



Secretariat of the Pacific Community

# Women

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## *in Fisheries*

Number 9 – September 2001

I N F O R M A T I O N B U L L E T I N



Coral Sculpture, Yap

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## Introduction

Welcome to the ninth issue of the Women in Fisheries Special Interest Group Bulletin. This issue will be my last as coordinator of the Women in Fisheries Bulletin. I have enjoyed putting together the growing amount of information around the region on women, small-scale fisheries and community fisheries management. It has certainly been an excellent way of keeping in touch with what is happening, both in and out of the region. But after six issues it is now time to pass the role on to someone else. I would like to invite those who are interested in taking on the responsibility of coordinator of the *SPC Women in Fisheries Bulletin* to please contact:

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This issue reports on the activities of the SPC Community Fisheries Section, and includes workshops in American Samoa and Federated States of Micronesia, the third fisheries module for SPC's CETC participants in Fiji and the second Heads of Fisheries meeting in Noumea.

From around the Pacific region we have a new village-based education system being developed in Vanuatu; a project to protect coral reefs in Guam; an article on past and present fishing in Kiribati; recent developments in native title over the sea and coastal areas in Australia; and an upcoming course for Pacific Island small-scale fisheries trainers in New Zealand.

## Contents

### *News from the Community Fisheries Section*

by L. Lambeth p. 2

### *What's happening within the region*

General	p. 8
Vanuatu	p. 8
FSM	p. 9
Guam	p. 10
CNMI	p. 11
Kiribati	p. 11
Australia	p. 17
New Zealand	p. 19

### *What's happening outside the region*

General	p. 20
Alaska	p. 21
Africa	p. 22

### *Books and publications*

p. 23



The news from outside the region includes a global symposium on women in fisheries to be held in Taiwan in November; an article about women working in commercial fisheries in Alaska; and a women fisher's collective in Mozambique, Africa.

Details and reviews of books and publications appear at the end of this issue.

Contributions in the form of articles, papers, news and information are welcome. Articles can be in French or English; the bulletin is published separately in both languages. This and other SPC bulletins are available online at <http://www.spc.int/coastfish/>

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## NEWS FROM THE

Community  
Fisheries  
Section



As usual it has been a very busy year for the Community Fisheries Section, with work including the final two in a series of four small-scale fisheries workshops for Federated States of Micronesia, a workshop on community fisheries management in American Samoa, the finalisation of five new field reports, the completion of the third fisheries elective for CETC participants, the second Heads of Fisheries meeting in Noumea, and work in the Marshall Islands looking at management aspects of nearshore resources (subsistence and artisanal fisheries).

### American Samoa community fisheries workshop

The Community Fisheries Adviser travelled to American Samoa in March 2001 to facilitate a five-day training workshop for the Department of Marine and Wildlife Resources (DMWR) staff. The workshop, conducted by experienced

*Fatima Sauafea, head of the  
Community Fisheries Management  
Programme, conducting  
a practical exercise*



Ueta Faasili

Samoan fisheries extension staff, trained new extension personnel at DMWR in the community-based fisheries management process, which was established in Samoa. This workshop was a result

of recommendations from the draft report, *Technical Input into the Community Fisheries Management Project of American Samoa*.

## Chuuk and Yap fisheries workshops

In May the Community Fisheries Officer conducted two workshops for women involved in small-scale fisheries activities in Chuuk and Yap. The workshops were a follow up to surveys done in 2000, and followed recommendations made in the reports: *An assessment of the role of women in fisheries in Chuuk, Federated States of Micronesia* and *An assessment of the role of women in fisheries in Yap, Federated States of Micronesia*.

The reports recommend that more training programmes be provided to those involved in subsistence and artisanal fisheries, particularly women. The SPC Community Fisheries Section agreed to assist in running workshops in both states, targeting those involved in small-scale fisheries activities for the local market, with no previous access to fisheries training.

The workshops for Chuuk and Yap were the final part of work begun in FSM two years ago. In 1999 FSM requested assistance from the Community Fisheries Section in assessing, documenting and subsequently training women involved in small-scale fisheries. This work was done with the assistance of national counterparts, Estephan Santiago (National Fisheries Section) and Anne Luior (National Women's Interest Officer). It was agreed that, because of differing cultural and fishing prac-

tices in each state, separate visits and reports would be undertaken for Pohnpei, Kosrae, Chuuk and Yap. State-level counterparts were identified to assist with each visit.

The Community Fisheries Section work in FSM has resulted in the production of four assessment reports, followed by small-scale fisheries training, for all four FSM states. The work reflects a commitment by the FSM National Fisheries Section to ensure both men and women are considered in the management and development of the domestic fisheries sector. Successful development of the medium- and large-scale fisheries sector is dependent on having a broad base of people with experience and training in all sectors of the industry: harvesting, processing and marketing. Those currently involved in the small-scale fisheries sector are where development efforts should begin. In most Pacific Island countries, women are involved in post-harvest and marketing activities and, when commercial fisheries develop, they are often employed in various capacities onshore. Basic training in seafood quality, spoilage, handling, processing, preservation, business and marketing is often lacking.

Topics covered at the Chuuk and Yap workshops included seafood quality control, fish processing and handling, small-scale marketing and business skills, seafood preservation, and fisheries management. During the workshop, participants built and tested a small fish smoker.

Follow-up activities recommended include:

- further training for Yap, and the outer islands of Chuuk, to be provided by national fisheries agencies, with SPC support as needed. Training should include practical fishing and harvesting activities to emphasise correct handling from
- continued support from SPC with the production and distribution of relevant training material;
- increasing awareness on pollution issues in Chuuk and Yap; and
- supporting key participants identified by the Community Fisheries Section for further regional training opportunities. The Section will liaise with regional agencies and other sections within SPC in the selection of participants for further training.

The Chuuk workshop trained 34 women, including one staff member of Chuuk Marine Resources and two from COM-Land Grant. Tanseny Reynold



*Bechyal cultural center, Yap*

Lyn Lambeth

(Special Assistant for Women’s Affairs) was the main counterpart, assisted by Ramio Osiena (Deputy Director of Marine Resources) and Shinobu Poll (President of the Chuuk Women’s Advisory Council). The workshop venue was the waterfront patio of the Truk Stop Hotel. Apart from the topics covered by the Community Fisheries Officer, presentations were also given by Ramio Osiena (fisheries and marine environmental regulations of Chuuk), Julita Albert of the Environmental Protection Agency, and Bernard Billimont from the Mayor’s Coordinating Office (traditional fisheries and marine resource protection). During the evaluation at the conclusion of the workshop, everyone agreed that all the topics were useful, with small business skills and conservation and management singled out as being especially useful.

The Yap workshop trained 16 women and three men, including one staff member of the FSM Fisheries and Maritime Institute, two COM-Land Grant staff and one from the Yap Community Action Program (YapCap). Three other staff of the FSM



Lyn Lambeth

*Women prepare the fish smoker, Chuuk*

The timing of the workshop coincided with a visit to Yap by Francis Itimai, Head of the National Fisheries Section. Francis gave participants an overview of fisheries from the national perspective, and discussed the work of the National Fisheries Section. Andy Tafleichig, Chief of Yap Marine Resources and Management Division, presented the state perspective, with a talk on the role of the Division, and marine resource management issues in Yap. Seafood quality and handling, and marine conservation and management were considered the most useful topics by participants at the conclusion of the workshop.



Lyn Lambeth

*Chuuk participants prepare a marinade for smoking fish*

Fisheries and Maritime Institute also attended the sessions on conservation and management of marine resources. Denitha Palemar of Yap Women's Association provided organisational support for the workshop, assisted by Yap Marine Resources and Management Division, YapCap, and Com-Land Grant. The workshop was held in the YapCap conference room, with practical sessions conducted outside the Small Business Centre.



Lyn Lambeth

*Men prepare the fish smoker, Yap*

*Francis Itimai of the FSM National Fisheries Section addresses the participants*



Lyn Lambeth



Lyn Lambeth

*Preparing the fire for fish smoking during the Yap workshop*

## Forum Fisheries Committee Meeting (FFC48)

In May 2001, the Community Fisheries Adviser (CFA) travelled to Rarotonga, Cook Islands, to attend the Forum Fisheries Committee Meeting. The primary objectives of the travel were to: discuss the SPC Community Fisheries Section with interested heads of fisheries, hold discussions with FFA on the section's work on gender issues in tuna management plans, and learn about the Cook Islands ra'ui system.

The CFA was fortunate to meet with the President of the Koutu Nui (body of traditional chiefs), and initiator of the ra'ui Marine Protected Areas (MPAs) in Cook Islands, Te Tika Mataiapo Dorice Reid. Mrs Reid knows a lot about the traditional system that require Cook Islands communities to undertake obligations for the management of MPAs, under the guidance of traditional chiefs. More interesting was her view on the need for village rules to be accorded legal recognition. She spoke against the phenomenon of legal recognition which is true in the case of small island countries like Cook Islands.

The CFA also met with Jaqueline Evans, coordinator of the WWF South Pacific Program in the Cook Islands, who played an important role in raising public awareness of the ra'ui MPAs. The discussion was very useful in light of her own views about the ra'ui and the involvement of the Ministry of Marine Resources.

The contribution of the Ministry of Marine Resources, through its technical advice and assessment of the ra'ui MPAs was deemed appropriate and important in many aspects.

There are eight ra'ui MPAs throughout Rarotonga covering about 42% of the Rarotonga lagoon area (Evans 2001) with different terms and conditions determined by the various communities for their management.

## Third fisheries module for SPC Community Education and Training Centre

In July, the Community Fisheries Officer travelled to Suva to assist with the third fisheries module for the SPC Community Education and Training Centre (CETC) programme, in collaboration with the University of the South Pacific's Post Harvest lecturer, Tony Chamberlain.

CETC runs an annual seven-month programme for women from the Pacific Island region. All trainees are involved to some degree in community-based work in their home countries. During the programme the trainees study a wide variety of topics

including nutrition, media, public awareness and agriculture. In 1999 USP's Post Harvest Fisheries Development Project (PHFDP) in collaboration with the SPC Community Fisheries Section developed and delivered a pilot fisheries module. Tony Chamberlain of USP and Patricia Tuara of SPC, as the main resource people, developed a draft manual to support the training. The module was offered as an elective and included theoretical and practical skills in sustainable harvesting techniques, gear technology, seafood processing, seafood preservation and marketing. The pilot module was success-

ful and the fisheries elective has now become a regular part of the CETC course.

This year, the one week Fisheries Elective Module was conducted from 16 to 20 July at the Marine Studies Center, USP. Fifteen trainees attended the workshop conducted by Tony Chamberlain, Post Harvest Fisheries Lecturer, USP and Lyn Lambeth, Community Fisheries Officer, SPC. Other resource people included Jone Maiwelagi, Fisheries Officer, USP; Johnson Seeto, Marine Biologist, USP; Samasoni Sauni, PhD Student, USP; Aliti Vunisea, Social Scientist, USP and Jope Lesavua, Post Harvest Fisheries technician, USP.

Theory sessions were held at the new “Seafood Village” which was built at the Marine Studies Center for the purpose of community-level training. The open building with gravel floor proved to be a good venue for such activities. The workshop was opened by Dr Ken MacKay, from the Canada-South Pacific Ocean Development Program, which partly funded the workshop. Participants took part in participatory exercises aimed at raising awareness on fishing methods, gender issues, destructive fishing methods and the sustainable harvesting of marine resources.

On day two the participants tried their luck at beach seining and spent some time identifying and collecting reef and lagoon resources, including shellfish, sea plants and sea urchins. They also practiced knot tying, rigging and net mending. Days three and four were spent on laboratory and practical activities related to seafood spoilage, seafood-borne disease, quality, safety, handling and processing. Many products were made including smoked fish, tuna jerky, various sea plant dishes, shellfish meals and urchin roe.

The workshop ended with discussions and activities on fisheries conservation and community management before being closed by Nu’ufou Petaia, CETC Principal, and Professor Robin South, Director MSP. This was the third successful year of the workshop and participants found the module useful (and fun). The closure and final words of thanks by participants and resource people were topped off by a feast of sample dishes prepared during the workshop — delicacies such as smoked fish, sea vegetable salad, *Gracilaria* relish, clear *Sargassum* and spinach soup, *Gracilaria* mould, seafood chowder and raw sea urchin roe.



Learning how to tie a bowline

Playing the “fish handling game”, a board game developed by the Marine Studies Programme of USP



Beach Seining

Lyn Lambeth

Lyn Lambeth

Lyn Lambeth

## Second Heads of Fisheries Meeting

The Second SPC Heads of Fisheries Meeting in July brought together regional fisheries representatives and observers to discuss a range of issues, including SPC's fisheries work programme, aquaculture, live reef fisheries, bycatch issues in domestic longlining, and community fisheries management.

As well as reporting on the work of the Community Fisheries Section since the last meeting in 1999, the Community Fisheries Adviser chaired a special session on community-based fisheries management in the region. Dr Mike King of the AusAID-supported Samoa Fisheries Project presented a paper on Samoa's experiences in involving villages in the management of subsistence marine resources. After the presentation, there was a discussion that addressed the legal issues of enforcement of traditional or village rules, especially on people from outside those villages. Many delegates shared examples of the varying

degrees and types of customary marine tenure and traditional regulations versus national management measures that exist in their countries.

Fatima Sauafea, head of the Community Fisheries Management Programme, presented a paper on a similar project recently started in American Samoa, with the assistance of SPC's Community Fisheries Section. The project is currently running in three of the six target villages for 2001.

Alava'a Navy Epati spoke about the traditional *raui* system used to set up marine protected areas in the Cook Islands, outlining the important role of women in initiating and ensuring the success of this form of marine resource management. The special session on community-based fisheries management was greeted with interest and enthusiasm by country and territory delegates and a number of draft recommendations were made endorsing and guiding SPC's work in this area.

## Marshall Islands

In August the Community Fisheries Adviser travelled to the Marshall Islands to look at management aspects of subsistence and artisanal fisheries. A draft report including suggestions on involving

communities in the management of nearshore resources is to be submitted to the Marshall Islands for consideration.

## Publications and Information

The reports, *An assessment of the role of women in fisheries in Chuuk*, *Federated States of Micronesia* and *An assessment of the role of women in fisheries in Yap*, *Federated States of Micronesia* have been printed as field reports and distributed to relevant agencies at the state and national level. These and other publications may be found in pdf format (and html for the Women in Fisheries bulletins) on the Community Fisheries Section homepage at: <http://www.spc.int/coastfish/Sections/Community/index.html>

Publications are also available from SPC's Publications Distribution Assistant:

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A series of eight community training manuals are currently being developed by the University of

the South Pacific and the SPC Community Fisheries Section. Originally designed to serve the needs of the fisheries module delivered each year to students at SPC's Community Education and Training Centre, the manuals are now being developed for use throughout the region. When finished, they will provide a training resource for community training at a level similar to the workshops held in Chuuk and Yap. The first three or four manuals in the series should be printed in the coming months. The complete set of manuals will cover the following topics:

1. Fishing
2. Seafood in our Meals
3. Sea Plants
  - 3.a Guide to the common edible and medicinal sea plants of the Pacific Islands
  - 3.b Sea vegetable recipes for the Pacific Islands
4. Seafood Spoilage and Sickness
5. Seafood Handling
6. Seafood Processing
7. Business Skills
8. Fisheries Management

# WHAT'S HAPPENING WITHIN THE REGION



## GENERAL

### Micronesia's Small Business Centers push private sector expansion

A growing network of small business development centers is expanding its work across Micronesia.

Casey Jeszenka, acting director of the Chuuk Small Business Development Center, has just been in Majuro to assist the Marshall Islands center with a workshop for people starting new businesses. There also is a center on Yap, with one soon to open in Palau and another in Pohnpei next year.

The Marshall Islands center is supported by the University of Guam-based Pacific Islands Small Business Development Center Network, the U.S. Small Business Administration, and the United Nations Development Program. "We train local people so that the program is available to the private sector on an ongoing basis," Jeszenka said. It

provides a range of counseling, training and workshops, help with business planning, and setting up other key aspects of business operations, including record-systems.

In other islands, the business development centers have helped people to develop credible business plans, which in turn have led to loans from banks, Jeszenka said. The centers are linked into a huge network of small business agencies throughout the U.S. All can be tapped to provide a variety of technical assistance to local firms or people starting up a business, he said.

**Source:** Pacific Islands Report/Marshall Islands Journal/PINA Nius Online, July 2001

## VANUATU

### Vanuatu pioneers new village-based education system

*By Len Garae*

A new village-based education system being developed in Vanuatu could also benefit other Pacific Islands countries. The new system, "Basic Life Skills", has been developed by Vanuatu's Curriculum Development Unit after Fiji and Tonga were approached to try it out but did not agree.

The project is funded by NZODA, New Zealand Official Development Assistance, and coordinated by the Friends of the South Pacific Vanuatu Program. Under the new system, students who are "pushed out" in year six for lack of sufficient space in secondary schools can still go to school, but in

their own village or community. Among the subjects, emphasis is placed on customs and culture, health, housing and land.

The Curriculum Development Unit plans to have trained teachers in the villages to help with teaching. Their assistants could be chiefs or fathers and mothers who are skilled in the traditional way of life. Mark Imbert of the project, said: "It is amazing how we can discover a wealth of knowledge among our own people. "Our elders are so intelligent that their skills and experiences and wisdom are equivalent to the academic qualifications



gained in higher institutions of learning in the west.” Imbert said the present education system was handed over to the government by education planners from the colonial times. The planners did not take into consideration anything to do with the customs and culture of the indigenous people of the country. “Holders of western qualifications live away from home, from their own people and culture, to achieve their qualifications,” he said.

The problem, he said, is they become alienated from their own society in the process. “This is where the danger is because if we are not careful, our children and their children will eventually be swallowed up by a foreign education system which is not suitable for our society,” Imbert continued.

Himself a former teacher, Imbert has found that there are so many qualified people in the villages from Torba to Tafea who are equipped with similar professional qualifications or higher, “in our indigenous culture.” In Melanesian traditional society, customs rule supreme and land is held close to the heart. When children reach a certain age, their parents help them to build their own houses. They move from their parents into their houses to start on the road to self-reliance and independence.

“We’d like to help the children to appreciate returning to the land and benefiting from it,” Imbert added. “They can turn the land into a business to generate revenue and employment at the

village level. “Eventually, if a young man wants to get married, he is prepared because he has the resources at his finger tips.” Furthermore, Imbert explained: “Through teaching, we want to convince the students to want to stay in their villages.” Teaching the students to know and be proud of their customs is the basis for their learning process.

Respect for one another is another important aspect of learning. The “Basic Life Skills” project is designed to be used first in a pilot project in the two islands. Then an assessment will be made. Asked what the reaction from the villagers was like, Imbert replied: “Both the chiefs and parents say this is what is lacking and they would definitely go for it, especially as it is going to train the students to stay home on their island and work the land.”

If successful, it would be taught throughout the provinces to benefit hundreds of students from year 6 in both English and French primary schools every year. This would reduce urban drift. With a reduced number of young people in Port Vila and Luganville, there would be fewer social problems in the towns.

With the participation of more school leavers in the economy in the rural areas, the level of economic activity in the provinces and country in general would increase.

**Source:** Pacific Islands Report/Vanuatu Trading Post/PINA Nius Online, August 2001

## FEDERATED STATES OF MICRONESIA

### Kosrae reef project on the web

A five-year-old Coral Monitoring project is now expanding its data onto the World Wide Web.

The project is a collaborative effort between Kosrae’s Division of Marine Resources and the Kosrae Village Resort. It offers tourists a chance to participate and have fun while producing significant surveys and findings regarding coral reefs.

The project is looking for more new volunteer divers to participate in the activities in September. “We are very proud of this program,” said Katrina Adams of the Kosrae Village Resort. “It has provided a great deal of useful data for the resource

managers, as well as contributing to the global information on coral reefs.” One can get the latest United Nations Reef Check Global Data Base on the Coral Reef Monitoring Web site (<http://www.ust.hk/~webrc/ReefCheck/home.html>). The program includes a long-term survey and analysis of adopted reef areas around the island.

The findings will determine how damaged the reef environment is due to human contact, development and erosion.

**Source:** Pacific Islands Report/Kosrae Visitors Bureau, April 2001



## GUAM

### Project to protect Guam coral

By Scott Radway

As oceanographer Eric Wolanski, clad in scuba gear, descended into Fouha Bay in Umatac, he noticed something seriously wrong: He couldn't hear anything but his breathing. "The reef makes no sound anymore," said Wolanski, a researcher from the Australian Institute of Marine Science. When a reef is healthy, fish and shrimp are plentiful and when they eat, their mouths make a snapping sound, Wolanski said. "There should have been crackling," he said. Instead, there was silence, because the reef is far from healthy, suffering in part from years of sediment flowing into the bay, preventing coral from spawning and suffocating some of the existing coral. That's why Wolanski and other scientists were in Umatac last month setting up testing equipment. That's why the federal Environmental Protection Agency has kicked in nearly \$800,000.

It's all part of a project to find a balance between man's use of the land and bays, and coral's need for a healthy environment. So the sea can once again crackle.

The results will be used from Australia to Hawai'i, and anywhere else people are trying to preserve coral reefs, said University of Guam marine biologist Robert Richmond. "This is unique research that has never been done within a tropical area before," said Richmond, who wrote the grant application. The grant is from the U.S. EPA's Science to Achieve Results, or STAR, program, which requires scientists to work directly with government and the community to develop a plan of action. That way, Richmond said, the results don't just end up in a scientific journal, unused.

The first stage of the project is gathering data and then making it understandable to average residents, Richmond said. About three weeks ago, Wolanski and Richmond and their crews set up equipment in Fouha Bay, to record how freshwater run-off and sedimentation affect the reef. On Friday, they collected the equipment and then began analyzing the information during the weekend. What they are trying to find out is exactly how much fresh water and how much sediment is too much for coral to survive. "Before you spend a nickel on restoring a reef, you need to deal with the problems that are causing (reef destruction) in the first place," Richmond said.

#### Marine snow

It's snowing in the tropics. As the soil runs off the land into the bays off Guam, it is combining with plankton to form a substance scientists call marine

snow. But it's not the kind of snow people would want to sing carols about. As it settles on the coral below, it acts like a plastic bag and suffocates it, Wolanski said, viewing pictures of marine snow from Fouha Bay.

People don't know about marine snow, said Gerald Davis, chief of the Guam Division of Aquatic and Wildlife Resources. But when people build roads, homes or hotels, they often are creating the substance. "Education is one of the keys," said Davis, whose role in the project is to get government officials to understand the research and know why it should be used. Davis will take the data from Richmond and Wolanski and calculate how much erosion control is needed to bring the levels of runoff down so the reef can rebuild itself.

In September and the ensuing months, scientists and a sociologist from the University of Hawai'i will talk with community members on Guam to gauge how much the reef means to the culture and the economy, Richmond said. One thing the project wants to emphasize is the importance of people's input, especially those who use the reef either for recreation or their livelihood, Davis said.

"Oftentimes cultures, through constant fishing, will see changes long before scientists can ever find them," Davis said. When all is said and done, the scientists want to be able to go to the government, lawmakers and businessmen and tell them how much an investment in soil erosion yields in such areas as tourism dollars.

Richmond said they are not anti-development. In fact, a restored reef system would benefit everyone from hotel owners to people who fish on the weekend. "We want to be able to tell people 'While you might save a couple thousand dollars in soil erosion (cuts), the island will lose millions and millions in natural resources,'" Richmond said.

#### Fewer reef fish

Twenty-five years ago, Umatac Mayor Tony Quinata said he remembers heading out to fish with his friends and wanting to head back a half-hour later. "In half an hour, I would be tired, because there were so many fish," Quinata said. "Now, it's kind of scary." Richmond said when routes 2 and 4 were expanded in the early 1990s, no environmental impact study was done and the runoff from the projects hit the reef there hard. But in general, it has been poor land use, lack of enforcement, and some over fishing that has affect-

ed about 60 percent of the reefs negatively, Richmond said. As proof, Davis said, the island is catching 70 percent less reef fish than it did 15 years ago. "And that is with an increased number of fishermen," Davis said, adding that a reef under the right conditions could return itself to a healthy state in 15 years.

Fouha Bay in Umatac was chosen as Guam's test case for the project, because it has lost much coral from rain runoff and there is lot of historical data available about the area's erosion, Richmond said. As part of the project, two sites in Palau will be tested, Richmond said. The completion date is about two years out.

Quinata said he is ready to give whatever help he can to push the project over the finish line. When the scientists were testing Fouha Bay, he gave them his office to use as a command center.

"We need to address this channel to correct these problems. I am not that much of a fisherman, but I am hearing from some of our constituents about it," Quinata said. "And I am not an expert so we let them come in and, hopefully, they will provide us with vital information to help restore our reefs."

**Source:** Pacific Islands Report/Pacific Daily News, August 2001

## NORTHERN MARIANA ISLANDS

### Northern Mariana Islands importing less fish

A sharp decrease in the Commonwealth's fish imports in recent years indicates that an increasing number of local businessmen have ventured into commercial fishing, according to a report from the Department of Commerce. Commerce officials said this development is spurred by the increasing demand by the islands' hotels and restaurants for fresh sea products.

The Central Statistics Division noted that fish imports dropped by close to 85 percent in a six-year period, from 1.194 million pounds in 1992 to only about 184,300 pounds in 1997. Since 1992, CNMI has witnessed a declining trend pertaining to the importation of fish products into the Northern Marianas. Fish imports dropped by 43 percent from 1992 to 1993, then down again by 24 percent in 1995.

The biggest drop on an annual comparison was recorded between 1996 and 1997 when fish imports fell by 55 percent from 410,690 pounds to only 184,363 pounds. A study previously commissioned by the Commonwealth Ports Authority recognized the bright potential for fish transshipment in the Northern Marianas. A proposed fish transshipment

program that may be implemented by the CNMI government would handle at least 150 boatloads of 15-20 tons per month, bringing at least \$3,500 in wharfage revenue to the seaport each month. Also, there are opportunities to transship by air fresh and frozen tuna to the Japanese market.

The Central and Western Pacific Ocean is home to the world's largest tuna fishery, which is currently worth approximately \$1.7 billion a year. The Commerce Department's report showed that imports still comprise more than half of the total fish sold in the Northern Marianas each year. In 1996 alone, a total of 846,686 pounds of fish products were sold in the CNMI. About 410,690 pounds of that total were imported from countries in Micronesia and Asia, and the mainland United States.

In 1997, 380,135 pounds of fish were caught and sold in the Northern Marianas, with reef fishes constituting the largest common species, followed by skipjack tuna and mahi mahi.

**Source:** Pacific Islands Report/Saipan Tribune, May 2001

## KIRIBATI

### Let's go fishing

*by Jane Resture*

Fishing and associated activities form an intimate part of the Kiribati way of life. From the preparatory work and fishing procedures to the final act of

consumption, these also relate to certain norms of behaviour and belief which until now have been traditionally handed down in each generation.

The ancient practices and attitudes as compared to modern culture are not always easy to identify because they are normally passed on only within the family group. Fishing and exploitation of other marine products are the mainstay of Kiribati life and therefore the traditions are closely guarded as being essential to survival of the culture.

Since the earlier magical practices, as recorded by writers like Sir Arthur Grimble and David Lewis and as researched by the Fisheries Division, a lot of changes have come about. The present status of Kiribati fisheries differs from island to island and from family to family. The availability of alternative foods and forms of recreation and the incorporation of new and modern ideas have all affected the nature of these changes. Major differences in attitudes about fisheries can be observed between the outer islands and the capital in South Tarawa where a greater mix of customs and a larger concentration of population exist. Besides their remoteness from the urban centre, the northern and southern groups of islands are distinguished further by differences in ecology which affect the nature of the fishery resources.

Generally, however, in the majority of the sixteen islands in the Gilbert archipelago, the fisheries culture is little changed from the olden days. In this chapter, it is endeavoured to highlight the various aspects of change, the associated problems and the potential of ideas which are applicable in the present stage of fisheries development in Kiribati.

### The "let's go fishing" concept

Two terms commonly used by writers to describe local fishing are "subsistence" and "artisanal". These are normally understood to mean the catching of daily food by families to acquire enough for one day. Only meagre gear is necessary and the amount of fish caught is dictated by the ability to process and preserve the catch beyond that required for immediate use. Traditionally, I-Kiribati regarded fishing as meeting the basic need for daily food. As the old saying goes, "You can live only if you go out and catch your food".

However, there is also a connotation of enjoyment, for traditional fishing inevitably involves the community in a social way - thus, the "let's go fishing" concept. The thrill of fish pulling lines, the risks faced on the water and the enjoyment of good or large-sized catches, all contribute to the tales told by fishermen, to the food for thought by women whenever they get together and to the examples set for the younger, upcoming fishermen.

In general, I-Kiribati in the northern islands have better access to fish and marine resources than those in the south. The northern lagoons abound

with edible cockle, clam, octopus, sipunculid (like a marine worm), sea urchin and others, and it is quite easy to obtain daily food without much gear. Acquiring seafood may involve anyone, whether it be woman or man. Only a few families utilise technical skills of a specialised nature although some have inherited a lot of such knowledge handed down in folklore form. One example is the ability to call dolphins to shore as reported by Sir Arthur Grimble in "A Pattern of Islands" (1952).

In the southern Gilberts the conditions are harsher with little land and poor soil. Many islands have no lagoon at all and hence are limited in the abundance of fish species compared to the atolls. The constant surf around the single islands of Nikunau, Tamana and Arorae requires fishermen with expertise in facing the often six-to ten-foot waves encountered in their small canoes as they cross the reef when leaving or returning to the island. As a rule, attitudes towards life are more reserved and are geared towards making the most from the limited and sporadic marine resources throughout all seasons. Fishing skills and ideas are more closely guarded by each from the open sea, while women concentrate their activities in the lagoon waters and in the household. From the shallow waters of the reef flat, young boys are encouraged to venture past the breakers into the sea and eventually to take part in spearfishing and handling of various catches beyond the reef.

Initiation into manhood involves a youth joining the older men in fishing, handling the catch and the canoe and finally doing all of this by himself and bringing in the quantities required by the family. He will then be regarded as *evenako* (a grown-up man).

The essential nature of fishing expertise in Kiribati is dependent on the remarkable efforts and skill of the old men in transforming various natural resources into something practical and useful to the people. At least, so it is said! A successful catch is assured not only by employing the correct gear but also by observing the strict behavioural norms attached to the fishing endeavour.

Other fish foods are now available in the stores for daily use. A tin of mackerel not only serves as a more convenient substitute but is becoming an acquired taste. It is a known fact, however, that the I-Kiribati do get tired of such foreign food and really prefer the taste of fresh fish, whether it is eaten raw or barbecued or cooked to any other preference.

### Conservation and management

The operationals of artisanal (subsistence) fishermen are controlled to a certain extent by the old men in the villages. This pertains mainly to the conservation and management of the fisheries stock.

For example, in the islands of Arorae and Tamana the use of pressure lamps and other strong lights to catch flyingfish is prohibited even today. Only the coconut leaf torch that was traditionally used is allowed. This requirement is locally observed in order to conserve the abundant flyingfish resources around these islands. It is believed that continuous use of much stronger lights will chase away these fish which are a mainstay of the daily diet in the south. Lots of people in Kiribati now question this conservative ruling of the old men from the past. It is also believed, however, that this prohibition will act as a conservation measure in the face of increasing pressure for fish food by a rapidly expanding population. It is known that similar conditions are enforced in other parts of the world. In a like manner, the use of underwater torches in Arorae by divers seeking to catch lobsters has threatened reduction in the extent of this resource, but the restriction on such methods has helped in letting the lobster supply regenerate naturally.

There will be a need to alter some of these subsistence ideas in order to effect gains in some aspects of modern development. For example, fishing by groups may be more advantageous than by individuals if maximum economic benefit is to be derived from relatively minimal equipment, resources and capital. For effective catching from small canoes, the tuna and other fishes which are regarded as essential for survival of the people need to be available close in to the islands.

Traditional beliefs and attitudes characteristic of artisanal fishing will have to be considered carefully in the light of fisheries development plans which aim to tap the larger resources farther out to sea and generally to encourage greater production of deep-sea fisheries.

Another clear example of restrictive fishing used in several of the islands which have no lagoons is the closing of certain areas to trolling for tuna. These areas are instead reserved for a deep-line method called *te kabara*, that is, a baited hook is fastened to a small stone with a leaf wrapping; the stone acts as a weight and when lowered to the required depth is untied by a sharp jerk on the line. It is believed that in trolling, the tuna tend to move with the moving lure and hence any deep-line method, including *te kabara*, is rendered ineffective. The use of outboard motors may be very effective in trolling but they are prohibited in most southern islands due to the noise and speed which tends to disrupt those fishermen who employ the *kabara* method.

When one thinks of maximising his catch, then conflict arises if restrictions must be observed for conservation reasons. Already, in Tarawa trolling is one of the favoured alternatives as this generally assures a better catch. However, it should be noted,

the rising cost of motor fuel has somewhat reduced the advantage of this method. This is somewhat offset by a rise in fish price. The benefits of conservation and the danger of overexploitation are well understood by some local fishermen who use bonefish (*te ikari*) for bait. For example, they will strip the bonefishes during the mass gathering of the *ikari* for their spawning runs. This stripping facilitates the natural fertilisation process and permits more bonefish to propagate.

Most conservation measures are recognised as necessary to offset current fishing pressures. The very nature of exploiting different kinds of fishes and marine life at different times of the year has so far caused little worry about the state of existing fish stocks. Nevertheless, concerns are now beginning to emerge due to increasingly productive and effective methods of large-scale fishing to cater for the rapidly growing food demands in Kiribati.

### Fishing methods and gear

Knowledge of fishing techniques is one of the main aspects of culture that gives recognition and status to I-Kiribati in the village communities. Exploitation of different inshore and offshore areas determines the type of fishing method to be used. There are more than thirty known techniques practised in Kiribati. Some of these are described here as appropriate to a given area and fish species.

### Reef flat and lagoon flat

Collection by hand or with simple tools or utensils (spoons, forks, sticks etc.) is common. This is done mainly by the women and children. The predominant method of fishing in the shallow waters is by a co-operative drive using gill nets. Monofilament gill nets are preferred and these are purchased from local stores in the villages or from other nearby countries such as Nauru, Marshall Islands and Fiji. The Fisheries Division is selling modern gear through a subsidy scheme.

In South Tarawa, most household possess a small gill net for catching small inshore fishes such as *ninimai* (silver biddies or *Gerres oyena*). Traditional netting is used rather little nowadays. Sometimes fishermen rig their own gill nets by using buoyant local wood for floats and lead which is melted down from old battery plates for sinkers. Excessive use of lagoon resources is seen, especially in Tarawa, where there is an emerging need to monitor the effect of new fishing gear and increasing production on the available stocks.

### At the reef edge

The long and narrow islands are edged by short coral reef slopes where a number of varied fishing

techniques are employed. Essentially these involve lines with baited hooks or lures. Outrigger paddling canoes are used, as well as floats (*te kai n tau-mata*) to which hook and line gear is attached as an accommodation while one is working in the water. For spearing equipment, the sling is made from a rubber inner tube (car or bicycle) and the spear is fashioned from a metal rod, but this gear is now being replaced with triggered spear guns and Hawaiian slings, brought back from overseas by Kiribati seamen and other travellers. In the past, binocular masks were used, being improvised from a shaped piece of wood with the glass piece fixed with sticky breadfruit sap to waterseal the fitting. However, imported plastic and rubber masks are now becoming more readily available.

In line fishing, specialised methods with different lures, bait and baiting techniques are employed. For example, one-to-two-inch hooks with a white feather lure are especially valued for catching *te mon* (soldier fish). At various seasons, other rock fishes are predominant and at certain grounds only. Knowledge of the prime areas and preferred methods is kept secret by local fishermen. Ordinary hand lines are used.

Eel fishing with traps is also done at the reef edge. A lot of rules and norms are associated with this method. Different baiting techniques are used in order to catch a particular species or size of eel. This is one of the oldest traditional methods of fishing that is still practised. The house-shaped traps are made from a heavy shrub or ironwood (*Pemphis* sp.) and it takes at least four days to build one. Catches from this trap can be quite substantial. As far as I am aware, Kiribati is one of the few places in the world where eels are caught by this method in such great quantity, ranging from forty to fifty pounds per trap. This kind of eel fishing is especially successful as practised by the people of Nonouti and Tabiteuea.

In the deeper areas, octopus is caught by using jigs or special curved and pointed rods. A few jigs similar to Japanese squid-jigs are getting to be common in South Tarawa.

Turtles are sought in the crevices of the reef edge. At depths of not less than five to ten metres, divers seek out the sleeping turtles whose backsides protrude from the coral crevices. While the captured turtles are then normally tied to a rope from a floating buoy at the water's surface, barbed steel hooks are now found to be more efficient when attached to the turtle's flesh.

Recently adopted methods of fishing tend to be more specialised and are favoured by the most energetic divers. These men have been known to stay underwater for more than five minutes.

Special training in traditional times, as described by early observers, is practised, though there are fewer traditional divers left.

### On the open sea

Pelagic fishing is done from canoes beyond the breakers at depths greater than ten metres and as far offshore as ten to twenty miles depending on the capability of the craft. Essentially the canoe will be equipped with monofilament lines for either deep-bottom fishing or trolling, an assortment of baited or feathered hooks, a knife, a club to stun the bigger fishes and a bottle of water for quenching one's thirst. Tobacco has become a necessity, too, without which fishermen have been known to return to shore to replenish their supply.

Traditional hooks are rarely used anymore except for pieces of wire three to eight inches in length and bent to form a V-shaped hook. Fish bones of similar shape were used in earlier times for flying-fish. It is interesting to note that hooks and lures normally used by fly or river-fishermen in other parts of the world have been stocked in some island stores but many of them are totally useless in Kiribati waters. Various old-time trolling lures, shaped mostly from feather, fish skin, coconut leaf and fibres, have persisted to this day. More important than these lures are the associated beliefs which fishermen still depend on to recognise the nature of the particular fish they wish to catch.

The pole-and-line method, using a pearl-shell lure as depicted in many legendary songs about Teraka, the fishermen's god, is now the most important and prominent commercial form of tuna fishing. This technique and the art of making the lure are still very much alive in Kiribati.

Deep-bottom fishing in depths greater than 100 fathoms have been revived through a Fisheries Division programme. Little longlining is attempted due to the scanty gear available, though some longlining has been trialled by the Fisheries Division.

### Canoes

The manufacture of Kiribati fishing canoes has changed little from the old designs. However, modifications have been made in the use of modern tools, paints and synthetic glues. Coconut sennit was once utilised for tying together the planks of a canoe hull. While sennit is still employed by some craftsmen, it is now being replaced by monofilament nylon cord of twenty to thirty pounds breaking-strength. On the slightly larger sailing canoes, small outboard engines (two to eight horsepower) now serve as an improvised supplement or in some cases replace sail power entirely. This modern substitution has extended coverage and range of these canoes.

In summary, the fishing methods and gear of I-Kiribati have changed with time and will most likely see even more developments due to the increasing demands for fish and marine products. It must be noted, however, that locally known information about fish behaviour, seasonal variation and periodicity is an essential ingredient in the successful adoption of newer methods. All of this—both traditional and modern skills and knowledge—have to be critically analysed and integrated if gains for the proper understanding and better utilisation of fisheries technology are to be achieved.

### New developments

The progress of Kiribati Fisheries Division programmes had led to a concentration in four major areas.

**A TUNA POLE-AND-LINE FISHING COMPANY.** Te Mautari Ltd. (now Central Pacific Producers), established in 1980, came about as a result of several tuna-catch surveys and a study of the feasibility of raising milkfish as live bait. The greatest asset in the operation is attributed to the locally recruited crews who readily adjusted and picked up the necessary skills after only one year. By 1983 the four company vessels were crewed mostly by I-Kiribati with only expatriate chief engineers, who were provided through external funding for technical aid.

This development certainly goes against the belief that it is difficult for “locals” to spend months away from home on a commercial fishing vessel. The company also operates marketing facilities on shore which have greatly changed local attitudes about the quality and distribution of fish which are now available for sale.

**EXTENSION PROGRAMMES IN THE OUTER ISLANDS.** In providing assistance to outer island fishermen, few problems have been encountered resulting from the introduction of new ideas and practices. For example, the concept of forming fishing groups was well received, contrary to some scepticism voiced earlier. This move has initiated and encouraged the greater production of fish. The marketing of fish locally in the islands has also been received favourably, despite a popular belief that traditionally every family should fish only for its own needs and not for other people, except possible missionary or government workers who are not native to the islands.

Introduction of new fishing gear has widened the experience of some I-Kiribati. A modified canoe-type boat with an improved sail design for greater manoeuvrability has helped to improve older canoe designs for more extended usage of the craft. Conversely, however, the tremendous expense incurred by the introduction of aluminium boats

with fuel-drinking outboard engines has led to a realisation of the dependence which only a few islanders can afford except some workers in government service.

With increased fish production from the outer islands, external markets will have to be found to generate foreign revenues needed to sustain the national economy. Not only that but standards of product quality and regularity of supply shipments will have to be guaranteed. These all add up to anticipated problems in trying to satisfy the foreign market at the expense of local consumption needs. Perhaps the most critical problem in meeting the demand from overseas will be to hold fishermen from the outer islands to a regular production schedule. But since they have many commitments, social and otherwise, in the local community, these calls on their time and labour may be more pressing than the fulfilment of export requirements.

**AQUACULTURE.** Traditionally, milkfish fry were maintained in inland ponds and raised extensively for use during feasts, droughts and stormy weather. Milkfish is favoured due to its fatty and delicious taste.

When *Tilapia*, a pond fish, was introduced by a visiting consultant to help the islanders in their protein requirements, it resulted in the destruction of the milkfish population in most of the ponds. As *Tilapia* is not eaten nor liked due to its non-salty taste, it is considered to be a pest and cries have been loud for its eradication.

Purchasing milkfish fry from villagers of the 80-hectare food and live bait production ponds at Temaiku in South Taro has given I-Kiribati another potential source of cash income. Great interest has now been shown in most islands to have the scheme extended to their place. Despite some beliefs that aquaculture is not suitable for development in Kiribati, it did exist in years past and if managed properly it could provide alternative sources today for protein and income.

Trochus spawning and restocking has been tried by the Fisheries Division, though it has proven difficult to check the survival of animals on the reef. The restocking is aimed at providing income opportunities for islands with limited lagoon systems. The black pearl aquaculture industry is still at the research stage. A Japanese project on sea cucumber rearing has also been established. Production of the marine seaweed, *Eucheuma*, is well established among coastal villagers in Kiribati and forms the basis of an important export industry.

**TRAINING.** The Division offers training in all aspects of fisheries, quite apart from its regular

programmes to train assistants for outer-island extension work. While it is true that we cannot truly teach our fishermen to fish – the majority of them know how already – the converse is also true in regard to the newer methods in fisheries which are conducted on a larger scale. In this context, the teaching of older men by younger ones who are specialists in the new developments is an interesting change because the reverse was normally the case in the traditional past. Training of technical manpower for localised posts is not an easy process as the terms of reference are based on an alien set-up and needs to be geared towards appropriate compromises.

### Commercial fishermen

Private and local commercial fishery ventures have started up in Tarawa. The fishermen have equipped their own 18 to 20-foot skiffs with outboard engines and regularly fish for skipjack and yellowfin tuna about four or five miles off Tarawa. Catches using poles and pearl-shell lures have been made up to 1,000 kilograms per boat per day. This is clearly a remarkable application of traditional knowledge which has been lost in most other Pacific islands.

Changes in traditional attitudes are notable in the use of machine equipment, cutting down on expenses and getting a fair sale value for each catch. There is still room for improvement in the quality of the catches. Some problem existed earlier in the fishermen's idea that Te Mautari Ltd. should always buy the catch at the producer's demand price. Then the Company at one time stopped buying the independent fishermen's catches due to a glut in the market and the need to lower its offering price for the time being. This difficulty has since been resolved after many hassles between the parties concerned. In any case definite know-how and training are required for upcoming business-oriented fishermen.

### Foreign involvement

Prospective joint-venture partners, private overseas businessmen and other outsiders keep appearing in Kiribati to promote ideas which appear to be very sound and sincere. But local management in fisheries developments is not always in control of sufficient information to properly evaluate overseas capabilities. Many of the self-styled developers do get away with making only a small commitment as Kiribati culture dictates kindness to all newcomers. These proposals from external sources need clearer analysis before immediate or future involvement by I-Kiribati whether it be in the public or the private sectors of fisheries concerned.

Foreign fisheries aid is not always free of conditions. It is not always possible to manage and co-ordinate

programmes due to foreign aid restrictions. It is, however, realised that self sufficiency is required at the Kiribati end. A final goal is always perceived and that is the need to train local manpower to replace expatriate staff. While this may be expected to happen in the long run, it will take much time and patience. The handing over of management and technical responsibilities to local counterparts is constantly preached, but how effective this will be with the great cultural differences that exist between Kiribati and the developed nations?

Foreign involvement in joint ventures is most probably the answer to the immediate commercial development of fisheries in Kiribati, since little capital is available locally to initiate large-scale enterprises. This strategy can be expected to have a corresponding effect on traditional values and culture which is a problem to be faced and accommodated if we are to enter the international community on a more self-sufficient basis.

### Conclusion

If the Kiribati culture is to persist for the purpose as people see and need it, then definitely some compromises will have to be made. One very clear difference from the traditional way of looking at fisheries is the monetary profitability of the whole fishing operation. Perceptions of expenditures, the running costs of operations, are becoming prime considerations. This approach, however, is countered by the concern of other commitments which normally obligate the island family and also the village community.

The concept of "Let's go fishing" is changing to "Who gains from it and what will it cost me?" Cultural joy in fishing is still very much a part of our heritage and the "fishy" nature of Kiribati fishermen persists. This needs to be recognised, channelled and utilised more fully for the benefit of all.

It is seen as inevitable that much of our fisheries culture will continue to change as it has already done. Caution is urged, however, to align the various new fisheries initiatives as near as possible with Kiribati culture as presently perceived or, more correctly, with full consultation of I-Kiribati who may be involved in any commercial venture.

In the face of all this and the emphasis which the Government places on marine resources for our national development, there needs to be a review of all these matters that are the basis on which lies our future fishery culture. In the face of change we need to keep reminding ourselves of such questions as these – "Are the old men ensuring that the essential values and knowledge are being passed on?" and "Is our system catering for and compromising this change?" Future development



promises benefits for us all but may impinge on our traditional concern which is “Enjoying Survival Through Fishing!”

**Source:** Jane’s Oceania Home Page , <http://www.janeresture.com/>; Let’s Go Fishing: <http://www.janeresture.com/ki33/fishing.htm>; Copyright © 1999-2001 by Jane Resture (jane@janeresture.com)

## AUSTRALIA

### Native title over the sea - recent developments

by John Kavanagh

The issue of native title over the sea and coastal areas is one of increasing importance. More cases are coming before the courts, and the well-known “Croker Island” case will be heard by the High Court later this year.

The trend in recent years has seen increasingly ambitious claims being brought by indigenous groups, who assert traditional fishing and access rights, as well as exclusive possession of the sea, the fishery and the seabed. By contrast, state and federal governments are concerned to regulate fisheries to ensure sustainability, and to exercise control over mining and exploration of seabed resources. Stakeholders, such as the fishing industry, are also vitally affected. It is likely that the trend towards litigation will continue as native title over the sea becomes an increasingly heated issue.

#### Mabo and Wik

Until relatively recently, the established categories of native title did not extend over the sea, or the seabed. In the landmark Mabo case, which introduced the concept of native title into Australian law, a native title claim over the sea was abandoned at an early stage. It was recognised by the claimants that the sea claim was very complex, and uncertain of success.

Mabo established that indigenous peoples who have maintained a continuous relationship with a particular area, may have rights of access and occupation to continue to enjoy traditional activities, such as hunting, fishing or religious uses. Such rights have been loosely termed “native title.” The existence of these rights is subject to demonstrating a continuous relationship.

This concept was extended in the Wik decision, where the High Court held that the granting of a Crown lease for the use of land, which lease was never taken up or exploited in any way, did not terminate the native title relationship with the land enjoyed by the indigenous inhabitants.

#### Elder

The recent spate of litigation involving native title sea claims could be said to have begun with *Elder v The State of Queensland* (1997). In *Elder*, a native title application was brought in the Queensland Supreme Court over an area both within and beyond the three mile limit of Queensland’s jurisdiction. The claim, as brought before the Court, was outside the ambit of the Supreme Court’s jurisdiction and was struck out without a detailed consideration of the substance of the native title claim.

#### Lardil

In the case of the *Lardil Peoples v The State of Queensland* (1999), the Federal Court was called upon to decide whether the granting of a consent by the Queensland Government to construct a buoy was lawful. The native title claimants wanted the licence to be set aside, to prevent the construction of the buoy. The Court held that the licence was lawful and that the construction of the mooring could proceed. The Court said that being a registered claimant for native title was not the same as being a registered native title holder. The judge was not satisfied, on the evidence before him, that the construction and occasional use of the mooring would be inconsistent with the enjoyment of native title rights in the claimed area.

#### Croker Island case

The most controversial case before the courts at present is the case of *Commonwealth of Australia v Yarmirr* (1999), also known as the Croker Island case.

Croker Island is near Arnhem Land in the Northern Territory. The subject of the claim is almost all of the area seawards of the island within three nautical miles. The claim is over the water, the seabed below it, the air space above it and all resources therein including fish, minerals and other natural resources.

The claim was heard before Olney J at the first instance, who held that:

- native title can exist in relation to the sea and the seabed, at least out to the 12 mile territorial sea limit;
- the native title claimants did not enjoy exclusive possession, occupation, use or enjoyment of the waters;
- there was no native title right of control over any of the resources of the seabed;
- a native title right of exclusive possession over the sea would be inconsistent with the right of innocent passage recognised in international law and with the public right of navigation and to fish recognised by the common law; and
- the relevant fisheries legislation merely regulates and does not extinguish native title fishing rights, which are capable of co-existence with the regulatory regime.

In short, the judge found that native title rights to the sea and the seabed existed, but were limited to non-exclusive access. An appeal was brought both by the Commonwealth and the native title claimants to the Full Court of the Federal Court, which was heard in May 2000. The Full Court dismissed the appeals of both parties, essentially leaving Olney J's decision at first instance undisturbed. Special leave to appeal to the High Court was sought by both parties, which leave was granted late last year. The High Court's decision is now keenly anticipated.

### The East Arm case

Most recently, the Federal Court in the Northern Territory has been involved in a native title application in respect of a substantial portion of Darwin Harbour. The Government in the Northern Territory compulsorily acquired all rights, title and interests in an area in Darwin Harbour known as the East Arm Port Complex in 1994. It is a major development for the Northern Territory which has been designed to improve Darwin's existing port infrastructure, to incorporate the terminal for the Alice Springs to Darwin railway line and to support the offshore oil industry and expansion for trade with Asia.

Until April 6, 2001, there were two native title applications over the East Arm Port Complex. Both claims were being heard together, but in a recent interlocutory application, the claim brought by one of the claimants was struck out because the claimant had failed to sufficiently identify the indigenous people for who the claim was being brought.

Once again, the claim is in respect of native title rights to both the land and sea areas of the port development and will have far reaching conse-

quences for the future commercial development in the Northern Territory. Its results are also keenly awaited<sup>1</sup>.

### Land grants

The relationship of native title over the sea with land grants to indigenous peoples has also been the subject of litigation. In *Director of Fisheries (NT) v Arnhem Land Aboriginal Land Trust* (2001), the Court was asked to consider an application brought by the Arnhem Land Trust, which sought declarations that:

- The Arnhem Land Trust (as owners) be entitled to exclusive rights to the fishery adjoining Arnhem Land; and
- any fishery licences which purport to permit fishing within sea areas adjoining Arnhem Land be declared invalid.

The Arnhem Land Trust was established to hold in trust the land now known as Arnhem Land for the benefit of indigenous people. The grant was specific, and excluded all land and waters seaward of the low water mark. Further, minerals beneath the land were reserved to the Commonwealth as well as some other minor exclusions and reservations.

In other words, the Arnhem Land Trust was given full title (as distinct from native title) to the land, which is now known as Arnhem Land. However, the grant stopped at the low water mark, and the Arnhem Land Trust wished to extend the grant into the offshore fishery. The primary judge held that indigenous people could fish exclusively on the landward side of the high water mark. That is to say, the Arnhem Land people had the exclusive right to fish in the tidal estuaries and rivers in Arnhem Land, but otherwise had only a public, non-exclusive right to fish in the waters to seaward of the high water mark.

None of the parties supported the distinction drawn by the primary judge and an appeal was brought in the form of questions to be answered by the Full Court. The matter is still very much at large, although it is likely that the native title rights over the sea areas adjacent to Arnhem Land will not be any different to the native title rights which are or will be decided by the Croker Island case.

### Conclusion

This is a continuously evolving and interesting area of law and we expect that the boundaries will continue to be defined by litigation brought

1. Coordinator's note: Recent news from the Australian Broadcasting Corporation. <http://www.abc.net.au/news/state/nt/archive/metnt-12aug2001-3.htm>) indicates that the Northern Territory Government and Darwin's Aboriginal custodians will sign their first native title agreements on 13 August. In respect to the East Arm Port Complex, the claimants have withdrawn their native title claims, and say in return they will become involved in urban land development.

by indigenous peoples, the Federal and State Governments and by stakeholders such as fishery bodies, harbour authorities and mining/exploration interests.

*John Kavanagh is a former mariner, and a trainee solicitor with the Queensland law firm, McCullough Robertson in their Admiralty and Maritime Group.*

**Source:** *Professional Fisherman*, July 2001

## NEW ZEALAND

### Regional course for trainers of women engaged in small-scale post-harvest fisheries activities

Collaborative work between SPC's Fisheries Training Section and Community Fisheries Section has enabled the design of a regional course aimed at building a pool of national trainers of women engaged in small-scale, post-harvest fisheries activities. This course, funded by NZODA, is scheduled for November 2001 in Nelson, New Zealand. It follows two consecutive regional courses, which trained women with managerial responsibilities in larger seafood enterprises (May 1999 and November 2000).

The overall objective of the course is to: *provide Pacific Island women who are involved in small-scale fisheries post-harvest and community training, with a unique learning experience which will upgrade their technical, teaching, and managerial skills.*

Adding value and assuring the quality of seafood production and processing are key factors in the challenge to effectively use marine resources from the Pacific Region. These factors are supported by technical expertise and economic efficiency in seafood business operations. Throughout the Pacific, women are playing an increasing role in the development of the seafood industry but their progress and promotion is often hampered by a lack of technical experience in seafood technology and business management. National fisheries training opportunities for women are limited, with most fisheries agencies concentrating on meeting the training needs of fishermen.

The New Zealand School of Fisheries has collaborated with the New Zealand seafood industry in developing new training programmes which meet

the regulatory and quality control requirements of international seafood markets.

Consequently, the experience of the seafood industry in New Zealand provides an excellent base for improving the skills of Pacific Island women in all aspects of seafood technology, business operations and fisheries management.

Participants will be either currently or potentially responsible for fisheries community training, especially those involved in training women engaged in small-scale seafood processing activities. The course is an opportunity for those who have participated in national, small-scale fisheries workshops to build on existing skills and experience. Topics covered during the three week course will include the following:

- seafood technology (quality and handling; seafood spoilage and sickness; sanitation; hygiene and food safety; product development and improvement);
- seafood business (record keeping, accounting and marketing);
- resource management (fisheries legislation and the management of marine resources); and
- adult teaching and communication skills.

Enquiries for further information should be addressed to: Michel Blanc, Fisheries Training Adviser, Secretariat of the Pacific Community (SPC) BP D5, 98848 Noumea Cedex, New Caledonia, Ph: +687 262000, Fax: +687 263818, email: MichelBl@spc.int



# WHAT'S HAPPENING OUTSIDE THE REGION



## GENERAL

### Global Symposium on Women in Fisheries

29 November 2001, Kaohsiung, Taiwan

*Women in Fisheries: Towards a Global Overview*



Convenors: Dr. Nai-Hsien Chao-Liao, Dr. M.C. Nandeesh, Dr. Kathleen Matics, Dr. Mohamed Shariff, Dr. Ida Siason, Ms. Elsie Tech and Dr. Meryl Williams

The contributions of women to the society and to the economy are progressively recognized and appreciated. In the fisheries sector, recognition of the roles and contributions of women and, more generally, the nature of gender considerations has lagged behind that in other sectors. While there is an urgent need to develop programs and policies to address gender issues, more research still has to be undertaken to further understand the complexity of gender issues in the fisheries sector and to develop appropriate actions and policies. Cognizant of this need, in 1998 the Asian Fisheries Society stimulated discussions on issues affecting women in fisheries with the aim of raising the level of awareness and encouraging the development of policies and programs that would better support the contributions by women to the sector. The Society further aims to influence national government policies and practices in the fisheries sector by helping them develop gender sensitive policies and fisheries professionals. With this vision, the Society organized a special symposium on "Women in Fisheries" that coincided with the 5th Asian Fisheries Forum held in Chiang Mai, Thailand in 1998.

Following the success of the symposium, the participants recognized the need to organize a global symposium on women in fisheries that would provide more opportunities for exchange of information on rapid developments taking place in this field.

During the forthcoming Sixth Asian Fisheries Forum, a whole day symposium on women in fisheries shall be held with the following objectives:

- To assess the status of research, development and policies on gender issues in the fisheries sector of different countries/continents
- To establish linkages among different fisheries societies/organizations for effective exchange of information on gender issues
- To increase gender awareness among fisheries professionals and promote the development of gender sensitive research and development projects.

During the Symposium papers will be presented on issues related to women in the field of fisheries (capture, culture, processing, marketing, education, research, development, etc.).

We are also taking this opportunity to solicit the sponsorship of organizations/societies as well as the participation of interested parties to join in this undertaking. Subject to availability of funds, some participants from developing countries may be given partial/full travel grants.

For more information, please contact: Asian Fisheries Society, P.O. Box 2725, Quezon City Central Post Office, 1167 Quezon City, Philippines. E-mail: [afs@compass.com.ph](mailto:afs@compass.com.ph) Tel. No.: (63-2) 921-1914/Fax No.: (63-2) 920-2757

## More fish FAQs from the US Northeast Fisheries Science Center's website:

### Do fish breathe air?

Yes, but not directly into the lungs as mammals do (except for some tropical fish). (Actually they breathe oxygen not air.) As water passes over a system of extremely fine gill membranes, fish absorb the water's oxygen content. Gills contain a network of fine blood vessels (capillaries) that take up the oxygen and diffuse it through the membranes.

### How do fish swim?

Primarily by contracting bands of muscles in sequence on alternate sides of the body so that the tail is whipped very rapidly from side to side in a

sculling motion. Vertical fins are used mainly for stabilization. Paired pectoral and pelvic fins are used primarily for stability when a fish hovers, but sometimes may be used to aid rapid forward motion.

### How fast do fish swim?

*Tunas* and tuna-like fish, billfish, and certain sharks are the speed champions, reaching 50 miles per hour in short bursts. Sustained swimming speeds generally range from about 5 to 10 miles per hour among strong swimmers.

**Source:** The US Northeast Fisheries Center's website: <http://www.wh.who.edu/faq/index.html>

## ALASKA

### Seeking their fortune

The cover story in the June 2001 issue of *National Fisherman*, the monthly magazine dedicated to commercial fishing in the United States, is about women involved in commercial fishing in Alaska. The article is written by Jennifer Karuza who, with her two sisters, spent six seasons working on her father's purse seine boat in southeast Alaska.

Women are working on purse seiners in the southeast, on processors on the Aleutian Chain and Prince William Sound, gillnetting in the Copper River and Bristol Bay, and longlining in the Gulf. They fish with fathers, sisters, brothers, uncles, husbands, and in some cases on their own. The majority find their way into fishing through family, with many coming from fishing families or marrying fishermen. Women go to Alaska for the same reasons men go—money, adventure and nature, but according to the author "it's what we find when we get there and what we take from it when we leave that makes the difference. We reach into places before untouched to gather the strength, aptitude and sense of humor we didn't know existed. We leave Alaska with a new sense of ourselves, and we carry the lessons and the knowledge with us for the rest of our lives."

Many, it seems, don't leave. Sue Laird has been fishing commercially in Alaska since 1978, and gillnetting alone on the Copper River Flats since 1981. Laird doesn't see her job as extraordinary, even though a very small number of women fishing in Alaska own and operate their own boats. She estimates that out of 500 permit/boat owners in the gill-

net fishery, fewer than ten are women. "People get held back by mechanics," she says. "I was determined to make an independent living in a place I wanted to live. If that meant turning a few wrenches, then that's what I chose to put my time into. I think the mechanics stuff is more about fear, like math. You build a wall, but it's all in our heads."

To Laird, the ocean is neutral on the role of the sexes. "The breakers and the waves don't care too much who is out there," she says. "Some men come up here and only last for one season or one week. It isn't a gender-based thing, and it isn't for everyone. I've seen God more than once out there. Your soul is stripped bare. You are always learning about yourself out there because you are so alone."

And then there's Anne Mosness, who fished commercially in the Pacific Northwest and Alaska for 26 years. Mosness grew up in a fishing family and began work as a deckhand for her father in Bristol Bay after graduating from college. She has spent seasons on Alaska's Copper River Flats, Bristol Bay and Prince William Sound, and Washington's Puget Sound. In addition to operating four vessels during her career, she has been a powerful force behind industry politics and issues affecting the livelihood of all commercial fishermen. In 1980, she joined the Women's Maritime Association and has served as its president for eight years. The Association is dedicated to improving maritime safety, including the protection of women working in what is sometimes a hostile work environment.

According to author Jennifer Karuza, “a woman working in a male-oriented industry faces particular challenges that can be hard to overcome. Menacing, what’s-that-girl-doing-up-there? glances from male fishermen create self-doubt. Physical limitations because of strength and size can create conflict. The looming possibility of sexual harassment hovers.”

Like many jobs, fishing is a team effort that requires a mixture of skills, and if one team mem-

ber is lacking in one area, they compensate by excelling in another area.

One woman in the article found that, although she faced more physical limits on a longliner than on a seiner, she could compensate for her lack of strength by focusing on different parts of the job.

**Source:** *National Fisherman*, June 2001

## AFRICA

### Mozambique

#### Proud of their achievements

An enterprising group of women from a remote island in Mozambique, get together to increase their income

*By Nalini Nayak, a member of ICSE, in consultation with the Institute for the Development of Small-Scale Fisheries (IDPPE), Mozambique*

Tucked away in the lush mangroves, an hour’s boat ride from Angoche, in Mozambique, lies the little island of Mituban. With the impression that one is sailing through a water forest, one alights in the water, wades through the younger mangroves and steps on to land as if alighting on another planet. Walking a little further, one realizes that one is in a fairly populous little village, with majestic coconut palms and neatly thatched huts scattered all over. The first little fence is the playground of a rather large school, again with mud walls and thatched roof. People are gathered in the shade of a large cashew tree. In the majority are the women, who then talk about their work.

This is an exclusively Muslim village. The men have been hunting crabs using their small canoes and little spears and their hands. Selling these crabs to mainland merchants brings them the cash they need to buy food. But, for the most part, this little island is self-sufficient, with potters who make the utensils, carpenters who make the furniture from mangrove wood, people who thatch their own houses and make rope from the coconut fibre. They grow their own vegetables and rice in the marshes when the salinity in the water falls. People seem to be dependent on the mainland mainly for medical assistance and higher-level schooling.

It is on this little island, that the women fishers have a collective. The origins of this group are ambiguous but from what the women say, it hap-

pened in mid-1998 when a couple from an NGO called PENDANA visited the island and interacted with the women. They suggested that the women could earn money through shrimp capture and sale. This couple brought in some small nylon gill-nets and insulated boxes and suggested that the women work in pairs, each pair using one net to catch shrimp. As 32 women were initially interested, 16 groups were formed. All went well and the couple came regularly to collect the shrimp that they took to sell to the mainland. After two months, the women began asking for their money and the couple kept putting it off. This went on for six full months. The couple then disappeared and the women were left high and dry.

The local fishing community in Angoche, which was in the process of organizing through the Nampula Artisanal Fisheries Project, a project initiated by IDPPE, heard about the plight of these women. The enthusiastic secretary of the APPA (the newly created Fishermen’s Association), then tried to do all he could to get these women their due. The fisheries association helped the women’s group to elaborate a project proposal, that was then submitted to the office of the First Lady through the District Office. The project was approved and a grant was made available for the purchase of a motor boat for this group. Once the women had a boat of their own, they were able to take their shrimp to sell directly and money started coming in. Enthused by this success, other women joined the group, which has now doubled to 64 members.

Each pair records the quantity of shrimp caught, and the women collectively decide on who goes to sell the catch. Two percent of the income from the sale is deposited in a common fund maintained by the secretary of the group. Each woman has a book in which her contributions are recorded. Interestingly, after being cheated in the initial stages, the women do not trust anybody with their

money, not even a bank. So they handle it themselves and they have a fairly large sum stored away somewhere. Now they also have a loan from the APPA with which they have bought more nets for their members. The group now owns two boats, one freezer and a generator. This is indeed an interesting and enthusiastic group of women who feel proud of their achievements.

All these women earlier gathered seafood for their own consumption. Being so far away from civilization as it were, they managed with what they had. Their men still do not own any boats or gear but

continue to hunt crab and gather fuel from the mangroves. Being distrustful of outside assistance, this little group is determined to learn by trial and error. Their freezer is not yet functional and to operate and manage it will entail additional costs and skills that the women themselves do not have at present.

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**Source:** *Yemaya*, ICSF's Newsletter on Gender and Fisheries. No. 6 April 2001

## BOOKS & PUBLICATIONS



### Corals of the World

by Jen Veron and Mary Stafford-Smith

This beautifully produced three volume set would be better described as a "trptych" than as a book. It really is a work of art. It is, equally, the culmination of a staggering amount of research. This makes it, effectively, the encyclopedia of the world's vitally important corals. Comprising over 1,300 full colour pages, the three volumes are carefully but lavishly illustrated. This makes it a pleasure to read and refer to.

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**Source:** *Professional Fisherman*, June 2001

### The Great Gulf: Fishermen, scientists, and the struggle to revive the world's greatest fishery

by David Dobbs

In the late 1980s, the fishery that had sustained New England coastal communities for nearly 500 years began to collapse from overfishing and poor management. In the face of this crisis, the fishermen and scientists who know this ocean best have become locked in a strange, bitter conflict over how to count the fish that remain. The gulf of distrust between them, which hauntingly echoes deeper discords in our culture, threatens to destroy any chance at recovering our nation's first bounty.

For readers who've come to know the New England fishery through books such as *Cod* and *The Perfect Storm*, *The Great Gulf* provides the story's next chapter: that of fishermen and scientists who, working the same body of water but understand-

ing it in completely different ways, strive to find a common vision that will revive this magnificent ecosystem. Full of salty sea voyages, cutting-edge science, unexpected humour, and the irrepressible spirit of those who work on the water, *The Great Gulf* is a must-read for anyone interested in science, nature, or the ocean.

Hardcover - 256 pages (September 2000)

Island Press - California; ISBN: 155963663

**Source:** Amazon.com (<http://www.amazon.com/>)

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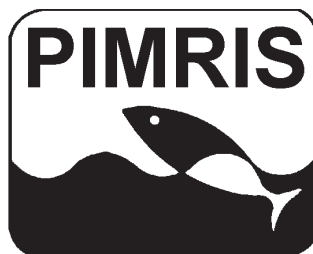
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