

authority, and the importance of monitoring and awareness for successful community-based management.

The session was chaired by Alan White of the University of Rhode Island's Coastal Resource Center. Bob Johannes of CSIRO emphasised the growing trend in the Pacific and elsewhere toward decentralisation of coral reef and coastal fisheries management functions. He reminded the audience that indigenous coral reef management systems and knowledge have been functioning for millennia with varying success in maintaining the ecological integrity of coral reefs, and that these systems provide the context within which management problems need to be understood and participatory solutions developed.

The information provided and lessons learned were new to many participants, as the session was the

first of its kind to be included in an International Coral Reef Symposium. These lessons, and several of the cases through which they were illustrated, will be published in a book 'Community-Based Coral Reef Management: Lessons from Experience', now being developed in collaboration by Greenpeace, University of Rhode Island Coastal Resource Center, and the Caribbean Natural Resource Institute. It is hoped to publish the volume in late 1993.

In addition, the session spurred the formation of an international network to facilitate information exchange, assist capacity development and generate support for community-based and collaborative coral reef management worldwide.

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Conference on the science of the Pacific Island peoples

by **Bob Johannes,**
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The value of traditional ecological knowledge (TEK) has been a well kept secret in modern societies and, until recently, has been all but ignored even by many professional natural resource managers. Happily, this is now changing. Even *Time Magazine* has got the message; its cover story (Sept. 23, 1991), entitled 'Lost Tribes, Lost Knowledge', brought the subject to international attention.

A somewhat more philosophical treatment of the subject is provided by the prominent environmentalists David Suzuki and Kenneth Knudtson in their book *Wisdom of the Elders*, published in 1992. They discuss the virtue of the widespread tribal view that the environment is a sacred system whose proper functioning requires that each species – including *Homo sapiens* – play its proper, humble role. (Christianity, in contrast, preaches environmental arrogance – humans are instructed to 'subdue' the earth and to 'have dominion over the fish of the sea,' a philosophy that has helped justify the environmental destruction that proceeds apace around the globe.)

Meanwhile, the growing profile of TEK in the Pacific Islands was reflected in the holding of the first-ever conference on the subject in the region in 1992. The conference on the Science of the Pacific Island Peoples, sponsored in part by the Government of France and the Sasakawa Peace Foundation (of Japan), was held at the University of the South Pacific in Suva, in early July.

Participants included not only biologists and social scientists, but also traditional healers and other Islander TEK experts, as well as philosophers, chemists, educationists, health specialist, linguists, Maori environmental activists, a regional planner, a politician, and a mathematician. Nine of the 65 papers presented concerned marine TEK, and quite a few others included some marine material.

Lamour Gina-Whewell described the traditional harvest and use of marine resources in the Solomon Island village in which she was raised, emphasising the importance of women, and Temawa Taniera described the information she obtained while studying traditional fisheries in some of the islands of Kiribati.

I described the strengths and weaknesses of both TEK and Western scientific knowledge for marine management, stating that a blending of the two would be more useful than either system in isolation. However, Marjorie Falanruw and Andrew Smith described cultural and environmental issues that make the combining of marine TEK and associated resource management with Western approaches a complex and difficult task in Yap.

Few studies of marine TEK are being carried out in the Pacific Islands, despite ever-increasing lip service being paid to their importance. In the meantime, priceless knowledge about the marine environment, knowledge found nowhere else, is vanishing as the old people who possess it die.

Why is so little being done when so many high-sounding resolutions are regularly passed at regional fisheries meetings concerning the importance of such work? Maybe some of our readers can throw some light on this question.

The proceedings of the conference will be published by the University of the South Pacific.

Forthcoming changes to the legal status of traditional fishing rights in Fiji

by Tim Adams,
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Fijian customary fishing rights have been legally recognised for the best part of a century. Indeed, the Fijian commercial reef and lagoon fishery has evolved entirely within the context of traditional fishing rights ownership. Whilst many countries are now looking at ways of re-potentiating traditional marine tenure systems, or even imposing new resource ownership systems on an already-developed commercial fishery, Fiji is one of the few countries in the world where the fundamental basis of such a concept is still in place and still strongly exercised.

There are over 200 legally-defined customary fishing rights areas, or *qoliqoli*, registered with the Native Lands and Fisheries Commission (NLFC) and these essentially cover every reef and lagoon in Fiji. Anybody wishing to fish commercially in Fiji (to catch fish by way of trade or business) must obtain a fishing licence from the Government, and anyone wishing to fish commercially in *demarcated areas* (areas subject to customary fishing rights, or *qoliqoli*) must first obtain the written permission of the registered owner of that area (usually the chief of the relevant coastal village), through the Divisional Commissioner, before the Government will issue a fishing licence.

This is an active, working system, and nearly 1,700 such community-sanctioned inshore fishing licences were issued in 1991. Communities also have the right to qualify their consent by excluding certain fishing gear types from being used, by prohibiting the catching of certain species, or by limiting fishing on certain sub-areas within the *qoliqoli*. Many communities have also exercised their legal option of appointing an *Honorary Fish Warden* to patrol their *qoliqoli*. Such wardens are unpaid and part-time, seeing this as a natural part of their traditional service to the community, but some of their costs may be subsidised out of *sevusevu*, or gifts, made to the community by fishermen seeking permission to use the *qoliqoli* at the start of each year.

The system is not without its problems, of course. One of the main problems in enforcing traditional measures in national law has been the difficulty of defining *qoliqoli* boundaries to a standard accept-

able by law. Indeed, such rigorous definition has been seen by many as being an unacceptable strait-jacket on what should be a dynamic and evolving customary system.

However, rigorous definition is a practical necessity for effective management. There are considerable financial returns to be made from the exploitation of certain inshore fisheries, and a purely traditional system cannot, without legal backup, cater for outsiders.

The Fiji Government Hydrographic Unit, together with the NLFC, is undertaking a long-term exercise to accurately survey *qoliqoli* boundaries. The existing system of dispute settlement, arbitration and registration through the NLFC is considered to give the system adequate flexibility to cope with any future changes.

Another problem lies in the differing concepts of marine spaces *ownership* between Fijian custom and British-derived law. The Fijian *vanua* concept embraces ties to the land and sea equally, whilst the law treats all of the sea-bed as State property and does not allow for marine spaces ownership either by the local community or by the individual.

Thus rural Fijian communities see fishing rights categorically as *ownership* rights, both of the geographical area of the *qoliqoli* and of the resources that it contains. But the law sees the geographical area of the *qoliqoli* as belonging categorically to the State, whilst the ownership of the resources it contains is somewhat confused. Some legal opinions state that fishing rights are *usage* rights to the resource only whilst others, pointing out the powers of management vested in the community (although, strictly speaking, these are powers to advise the Divisional Commissioner), opine that they are *ownership* rights over the resources.

Over the past few years there have been several different moves towards harmonising these conflicting ownership viewpoints and giving greater legal weight to the traditional concept. Many of these initiatives have stalled because of the delicate nature of the issue. Marine space ownership is