from Malaysia but now living in exile in Canada; Elder Ellen White of the Snuneymuxw First Nation of Vancouver Island; and Edward Hammond, a Seattle based

member of RAFI.

While the discussions were wide ranging, workshops looked particularly at traditional medicine, cultural property rights, traditional approaches to resource management, ethical issues related to the use of Indigenous knowledge by non-Indigenous peoples and organizations, and non-Indigenous exploitation of Indigenous genetic property.

In his opening remarks, Stuart Wulff, SPPF's executive director, noted that less than ten years after the Canadian government approved plant breeders' rights, the patenting of seeds, the genetic properties of Indigenous Peoples, including people from the Pacific, have been patented, plant breeders' rights have been greatly extended, and multi-national drug companies are exploiting at unprecedented levels the traditional knowledge of Indigenous Peoples.

Clark Peteru, a lawyer from Samoa, spoke about the surreptitious removal and patenting of Pacific island plant materials by foreigners, about the moves to force patent holders to recognize the traditional knowledge and development that has gone into these removed materials, about the initiatives to obtain economic benefits for Indigenous Peoples who share that knowledge, and about efforts to have an alternative or *sui generis* intellectual property rights law recognized by western nations and western institutions, e.g. the World Trade Organization. Focusing on traditional medicine, Maggie Vuadreu from WAINIMATE spoke on

the role of women in conserving and passing on traditional knowledge. Edward Hammond of RAFI addressed the consolidation of ownership in the seed and agricultural industries, new and disturbing technologies aimed at developing countries — eg. the "terminator" technology — and challenges on the international level to the underhanded actions of commercial plant breeders regarding patent law.

Delegates took part in four thematic workshops:

- *Who Benefits? Who Decides? — Traditional Knowledge, Bio-prospecting and Bio-piracy*



Conference participants gather at LAU'WELNEW Tribal School

Photo: Antonieta Pincheira

- *A Matter of Respect — Indigenous Cultural Property Rights*
- *No More Witches — Traditional Medicine*
- *Traditional Tenure and Resource Management — Answers for a Modern World*

Recommendations from the Traditional Knowledge workshop were: to support the development of *sui generis* options for national protection of traditional knowledge under the General Agreement on Tariffs and Trade (GATT); to support the Treaty for a Lifeforms Patent-free Pacific; to support PCRC to maintain and expand its work on intellectual property rights issues; and to use an upcoming

kava symposium in Fiji as a forum to raise awareness on the control and commodification of kava, especially the threat to Indigenous intellectual property rights of patents and factory farming.

The workshop on Indigenous cultural property rights focused on the pros and cons of patenting intellectual property as they relate to Indigenous culture, the energy expended by Indigenous peoples in their struggles to maintain their cultures and rights in the face of western exploitation, and the strength of belief of Indigenous Peoples in the value of their culture and traditional ways.

The traditional medicine workshop was one of the most

South to North Pacific Visitors on the Road

by Margaret Argue

Little did Pacific Islanders coming to SPPF's 15th annual conference know that some of them would soon be walking in Northwest Coast rainforest in Haida Gwaii or standing on the edge of a remote lake in Northern Saskatchewan. As an adjunct to each conference, SPPF arranges for some of our Pacific visitors to visit First Nations communities in other parts of Canada. Over the years solid ties have been made with the Haida Nation, whose islands territory lies offshore of the Canadian mainland and with Indigenous communities in Saskatchewan, the Canadian province that is home to uranium mining by France. 1998 provided an opportunity to deepen these links.



Photo: Don Kossick

Cree and Fijian healers find common ground in Northern Saskatchewan

Ralph Regenvanu, director of the Vanuatu Cultural Centre, spent several days in Haida Gwaii, dividing his time between two Haida communities, Old Massett and Skidegate. Ralph, who was hosted by the Economic Development and Heritage Resources Unit of Old Massett Village Council, met with Haida representatives to discuss issues around cultural preservation, traditional medicine and fishing practices and steeped himself in the traditions of Haida art.

After the wind-up of the Pacific Networking Conference, it was on to the Canadian Aboriginal Science and Technology Conference in Saskatoon, Saskatchewan, for Ralph and Francis Hickey, also associated with the Vanuatu Cultural Centre, and for WAINIMATE representatives Maggie Vuadreu and Seini Fiu (WAINIMATE is a Fijian traditional medicine organisation supported by SPPF). Their host and chair of the CASTS conference was Priscilla Settee, the Turtle Island representative on the Board of Directors of the Nuclear Free & Independent Pacific Movement. The two teams gave workshops on Integrating Traditional Resource Management Systems and Traditional Medicine.

Maggie and Seini went on a whirlwind tour, organized by Don Kossick of the Community Outreach Centre, through northern Saskatchewan. Visiting the Indigenous communities of Pagan Lake, Meadow Lake, Ile a la Crosse, La Loche and Clarke Lake, they spent time with traditional healers and spoke to a group of Indigenous youth at Dene High School. Next they hopped on a plane to Winnipeg, Manitoba. Hosted by Stan McKay, former Moderator of the United Church of Canada, they saw the workings of the Aboriginal Health and Wellness Project at the Winnipeg Health Sciences Centre. Then it was back to Saskatchewan to wind up their trip with Kerrie Strathy, a former colleague at WAINIMATE. Kerrie had arranged a consultation for them with officials at the Saskatchewan Indian Federated College to explore the possibility of a future partnership with the WAINIMATE Research and Training Institute (still in its conceptual stage).

Even before the conference, SPPF was introducing another set of Pacific visitors to the Pacific Islander community in Vancouver, BC's biggest city. The Canada-South Pacific Ocean Development Program (CSPOD) sponsored a 10-person delegation to Coastal Zone Canada (CZC), a major ocean-oriented conference. The delegates — from Cook Islands, Fiji, Kiribati, Samoa and Solomon Islands — were guests at a SPPF organized "Hands Across the Pacific" reception in Vancouver. The event was a great success thanks to the co-sponsorship and food provided by the Fiji Canada Association and the Viti Fiji & South Seas Cultural Society of BC. The delegation then traveled to Victoria to spend four days at CZC, concluding the conference with their own special session, "Asian and South Pacific Experiences in Community Involvement in Coastal Zone Management". Four members of the CSPOD delegation — Michelle Lam, Nelson Kile, Ralph Regenvanu and Francis Hickey — stayed on for SPPF's conference.



The food provided by Tsartlip women and youth was a highlight of the conference

dynamic. Participants came up with many recommendations: promote positive grassroots attitudes and behaviours about using traditional medicine; urge SPPF to facilitate a submission to UN hearings in 1999 on the disrespect for healers, misapplication of traditional medicines, and violations of applicable international conventions; support the formation and growth of groups like WAINIMATE in western nations; promote respect for the protocol of traditional healers by inviting medical profession representatives to take part in traditional ceremonies; take responsibility for and be part of our own healing; challenge Canadians to look at the barriers to traditional medicine in their health care system; research the implications of the 'Codex Alimentaris' for control of herbals; recognize the right of communities to protect their knowledge from exploitation; send further ideas for action to the Canadian Centre for Policy Alternatives and send song lyrics to Raging Grannies groups and/or form your own Raging Grannies group.

In the Traditional Tenure and Resource Management workshop, the following issues were identified: the need to integrate formal government laws and regulations with a decentralized custom control of land and ocean management; the need to mitigate the influence of western educational models by renewing respect for traditional knowledge; and the need to maintain access to traditional resources and see that they are sustainably managed. The participants recommended that countries should protect traditional ecological knowledge by legislation, that cultural values should take precedence over economic and political values, that a balance between traditional and modern perspectives be pursued, that management of Pacific Island reef and marine resources should devolve to local communities wherever possible, and that interactions between Pacific Island peoples and First Nations peoples of Canada be encouraged to solve common issues.

On the final day of the conference delegates had the

opportunity to learn about recent developments in the Hawaiian sovereignty struggle and in Bougainville, land struggles of Indigenous people in Sarawak and Sabah in Malaysia, popular theatre as a tool for learning, and details about the Canada-South Pacific Ocean Development Program (CSPOD), Canada's major aid program in the South Pacific.

Indigenous participants from the Pacific Islands and Canada expressed support for SPPF's increasing attention to traditional knowledge issues. SPPF was encouraged to continue its support for organizations like WAINIMATE and to further develop links between Indigenous Peoples of the Pacific and Canada on these issues. As a result, SPPF has developed a multi-year Indigenous Peoples and Science Project, which will begin in 1999. For further information, people can contact SPPF.

Margaret Argue was on staff with SPPF from 1984 to 1996 and returned to organise the 1998 conference.



Proceedings of the 1998 Pacific Networking Conference

are available from SPPF at \$Cdn6.00 (US\$4.50) plus shipping (C\$3.50 in Canada; US\$5.00 outside Canada).

T-shirts featuring the conference logo

are also available. The logo was designed by Ake Lianga, a Solomon Islands artist studying in Canada. Price is \$Cdn20.00 plus shipping (C\$5.00 in Canada, US\$6.00 outside Canada).

Sizes L or X-L.

Send Canadian or US dollars cheque or bank draft in US dollars to:

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Photo: Antoineta Pincheira

Margaret Argue shows off conference t-shirt

Misappropriation of Indigenous Knowledge

The Next Wave of Colonisation

by Aroha Te Ao Maohi Pareake Mead

Whenever legal standards are used to implement what are essentially ethical concerns, one can always expect an almost hysteric public reaction. This has been evident in the abortion/right to life debate, and similarly the issues of capital punishment and sexual orientation. Misappropriation of *tangata whenua* (indigenous knowledge) is also a matter of morality. It has been an accepted practice by colonists and their descendants for a long time. In spite of vigorous protests by the world's indigenous peoples, the problem is still escalating.

This article will briefly explore examples of misappropriation of indigenous knowledge past and present. I will discuss current global trends in the environmental sciences and medical research, and indicate the direction which indigenous peoples have indicated should be taken in order to minimise the damage to indigenous peoples in what is best described as 'the next wave of colonisation'.

Aotearoa New Zealand as well as the rest of the global community will no doubt face a heated debate as citizens come to realise that misappropriation of indigenous knowledge and resources is as much an issue of national sovereignty as it is about race relations and human rights.

In a discussion on misappropriation and commodification of indigenous knowledge, the western legal invention of cultural and intellectual property rights (CIPR) inevitably comes up. The ability and desirability of CIPR to become the main mechanism to address and redress matters as comprehensive and interdependent as *nga taonga tuku iho*, the treasures of the ancestors, needs to be thoroughly debated.

As with all issues of morality, one cannot enact legislation to force one individual to respect another. Ultimately, the will of citizens (academics, scientists, artists, musicians, writers to name but a few) as well as politicians and corporations to act ethically will determine whether the debate will be constructive or destructive.

Ethical Research

It has been commonly accepted practice amongst many research professionals to access traditional indigenous information for thesis, published works and development of government (national and local) policy. Such works have been considered as 'public record'. Whenever the appropriateness of a non-indigenous person recording and interpreting indigenous knowledge has been raised (eg. NZ author Michael King), we are usually left with the explanation that if

a non-indigenous person didn't record it, it would be 'lost' forever.

That explanation might hold up for the collecting of information, but cannot withstand scrutiny when the eventual work is published as an author's work and the financial proceeds (albeit few) are retained by the author.

It has been argued that even if a non-indigenous author wanted to return the financial profits to the indigenous informants, they wouldn't be able to identify the 'true owners' of the information. However, in the absence of identifying the indigenous 'owners',

what right does a non-indigenous person have to assume ownership? In isolation this may not necessarily present a problem, but when one considers that this practice has continued worldwide for many generations, the collective result has brought devastating consequences to indigenous communities. The Brazilian sociologist Paulo Friere stated in his often-quoted work *Pedagogy of the Oppressed* "as beneficiaries of a situation of oppression, the oppressors cannot perceive that if having is a condition of being, it is a necessary condition for all humanity."

A great deal of misinformation about indigenous peoples and their history pre and post colonisation has been promoted worldwide by non-indigenous authors and researchers. As a result, the world has lived a lie. For many governments, this has suited their objective to assimilate or annihilate indigenous peoples within their State. It is only through the global assertion of

sovereignty into *rangatiratanga* rights by

indigenous peoples that the rest of the world is able to better understand how naïve and ignorant we have all been about the history of others, particularly other indigenous peoples.

Misappropriation of indigenous knowledge in the social sciences has over time certainly contributed to the situation described above, but Social Scientists as a group of professionals have, generally speaking, improved their understanding of ethical research. Many have experienced prolonged and direct challenges by their 'subjects' and didn't have much choice but to improve!

There is a new team of science professionals however who are embarking on a course well-tramped. Without focusing their urgent attention to developing Research Codes of Ethics their path is bound to lead to conflict. Environmental scientists, medical researchers, and governments policy makers in these fields have for the most part been spared from experiencing public accountability. They have been left to their own on the assumption that whatever it is they are doing must be for the



Source: Jasper, Islands Business magazine

public good. It is critical for professionals to develop ethical research methodology, particularly in light of the inseparability in today's climate of commercialisation of research outcomes. The user-pays, cost-effective, policy directive has numerous cultural and property rights issues threaded throughout. Ultimately, the morality of certain research projects needs to be thoroughly considered by those involved. National and international policies should only be used as instruments when all else fails. The onus must be on researchers and government policy makers, in the first instance, to act ethically and morally.

Misappropriation of Biodiversity

The difficulty in negotiating with the aforementioned professionals as to the level of ethical protocol now required of them is in explaining the inseparability for indigenous peoples of the physical and metaphysical, the tangible and the intangible aspects of cultural and intellectual property. A very foreign concept for some. The English vocabulary has many terms to differentiate between the two, but this is not the case in most indigenous languages. The Maori term *Taonga*, for example, relates to both the physical and metaphysical.

Iwi (tribal) customary knowledge forms the major component of what Maori describe as the *mauri* (life force) of our cultural and intellectual property. Misappropriation of physical indigenous *taonga* (assets) therefore, is wholly related to misappropriation of indigenous knowledge. Both elements are interdependent and inseparable.

It stands to reason, therefore, that misappropriation of a natural resource prevents the parallel metaphysical resource from being utilised. This is why defending *Iwi* claims to the Waitangi Tribunal concerning sacred sites, confiscated lands and polluted waters, to name a few, *Iwi* consistently raise the 'mauri factor', which essentially is the metaphysical connection between customary knowledge of environmental and cultural well-being with a physical tangible resource.

The Global Environment

The environmental community has come to recognise that 7% of the earth's surface hosts between half and three-quarters of the world's biological diversity. Virtually none of this botanical treasure resides in either Europe or North America. In the industrialised world's obsessive drive to develop super-breeds of fruit, vegetables and livestock, substantial habitats of rich biodiversity have been lost. The only sources of replenishment are the lands of developing countries. Biodiversity mining, as it has come to be known, is big business these days. The prospectors are virtually all from industrialised countries. The new mining sites are primarily in developing countries and those peoples most affected tend to be the world's indigenous peoples.

New Zealand is recognised as part of the 'North', an inherently white club with the majority of members demonstrating appalling feats of colonisation. We follow the policies set by 'colleagues'. We make the same mistakes. We see land with scrub (popular name for native bush) and the first thing we do is burn it off so we can raise sheep and cattle. I don't know how many times I have listened to people, including the current Minister of Maori Affairs, who are almost incensed that pockets of Maori land are left 'dormant'. They view the land as unproductive and the land owners as lazy and wasteful. But how much of this nation's biodiversity, particularly indigenous flora and fauna, has been lost because of the push to raise livestock or farm genetically-improved super-crops? The guardianship responsibilities which indigenous



Source: Gavino/BioTalk/RAFI

peoples universally refer to demand that our environmental management withstands the needs of future generations, a principle from which industrialised countries, including New Zealand, could well benefit.

Biodiversity mining is a billion dollar industry made a lot easier for industrialised countries (the North) by the General Agreement on Trade and Tariffs (GATT). In a history making contract, Merck Pharmaceuticals signed a \$US1 million (over 2 years) deal with Costa Rica for bio-prospecting rights to one-third of the country's land area. The Canadian based RAFI (Rural Advancement Foundation International) published in 1993 a Report on Technology Transfer entitled *100+ Examples of the South's Informal Innovation Systems, Contributed to the North's Development*. Among the examples are the following:

- New Zealand's modest wheat industry has gained well over \$5 billion in seed from developing countries since the creation of the International Germplasm Board in 1974.
- Plant collector Clive Francis of Australia violated his contract and pocketed lucerne (alfalfa) seed he was sent to study in Libya and, returning to Australia, now claims the seeds are worth millions to Australia's livestock industry.

How does this relate, you might ask, to indigenous peoples? Biodiversity mining is based on the philosophy that the resources of one country can be commercially exploited by another. The GATT makes it legal. In a country such as Aotearoa New Zealand, where ownership and management of our natural resources rests with two Treaty of Waitangi partners, it is morally unacceptable for the Crown Treaty partner to enter into an international agreement which could allow for our country's natural resources to be commercially exploited by outsiders without consultation with the *Iwi* Treaty partners. In other countries the morality of commercialisation of natural resources is equally difficult. In all cases, national sovereignty is threatened as well as the rights of indigenous peoples.

The main players in biodiversity mining are multinational pharmaceutical companies who rely a great deal on local indigenous knowledge to identify the plants with healing properties. The motives of such companies are clearly commercial.

We are faced with the same dilemma referred to earlier, that in the absence of being able to ascertain customary 'ownership' of a native plant, what right does the government have to grant

patent/plant variety rights to an international or even national company? What right does the company have to patent? The immorality of the situation is multitiered: Governments, Companies, Research Scientists.

Inherent in the GATT Agreement is approval in principle to the patenting of all life forms, a principle directly stated in current NZ legislation (NZ Patents Act). Not surprising therefore is confirmation that patenting has recently extended into human genetic material. RAFI states that the US Government has over 1000 patent claims currently being considered of human genetic material.

A US-European consortium of scientists has established the Human Genome Diversity Project. Dubbed 'The Vampire Project' by indigenous peoples, its task is to collect DNA specimens of 700 endangered ethnic (indigenous) communities identified as 'Isolates of Historic Interest'. The Project has been rigorously criticised and the researchers involved claim that they are using the genetic material to find treatments to cure cancer and AIDS. For the sake of humanity, one might possibly excuse the collection procedure. But how can one explain the patent claims?

Initiatives of Indigenous Peoples and the United Nations

Through the annual sessions of the UN Working Group on Indigenous Populations (WGIP) indigenous peoples have established an international forum for information exchange and discussion of issues of national as well as international concern. The WGIP forum is tasked with developing a draft Universal Declaration on the Rights of Indigenous Peoples. The current Draft refers to aspects of cultural and intellectual property in 4 of the 31 Articles. Article 29 which has the broader application states:

"Indigenous peoples are entitled to the recognition of the full ownership, control and protection of their cultural and intellectual property. They have the right to special measures to control, develop and protect their sciences, technologies and cultural manifestations, including human and genetic resources, seeds, medicines, knowledge of the properties of flora and fauna, oral traditions, literatures, designs and visual and performing arts.

Agenda 21 of the 1992 UN Conference on Environment and Development (UNCED), popularly known as the Earth Summit, also makes specific mention of the intellectual property rights of indigenous peoples.

"In full partnership with indigenous people and their communities, Governments, and where appropriate, intergovernmental organisation, should aim at fulfilling the following objectives:

Adopt or strengthen appropriate policies and/or legal instruments that will protect indigenous intellectual and cultural property and the right to preserve customary and administrative systems and practices." (26.4(b))

In commemoration of the 1993 UN International Year for the World's Indigenous Peoples, the nine *Iwi* of Mataatua (The Bay of Plenty Region) lead by Ngati Awa, convened the world's First International Conference on the Cultural and Intellectual

Property Rights of Indigenous Peoples. Participants came from the Pacific, South America, Europe, Asia and North America. The week-long conference focused on the commodification of indigenous cultural and intellectual property throughout the public and private sectors. An international declaration was subsequently developed and named the **Mataatua Declaration** in honour of the conference hosts.

The **Mataatua Declaration** has moved on to occupy a place in history as one of the first international indicators identified by indigenous peoples of the ethics and protocols which should be considered by any individuals or organisations accessing indigenous cultural and intellectual property.

Where to From Here?

Through the **Mataatua Declaration** and other national and international agreements, there now exists minimum of guidelines which researchers and policymakers should observe. Some of these include:

- Developing a Code of Ethics for Collecting and Using Indigenous information.
- Ensuring that the maximum standards of Free and Informed Consent are obtained from Indigenous informants.
- Sharing any financial benefits.

Reading the **Mataatua Declaration** is a must for any researcher. Implementing it is a responsibility of every research project. Ensuring that the Declaration is adhered to should be the responsibility of every government.

Indigenous peoples, for their part, must embark on a separate journey to protect the treasures of their ancestors.

Conclusion

The new wave of colonisation leaves indigenous peoples in a position of enormous vulnerability. International agreements such as the GATT provide international acceptance for the principle of patenting all life forms, human as well as flora and fauna. The basic right of a citizen must surely include the right to exist without being genetically tampered with. We do not know that all citizens face this threat, but we do know that indigenous peoples, through projects such as the Human Genome Diversity Project, do.

It can be referred to as a 'tampering'. It can also be referred to as 'misappropriation'. Either way it is immoral and brings back painful memories of the attitudes of the first colonists, who regarded indigenous peoples as savages not deserving of negotiation, consultation or consensus agreement. What has changed? Is the role of indigenous peoples and their resources, including DNA (*wbakapapa*), simply to improve the livelihoods of colonists? Researches must be aware of these issues and ensure that though the development of Research Codes of Ethics they do not contribute further to the problem.

Reprinted from **Otago Bioethics Journal**, January 1993.
Aroha Mead is a Maori activist working on Indigenous knowledge and cultural rights issues.



The Mataatua Declaration

on Cultural and Intellectual Property Rights of Indigenous Peoples

June 1993

PREAMBLE

- Recognising that 1993 is the United Nations International Year for the World's Indigenous Peoples;
- Reaffirming the undertaking of the United Nation Member States to: "Adopt or strengthen appropriate policies and/or legal instruments that will protect indigenous intellectual and cultural property and the right to preserve customary and administrative systems and practices" — United Nations Conference on Environmental Development; UNCED Agenda 21 (26.4b);
- Noting the working principles that emerged from the United Nations Technical Conference on Indigenous Peoples and the Environment in Santiago, Chile from 18-22 May 1992 (E/CN.4/Sub.2/1992/31);
- Endorsing the recommendations on Culture and Science from the World Conference of Indigenous Peoples on Territory, Environments and Development, Kari-Oca, Brazil, 25-30 May 1992;

WE

- Declare that Indigenous Peoples of the world have the right to self determination; and in exercising that the right must be recognised as the exclusive owners of their intellectual and cultural property;
- Acknowledge that Indigenous Peoples have a commonality of experiences relating to the exploitation of their cultural and intellectual property;
- Affirm that the knowledge of the Indigenous Peoples of the world is of benefit to all humanity;
- Recognise that Indigenous Peoples are capable of managing their traditional knowledge themselves, but are willing to offer it to all humanity provided their fundamental rights to define and control this knowledge are protected by the international community;
- Insist that the first beneficiaries of indigenous knowledge (cultural and intellectual property rights) must be the direct indigenous descendants of such knowledge;
- Declare that all forms of discrimination and exploitation of Indigenous Peoples, indigenous knowledge and indigenous cultural and property rights must cease.

1. Recommendations to Indigenous Peoples

In the development of policies and practices, Indigenous Peoples should:

- 1.1 Define for themselves their own intellectual and property.
- 1.2 Note that existing protection mechanisms are insufficient for the protection of Indigenous Peoples Intellectual and Cultural Property Rights.
- 1.3 Develop a code of ethics which external users must observe when recording (visual, audio, written) their traditional and customary knowledge.
- 1.4 Prioritise the establishment of indigenous education, research and training centres to promote their knowledge of customary environmental and cultural practices.
- 1.5 Reacquire traditional indigenous lands for the purpose of promoting customary agricultural production.
- 1.6 Develop and maintain their traditional practices and sanctions for the protection, preservation and revitalisation of their traditional intellectual and cultural properties.
- 1.7 Assess existing legislation with respect to the protection of antiquities.
- 1.8 Establish an appropriate body with appropriate mechanisms to:
 - a) preserve and monitor the commercialism or otherwise of indigenous cultural properties in the public domain;
 - b) generally advise and encourage Indigenous Peoples to take steps to protect their cultural heritage;
 - c) allow mandatory consultative process with respect to any new legislation affecting Indigenous Peoples' cultural and intellectual property rights.
- 1.9 Establish international indigenous information centres and networks.
- 1.10 Convene a Second International Conference (Hui) on the Cultural and Intellectual Property Rights of Indigenous Peoples to be hosted by the Co-ordinating Body for the Indigenous Peoples Organisations of the Amazon Basin (COICA).

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Plants, Patents and Prospectors

How Can We Best Protect Indigenous Knowledge

by Clark Peteru

The majority of the world's people rely on traditional knowledge of plants, animals, insects, microbes and farming systems for food and/or medicines. Eighty per cent of the world's population depends on indigenous knowledge to meet their medicinal needs and at least half rely on indigenous knowledge and crops for food supplies. Indigenous knowledge has also helped to fuel innovation and development in multi-billion dollar industries, ranging from agriculture and pharmaceuticals to chemicals, paper products and energy.

The Pacific (excluding Australia and New Zealand, but including Pacific Island states south and north of the equator) is a vast region extending over 29 million km² of which only about 500,000 km² is land. The geographical and ecological isolation of Pacific islands has led to the evolution of unique species and communities of plants and animals. There are about 2,000 different types of ecosystem throughout the Pacific and on some islands 80% or more of the species are endemic (i.e. found on that island only and nowhere else in the world). The region also has the most extensive coral reef systems in the world, with vast and complex marine ecosystems. The full extent of biological diversity is not known conclusively, however, for either marine or terrestrial systems because detailed biological inventories are lacking. It has been estimated that only 10 per cent of tropical species have been described.

Linked to the issue of biodiversity is that of indigenous

customary knowledge and practices with respect to the natural environment, including the medicinal uses of fauna and flora. There is a need to document and promote the wider use of customary knowledge and environmentally sound customary practices. This requires the development of effective legal mechanisms for protecting the intellectual property rights of indigenous people, including traditional resource owners. It also requires that customary practices that benefit conservation are reinforced by incentives and those that are detrimental are regulated.

Sanctions could be imposed for breaking customary laws and formal recognition in legislation, policy or plans could be given to customary environmental conservation and management practices. The following examples of provisions in draft environmental legislation show some of the approaches being taken.

Kiribati:

to promote environmental education and research at all levels and to utilise existing traditional and customary practices that promote the protection, preservation, restoration, improvement and management of the environment.

Niue:

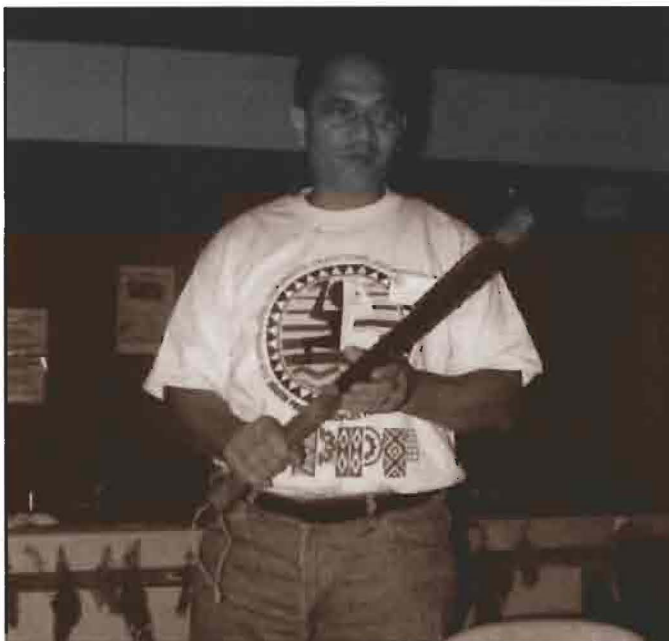
to encourage knowledge, innovations and practices embodying traditional lifestyles that promote the protection, conservation, improvement and management of the environment.

Samoa:

to encourage and foster knowledge, innovations and practices embodying aspects of the faaSamoa that promote the protection, conservation, improvement and management of the environment.

The importance of indigenous knowledge regarding the use of medicinal plants has not been lost on biotechnology and pharmaceutical industries. Such information, coupled with plant samples, increases the chances of isolating genes or chemicals that can have commercial uses in the agricultural or pharmaceutical industries. Bio-prospectors (scientists who provide pharmaceutical companies and similar bodies with samples of plants, animals and micro-organisms for analysis and — where available — indigenous knowledge about the use of such samples) are active in many islands.

Patents, copyrights and plant breeders' rights are examples of intellectual property rights. They are mechanisms which protect "creative effort" and the industrial property resulting from that effort. The creative effort cannot be seen or touched; it is intangible. Nevertheless it **results in**



Clark Peteru at the conference

Photo: Antonieta Pincheira

something tangible, like a book or an invention. Patents and copyrights protect both the creative effort and the product. Like personal property they can be sold, exchanged, given away or licensed.

Intellectual property exists in various forms at various stages in the development of an 'invention'. At its inception, an idea is simply a piece of information or knowledge, whose only claim to protection is that it has not yet been made public. This information is capable of being legally protected by confidentiality or trade secrecy laws. The next step, in all likelihood, is that the idea will be written down or recorded in some way. Protection of that record may be achieved through trade secrecy laws or through copyright. If the idea turns out to be inventive, protection may be obtained by applying for a patent.

Indigenous communities need to consider whether intellectual property laws such as patents are an appropriate means for protecting their knowledge. The underlying principle behind intellectual property laws is private property. In contrast, the communal nature of indigenous societies has at its core the values of exchange and sharing of things, including knowledge. This fundamental difference would suggest that intellectual property laws are likely to be inappropriate for protecting indigenous knowledge.

Patents

A patent is the grant of an exclusive (monopoly) right to exploit an invention. The invention must then be disclosed to the public. The idea that patented inventions should be the starting point for further innovation is fundamental to patent law. Patent systems are designed to encourage the disclosure of information to the public by rewarding inventors for their endeavours.

The law works in this way because it is fair that the creator be rewarded for his efforts (the other side of this being that 'free-riders' should be penalised for illegally benefiting from the creation); secondly, investors can recoup their research and development costs (and so are willing to invest again in further ventures); and thirdly society as a whole can benefit from the creation. The benefits are less obvious however for developing nations. If there is little competition, the monopoly may impose serious social costs, especially when the fundamental needs of the poor are at stake.

Exclusive use of the invention, for a limited period of time is assured to the inventor or his employer by patent law, but only in the country or territory subject to the law. The applicant must obtain patents from other foreign countries if he wishes to protect the invention there.

The importance of the patent is particularly great in the pharmaceutical industry, in which product research is relatively expensive but imitation is relatively easy. Patents will probably be similarly important in biotechnology for much the same reason.

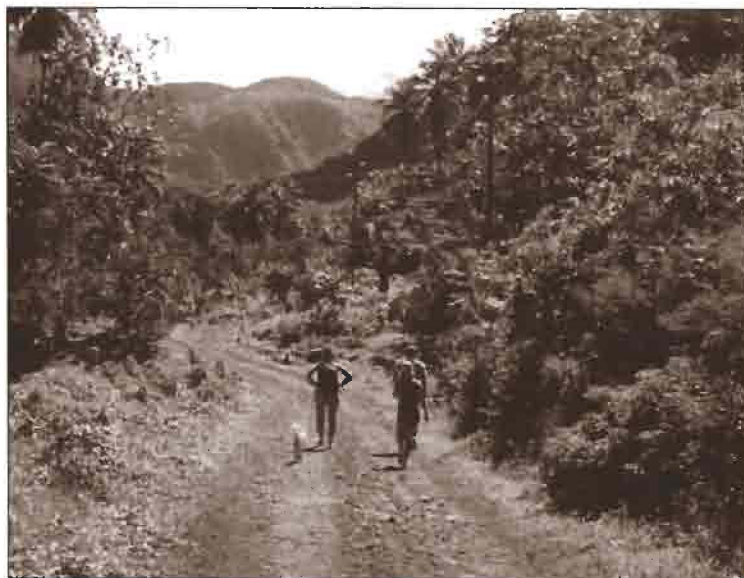


Photo: Bev Insley

Ua Pou, Marquesas Islands — The Pacific is renowned for its diverse ecosystems and preponderance of endemic species

The Evolution of Patents

Historically, patents were granted only to industrial inventions. Over a number of years they came to be extended to living things. The United States grants patent protection for a wide variety of living material: novel DNA sequences, genes, plant parts, plant or animal varieties, purified compounds and genetically altered microbes, plants and animals. Protection in European countries is not as wide. In many developing countries living organisms, biological processes and products cannot be patented.

With patents now being applied to a vast array of things, it is conceivable that patent claims will be made over genes or biochemicals that occur in nature, even though innovation, not discovery, is the basis of the patent claim. Thus, in many industrialised countries, patents are allowed if the discovery requires a notable input of human effort and ingenuity. The argument goes that companies should be rewarded for undertaking the difficult task of making natural genes useful. Although the research costs are high the imitation costs are slight, hence, protection is warranted.

For example, in the case of agriculture, a gene will usually be patentable only if it is used in a species in which it did not evolve or could not have been transferred to through conventional breeding. Similarly, the purified form of a chemical can be patented if the chemical is found in nature only in an unpurified form. Thus, the purified sample or genetically altered organism could be protected while the raw material or original organism remains part of the public domain available for others to use. It is little wonder then that developing countries are frustrated with a system that labels their resources as open access, but then establishes private property rights for products based on those resources.



Cartoon: Gavino/BioTalk/RAFI

Only intellectual effort can be protected as intellectual property — wild species, raw extracts or products arising in nature cannot. Tropical rainforests and coral reefs have an abundance of biodiversity and present a variety of potential objects for which intellectual property protection might be sought. Only some, however, are protectable under existing laws. Objects for which intellectual property protection might be sought include:

- knowledge pertaining to the habitat, its species and their usefulness.
- inventories of species and compilations of such information in databases.
- extracts and purified compounds from the species.
- the methods for preparing and administering such substances.
- seeds and genes isolated from the species.
- pure-bred or hybrid crops or animals originally found in wild habitats.
- synthetic derivatives of the compounds or genes isolated from the species.
- products prepared from such compounds or by use of such genes.

Are patent laws suitable for protecting indigenous knowledge?

Patents can sometimes be used to protect the knowledge of indigenous people and traditional healers and farmers. Traditional healers could be granted patents for novel uses of a compound. Also, if a traditional medicinal use of a compound is public knowledge, then patent laws should be applied to prevent others from patenting that compound for the same purpose. Similarly, a traditional farmer who breeds a new variety of plant could probably receive protection under most systems of plant breeders' rights.

Overall however, patent laws tend to be unsuitable to protect indigenous knowledge or innovation (as applied to plants) for three basic reasons:

1. Indigenous communities share a repugnance to the idea of ownership over life-forms. Unless they change their

cultural world-view of what can and cannot be owned, it would be difficult for them to take even the first step, i.e. a claim of ownership.

2. Indigenous knowledge may not meet the requirements for patentability. For example patents are available for 'new' knowledge, not traditional knowledge, which by definition has been around for some time. Moreover the patent system tends towards individual rather than community ownership. Neither problem is legally insurmountable, but they do expose the cultural and commercial bias of the patent system.
3. Even if the foregoing points were satisfied, there would still be practical problems of filing and registering the patent claim and, when granted, protecting the rights conferred — assuming that the benefits from enforcement outweighs its cost.

The conventional intellectual property system, while theoretically capable of allowing indigenous communities to stake substantial monopoly claims, presents indigenous people with two major hurdles. First, indigenous people would be forced to change their world-view regarding ownership of knowledge. Second the costs of participation would be prohibitive.

Rural Advancement Foundation International (RAFI), an NGO working on traditional knowledge issues, concludes that indigenous communities could "succeed in winning the right to establish patent claims over biological products and processes... But it is likely that the economic benefits of such protection would be negligible in most situations most of the time".

A New Intellectual Property System?

Indigenous groups which feel uncomfortable dealing with the conventional intellectual property system could devise an alternative system, one that is more in tune with their particular situation. The following could provide useful starting points.

Model Law on Folklore — Adopted in 1985 by UNESCO and the World Intellectual Property Organisation (WIPO), this document is helpful in three ways: communities rather than individuals can be the legally registered innovators;

continued on page 30

Final Statement of the Consultation on Indigenous Peoples' Knowledge and Intellectual Property Rights

Suva, April 1995

PREAMBLE

We the participants at the Regional Consultation on Indigenous Peoples' Knowledge and Intellectual Property Rights held in April, 1995 in Suva, Fiji, from independent countries and from non-autonomous colonised territories hereby:

Recognise that the Pacific region holds a significant proportion of the world's indigenous cultures, languages and biological diversity;

Support the initiatives of the Mataatua Declaration (1992), the Kari Oca Declaration (1992), Julayinbul Statement (1993) and the South American and Asian consultation meetings;

Declare the right of Indigenous Peoples of the Pacific to self-governance and independence and ownership of our lands, territories and resources as the basis for the preservation of Indigenous Peoples' knowledge;

Recognise that Indigenous Peoples of the Pacific exist as unique and distinct peoples irrespective of their political status;

Acknowledge that the most effective means to fulfil our responsibilities to our descendants is through the customary transmission and enhancement of our knowledge;

Reaffirm that imperialism is perpetuated through intellectual property rights systems, science and modern technology to control and exploit the lands, territories and resources of Indigenous Peoples;

Declare Indigenous Peoples are willing to share our knowledge with humanity provided we determine when, where and how it is used. At present the international system does not recognise or respect our past, present and potential contributions;

Assert our inherent right to define who we are. We do not approve of any other definition;

Condemn attempts to undervalue Indigenous Peoples' traditional science and knowledge;

Condemn those who use our biological diversity for commercial and other purposes without our full knowledge and consent.

WE PROPOSE AND SEEK SUPPORT FOR THE FOLLOWING PLAN OF ACTION:

1. Initiate the establishment of a treaty declaring the Pacific region to be a lifeforms patent-free zone.
 - 1.2 Include in the treaty protocols governing bioprospecting, human genetic research, 'in situ' conservation by Indigenous Peoples, 'ex situ' collections and relevant international instruments.
 - 1.3 Issue a statement announcing the treaty and seeking endorsement by the South Pacific Forum and other appropriate regional and international fora.
 - 1.4 Urge Pacific governments to sign and implement the treaty.
 - 1.5 Implement an educational awareness strategy about the treaty's objectives.
2. Call for a moratorium on bioprospecting in the Pacific and urge Indigenous Peoples not to co-operate in bioprospecting activities until appropriate protection mechanisms are in place.
 - 2.3 Bioprospecting as a term needs to be clearly defined to exclude Indigenous Peoples' customary harvesting activities.
 - 2.4 Assert that 'in situ' conservation by Indigenous Peoples is the best method to conserve and protect biological diversity and indigenous knowledge, and encourage its implementation by indigenous communities and all relevant bodies.
 - 2.5 Encourage Indigenous Peoples to maintain and expand our knowledge of local biological resources.
3. Commit ourselves to raising public awareness of the dangers of expropriation of indigenous knowledge and resources.
 - 3.4 Encourage chiefs, elders and community leaders to play a leadership role in the protection of Indigenous Peoples' knowledge and resources.
4. Recognise the urgent need to identify the extent of expropriation that has already occurred and is continuing in the Pacific.
 - 4.5 Seek repatriation of Indigenous Peoples' resources already held in external collections and seek compensation and royalties from commercial developments resulting from these resources.
5. Urge Pacific governments who have not signed the General Agreement on Tariffs and Trade (GATT) to refuse to do so, and encourage those governments who have already signed to protest against any provisions which facilitate the expropriation of Indigenous Peoples' knowledge and resources and the patenting of life forms.
 - 5.6 Incorporate the concerns of Indigenous Peoples to protect their knowledge and resources into legislation by including 'prior informed consent or no informed consent (PICNIC) procedures and excluding the patenting of life forms.
6. Encourage the South Pacific Forum to amend its rules of procedure to enable accreditation of Indigenous Peoples and NGOs as observers to future Forum officials meetings.
7. Strengthen indigenous networks. Encourage the United Nations Development Programme (UNDP) and regional donors to continue to support discussions on Indigenous Peoples' knowledge and intellectual property rights.
8. Strengthen the capacities of Indigenous Peoples to maintain their oral traditions, and encourage initiatives by Indigenous Peoples to record their knowledge in a permanent form according to their customary access procedures.
9. Urge universities, churches, governments, non-governmental organisations and other institutions to reconsider their roles in the expropriation of Indigenous Peoples' knowledge and resources and to assist in their return to their rightful owners.
10. Call on the governments and corporate bodies responsible for the destruction of Pacific biodiversity to stop their destructive practices and to compensate the affected communities and rehabilitate the affected environment.
 - 10.11 Call on France to stop definitively its nuclear testing in the Pacific and repair the damaged biodiversity.

GLOSSARY

'In Situ' — 'On-Site'. In situ conservation is the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties.

'Ex-Situ' — 'Off-Site'. This refers, for example, to the conservation of genetic resources outside their natural habitats, eg. Gene Banks and Botanical Gardens.

The Kava Boom

Will the Pacific Benefit?

*This article is edited by Linda Pennells from two papers by Clark Peteru: **The Kava Plant and Ownership Issues (1997)** and **Case Study - Indigenous Innovations and Practices (1998)**. Additional information is included from SPPF's 1998 Pacific Networking Conference and periodicals.*

Growing and nurturing kava, a plant in the pepper family, has been a labour intensive passion for Pacific Islanders for more than 3,000 years. The kava plant is infertile and dependent on human propagation for reproduction. The careful selection skills, passed from father to son for generations, are responsible for the 118 cultivated varieties existing today.

The kava plant is grown in Fiji, Vanuatu, the Federated States of Micronesia, Samoa, Hawai'i, French Polynesia, Tonga, and Wallis & Futuna. Kava's origins in each country are richly wrapped in legend. The name, kava, also given to the coffee-coloured liquid extracted from the kava root, is consumed extensively on ceremonial and social occasions.

On some islands, kava roots were traditionally cleaned, cut, chewed and spat into a communal kava bowl. Water or coconut milk was added and the resulting beverage served in coconut shell cups. On other islands, the kava is pounded. Today, kava is most commonly dried and pounded into powder, packed into a cloth often made from the hibiscus tree, soaked in water, and squeezed to release the kava juice.

Kava users report that the drink calms without dulling the mind, without hangover, and without addiction.

The wider world discovered kava through the generosity of Pacific hosts who traditionally offer a half coconut shell of kava drink in respect and friendship. Now global demand is soaring for the kava root, so central to the spiritual, medicinal and recreational culture of the South Pacific. With the global demand comes complex commercial, cultural and ethical questions.

Kava was described in the journal of the botanist accompanying Captain James Cook on his first voyage to the South Pacific in 1768-1771. By 1860 researchers had developed alcohol extract, pills, essential oils and syrup from kava. By 1920 kava appeared as a sedative on the European pharmaceutical market. The Japanese used it as a treatment for gonorrhoea prior to World War II. Now an array of kava-based preparations are available on several

continents as drugs, health foods and in other forms. Kava is considered a drug in Europe and therefore more heavily regulated than in the US where it is deemed a dietary supplement. In 1998 a team of University of South Pacific and Japanese researchers found that kava inhibits tumour necrosis factor-alpha, a tumour promoting factor, which could signal a breakthrough in cancer research.

The active ingredients of kava, called kavalactones, are contained in its resin. Three kavalactones (dihydromethysticin DHM, dihydrokavain DHK and kavain) give kava its well documented potential as a sleep-inducing agent, painkiller, local anaesthetic, anti-convulsive agent and muscle relaxant, anti-bacterial agent and food preservative.

The National Business Journal projected Americans would spend almost US\$50 million on kava in 1998, more than a three-fold increase over 1996. Demand is heating up in European, Japanese and other markets. Web sites that sell kava are mushrooming. A Fijian kava exporter, Ratu Josateki Navalowalo, says his company struggles to supply 16 tonnes a week when the demand is for 100 tonnes. He was quoted in Agence France-Presse saying that with proper government backing he could boost national revenue from kava exports to US\$150 million in three years, replacing sugar as the country's main revenue earner.

Kava has traditionally, and continues to be, grown largely by subsistence farmers and villagers. In the late 1990s, there are reports of kava prices increasing 10-fold in response to the surge in world demand. The big money is triggering an increase in kava production at the expense of food crops, posing several questions. What are the risks to food security? When Australia, Papua New Guinea, the US and other countries are starting or exploring to grow kava, how competitive will small-scale Pacific producers be in the future? Will the Pacific Islands be a market force or be forced out of the market?

Intellectual property rights are a burning issue. For decades, overseas laboratories have conducted research on kava, for the most part independently of any kava-producing Pacific Island country. Increasingly Pacific Islanders are asserting that such research should be identified and only proceed on mutually-agreed terms.

Can the kava plant, the genes or chemicals it contains, or even the name *kava* be protected? The Rural Advancement Foundation International has explored the issues and concludes that an alternative model, uniquely tailored to Pacific needs, is required. The following is a precis of RAFF's findings on the key existing options: patents, plant breeders' rights and trademarks.

Patents - Genes can be patented in the US and some other domains. Researchers seek to isolate the genes responsible for the kavalactone content. The complex genetic make-up of kava may, however, mean that genetic research will not be as productive as chemical research. Foreign patents have been issued on

Pope John Paul II drinks a coconut shell of kava in Fiji



Photo: Bettman Archives

pharmaceuticals derived from the kava plant. RAFI reports that no discussions were held with Pacific Island countries or communities before the patents were obtained. No royalties or benefits are being paid to them. The level of patent activity in Pacific Island countries is minimal to non-existent. Some have no patent laws. Others have laws allowing the registration of foreign, but not domestic, patents. Kava growers will probably find it too expensive to apply and protect patents in countries other than their own. Strategies for licensing patents to others are central to the effective maximisation of benefits. However, it is unlikely that kava growers will have the cohesion and capacity to maximise licensing opportunities.

Plant breeders' rights - Kava growers can not protect their kava varieties using plant breeders' rights (PBR) because no Pacific Island country has plant variety protection law. Making the issue more problematic is the genetic diversity common to traditional kava varieties. Because of this, it would probably not meet criteria defining a new variety as set by The Union for the Protection of New Varieties of Plant (UPOV). Despite these barriers to Pacific Islanders gaining PBR protection, there is no impediment in several developed countries to gaining PBR protection for new kava varieties even though the variety would most likely have been based on plant material from the Pacific Islands. UPOV compliance would also mean imposing a law that overturns the Pacific custom of sharing planting material and fails to understand the communal system of innovation through which farmers select, improve and breed diverse kava varieties.

Even if kava growers, themselves, can not obtain intellectual property protection for plant materials, they can still demand that governments prohibit pharmaceutical companies and others from patenting such material found on their lands.

Trademarks - In 1997, the South Pacific Forum Secretariat sought an opinion on whether kava could be trademarked. The answer was no. Kava is so well known not only in the Pacific, but beyond, that it would be as difficult or impossible to trademark as coffee or soap. On a more positive note, it was suggested that Pacific Island nations could band together and create a certification mark such as *Pacific kava* which could be trademarked to identify kava and kava products originating in the South Pacific. US and European companies already have trademarks such as *Kava Pure* and *Kavatrill*.

Another contentious issue is the abundance of kava plants and dried samples held in numerous institutions and collections across the globe. The Pacific Islands have no legal recourse to reclaim the significant volume of kava germplasm located in foreign collections prior to the Convention on Bio-Diversity (CBD). Collections held by the International Agricultural Research Centre, which made no previous attempt to control commercial use, are being brought under the scope of the CBD.

Bio-prospecting makes the problem worse by the day. Bio-prospecting refers to collecting samples of plants, trees, bushes, marine organisms or soil samples for scientific analysis with the intention of commercial exploitation. Often, bio-prospectors tap the knowledge of local people and traditional healers to identify plants, such as kava, and their special properties.

Fiji's Sustainable Development Bill is the first Pacific Island attempt to target bio-prospecting. Some island nations, however, do prohibit the removal of plants, coral and fish under agricultural

or livestock acts.

Under international law, the plant resources of a country are the property of that country. In the Pacific Islands, the knowledge regarding the medicinal uses of a plant is the property of the family or community which holds that knowledge. Rarely, however, is compensation made for the contribution of the community, either regarding its knowledge relating to the plant's medicinal properties, the breeding of the plant in order to bring out desired characteristics, or simply the nurturing of the plant to ensure that it survives. Countries must therefore be vigilant in detecting covert collecting.

Action has recently started on the bio-prospecting front. In 1995 the Pacific Concerns Resource Centre hosted the UNDP funded Regional Consultation on Indigenous Peoples' Knowledge and Intellectual Property Rights. The conference recommended a moratorium on bio-prospecting in the Pacific and urged Indigenous Peoples to refuse to cooperate with bio-prospectors until appropriate protection mechanisms were in place. Participants insisted that originating communities/countries be shareholders in the companies manufacturing any resulting product. The region's first profit-sharing agreement resulting from bio-prospecting is being negotiated by the University of the South Pacific and the UK's Strathclyde University.

Clark Peteru advocates that ex situ collections be brought within the CBD and that communities and countries which originally provided the germplasm be accorded sovereign rights which entitle them to regulate access and obtain benefits on the same basis as for their in situ collections. Peteru further asserts that Pacific kava producing nations need to stop skirmishing among themselves and take a united stand against multinational interests. He calls for action:

At the national level

- put strict controls or a ban over the export of planting material.
- establish national kava councils to coordinate kava development.

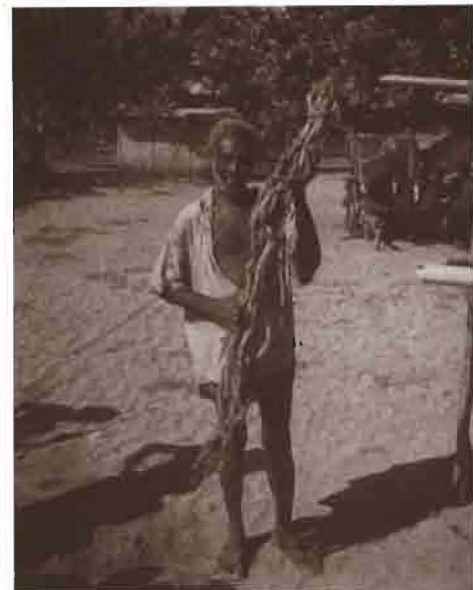
At the regional level

- facilitate dialogue and coordination among growers, retailers, wholesalers, exporters and manufacturers of kava and kava products.
- set industry standards and ethical guidelines.
- provide a regional strategy for the production and marketing of kava.

At the international level

- lobby governments to bring ex situ collections within the CBD.
- facilitate the development of a model for kava plant protection that reflects Pacific Islands realities. Existing IPR models are not appropriate.

Photo: Chris Kilham



A grower displays a bundle of kava roots

continued from page 11

2. Recommendations to States, National and International Agencies

In the development of policies and practices, States, National and International Agencies must:

- 2.1 Recognise that Indigenous Peoples are the guardians of their customary knowledge and have the right to protect and control dissemination of that knowledge*
- 2.2 Recognise that Indigenous Peoples also have the right to create new knowledge based on cultural traditions.*
- 2.3 Note that existing protection mechanisms are insufficient for the protection of Indigenous Peoples' Cultural and Intellectual Property Rights.*
- 2.4 Accept that the cultural and intellectual property rights of Indigenous Peoples are vested with those who created them.*
- 2.5 Develop in full co-operation with Indigenous Peoples an additional cultural and intellectual property rights regime incorporating the following:*
 - collective (as well as individual) ownership and origin*
 - retroactive coverage of historical as well as contemporary works*
 - protection against debasement of culturally significant items*
 - co-operative rather than competitive framework*
 - first beneficiaries to be the direct descendants of the traditional guardians of that knowledge*
 - multi-generational coverage span*

BIODIVERSITY AND CUSTOMARY ENVIRONMENTAL MANAGEMENT

- 2.6 Indigenous flora and fauna is inextricably bound to the territories of indigenous communities and any property right claims must recognise their traditional guardianship.*
- 2.7 Commercialisation of any traditional plants and medicines of Indigenous Peoples must be managed by the Indigenous Peoples who have inherited such knowledge.*
- 2.8 A moratorium of any further commercialisation of indigenous medicinal plants and human genetic materials must be declared until indigenous communities have developed appropriate protection mechanisms.*
- 2.9 Companies and institutions both governmental and private must not undertake experiments or commercialisation of any biogenetic resources without the consent of the appropriate Indigenous Peoples.*
- 2.10 Prioritise settlement of any outstanding land and natural resources claims of Indigenous Peoples for the purpose of promoting customary, agricultural and marine production.*
- 2.11 Ensure current scientific environmental research is strengthened by increasing the involvement of indigenous communities and of customary environmental knowledge.*

Cultural Objects

- 2.12 All human remains and burial objects of Indigenous Peoples held by museums and other institutions must be returned to their traditional areas in a culturally appropriate manner.*
- 2.13 Museums and other institutions must provide, to the country and Indigenous Peoples concerned, an inventory of any indigenous cultural objects still held in their possession.*
- 2.14 Indigenous cultural objects held in museums and other institutions must be offered back to their traditional owners.*

3. RECOMMENDATIONS TO THE UNITED NATIONS

In respect for the rights of Indigenous Peoples, the United Nations should:

- 3.1 Ensure the process of participation of Indigenous Peoples in United Nations fora is strengthened so their views are fairly represented.*
- 3.2 Incorporate the Mātaatua Declaration in its entirety in the United Nations Study on Cultural and Intellectual Property of Indigenous Peoples.*
- 3.3 Monitor and take action against any States whose persistent policies and activities damage the cultural and intellectual property rights of Indigenous Peoples.*
- 3.4 Ensure that Indigenous Peoples actively contribute to the way in which indigenous cultures are incorporated into the 1995 United Nations International Year of Culture.*
- 3.5 Call for an immediate halt to the ongoing 'Human Genome Diversity Project' (HGDP) until its moral, ethical, socio-economic, physical and political implications have been thoroughly discussed, understood and approved by Indigenous Peoples.*

4. CONCLUSION

- 4.1 The United Nations, International and National Agencies and States must provide additional funding to indigenous communities in order to implement these recommendations.*

Supporting Traditional Management of Marine Resources

by Ralph Regenvanu & Francis Hickey

The Vanuatu Cultural Centre wants to help sustain Vanuatu's nearshore marine resources. To achieve that goal, the Centre is focusing on documenting and promoting traditional marine tenure practices (TMT) at the community level. Using research, interaction and information sharing, the project has these objectives:

- To record important indigenous knowledge relevant to TMT;
- To improve the understanding of when TMT works most successfully;
- To promote and enhance TMT in the sustainable management of nearshore marine resources; and
- To advocate national policies for the sustainable management of nearshore marine resources through TMT at the community level.

Researching indigenous knowledge and local practice

Under national legislation, the Vanuatu Cultural Centre has a mandate to preserve, protect and develop the diverse cultural heritage of the country. Working through trained fieldworkers in their own communities, the Cultural Centre tries to record traditional knowledge and cultural history for posterity. The Centre also seeks to revitalise and maintain interest in traditional cultures at a community level. Finally, the Centre is refining a system

for storing and accessing cultural materials in a manner consistent with traditional access and transmission methods.

Every year, the Centre hosts a workshop bringing together fieldworkers to discuss an aspect of traditional lore chosen at the previous year's workshop. Each fieldworker addresses co-workers on the topic's traditional knowledge and practices. The proceedings are recorded on audio-tape.

For example, the 1997 topic was "traditional environmental management." We recorded much information at the workshop, including abundant data on traditional management of nearshore marine resources. In addition, Cultural Centre fieldworkers, the Environment Unit and the Fisheries Department prepared questionnaires on historic and contemporary marine resource management practices and local knowledge. The questionnaire responses were later completed by the fieldworkers within their communities. Separate surveys were prepared for men and women to gather data on the species they target, and on their customs, ecological concerns and informational needs.

Western resource management discussions usually share information among stakeholders. But transmission of indigenous knowledge is controlled by strict access and transmission procedures. Over the years, the Cultural Centre has developed a system which, whenever possible, respects these customs.

When fieldworkers record knowledge on audio-tape, they make clear what portions of the oral narrative are restricted and to whom. Because fieldworkers are often from the same language group, even kin, to the informant, there is a stronger possibility that the informant is willing to divulge certain knowledge that he or she has. Once stored at the Cultural Centre, only persons identified by the informant are allowed to hear it. Once their right to access is verified, people come into the Centre and listen to material recorded by their deceased kin. In this way, some traditional part of the oral transmission of knowledge is continued. Moreover, a kin group can learn about its own traditions even though those having the knowledge are no longer alive.

Photo: Vanuatu Cultural Centre



A traditional dugout canoe. Sail-power, once widespread in Vanuatu, is now found in only a few areas.

There are about 60 men and 30 women fieldworkers based in their own communities

throughout Vanuatu. The information on traditional environmental management and marine resource management practices collected at the 1997 workshop thus provided a comprehensive reference on TMT from the archipelago's many culturally distinct areas. This has also facilitated the Cultural Centre's ongoing surveying and documentation of these practices and identified additional subjects and locations needing further research.

To make more detailed examinations of TMT practices, incorporating the more effective management regimes from a social and biological perspective, site visits have been made to areas where TMT and local knowledge are particularly rich. At these sites, detailed surveys and analysis, including assessment of reef areas, have been performed.

This information gathering and sharing has focused on these areas:

- identifying and verifying local knowledge about the marine environment;
- the cosmologies, stories, rituals and sites providing the rationale for certain management practices;
- the traditional and contemporary technologies and raw materials used in fishing and fisheries management;
- the requirements, rules and processes used in management decisions and in specialised knowledge and practices;
- the political, economic and social dynamics within the communities;
- the presence of capital-intensive development projects in the area;
- the level of dependence on cash incomes and locally-available sources for earning cash;

- the extent to which traditional knowledge and methodologies are still used;
- the management issues and problems currently faced by the communities; and
- the feasibility and desirability of reintroducing aspects of TMT regimes, which is dependent on respect for and the power of local traditional leaders.

During site visits, Cultural Centre staff have also disseminated reef management information to fishers, village leaders and reef custodians through informal workshops. Thus our visits have the dual purpose of both collecting and disseminating information. The information useful for reef management includes species' growth rates, habitat requirements, size at sexual maturity, modes of reproduction and life cycle, general habitat and other ecological information. This type of information helps reef custodians determine the optimum time and duration of a taboo and explains the government-imposed size limits.

Access to biological information also offers a bridge between traditional fisheries practices, which sustain resources within traditional society, and the increasingly commonly found modern commercial and subsistence harvesting using introduced fishing gear.

The two-way exchange of information and co-operative management helps to maintain trust between researchers and community members who are understandably wary of exploitation. The process also enhances nearshore reef management. When the staff and the indigenous managers discuss both traditional and modern options, all reach a better understanding of how to sustain resources. The workshops also identify information gaps among reef custodians; thus the staff can produce educational materials to target these gaps.

Extra-community advocacy

The Cultural Centre is now beginning the second phase of the TMT Project: the production of videos, illustrated booklets and posters. These disseminate the indigenous and scientific knowledge, as well as local examples of effective management, to Vanuatu's reef custodians. These materials are produced in Bislama, the most widely used of Vanuatu's three national languages. Over many years, the Cultural Centre has learned that video is the best medium to reach rural communities in Vanuatu. It is also one of the best ways to record information in these oral cultures. Videos will explain how nearshore resources are being managed, the social controls used for enhancing compliance with taboos (traditional restrictions on the use of marine resources and harvesting methods), local customs upon which the taboos are based, and how



Photo: Vanuatu Cultural Centre

Fishing with bow and arrow, a method requiring intimate knowledge of fish behaviour

communities benefit from effective resource management.

Cultural Centre field workers, the Department of Fisheries Extension Services, the Environment Unit field officers, existing community-based networks of church and women's' groups and other NGOs will distribute the videos and publications. The latter will also be included in a final report. This report will describe the efficacy of practices of indigenous knowledge in marine management regimes and will provide an analysis of what makes marine resource management at the community level sustainable. Finally, the report will recommend enhancements in managing nearshore marine resources targeted at communities, NGOs, and provincial and national government policy-makers.

Indigenous knowledge and national development

When Vanuatu became an independent nation state in 1980, the principle of indigenous customary ownership and tenure over land and sea resources was enshrined in the Constitution. Almost all local communities in Vanuatu own and manage their traditional land and marine resources. But when the donor-driven Comprehensive Reform Program (CRP) began in 1997, the national government made explicit its role (increasingly obvious to concerned observers over the last decade) of engineering Vanuatu's incorporation into the global free-market [sic] economy. This role has adopted strategies designed by aid-loan-investment brokers (in Vanuatu's case, the Asian Development Bank in particular), aiming to attract foreign investment, mostly by creating the preconditions for private-sector growth.

Because indigenous society in Vanuatu is premised on providing members with social and spiritual security in a multi-generational context, the national development strategies contained in the CRP are quite antithetical to the fundamental principles structuring ni-Vanuatu societies. The gravest example of this allows customary landowners to use their land as collateral for bank loans and in joint ventures with foreign investors. Given the extremely poor success rate of indigenous attempts to participate in Western business, the future for this ill-advised 'development' strategy — if it ever gets off the ground — is the loss by communities of their ancestral lands and a subsequent slide into dependency.

It is astounding that the CRP strategy document does not include the role of customary political, legal or resource management systems in national development. Most ni-Vanuatu function within these customary systems. They are the only structures maintaining social cohesion in the face of increasing development pressures. They also



Photo: Vanuatu Cultural Centre

Removing a lobster from a trap on the island of Futuna. The traps are ritually consecrated by the builder and user before use.

remain the most legitimate and effective structures for governance at the community level.

Our ancestors — our *bubu* — have lived in these islands for thousands of years and have accumulated a vast store of knowledge, a 'blueprint' for living in our particular environment. Sweeping that aside to implant economies, ideologies and technologies appropriate to other environments is foolish. Our indigenous cosmologies, value systems and social and economic structures are valuable in their own right and offer insights into the human experience. Most importantly, our indigenous cultures offer an alternative path for social change while the world seems to be heading into increasing social and ecological crisis. Our indigenous cultures offer an alternative path particularly well-suited to our social and ecological milieu.

Unfortunately, our cultural lore is rapidly being lost. Traditionally, knowledge was passed orally from generation to generation through specific forms of cultural transmission and education that were themselves as important as the knowledge conveyed. That this inter-generational transmission of cultural knowledge is no longer occurring is due mostly to the breakdown and replacement of traditional economies, social customs and forms of knowledge transmission.

Often we hear people say that the old people should teach the younger people these old ways. But the young people are no longer interested in learning their cultural heritage from their elders. Some reasons for this lack of interest include the need to survive in an expanding cash economy, the magical attractions of a global consumer society and the breakdown of traditional social relationships. The result is the same, however. This knowledge is lost forever when not transmitted.



Photo: Vanuatu Cultural Centre

Preparing a traditional fish poison. The gratings are packaged in a broad leaf for immersion in a tidal pool. this method is practised by men, women and children

To record this knowledge and to transform our oral heritage into permanent records is an enormous and ongoing task. Moreover, it is an urgent task. The way we describe the problem is this: Every time an old man or woman dies without passing their knowledge on, an entire library of accumulated cultural knowledge is destroyed.

The Cultural Centre has recorded large amounts of information which is rapidly disappearing from daily island life while the TMT Project is critically important for enhancing the management of marine resources. Our field work has encouraged local people to re-value their traditional knowledge and re-apply it. In all the locations we visited, people revived fishing practices so as to document them and also to demonstrate these methods to younger community members.

All the people in the areas we visited were inspired by the documentation process. They began to re-assess the value of their traditional management practices and fishing methods and to dig deep in their memory to recall almost forgotten customs and traditions. We hope that this process of community-level reassessment, and the Project's information dissemination on the effectiveness and sustainability of TMT, will encourage policy-makers to look carefully at the more effective strategies for community-led resource management in Vanuatu.

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Ralph Regenvanu is the director of the Vanuatu Cultural Centre. Francis Hickey is a CUSO cooperant working with the Cultural Centre's Traditional Marine Tenure Project. Both were visiting Canada under the auspices of the Canada-South Pacific Ocean Development Program to attend the Coast Zone Canada conference, SPPF's Pacific Networking Conference and other meetings.



Indigenous Knowledge Small Grants Programme

The Indigenous Knowledge Programme is an initiative of the Indigenous Peoples Biodiversity Network with support from the International Development Research Centre, the Swiss Development Cooperation, DANIDA and the UNDP. Its objective is to support Indigenous Peoples' activities that help to preserve and protect local traditional knowledge and garner recognition and compensation for Indigenous Peoples' innovations and intellectual contributions at local, national, regional and international levels.

The Programme is unique, not only because its objectives and outcomes are based on the priorities of Indigenous Peoples, but also because Indigenous Peoples from different regions of the world play the lead role in implementation of the programme. The executive body of the Programme is a steering committee of 8 Indigenous regional coordinators from Africa, South Asia, Southeast Asia, South America, Meso-America, North America, Arctic Circumpolar and the Pacific. The Pacific coordinator is Aroha Te Pareake Mead of Aotearoa.

The small grants programme will provide up to US\$12,000 per project to support research activities that build Indigenous organisational capacity in research techniques. The IKP focuses on Indigenous knowledge systems and the impact they have on:

- 1) the conservation of biological diversity;
- 2) the continuation and revitalisation of Indigenous cultures;
- 3) the reduction of poverty among Indigenous communities; and
- 4) laying the foundation for sustainable livelihoods.

For guidelines on applications and deadlines for submission please contact the IKP Pacific Regional Coordinator:

Ms Aroha Te Pareake Mead
PO Box 13-177
Johnsonville, Wellington
AOTEAROA/NEW ZEALAND
Fax: 64-4-494-7103
Email: aroha.mead@tpk.govt.nz



No More Witches Valuing Traditional Medicine

by Susana Tuisese & Kerrie Strathy

According to the World Health Organisation, up to 90 percent of people in developing countries rely on traditional medicines to meet primary health care needs. This is especially true in Pacific Island countries (PICs), where many people live on remote islands or in interior villages on larger islands. These islands tend to have extremely limited access to modern health services and, where health centres do exist, their supply of medicines is often limited to the '3 Ps' - panadol, peptobismol and penicillin.

Participants at the First Regional Women's Traditional Medicine Workshop held in Fiji in 1993 indicated that both women and men in PICs generally know that plants can be used as medicines. Many people, for example, are familiar with a number of common treatments such as the use of guava leaves to treat diarrhea and roman candle leaves to treat ringworm and fungal infections. However, participants indicated that women tend to know more medicinal plants than men, and that older women tend to know more remedies than younger ones - beliefs that have been upheld by subsequent surveys carried out by WAINIMATE and others.

Research carried out in Samoa by Paul Cox revealed that nearly all taulasea, or indigenous herbalists, are women. These taulasea learned their craft from their mothers, who had in turn apprenticed with their grandmothers, and so on. The same appears to be true in other PICs where women play a significant role in the provision of healthcare both within their families and within the larger community, although men do tend to be specialists such as traditional bone setters.

Formal education systems throughout the world have tended to dismiss experienced knowledge, such as that held by traditional healers. Women in Europe who practised traditional medicine were burned alive as witches following Pope Innocent VIII's proclamation of 1484 condemning witchcraft. These knowledgeable women - medicine women and midwives - were a threat to the male hierarchy and religious leaders who eliminated them. The experiential knowledge held by traditional healers in the Pacific and elsewhere is largely left out of school curricula and continues to be challenged by religious leaders and western trained medical practitioners who are similarly trying to maintain their positions of power and control.

Much knowledge about the traditional use of plants to prevent and treat sickness is thus in danger of being lost.

Traditional healers report they are finding it increasingly difficult to encourage daughters or other young girls to become their apprentices. Young girls spend considerable periods of time in school where they learn about 'modern' health care systems and subsequently become reluctant to continue old practices. Time spent in the classroom also significantly reduces opportunities for the experiential learning that used to occur when these young girls accompanied their mothers, grandmothers and aunts on medicine making expeditions.



Photo: Kerrie Strathy

Healer Maggie Vuadreu with a fern used to treat sore throat

Some nurses and doctors acknowledge that traditional treatments are more effective than the ones they administer from hospitals and health centres, and encourage patients to self-administer traditional treatments instead of using expensive medications from the chemists. These medical practitioners are being encouraged to work with groups like WAINIMATE and its counterparts in other PICs to incorporate safe and effective traditional medicines into national health delivery systems, thus supplementing or replacing increasingly expensive imported medicines. Members of Maurin Kiribati have had some success in encouraging doctors to allow traditional healers to treat patients in hospital. Others are working towards the same end.

WAINIMATE's chairperson, Filomena McKay, an instructor at the Fiji School of Nursing, learned that chopped

pawpaw [papaya] leaves mixed with warm coconut oil is an effective treatment for beka [boils under the armpit]. Prior to learning about this treatment, Filo had taken repeated courses of penicillin to clear up her own boils. She also had her abscesses surgically removed on numerous occasions since they recurred in spite of the penicillin treatments. Then one day the gardener at the Health Centre where she was working told her about this traditional treatment. Since trying the pawpaw and coconut oil treatment, Filo has not had beka and has gone on to encourage others suffering from beka to use this safe and effective traditional treatment.

Other medical practitioners have similar stories to tell about traditional treatments they have had administered to themselves, or traditional treatments that have been administered when conventional treatments did not remedy conditions affecting their patients. One Lautoka-based doctor indicated that he routinely refers patients with migraine headaches to a traditional healer in the

deliver medical supplies for six weeks to the hospital where he was working on the island of Kadavu. During this time he saw the patient's leg deteriorate and was afraid that amputation would be necessary. Fortunately, he remembered his mother treating infections with chewed leaves when he was a child and decided to try this traditional treatment. When the treatment worked, he applied the same treatment to another patient whose leg wound had not healed with penicillin. Much to his surprise, the traditional treatment cleared up the infection. This doctor published an article about his experience in the journal of the Fiji Medical Association and was subsequently informed by another doctor that his license to practice medicine could be revoked for such an admission!

Many nurses have admitted that they administer safe and effective traditional medicine treatments to patients in hospital after hours or during the nightshift when doctors are not around. The secretary of WAINIMATE, while in hospital, noted that nurses administered aloe vera to a diabetic patient's leg wound. These treatments were given once the doctors went home and within a few days the man, who was in hospital to have his leg amputated, was released with his legs intact since the aloe vera cleared up the infection.

Katy Moran, Executive Director of the Healing Forest Conservatory, has acknowledged that 'the contributions that indigenous peoples have made to medicine have yet to be recognised, much less protected and paid for.' A case in point for Pacific Islanders is that of kava or yaqona, which has gained widespread use as a stress-reducing treatment in many western countries. While Pacific Islanders earn some money from supplying the raw material to pharmaceutical companies, they receive no compensation for the knowledge which has generated millions of dollars in profit for the companies that have used it. Although the

Convention on Biological Diversity adopted at UNCED in 1992 encourages benefit sharing as a result of indigenous knowledge, there is very little national legislation or international goodwill to ensure this happens.

Overseas researchers continue to look for healers in PICs to obtain information and samples of the plants used to make their herbal medicines. In some cases the researchers provide small tokens of appreciation to healers, but there are other cases where researchers have taken plant samples with no compensation. One healer from Solomon Islands gave researchers from Japan samples of the plant she uses to treat malaria patients. While they have informed her that the plant contains properties similar to those of the well known anti-malarial drug quinine, which is also derived from plant sources,



Photo: Kerrie Stratby

Visiting the Kava Store in Port Vila, Vanuatu, a business dedicated to the products of traditional medicine

area. He said he does this because there is nothing he can give his patients that works as effectively as the treatment provided by the local healer.

Another doctor recounted his experience trying to treat a young girl who had an eye infection that persisted in spite of treatments prescribed by numerous doctors. He had almost given up when he remembered a treatment that had been given to treat his sore eyes after a tiring sea voyage. To make the 'medicine' more acceptable, he squeezed the juice of the common beach morning glory leaves into a small bottle with an eye dropper which he used to administer the successful treatment.

Yet another doctor revealed how he was forced to treat a patient's diabetic leg ulcer with the chewed leaves of a plant. Due to rough seas it was impossible for a ship to

they have failed to provide any compensation for her valuable assistance. As the search for treatments for malaria and other epidemics continues, there will undoubtedly be more Pacific Island healers in danger of freely giving away traditional knowledge for which they should be compensated.

We rely on plant-based medicines to a much greater degree than is commonly realised, even if we ignore the recent proliferation of herbal medicines available from every pharmacy and supermarket in many countries. Did you know that almost 50% of all prescription medicines contain substances of natural origin? Or that half of these drugs contain an active principle that is derived from plants? Many of these drugs have been derived from plants brought to the attention of medical researchers by their use in an indigenous society. Researchers are now deriving personal benefit from patenting neem products that were developed with knowledge derived from India, where neem has been used medicinally for several generations. The time has come for traditional healers in the Pacific to become aware of their intellectual property rights so that their indigenous knowledge can be recognised and protected for the continued benefit and well-being of all Pacific Islanders.

Susana Tuisese is the Forestry Advisor to WAINIMATE, the Women's Association for Natural Medicinal Therapy, an association of traditional healers and their supporters in Fiji. Kerrie Strathy was until recently WAINIMATE's Education Advisor. Though recently returned to Canada, she remains an active supporter of WAINIMATE and is working with the International



Photo: Willie Cbung

WAINIMATE members, Mere Masi and Sittiri Tukutukuivalu with wabasucu, a plant used to stop bleeding

Council for Adult Education's Learning for Environment Action Program [LEAP] on a project designed to dispel the notion that traditional healers are witches.



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WAINIMATE - Women Healers Unite

by Seini Fiu

In Fiji, as in other parts of the Pacific and around the world, women play a major role in the provision of health care within their families and communities. As such they have a respect for the forest resources that are frequently used to make traditional medicines. Women are also dependent upon forests for many other items required for daily living, including foods and craft materials. Increasingly however, as the need for cash increases, there is a tendency to view the forest as a source of timber or quick cash. Little thought is given to the other products obtained from the forest.



Photo: Maggie Vuadreu

Launching the WAINIMATE traditional medicine 'cookbook'

In July 1992 the South Pacific Action Committee for Human Ecology & Environment (SPACHEE), the YWCA and the Fiji Department of Forestry held a Women & Forests Workshop. Participants looked at how women use forest resources. An issue of particular interest to the participants was traditional medicine. Participants indicated that it would be useful to learn more about traditional medicine practice in the Pacific and to encourage women to use and 'Save the Plants That Save Lives'.

A regional Women Traditional Medicine Practitioners' workshop was held in August 1993 in Fiji to explore the practice of traditional medicine in the Pacific. Participants shared their knowledge and experience with traditional medicine. They developed plans for follow-up activities that included documenting traditional medicine practice and promoting the use and conservation of medicinal plants. Participants also

participated in the establishment of a traditional medicine demonstration garden at the University of the South Pacific. Further regional workshops took place in 1995 and 1997.

Within Fiji, as follow-up to the first regional meeting, a workshop was held in May 1994 to further develop ideas for a long-term traditional medicine documentation and promotion programme. The enthusiastic participants decided to form an association of women healers and supporters of traditional medicine. WAINIMATE, the Women's Association for Natural Medicinal Therapy was born.

WAINIMATE was registered in Fiji as a women's non-governmental organisation (NGO). It exists to ensure the promotion, conservation and protection of safe and effective traditional medicine knowledge and medicinal plant resources for women and their families. Working with the two themes of 'Saving the Plants That Save Lives' and 'Affordable Health for All', it has focused on five major areas:

- conservation of medicinal plants;
- promotion of safe and effective traditional medicines, including verification of the safety and efficacy of traditional medicines and treatments;
- conservation of traditional medicine knowledge;
- protection of the intellectual property rights of traditional healers; and
- discouraging the use of unsafe traditional medicines.

WAINIMATE works toward these objectives through training, awareness raising, demonstrations, consultations with relevant organisations and individuals, networking and research. Within the next three to five years, WAINIMATE envisions establishing the WAINIMATE Research & Training Institute to carry out research and develop training programmes for health professionals and others interested in practicing traditional medicine. It will also have an extension programme that will work with forest owners to develop environmentally sustainable community-based traditional medicine harvesting and processing enterprises. These enterprises will provide landowners with income in an effort to encourage resource conservation through sustainable use.

WAINIMATE is a membership organisation that brings together both healers and anyone else who supports the aims of the organisation. There are also 'Friends of WAINIMATE', men and those living outside Fiji who wish to support WAINIMATE. Members are involved in local

activities and at their Annual General Meeting elect an Executive Committee to manage the affairs of the association. WAINIMATE also has a small staffed secretariat that is being supported with funding from the South Pacific Peoples Foundation, Anglican Church of Canada, United Church of Canada and Canadian International Development Agency.

While still young as an organisation, WAINIMATE has already implemented several important projects. A Fijian language video on traditional medicine was produced (with support from the Canada Fund) for use in workshops and ongoing awareness programmes. Traditional medicine demonstration gardens have also been established by several local WAINIMATE groups. A Fijian language traditional medicine handbook, or 'cookbook' as it is sometimes referred to, was produced and launched at this year's World Health Day.

Another project that WAINIMATE is currently undertaking is a survey of healers throughout Fiji (with support from the International Women's Development Agency of Australia and the Canadian International Development Agency through Ecowoman). Local organisers are carrying out village visits to discuss intellectual property rights, compile profiles of traditional healers and identify medicinal plant species that are becoming scarce. A directory of healers will be compiled at the completion of the survey.

WAINIMATE has carried out community-based workshops for women to encourage the retention of traditional medicine practices and conservation of medicinal plants. Displays and demonstrations are another public awareness activity. Members have also been resource persons or participants in workshops organised by other agencies including the Forestry Department, Department of Women & Culture, Ministry of Health, Ministry of Education and several regional organisations.

WAINIMATE has also promoted the development of traditional medicine organisations and programmes in other Pacific Island countries. It supported the formation of traditional medicine associations in Kiribati, Samoa and Nauru. During 1998, it has provided resource people for workshops in Vanuatu and Solomon Islands. This resulted in the formation of new traditional medicine associations in both countries.

WAINIMATE is represented on Fiji's Biodiversity Strategy and Action Plan (BSAP) Steering Committee and, together with the Ministry of Fijian Affairs, conducted a 4-day workshop as part of the BSAP consultations.

An important communications tool is **WAINIBULA**, the WAINIMATE newsletter. It provides information about WAINIMATE activities and other activities related to traditional medicine. [Contact the WAINIMATE office to become a subscriber, member or "friend of



Photo: Maggie Vuadreu

Healer Maggie Vuadreu gives the United Church of Canada's Bruce Gregersen a tour of her medicinal plants garden

WAINIMATE".]

WAINIMATE is committed to extend its campaign to Save the Plants that Save Lives as it works towards its goal of Affordable Health for All. It will continue to document the use of safe and effective traditional medicines through ongoing ethnobotanical surveys, healer profiles and workshops over the next three years. Workshops and public awareness campaigns will focus on conservation of medicinal plants and use of traditional medicines for common ailments. It will also continue networking and collaborating in Fiji, the South Pacific and around the world with other organisations that work on similar issues and/or share its concerns.

ACKNOWLEDGEMENT - WAINIMATE would like to extend its sincere thanks to the very many individuals and organisations who have generously supported its work. A special thank you is extended to the Anglican and United Churches of Canada, the Canadian International Development Agency and the South Pacific Peoples Foundation for supporting WAINIMATE's Institutional & Programme Development Project.

Seini Fiu was hired in 1998 as WAINIMATE's first coordinator. She left WAINIMATE at the beginning of 1999 to resume her educational studies.

**FOR MORE INFORMATION
ABOUT WAINIMATE,
CONTACT:**

WAINIMATE
Private Mail Bag
Suva, Fiji





Ecowoman

Women's Role in Traditional Knowledge

by Aliti Vunisea

Pacific women have played and continue to play dominant roles in conserving, practising and passing on traditional knowledge. Women have specifically defined roles and contribute to all spheres of the traditional subsistence lifestyle in Pacific Island nations. Modern development however has seen the gradual loss or erosion of some of this knowledge. Women's knowledge, work and participation are usually described as complementing men's tasks. As a result, women's traditional knowledge is not seen as important and their contribution is not included in decisions pertaining to resource management or conservation, nor are they included in mainstream development. They however continue to pass on traditional knowledge to other women and to children through the various activities they partake in at the village or community level.

Because Pacific countries are predominantly patrilineal, women face various socio-gender constraints, which hinder their full participation in village activities. In most ritualistic hunting and fishing activities, women do not participate. Taboos which prohibit women from fishing when pregnant or when menstruating, and prohibitions on travelling in boats are typical barriers. Women also do not participate in traditional rituals and ceremonies of food presentation. Their involvement is

basically through the preparation of food or catering during village or community functions. Consequently women's diverse knowledge of both the marine and terrestrial environment developed through generations of usage are not fully utilized.

Some Pacific societies customarily recognize women's rights. In Polynesia for example, females are not considered intrinsically inferior to males. Samoan women who are unmarried, divorced or widowed and continue to reside in the village are known as the 'ladies of the village'. Such women hold high ceremonial status that is independent of male rank and which enables important decision making powers within their families. Fijian women of chiefly birth also hold special status and can ascend to chiefly positions if they are first born in their families.

I will discuss women's traditional knowledge with emphasis on the fisheries sector. Most examples will be from Verata Province, on the south-eastern coast of Fiji. Fishing provides the sustenance and livelihood for most Pacific Island nations. Early Pacific societies were self-sufficient in foods, many of which were acquired through family fishing, foraging and collecting efforts. Women's subsistence fishing activities, which concentrated in the inshore area, were a major component

of these efforts. Traditional fishing roles were specifically defined with men fishing in the deeper oceanic waters while women gleaned the reef flats and inshore zone.

In some parts of Polynesia fishing is a test of manhood. Thus only men are perceived to fish even though women partake in numerous fishing activities. Incidences of women's prohibition from such fishing activities are often explained as protection of femininity. Schoeffel (1995: 8) explained that such biases were very strongly felt in Melanesian culture where there existed "a kind of sex class system in which the superiority of men and the inferiority of women was strongly asserted. Thus what men do is considered important and what women do is not important".

Women participated in all spheres of traditional village life, although in some cases this involvement was passive. Where men had specific customary tasks or roles within the community, women also had defined roles that complemented men's activities. During ritualized fishing activities for example, women were expected to look after the household until the men returned. Women also participated in important communally performed fishing activities such as the leaf sweep (yavi rau). Women also had set traditional tasks to perform during ritualised

fishing or farming activities. Consequently women had an intimate knowledge of such rituals and were familiar with the different roles played and associated taboos and restrictions.

The description of women's fishing activities as gleaning and collecting on reef flats does not accurately portray the immense knowledge and skills that women's fishing activities entail. Contrary to common assumptions about women's gleaning activities, their activities are quite varied and involve in-depth knowledge of individual species and their habitats, inter-species relationships and the seasonal and temporal patterns of abundance. Because their target species vary considerably in terms of their habitats, women are more aware of the minute details of the inshore reef flats, the different names given to them and the various habitats of species than their male counterparts. Intricate skills of gently prying or pulling away shellfish from under rocks, clamping hands on crabs and catching fish barehanded, give women a unique edge over men in fishing. Interestingly, the fishing lore is not confined to the older generation, as younger women who have informally learned from their mothers and other women are also very well informed and skilled. Gina-Whewell (1995) demonstrated that Roviana women in the Solomons are as informed in terms of fisheries knowledge as their male counterparts.

Associated with women's amazing ability at finding and trapping or catching species was the unique understanding of tides, lunar cycles, weather and seasons. In Fiji the best locations for line or net fishing at the incoming or ebbing tide were well known to women. Low tides in the afternoons were the best times to collect shellfish. Fish habits and how they migrated inshore with the incoming tide was fully utilized for line and net fishing purposes. Other natural influences on marine species behaviours were also well known. Thus crab fishing and shellfish collection was targeted during stormy weather. Mud lobsters were especially collected after an occurrence of thunder. The effect of thunder was supposed to leave some fish

and other marine species disorientated and they would come out of their abodes.

Seasonality of species was also well known and was the major influence on fishing patterns and emphasis. Not only were women familiar with availability and abundance patterns, but specific habitats or areas colonized by different species were well understood. Thus when women were out collecting ark shells, spider conch shell or *andara*, they would target certain areas of the reef. Thus on a typical fishing day women could be found in little groups or clusters in different locations depending on their target species.

Women are also very familiar with terrestrial resources, their abundance, seasonality and harvesting techniques and how this correlated with marine products. A good grasp of this knowledge enabled people to alternate harvest of marine and terrestrial resources, thus utilizing an inbuilt resource management system. The bearing of fruit or flowering of certain terrestrial trees or plants served as indicators for the availability of some marine species. For example the flowering of the *dadap* (African tulip) was associated with the seaweed and octopus season. During the month when yams begin to grow (June), seaweeds also begin to grow. Generally good harvests of yams are indicative of good harvests of seaweed.

As collectors of firewood and traditional medicines, women have an untapped bank of knowledge on the different tree, plant and herb types that are utilized. Women's knowledge is not confined to the use of different plants, but also of the preparation and administration of medicines. Apart from medicinal uses, women also use plants and herbs for a variety of other reasons. This included the making of scent for body oils. Coconut cream is cooked and special flowering plants are immersed in the oil to give it an attractive odour. Most women plant trees and shrubs for the above use in the backyard gardens and around their home.

Women are also the major informal traders throughout the region, dominating municipal markets and other roadside and street outlets. Fairbain-

Dunlop (1995) maintains that if the 'self-employed' category is used as an indicator of informal sector activity, then almost one-quarter of Pacific women are engaged in informal trade. Contributing to this significant participation is women's distinct processing and preservation activities. Complex skills and knowledge involved in selective processing and preservation are well understood by women.

Traditional exchange or barter is an ingrained system of acquiring artifacts or food not produced locally from other areas. For example, women in Vatulele (Fiji) who make *tapa* exchanged this with mats from women coming in from Vanua Levu or other areas of Fiji. Women made most of the traditional crafts or artifacts used in barter. There were also areas of specialization. For example women of Lau in Fiji are well known for special mats; Bua and Macuata are makers of *kuta* (a special mat made from a reed); women in Vatulele and Moce were experts at *masi* or *tapa* making. Mat making is a complex process of harvesting the *pandanus*, cutting the edges, drying, boiling, smoothing and stripping to the appropriate size before weaving. All these skills have been passed down through hundreds of generations.

Modernisation and monetisation are gradually integrating rural populations into the market economy. The gradual erosion of traditional structures and norms could result in the loss of valuable indigenous knowledge, especially that of women. This is more so given the predominantly negative attitude to their traditional knowledge, skills and participation. Despite women's active role in village dynamics, their progress is still hindered by social and gender restrictions that continue to undermine the importance of the knowledge they have. With increasing change supported by 'western models' of education, a lot of the intimate knowledge of the environment, traditional ethics or norms that go with it may be lost in the near future.

Aliti Vunisea teaches in the Geography Department at the University of the South Pacific. She is a member of the Women & Fisheries Network, one of the founding organisations of Ecowoman.

- continued from page 14

community innovations need not be fixed and final, but can be ongoing or evolutionary; and communities retain exclusive monopoly control over their folklore innovations for as long as the community continues to innovate.

Bio-Prospecting Agreements — Under article 15 of the Biodiversity Convention, the sovereign rights of States over their natural resources and their authority to determine access to genetic resources is recognised. Bio-prospecting — the research, collection and utilisation of biological and genetic resources for the purpose of applying the knowledge to scientific or commercial purposes — is being carried out today by both foreign and local collectors. The initial question facing indigenous communities is whether they should earn income from their traditional knowledge and biodiversity. Payments for access to samples are low because the high added value of the final product has been provided by the pharmaceutical industry; a decade or so may pass before significant revenues materialise; there is an abundance of unimproved genetic and biochemical resources; and a good chance exists that no commercial drugs will be produced.

Problems arise when consent is not informed, when it is given by a few or not at all, or when it is given outside accepted community processes. The Philippines has produced a draft Executive Order which attempts to control access to the resource and to avoid potential problems. The objectives of the regulation are to ensure that:

- all information about bio-prospecting becomes available to the public;
- before the activity is undertaken, indigenous and local communities have given their prior informed consent.
- both the country and communities benefit from its results.

Above all, what the Executive Order does is make the activity of bio-prospecting transparent so that interested parties may make decisions and act on them with the proper information.

It has been suggested that bio-prospecting laws are not an answer to biodiversity or indigenous knowledge protection, but that they allow breathing space until stronger protection can be obtained. It has also been suggested that bio-prospecting arrangements are not likely to provide adequate compensation to either indigenous peoples or developing countries unless they are made within the framework of broader intergovernmental arrangements.

Materials Transfer Agreements — These agreements treat genetic material as a commodity rather than as knowledge. A contract is reached between buyer and seller based on the potential value of the commodity. Such contracts generally involve both an initial 'up front' payment and a formula for additional payments if and when the material is commercialised. Such contracts are inevitable in situations where both parties realise that the material to be transferred has real (and relatively immediate) commercial potential.

Sui Generis Laws

While current IPR laws may offer limited protection of community knowledge and innovations, in general they are inappropriate because:

- they seek to privatise ownership;
- they are suited to applications by individuals and corporations rather than communities;
- they are expensive to apply for and to maintain;
- they give a restrictive interpretation of invention.

Work on drafting alternative IPR laws which more suitable to communities has accelerated, particularly since the inception of the Convention on Biological Diversity. In recent months Costa Rica has passed a law which will allow for the formulation of alternative or *sui generis* IPR laws. In a parallel development, the Organisation of African Unity has endorsed a model law on access to genetic resources and *sui generis* IPR.

Pacific Island countries would be well advised to develop their own *sui generis* laws to protect the indigenous knowledge of Pacific peoples.

Clark Peteru is a Samoan lawyer who has done extensive work on intellectual property rights issues. He organised the Pacific Indigenous Peoples Knowledge and Intellectual Property Rights Consultation sponsored by the Pacific Concerns Resource Centre in Fiji in 1995 and represented PCRC at the 1998 Pacific Networking Conference. This article was based on materials from various sources, particularly Rural Advancement Foundation International (RAFI).



Looking for more information about Indigenous Knowledge & Intellectual Property Rights Issues?

Pacific Concerns Resource Centre (PCRC)

Contact PCRC to obtain copies of the proceedings of the 1995 Pacific Indigenous Peoples Knowledge & Intellectual Property Rights Consultation.

Private Mail Bag
Suva, Fiji
Tel: 679-304649
Fax: 679-304755
Email: pcrc@is.com.fj

Rural Advancement Foundation International (RAFI)

RAFI does research and advocacy and produces extensive up-to-date information on indigenous knowledge and intellectual property rights issues. Check their website to find out more about their current publications and activities.

<http://www.rafi.org/> Tel: 204-453-5259
110 Osborne Street, Suite 202 Fax: 204-925-8034
Winnipeg, MB R3L 1Y5 Email: rafi@rafi.org





Pacific Islanders visit Canada's Pacific Coast

Late August saw nine Pacific Islanders and two Canadian working in the Pacific travel to the west coast of Canada. The purpose of the visit was to share their experiences in management of marine and coastal resources, and to increase networking and linkages between the Pacific and Canada. The group (see Box 1) represented six Pacific Island Countries: Cook Islands, Fiji, Kiribati, Samoa, Solomon Islands and Vanuatu. The participants were made up of a cross-section of people with experience in coastal and fisheries management in the Pacific. They included two hereditary chiefs, three university lecturers and researchers, staff of fisheries and environment departments from

two countries; the wetlands management officer from the South Pacific Regional Environment Programme, the director of a national cultural centre and a Canadian CUSO cooperator working with the cultural centre.

Funding for the visit came through the Canadian International Development Agency's major aid program in the Pacific, the Canada-South Pacific Ocean Development (C-SPOD) Program Phase II. The visit was coordinated by William Cross, the Canadian Program Coordinator and Kenneth MacKay, the Field Program Coordinator, both with the Canadian coordinating agency for C-SPOD, LGL Limited, environmental research associates. SPPF offered considerable assistance with local arrangements and facilitated post-conference visits for some of the participants.

The group attended the Coastal Zone Canada 98 (CZC98) meeting in Victoria, 31 August to 4 September, participated in a special workshop focused on Asia and the Pacific, and also attended a meeting with members from the Pacific community living in Vancouver. Some of the group stayed on for additional meetings facilitated by SPPF including the SPPF Pacific Networking Conference, *"Our Knowledge Our Rights; Traditional Knowledge and Pacific Peoples"* and the Canadian Aboriginal Science and Technology Society's annual conference.

At CZC98 the group participated actively, presenting four papers and one poster in the session on Empowering Coastal Communities, attended the technical sessions and shared their experiences in the workshop discussions.

One of the highlights for many participants was a special meeting organized by First Nations at the traditional Long House beside the Royal British Columbia Museum. This traditional West Coast dwelling is located next to the museum and is a living museum facility that also hosts a number of First Nation's meetings. The Pacific and other international participants at CZC98 were introduced to some of the problems in coastal management faced by Canada's First Nations through stories, song and dance and then treated to traditional food. The Islanders appreciated the sharing and closely identified with the respect for tradition and the environment.

BOX 1 - Participants in Pacific Islanders Visit to Canada

Name	Address	Name	Address
Te Tika Mataiapo	Te Tika Mataiapo	Temakei	Director
Dorice Reid	Dorice Reid	Tebano	Atoll Research Programme, USP, Tarawa, Kiribati
	Koutu-Nui of the Cook Islands		
	Rarotonga, Cook Islands		
Vina Ram Bidesi	Lecturer, Marine Policy, University of the South Pacific, Suva, Fiji	Naomi Biribo	Ministry of Natural Resources Development, Tarawa, Kiribati
Aliti Waqairamasi Vunisea	Lecturer, Geography Department, University of the South Pacific, Suva, Fiji	Lucille Apis-Overhoff	Wetlands Management Officer, South Pacific Regional Environment Programme (SPREP), Apia, Samoa
Michelle Lam	Fisheries Division, Ministry of Agriculture and Fisheries, Solomon Islands	Francis Hickey	Vanuatu Cultural Centre, Port Vila, Vanuatu
Nelson Kehe Kile	Chief, Baehai Clan, Honiara, Solomon Islands	Ralph Regenvanu	Director Vanuatu Cultural Centre, Port Vila, Vanuatu
Kenneth MacKay	Field Program Coordinator, C-SPOD II Forum Secretariat Suva, Fiji	William E Cross	Canadian Program Coordinator, C-SPOD II LGL Limited, King City, ON, Canada



Te Tika Metaipo Dorice Reid, a chief from Rarotonga, Cook Islands, made a very moving presentation to the Chief of the Tsartlip Tribe, our hosts at the Long House. She thanked the hosts, indicated that there were many things in common between Canadian First Nations and Pacific Peoples, and presented him with traditional gifts from the Pacific.

As Francis Hickey and Ralph Reganvanu reported:

First Nations meetings, particularly the welcoming at the bighouse provided an excellent way to deepen one's understanding of the First Nations' approach to resource utilization and management, and in a broader sense how they view the world around them, the two being inextricably related. This opportunity helped to facilitate the ongoing exchange of issues and ideas between the First Nations of Canada and participants from the Pacific. Throughout these sessions, and this process of exchange, it became increasingly clear how the management approach of the First Nations is analogous with that of Pacific Islanders. It was very interesting to exchange management approaches with First Nations people and to draw parallels with the Pacific approach.

The major activity of the visit to Canada was a special workshop, *Asian and South Pacific Experiences in Community Involvement in Coastal Zone Management*, held after the main CZC conference had ended. The Pacific participants were joined by one Canadian First Nation presenter, two from the Philippines and one with experience in Indonesia to present case studies, approaches and tools for involving coastal communities in

community based management. The sessions were chaired by Judith Swann, the keynote speaker at the opening of CZC98. Judith is a long time friend of the Pacific and has assisted many countries in the region in drafting their fisheries laws. The presentations focused on practical approaches that have been used in the field and included Community Involvement, Empowerment and Traditional Knowledge Systems.

The workshop was attended by over 60 very interested participants, including a number from Canadian First Nations. The details of the formal presentations are given in Box 2. The expected results included:

- to supply coastal zone management practitioners with methods, approaches and resources to involve coastal communities in issues related to coastal zone management.

- to inform a Canadian audience about the experiences and approaches that have been applied in Asia and the Pacific.

- to develop potential links between Canadian and Asia-Pacific groups involved in community based management of coastal resources.

These results were clearly achieved. Many of the special session participants indicated this was the best session at the conference and should have lasted all day. The Pacific and South East Asia clearly had considerable to offer to those interested in community based coastal management. In addition a number of contacts and lasting friendships were made. The group returned to their respective countries full of new ideas and better prepared to address the challenge of managing their own precious coastal resources.

BOX 2 - Presentations at the Special Session on Asian and South Pacific Experiences in Community Involvement in Coastal Zone Management

Chair: Judith Swann, SwanSea Ocean Environment, Waverly, N.S. Canada

Introduction: Kenneth T MacKay, Forum Secretariat, Suva, Fiji

- Community Involvement
- Community Awareness and the Pacific Year of the Coral Reef Programme, Lucille Apis-Overhoff, SPREP, Apia, Samoa
- Community Resource Management in the Solomon Islands, Nelson Kile and Michelle Lam, Solomon Islands

Empowerment

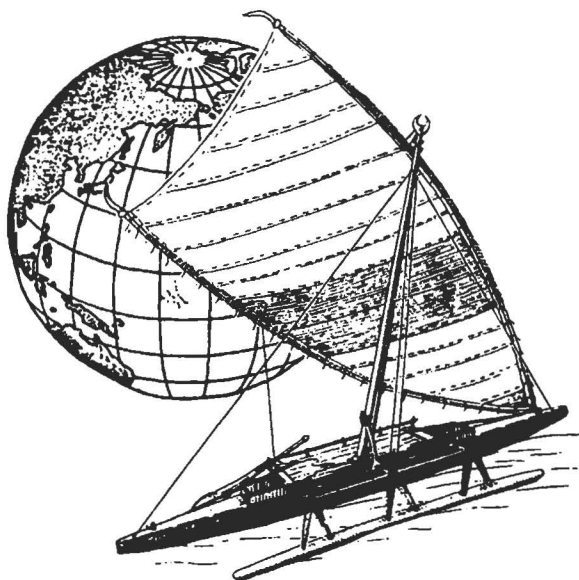
- Empowerment of Women, Aliti (Vunisea) Waqairamasi,
- University of the South Pacific, Suva, Fiji
- Empowerment and Conflict Resolution, Rebecca Rivera, Tambuyog Development Centre, Quezon City, Philippines

Traditional Knowledge

- Collection of Traditional Marine Lore,
- Francis Hickey and Ralph Reganvanu, Vanuatu Cultural Centre, Port Villa, Vanuatu
- Integration of Traditional and Formal Management Systems,
- Tom Sampson, Tsartlip Tribe, Brentwood Bay, B.C., Canada
- The Indonesian Sasi System and Community Monitoring of Marine Protected Areas in Biak, Irian Jaya, Indonesia, Irene Novaczek, Yayasan Hualopu, Ambon, Maluku, Indonesia
- The Ra'ui Traditional Management System in the Cook Islands,
- Te Tika Mataipo Dorice Reid, Traditional Chief, Rarotonga, Cook Islands
- Integration of Scientific Information with Traditional Knowledge and Customary Land Tenure Systems with Reference to Pacific Atolls,
- Temakei Tebano, and Naomi Biribo, Tarawa, Kiribati

Summary

- WE Cross, LGL Limited, King City, Canada



Ambassador Says Thank You

SPPF received the following message from Papua New Guinea's ambassador to Canada and the US.

I have noted at the back of your September 1998 issue a special mention of the effort of the Yukoners and Canadians in general in selflessly raising funds for the Aitape villagers stuck by the tsunami.

Please convey, through your bulletin, heartiest thank you and appreciation for this kind humanitarian gesture on behalf of the Government and people of Papua New Guinea.

Thank you,

Ambassador Nagora Bogan, KBE

SPPF in action

Update on Overseas Projects

SPPF's executive director, Stuart Wulff, spent a month (November-December) visiting projects in Vanuatu and Fiji. The Vanuatu visit was particularly important and exciting as it featured an SPPF facilitated evaluation of SPPF's three years of project support to the Vanuatu Society for Disabled People. To make the evaluation of greatest benefit to VSDP, it was structured as an overall evaluation of VSDP, leading to various recommendations about future directions for the organisation. The project was also supported by two dioceses of the Anglican Church of Canada and by the Canadian International Development Agency, to whom VSDP and SPPF extend our thanks.

Much of the time in Fiji was spent visiting Ecowoman, a project of the South Pacific Action Committee for Human Ecology & Environment, and WAINIMATE, a women healers' organisation. Both are being supported by SPPF and CIDA, with the Anglican and United Churches of Canada also providing support for WAINIMATE. SPPF has also learned about a major success arising from our earlier support to childcare research by another Fijian organisation, Women's Action for Change. WAC's efforts have led to an agreement for WAC to manage an innovative workplace based childcare for women workers in garment factories.

Donations also continue to trickle in for reconstruction efforts following the tsunami (tidal wave) in Papua New Guinea.

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