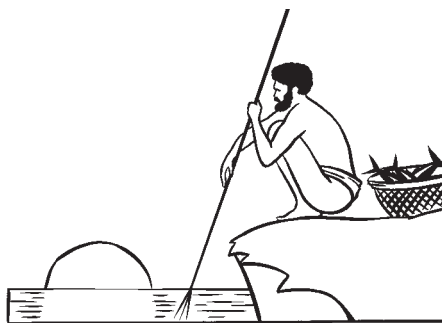


TRADITIONAL MARINE RESOURCE
MANAGEMENT and KNOWLEDGE

I N F O

**Decentralised nearshore fisheries management in Oceania — report of an FFA workshop in Niue**

by **R.E. Johannes,**
CSIRO,
Hobart, Tasmania, Australia

This workshop was held in conjunction with the 6th Technical Subcommittee of the Forum Fisheries Committee, in Niue, 27–28 April, 1992. Two major themes were taken up by the workshop: (1) Scientific support for decentralising management of inshore fisheries, and (2) Legal and political support for decentralised management.

An awareness in Oceania of the need to decentralise marine resource management is clearly gaining momentum, as demonstrated by recent developments in the Cook Islands, Fiji, Palau, Papua New Guinea, Solomon Islands and Yap. Island governments are seeking ways to turn over more management responsibilities to local resource rights holders, while continuing to direct some very important activities from the national central office. How, then, can traditional resource managers be provided with technical knowledge to enhance their effective managerial capacity? At the same time, how can exchange of information be promoted between the traditional marine resource managers and government administrators, to increase opportunities for management responsibilities to be shared, integrated and supplemented? This topic dominated discussions during the workshop. Accordingly, it was decided to focus the workshop on ways of encouraging experiments in decentralisation and the transfer of information between rural marine resource users on the one hand and central legislators and fisheries personnel on the other.

Some such experiments are already under way in the region. A good example was provided by Moses Amos, of the Vanuatu Department of Fisheries, concerning a trochus re-seeding project that he supervises. Mr Amos locates villages in Vanuatu where customary authority over marine resources remains strong and where rights holders are interested in obtaining management advice from the Department of Fisheries. Advice is given on such simple but important things as the importance

of maximum and minimum size limits in trochus, and how long the local trochus fishery should be closed in order to rebuild stocks and realise better sustainable returns. Other advice might include demonstrating to the local resource manager the advantages of staggering closed seasons for trochus, lobster, beche de mer, coconut crab, and other species, so that at least one commercial species is always available for exploitation. Mr Amos locates villages where such an approach might be promising by informing rural fishermen, via radio messages, that the Department of Fisheries will provide such a service for anyone who asks. He takes pains to ensure that important information flows both ways. For example, learning from villagers about the locations and movements of various marine populations in local waters provides essential information for him to use in helping the villagers formulate their management policies.

This is but one example. Given the growing awareness of the potential for using fisheries officers to encourage local management of marine resources, the workshop participants considered how training in the region might provide the appropriate skills for carrying out such work. It was concluded that the best approach will undoubtedly vary greatly among countries and even within countries. Thus it would be impractical to tackle this job at all locations simultaneously.

Discussion of the related subject of legal and political support for decentralised management re-emphasised that to help local people manage their resources more effectively, they require legal and political support in addition to scientific support. One of the toughest problems facing those who wish to manage their local natural resources is the reconciliation of customary rules and regulations with the formal legal system of the courts. Although some Pacific Island countries have *begun* to lay the foundation for addressing this issue, in others the government and courts do not formally recognise

the legitimacy of customary law. Although such a recognition is hard to put into practice, workshop participants felt that customary regulations are not often *adequately* acknowledged and supported in national legislation.

These and other concerns of the participants were reflected in 14 recommendations, about the recording of relevant traditional knowledge, research on customary practices, national profiling of traditional knowledge and customary practices,

reviewing regional constitutional and legislative provisions and international law relevant to customary marine tenure and management systems, case studies and potential for transfer of known effective customary marine resource management systems, compilation of literature and other databases, mechanisms for the collection and dissemination of information, educational and training requirements, and specialised workshops and other events. Further information can be obtained from the Forum Fisheries Agency.

Database and annotated bibliography project

by K. Ruddle

A database and annotated bibliography project on traditional marine resource management and knowledge is being conducted by Kenneth Ruddle, supported by the Centre for Development Studies, University of Bergen, Norway, through a small grant from the Royal Norwegian Ministry of Foreign Affairs. The objectives are:

—to provide users with a PC-based standardised database of existing published and unpublished literature (including reports, students' papers and theses, newspaper clippings, etc.) on traditional marine resource management and knowledge; and

—to publish an annotated bibliography on the same topics.

Some 1,000 items for inclusion have been collected so far from around the world, but with a special emphasis on the Pacific Basin. Members and readers are urged to assist in making the coverage as comprehensive as possible by searching their files and any libraries or archives to which they have access and send copies of relevant material to the editor of this *Bulletin*, for processing and entry into the database and bibliography. (We will arrange to have these deposited eventually in the SPC library.)

Traditional marine environmental knowledge is invaluable for fisheries management, protected areas planning and environmental impact assessment

by R.E. Johannes,

CSIRO,

Hobart, Tasmania, Australia

Knowledge of the local marine environment and the movements and behaviour of marine animals is remarkably rich in some Pacific Island fishing cultures. It offers resources managers a short cut to some vital basic natural history data needed for managing nearshore marine resources.

The timing and location of reef fishes' movements provides a good example. Year after year many reef fish migrate to specific locations on the reef, to aggregate there for several days, usually in a particular moon phase, in order to spawn. Local fishermen often know the precise timing and pathways of these migrations and the locations of the aggregations into which they feed. For example, a few years ago, the fishermen of Palau provided me with information on the lunar periodic spawning

aggregations of more than twice as many species of reef fish as such information could be found for in the scientific literature for the entire world (Johannes, 1981). I have since obtained similar information in Yap, Pohnpei, the Marshall Islands, Kiribati, Papua New Guinea, Western Samoa and the Solomon Islands*.

Such information is very valuable for stock assessment. Populations of most species of coral reef fishes are normally scattered over large areas. Under these conditions it is almost impossible to get a useful notion of stock sizes. But the difficulties are greatly reduced if the biologist knows where and when a species aggregates to spawn, and can carry out visual surveys there.

* For reasons I do not understand, I have been consistently unsuccessful, however, in obtaining such information for isolated, lagoonless islands.