



Secretariat of the Pacific Community

Women

in Fisheries

Number 3 – December 1998

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



Coordinator: Aliti Vunisea, c/-Geography Department, University of the South Pacific, P.O. Box 1168, Suva, Fiji [Fax: +679 301487; E-mail: VUNISEA_A@usp.ac.fj]. **Production:** Information Section, Marine Resources Division, SPC, B.P. D5, 98848 Noumea Cedex, New Caledonia [Fax: +687 263818; E-mail: cfpinfo@spc.org.nc]. **Printed with financial assistance from the Governments of Australia and New Zealand**

Introduction

Welcome to the third issue of the Women in Fisheries Special Interest Group bulletin. The bulletin has continued to report on the activities of women in the fisheries sector both within and outside the Pacific region. The involvement of women in various fisheries-sector activities, including harvesting, processing and marketing, is evident wherever you look in the Pacific.

Women are the most visible resource users of inshore reef areas, perform much of the processing of seafood products and are often seen selling produce at markets or by the side of the road. The Women in Fisheries Information bulletin seeks to highlight this involvement as well as provide a channel to exchange ideas, knowledge and experience.

It is often difficult to isolate the role, responsibilities and needs of women from those of the rest of the community. This issue of the bulletin recognises this with the inclusion of more articles on community-based fisheries, as well as women-specific information. The news from the SPC Women's Fisheries Development Section includes work done in Nauru, Marshall Islands, Niue, Vanuatu and the Solomon Islands as well as the appointment of a new Women's Fisheries Development Officer.

News from within the region includes an article on community-based fisheries in Samoa, a new post-harvest fisheries development project with the University of the South Pacific, a regional course for Pacific women being held in New Zealand, news from Women in Fisheries in Papua New Guinea, an article on the empowerment of communities for coastal zone management, a move to increase the participation of women in development activities in the Marshall Islands and awards for outstanding contributions to grassroots development in the Solomon Islands.

Contents

News from the Women's Fisheries Development Section
by Patricia Tuara p. 2

What's happening within the region?:

Women & community-based fisheries in Samoa
by Lyn Lambeth p. 11

USP, Post Harvest Fisheries Development Project
by Tony Chamberlain p. 17

Empowering communities for coastal zone management
by Aliti Vunisea p. 18

Seafood Business Operations and Management Course for Pacific Island Women
by Michel Blanc p. 21

What's happening outside the region?:

GTZ-IOI Coastal Eco-villages Project
by Prof. R. Rajagopalan p. 23

Books and Publications p. 27



The news from outside the region has articles on community development in India, improvement of a fish-drying operation in Mauritania, North Africa, assistance for women in Burkina Faso, West Africa, in freezing and icing fish for transport and a fisheries community development in Eritrea, North Africa.

This issue of the Women in Fisheries Information bulletin also contains a Books and Publications Section, with information on relevant books around the region and how to obtain copies.

The bulletin is always looking for articles and pictures that readers might like to share with others around the region. Information you might like to have published in the next issue could include:

- fishing techniques and equipment
- research activities
- development and management projects
- community initiatives (cooperatives, local projects)

- training opportunities
- conferences
- books and publications
- issues that may impact on fishing communities (e.g. forestry, agriculture, tourism, pollution).

We also welcome any questions, requests for information, contact addresses and other relevant information about institutions and individuals who should be receiving this bulletin.

Inquiries and articles should be addressed to:

Lyn Lambeth
Secretariat of the Pacific Community (SPC)
BP D5
98848, Noumea Cedex
New Caledonia

Tel: +687 262000,
Fax: +687 263818
E-mail: LynL@spc.org.nc

WOMEN'S FISHERIES

DEVELOPMENT PROJECT



News from the Women's Fisheries Development Section

*by Patricia Tuara
Women's Fisheries Development Adviser*

Since our last bulletin, the Women's Fisheries Development Section (WFDS) has been quite busy in the region. Below is a summary of some of the activities.

Nauru workshop

From the 20–24 April 1998 the *Women in Fisheries Workshop on Alternative Techniques in Harvesting and Processing Seafood* was held in the Republic of

Nauru. This was a follow-up to the Assessment on the Role of Women in the Republic of Nauru survey undertaken in 1997.

The workshop conducted theoretical and practical sessions on seafood handling and recipes, sustainable fishing methods, alternative harvesting techniques and basic gear technology. The workshop was the first of its kind in Nauru to provide training specifically for women involved in fisheries activities.

“The participants worked well on the first topic which was sustainable harvesting. The level of understanding was very high. Group work was particularly successful in identifying problems that certain harvesting gear and technology can have on marine stock, and posing solutions. Interest in basic gear technology was high with participants learning how to make handlines, and whip and splice rope. Tips on net repair were given to those who had brought in damaged nets. Some participants took home handlines as samples of their work. Extra rope was provided to each participant to practise splicing.



Splicing of rope proved popular amongst Nauruan fisherwomen

For the recipes, eels were substituted for octopus, as no octopus was available. The participants took home their cooked eels for sampling by family members.

With the collection of sea cucumbers, participants were instructed on how to measure species against the hand.

The acceptable size for collection were sea cucumbers that stretched from the tip of the longest finger to the wrist. All undersized sea cucumbers were returned to the sea. For sea urchins, the participants were instructed in the practice of only taking a few from each group, leaving enough behind to re-populate.



Collecting sea cucumbers for the making of non-traditional seafood dishes in Nauru



Participants try out their handling techniques using the lines made at the Nauru workshop

Handlines made the day before were tested in the boat harbour while alternative fishing methods (fish herding, fish fences and artificial reefs) were discussed in the classroom.

The lecturer on sea-cucumber and tuna-jerky processing took the participants through the processing steps before the practicals were carried out. The steps in the processing of sea urchins (preparation and recipes), and milkfish (deboning, marinating, smoking and recipes) were outlined. Participants were very enthusiastic to learn the processing/cooking of milkfish as milkfish is a dietary favourite. The stuffed milkfish was a popular recipe. Milkfish, eels and flying fish were successfully smoked using the smoke house. The stuffed milkfish, in particular, was delicious when smoked (this was an innovation by some of the participants) "A big thank you to the Nauru Fisheries and Marine Resources Authority for constructing the smoke house!"



The President of the Nauru Council of Women tries her hand at making fish cakes

Closing ceremony – presentation of participants' certificates

The participants were enthusiastic about the recipes they had learned and eager to begin their cooking for the closing ceremony.

At 10am the Women's Fisheries Development Adviser presented the programme for the day. Then she gave a summary of the workshop. The Adviser then went through the three stages of assistance provided by the SPC Women's Fisheries Development Project to Nauru. For follow-up work the group said they would like talks to be carried out in schools to educate the youth (i.e talks on the environment).

The participants then worked on the processing of fish into burgers, and balls, as well as into the recipes learned during the week. Smoking of fish was very popular and several women continued smoking fish after the closing ceremony.

The closing ceremony began at 3pm. In his speech, the guest of honour Minister Bernard Dowiyogo (Minister responsible for fisheries) stated that a position for a Women in Fisheries Development Officer

had been approved for the Fisheries and Marine Resources Authority."

Extract from SPC Report on Nauru Workshop, April 1998.

As of September 1998, budget preparations were underway for the position of the Women in Fisheries Development Officer. A short list of applicants for interview has been made.

Marshall Islands workshop

The Ebeye Fish Base Workshop on the Processing and Marketing of Seafood was held from the 10–14 August 1998 in Ebeye, Marshall Islands. The purpose of the workshop was to teach (mainly Fish Base staff) techniques in processing and selling seafoods. Attended by 16 participants (11 women and 5 men), the workshop included seafood handling and hygiene, primary processing of fish (cleaning, gutting, gilling, skinning and filleting), secondary processing of seafood (making sashimi, tuna jerky, wet and dry salted fish, and various seafood recipes), setting up a business (deciding on types of businesses, book keeping, cost pricing, advertising, and packaging of products).



The preparation of wetfish is an important premise for making seafood recipes. Here the participants at the Ebeye Fish Base workshop were keen to learn both primary and secondary processing techniques

The participants who attended the workshop were very pleased with its contents. They found the workshop provided a lot of information, and allowed for practical application of the techniques learned.

Of particular interest to the group was the making of tuna jerky. On the final day the group was tasked to cost price the jerky. The Fish Base is keen to market the jerky as an additional product to the raw and salted fish it already sells.

As a follow-up to this workshop, an informal request has been made to the Women Fisheries Development Section to conduct a similar workshop on Jaluit atoll.

Niue field survey and workshops

A field survey on the role of women in fisheries was completed in Niue (26 February–12 March 1998) and a draft report compiled. During the visit to Niue, the Women's Fisheries Development Adviser was able to meet with a number of women's handicraft groups, as well as the Niue Council of Women. The women expressed their desire for training in the making of shellcraft and the processing of seafoods. As a result, two workshops were held in Niue in October 1998. The *Niue Women's Workshop on the Production and Marketing of Shellcraft* held from the 29 September to 1 October 1998 and the *Niue Women's Workshop on the Processing and Marketing of Seafood* held from the 2–7 October 1998.



Fishing for *kaloama* (yellow striped goatfish) using a *kafika* (native timber) rod is a popular activity for all family members during *kaloama* season in Niue



Village handicraft groups meet each week in the 14 villages of Niue. In Alofi South, a woman makes *hihi vao* (small yellow land snail) necklaces. Each necklace sells for NZ\$ 4.00 to NZ\$ 8.00 depending on the design

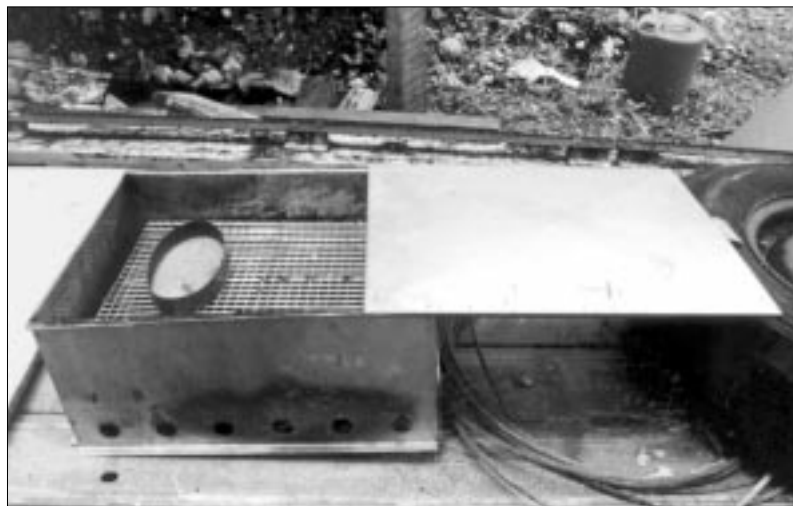
The shellcraft workshop was attended by 18 participants, and targeted women who rely on selling shellcraft as a means of income. The women were introduced to new designs using both local and imported shells. The mother-of-pearl shell from the

Cook Islands was provided to the women to weave into hats, necklaces and fans. The local shells were used in making novel designs in jewellery. In addition, the women were taught how to ensure quality of their products, and how to market them.



During the Niue shellcraft workshop, the participants learned to carve mother-of-pearl shell

The seafood workshop was attended by 27 participants, and targeted women who were interested in learning different methods of seafood processing, mainly for home consumption. Topics included sustainable harvesting techniques, seafood nutrition, hygiene and handling, primary and secondary processing methods, and marketing of seafood. Unlike the Marshall Islands participants, the Niuean participants did not find the tuna jerky to their taste. Instead the women preferred the smoked fish, and the novel recipes they learned (stuffed sea cucumber, sashimi and so forth).



The portable smoker pictured here proved the most popular because it is simple and quick to use



The presentation of seafoods was stressed as part of the learning undertaken by participants. This is reflected in their display of seafood dishes

At the closing ceremony, participants from both workshops came with the products of their learning. Beautiful shellcraft jewellery, hats, and fans were displayed by the shellcraft group, while the seafood group provided seafood dishes as part of the closing dinner. Certificates were given out to the graduates by the Minister responsible for fisheries (Hon. Terry Coe). Representatives of both groups requested that the Minister create the post

of Women in Fisheries Officer in the Dept of Fisheries to cater to the needs of women in the fisheries sector.

Both the Minister of Women's Affairs (Hon. O'Love Jacobsen) and the President of the Niue Council of Women (Lady Rex) expressed their appreciation for both workshops, saying they were both practical and beneficial for the women of Niue.



Shellcraft produced at the workshop are proudly displayed at the closing ceremony

Vanuatu workshop

A workshop on seafood processing, handling, packaging and export techniques for women was held in SANTO, Vanuatu from the 21–25 September 1998.

Funded by the WFDS, the workshop was organised by Ms Nicolle Rutherford of the Fisheries Department, Vanuatu.



Women are the main sellers of marine products in Vanuatu.

Regional collaborative work

Collaborative work has also been undertaken with the Forum Secretariat on a FFA-funded project to assist the Solomon Islands, Palau and Vanuatu in compiling Tuna Industry Management Plans.

In July 1998 the Women's Fisheries Development Adviser travelled to Honiara, Solomon Islands, with the Forum Secretariat's Gender Issues Adviser to collect baseline data on the existing roles of men and women in the tuna industry, and to incorporate the likely gender impacts of future industry development.

Future work

To date, the work of the WFDS has primarily targeted women, as the needs and responsibilities of women in the fisheries sector are often overlooked in national and regional management and development projects.

With the assistance of a new staff member, the WFDS will be looking at the roles and needs of all sectors of the fishing community and encouraging national fisheries agencies to do the same. This work will continue to deal mainly with inshore reef use, both non-commercial (subsistence) and small-scale commercial (artisanal).

The emphasis will remain on assisting women as they are the main users of inshore reefs, but the activities of other sectors of the community will be examined and assisted as necessary. The women who are mainly dependent on these inshore resources are not the ones who are able or willing to move into fishing offshore.

Subsistence and artisanal fishing communities need to be supported in the conservation and management of their way of life as well as their inshore resources.

As the WFDS is already dealing with the needs and responsibilities of the major users of the inshore reef areas—women—it would appear logical for the WFDS to be involved in some of the management aspects of community-based fisheries. Women will remain the main target group of the section, but they will be considered within the context of the whole community.

Countries that have recently requested field surveys, workshops and income-generating project support from the WFDS include Tuvalu, Palau, Federated States of Micronesia and the Commonwealth of the Northern Mariana Islands.

Informal requests for collaborative work with the University of the South Pacific's Post Harvest Fisheries Development Project and USP Post Graduate students have also been received.



New Officer appointed

A new Women's Fisheries Development Officer, Ms Lyn Lambeth, started work with the Women's Fisheries Development Section in September 1998. This section of the Coastal Fisheries Programme of the SPC has seen an increasing demand for its work by member states and the need for a new officer was seen to be necessary to meet this demand.

Lyn worked for 12 years in the commercial fishing sector in the north of Australia, progressing from a brief stint as cook on prawn trawlers in Queensland to deckhand on 12 metre barramundi gill-netters and a 21 metre vessel involved in gill-netting and longlining for shark, drop lining for reef fish and trolling for spanish mackerel in the Northern Territory and Western Australia.

This last vessel also introduced her to another side of fisheries, at various times being chartered for scientific research trips for the Commonwealth Scientific & Industrial Research Organisation (CSIRO), the Australian Institute of Marine Science (AIMS), the Northern Territory Museum and an anthropological research trip for the Northern Lands Council.

The fishing industry in the north of Australia is quite unique in that it has a fairly well-established tradition of women working on fishing boats. This had its beginnings with the advent of women being employed as cooks in the Northern Prawn Fishery in Queensland and the Northern Territory. Most of those women were required to do deck work as well as cooking and cleaning.

From that small beginning a number of women continued with the seasonal work, subsequently signing on as just deckhands rather than deckhand/cook. A few women went on to obtain their skippers ticket and to run vessels themselves, but by and large it remains a male-dominated industry. A number of women throughout the north of Australia are also involved in small-scale fisheries (barramundi, mud crab, mackerel) as part of a husband-and-wife team.

This has made it somewhat easier for women to be accepted within some parts of the industry as it becomes more recognised that the ability to do the work and cope with the often difficult work conditions is often more a matter of individual personality than gender.

After leaving the commercial fishing industry in 1993 Lyn went on to do a Bachelor of Science degree (Fisheries) at the Australian Maritime College in Tasmania. Following that, she spent a

year and half as a regional extension officer in Samoa, first on Upolu then Savaii. This was an excellent introduction to subsistence and artisanal fisheries development and management in the Pacific.

The Samoa Fisheries Extension and Training Project (funded by AusAID and implemented by the Samoa Fisheries Division) has been very successful in encouraging all sectors of the village communities in recognising the problems with their inshore fisheries and taking control of solutions. Management of inshore fisheries of participating villages is now being handled by Village Fisheries Management Committees, made up of three or more representatives from each of the titled men, untitled men and women's group.

This has taken much of the management and enforcement responsibility away from the staff of the Fisheries Division, leaving them with a more supportive and informative role. Positive contact between the village communities and the Fisheries Division has since greatly increased.

In April 1998 Lyn was employed as a technical consultant by the Secretariat of the Pacific Community (SPC) for the *Nauru Women's Workshop on Alternative Harvesting & Processing Techniques*, taking sessions on sustainable harvesting methods, alternative fishing techniques, and basic gear technology.

Lyn will be working with the Women's Fisheries Development Adviser, Patricia Tuara, in providing technical support for women and community-based fisheries, as requested by member countries.

At present the Women's Fisheries Development Section is looking at broadening its scope beyond exclusively women's development work to a more community-based management and development section, and flagged this idea at the 2nd SPC Fisheries Management Workshop in October.



Lyn Lambeth
**Women's Fisheries
Development Officer**

WHAT'S HAPPENING WITHIN THE REGION?



Women and community-based fisheries in Samoa

by Lyn Lambeth, Women Fisheries Development Officer, SPC

In the previous issue of the *SPC Women in Fisheries Information Bulletin* an article appeared entitled 'Role of women in Samoan society: The sacred covenant'. Included was a detailed look at a case study of an aquacultural project in Auala, a village on the island of Savaii. The information given was confusing and contradictory and the conclusion especially disturbing to the Fisheries Division of Samoa.

Part of the concluding paragraph reads 'From this research, it is evident that women in Samoa are still being excluded from the decision-making process when it comes to rural fisheries development. Nowhere in the Fisheries Management Plan was there any mention as to how women's actions could play a valuable part in the development of rural fisheries or in the conservation and management of the marine life in Auala. It is believed that the situation is similar in most other Samoan villages.' The Fisheries Management Plan is not referred to or explained anywhere else in the article.

According to the Samoan Fisheries Division, Auala has never had an aquacultural project such as the one described in the article. The author, when questioned by the Fisheries Division, admitted making up much of the information contained in the article. The Fisheries Division is concerned that the article detracts from some very good work being done by a group of dedicated and enthusiastic young fisheries extension workers in Samoa and that it gives the impression that women are not being included in this work. Auala village is actually part of a fisheries extension and training project being conducted by the Fisheries Division, with funding by AusAID, the Australian Agency for International Development. A Fisheries Management Plan has been developed by the

Village Fisheries Management Committee (VFMC) of Auala and this sets out the resource management and conservation undertakings of the community and the technical and servicing support to be provided by the government.

Women's groups were involved in every step of the extension process in Auala, as in all other villages participating in the programme, and the elected VFMC included representatives from each group consulted in the process—titled men, women and untitled men. As of August 1998, a total of 51 villages in Samoa had approved Fisheries Management Plans; 46 had set aside areas of their lagoon as 'No Fishing' zones, and all implemented a range of management and conservation measures designed to ensure their lagoons have a chance to recover from overexploitation, harmful fishing practices and environmental damage. Women have played a large part in designing those management and conservation measures and continue to be active in maintaining the programme in their villages.

The following article was written by the new SPC Women's Fisheries Development Officer, with the approval of the Samoa Fisheries Division, in response to the article on the role of women in Samoan society published in the last bulletin.

Subsistence and commercial fisheries production in the South Pacific

Most South Pacific countries have an estimate of their commercial fisheries production but few have an accurate estimate of their subsistence fisheries production. Those figures that do exist show the subsistence fisheries production in terms of weight

to be, on the whole, substantially more than the commercial fisheries production. It has been estimated in the South Pacific that 80 per cent of the catch from inshore fisheries (including reefs, estu-

aries and fresh water) is taken for subsistence purposes with the remaining 20 per cent going to commercial markets. This is production by men and women, though the data is rarely separated.



Women are involved in fisheries activities . . .

Women are involved in fisheries

Most people living in the Pacific are aware of the large role that women play in harvesting, processing and marketing marine resources. A look at many lagoon and inshore areas will show the most visible people on the reef are often women. Women do much of the processing of marine species harvested by both men and women.

Many of the market and roadside sellers of marine produce are women. So to talk of fishing and fisheries as something that involves mainly men is to ignore the very large contribution that women make to harvesting marine resources.



. . . and men are involved in fisheries activities

Nevertheless, when people talk of fishing, they usually think of fishermen and male-dominated commercial fisheries.

In development and management programmes, priority is often given to assisting large-scale operations and production—areas dominated by men—in order to encourage activities that will bring in an income for the country.

The role of subsistence fishers in ensuring the well-being and health of their families and community is often overlooked. Extension and training programmes have usually been aimed at men since they promote commercial fishing through upgrading fishing boats and technology.

It has been said that women's economic role is undervalued and ineffectively supported. It should equally be argued that women's environmental impact has been just as underestimated.

There has been little information previously collected on the involvement of women in fisheries; the problems they face; or the problems they cause.

Including all parts of the community in development and management

These factors have been part of the rationale behind establishing programmes that specifically target women. It has been recognised however, that men should not be excluded from the development process for women. Any development aimed at women will undoubtedly affect the men of the community; without support from men it can be difficult for women to take full advantage of development projects. For the same reasons women must also be included in any development process that is mainly aimed at men. A step beyond this is to include the community as a whole in any fisheries development and management project. Instead of individual projects aimed at separate parts of the community a more inclusive project would have the whole community as the target group. This can be very important when considering sustainable development, and especially the management of resources under pressure. Addressing the impact of one part of the community without considering the impact of the others will not result in effective management and may lead to conflict.



Fisheries management and development should involve the whole community

Samoa Fisheries Extension and Training Project: a community-based fisheries project

Any development or management programme must consider the needs and the impact of all marine resource users when promoting sustainable development. A fisheries extension and training project in Samoa has been following this approach since 1995 and the results have been very encouraging.

The Samoan Government has become increasingly concerned about the state of its reefs and lagoons and the decreasing fish catches. It also recognises that fish stocks and the environment cannot be effectively protected simply by passing national laws. The Samoan Fisheries Extension and Training Project is a good example of effective, community-based fisheries development and management. The project encourages coastal communities to produce their own management plans. Participating villages have taken on the responsibility of defining problems, discussing causes, proposing solutions and deciding on the most effective actions, while the Fisheries Division provides technical support and advice. The project has been very successful in including women in all parts of the process, ensuring that they not only contribute to the discussions on problems, solutions and actions, but that they also have access to training and the development of small-scale business opportunities. This was achieved by working within the traditional village structure, following the Samoan way, or *fa'a Samoa*.

Women do have a lot of influence in Samoan village life, as in many traditional communities. It is however, more subtle and informal than the men's influence.

Working within the traditional structure of the community

Successful community-based fisheries development and management should work within the existing structures of the community. In the words of the Canadian International Development Agency (1993) 'It would be a mistake in most instances to treat certain issues as 'women's issues' and to go around the normal community organisation and leadership. Similarly, when women are to be the main beneficiaries of a new technology or other intervention, project planners and implementers should work along with men in the sector and community, ensuring their cooperation and assistance.' In the Samoan project the benefits were directed at the whole community, on a village-by-village basis. Full community participation was achieved by first seeking the approval of the *fono*, or council, at a formal village council meeting. Following this, the *fono* was asked to arrange separate meetings of several village groups, including women. This meant that the formal ruling body of the village, the *fono*, approved of and had control of the process from the beginning, but that the rest of the community, including women and untitled men, were given the opportunity to put forward their opinions in separate meetings.



Work within the existing structure of the community

Broad knowledge of development and management measures

The process, after a series of separate meetings, resulted in the selection of a village Fisheries Management Committee, made up of representatives from each of the groups, so again the women were included and their inclusion was agreed to and accepted by the other groups. This ensured that any step taken by the fisheries management committee, whether it be the introduction of a village regulation or the development of a new income or food-generating project, involved broad community knowledge and support and was therefore more likely to succeed.

The final copy of the Fisheries Management Plan was then presented to the *fono* for approval, again ensuring broad-scale acceptance and success by following the traditional community structures.

More interaction between community and the Fisheries Division

Strong links were also forged between the village and the Fisheries Division in the process. In the past, women and village-women's committees have tended to look to church groups or women's organisations for assistance in fisheries-related matters. A similar situation existed with the men of the village. There is often little contact between subsistence or

artisanal fishers, both men and women, and Government fisheries organisations.

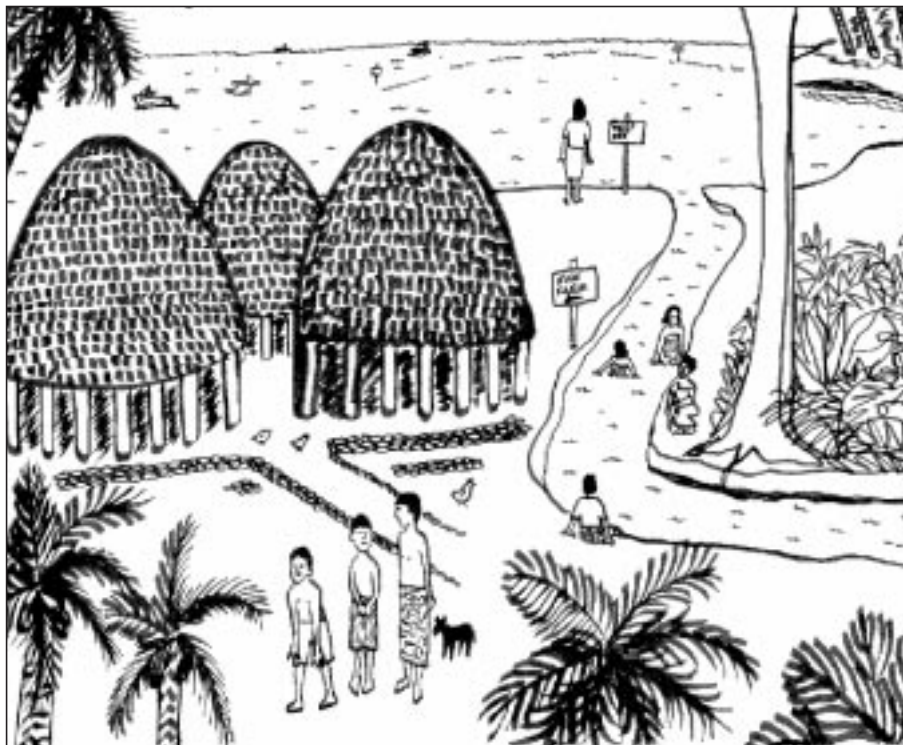
There is now much more contact and communication between villagers and the Fisheries Division in Samoa. This is an important consideration when the Fisheries Division is the logical provider of technical expertise and information to do with the harvesting, processing, marketing and management of fisheries.

Equally the villagers are an important source of the information and data needed by the Fisheries Division for resource assessment, management and development.

Women's groups and church organisations are still important providers of support and advice but the Fisheries Division is now the one most likely to be approached for technical assistance and information on marine issues.

Sapapalii, an example of community-based fisheries management and development

An example of broad community-involvement can be illustrated by looking at the village of Sapapalii on the island of Savaii. Representatives from Sapapalii first approached the Fisheries Division with a request for help in setting up a tilapia pond. From this the village became interested in the



Sapapalii: community-based fisheries management and development

extension and training project and went on to develop and implement a Fisheries Management Plan for their village.

The cost of hiring the excavator to create the tilapia pond was met by holding fund-raising activities within the community – raffles, dances etc. Women's groups, youth groups, and church organisations were all involved. The Fisheries Division provided advice and, when the pond was completed, stocked it with tilapia fry. The whole community provided their skills for work on and around the pond, erecting and decorating buildings, establishing gardens around the pond for plants to feed the tilapia, and building fences. At the same time the village introduced bans on damaging fishing methods, marked out a fish reserve, brought in restrictions on harmful environmental practices and started raising funds to buy small aluminium boats for fishing outside the lagoon.

These measures would not have been possible without the support of the entire community. A project which aimed to work only with the women of that village might have resulted in putting an end to a particular harmful practice—such as dumping rubbish on the beach—but a whole host of other problems caused by other parts of the community would have continued to add to the degradation of the lagoons.

The fact that the entire village had a part to play in identifying the problems and seeking the solutions has meant that they now feel responsible for them. Similarly, the tilapia pond has enjoyed success because everyone has played a part in its creation.

The village still has a long way to go in reversing much of the damage done to its lagoon by past fishing and environmental practices and overexploitation.

Recovery will be slow and there is always the danger that the community will lose its enthusiasm for following the Fisheries Management Plan. There are still parts of the community which do not agree nor voluntarily comply with all that has been done, but expecting 100 per cent agreement would be unrealistic in any community.

It is still an encouraging example of what can be achieved with broad community participation.

Acknowledgements

Pictures for this article were provided courtesy of AusAID, funding agency for the Samoa Fisheries Extension & Training Project.

In memory of Siamupini Iosefa who passed away on 2/1/98. Tofa Soifua Champ.



**Checking the progress of giant clams
in Satoalepai fish reserve, Savaii, Samoa**

Morobe (PNG) Women-in-Fisheries news

by Alberta E. Tumonde, WIFDO.

The Women in Fisheries Program (WIF) is a national program jointly implemented by the National Fisheries Authority (former Department of Fisheries and National Administration) and the Division of Fisheries and Marine Resources of Morobe Administration. The program is specifically aimed at encouraging women in coastal and riverine areas to participate in the utilisation of fisheries and marine resources to enable them to contribute to the social, cultural and economic development of their communities and hence their country. The type of service provided by the Women in Fisheries section, Department of Morobe Administration, Division of Fisheries and Marine Resources is described as follows:

1. Information:

In terms of information, the section is able to provide:

- Technical (handling, processing, preservation and marketing);
 - Financial analysis;
 - Project costing and management;
 - Product formulation and testing;
 - Quality standards for domestic consumer fish products;
2. Extension training in the following areas:
- Fish handling on shore
 - Fish smoking
 - Fish drying
 - Fish fermentation
 - Minced-fish processing
3. Extension services to other Provinces or other interested SPC islands:
- Consultancy service

University of the South Pacific Post Harvest Fisheries Development Project

The University of the South Pacific's (USP) Marine Studies Program (MSP), is running a Post Harvest Fisheries Development Project (PHFDP), funded by the Canada-South Pacific Ocean Development Program Phase-II (C-SPODP-II). The project is being coordinated by Mr Tony Chamberlain, Lecturer in Post Harvest Fisheries at the University.

Countries that can be involved in the PHFDP include all USP Member Countries (Cook Islands, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu and Vanuatu) as well as Palau, the Federated States of Micronesia and Canada.

The goal of the project is to improve the utilisation of inshore and nearshore fisheries resources in the Pacific region by increasing the capacity of Pacific Islanders to:

1. improve quality and add value to seafood products
2. decrease nutritional, physical and economic losses due to spoilage
3. improve seafood safety

The aims of the PHFDP are:

1. to enhance post-harvest fisheries technical expertise of Pacific Island nations especially in relationship to inshore and nearshore fisheries
2. to strengthen post-harvest fisheries training and research capabilities at USP
3. to forge stronger links between USP and other South Pacific regional organisations and Canada

The activities of the project will include training in post-harvest fisheries, which will be implemented to meet the priority objectives identified in the needs analysis.

Training is anticipated to be run in the form of regional, sub-regional and in-country workshops, or awareness campaigns, to enhance seafood utilisation by Pacific Island men and women by improving their knowledge and expertise in seafood quality, safety, value adding and marketing.

It is a clear objective of USP, of MSP and hence this project to continue existing links with other organisations in the South Pacific Region such as SPC,

FAO and Fisheries Departments. These links include networking, information sharing, attendance at technical meetings of partner organisations, conduct of joint projects, and sharing of human and physical resources. The USP frequently engages in activities of an advisory or consultative nature with other regional organisations, and engages in regular dialogue regarding identification of priorities in training, education and research.

It is anticipated that the PHFDP will enhance SPC programmes such as the Women's Fisheries Development programme whose activities include training for women and coastal communities in post-harvest fisheries techniques.

There are a number of existing Fisheries Department programmes in the region to which the PHF Development Project can be linked. Projects include Samoa Fisheries Division's AusAID assisted Fisheries Extension & Training

Project and Fiji Fisheries Division's Commodity Development Framework for Inshore Fisheries Project.

Linkages with existing regional programmes with their local background knowledge will help focus the PHF Development Project on priority PHF development issues and help guarantee sustainability. Further to this, by collaboration with these organisations, care will be taken not to unduly disturb the traditional strengths of communities; but build on and utilise these strengths.

There are also a number of other potential linkages including the UNDP's Sustainable Development and Utilization program, FAO, and the Women & Fisheries Network based in Suva. It is anticipated that the already strong linkage between the USP's Institute of Applied Science (IAS) and the Marine Studies Program (MSP) will be further enhanced. The IAS is able to provide services for testing foods, and human resources for training.



USP



C-SPODP II

Enquiries for further information should be addressed to:

Mr Tony Chamberlain
Lecturer in Post Harvest Fisheries
Marine Studies Program
University of the South Pacific
PO Box 1168, Suva
Fiji
Phone: (679) 212051 or 212876
Fax: (679) 301490
E-mail: chamberlain@usp.ac.fj

Empowering communities for coastal zone management

by Aliti Vunisea

Paper presented at the Coastal Zone Canada Conference in Victoria, British Columbia - September, 1998.

In Fiji as in other Pacific Island states traditional resource bases and community sources of sustenance and livelihood are increasingly threatened by changes primarily arising from factors beyond their control. Modernisation and monetisation, which

result from globalisation, have had a profound impact on social structures, institutions, protocol, customs and traditions. Increasingly evident is a more modernised or westernised lifestyle, patterned on 'western perceptions' of development. In the process, social structures, institutions, beliefs and traditions that saw the traditional subsistence societies survive for centuries, even millennia, start

to crumble. Consequently, intimate knowledge, behaviour and skills associated with indigenous people's use and management of their coastal resources are slowly being eroded.

Increasingly communities undergo change through development but lack the necessary empowerment to fully exploit benefits brought about by these changes. For example a new beche-de-mer market may not have much impact on a coastal community that has limited control or access to the means of transport available. Lack of preservation facilities and inaccessibility to electricity may hinder full participation of communities. The people regularly utilising resources are almost always the least empowered in decision making, are not aware of information networks and of avenues for assistance or redress. When the custodians and users of the resources are at such a disadvantage, there is a need for more effort to achieve greater community awareness of their resources and how best they can participate or become involved in development ventures. At the same time, researchers, developers and other stakeholders in development or management programmes should have a better understanding of the communities they are dealing with.

Pacific societies, which are basically subsistence in nature, are threatened by the effects of the market economy and the shift to individualism and competition as opposed to community efforts. Vunisea (1996) highlighted the importance of the mixed mode of production taking over the previously predominantly subsistence lifestyle of Pacific Island people. For not only were these resources the economic bases of island nations but the very source of survival for future generations.

The alternatives provided by coastal areas in Fiji and other Pacific nations are immense and provide a fundamental fall-back option for people. More so coastal fisheries provide a vital alternative to stagnant and falling economies. The semi-subsistence nature of coastal zones ensures a strong 'informal fisheries sector' base for people who otherwise would not find formal employment.

In some coastal locations in Fiji, there are in existence management strategies which people continue to utilise. Although not direct stringent measures, customs or norms currently in place serve to play a significant role in the management of resources at the village level. Designated community working days for example, take the pressure off most fishing activities. Taboos implemented on the death of a chief usually last from three months to a year. In Verata on Viti Levu in Fiji, other conservation strategies include the setting aside of certain fishing areas for subsistence purposes. This is a

modification of what used to be the chiefly fishing grounds. In addition there are strict taboos on food types consumed amongst the different clans. People from the Verata district cannot consume fish and other marine products in the presence of their warriors (the Naitasiri and Vugalei clans) (Vunisea, 1996). Most of these taboos have their roots in kinship relationships.

Also significant at the community level are networks and groupings that the people utilise to adapt to modern-day changes. In the case of Fiji, women who are the major participants in the subsistence fishing sector have set up their own networks and groupings, through which they organise harvests, processing and distributing responsibilities. Women in Verata for example have their own fishing groups; they share boat fares out to the reefs. The groups also assist in marketing, where each member takes turns at taking everyone's products to the market. The process results in each woman taking a turn at marketing once every four or five weeks. Although lacking economic security, these networks are a cost-cutting measure and have enabled women and other fishers in coastal communities to compete in the fisheries development arena.

The focus on 'community'-based development or management emphasises the need for a thorough understanding of 'communities'. Communities in most cases are seen as uniform institutions thus there is the tendency to put in place generalised structures and programmes. As in the case of Fiji, communities are like small governments. They are very dynamic systems with different hierarchies in leadership and modes of authority with traditional rules regulating resource use. At the same time they have different priorities and differ in the way they function. Different villages or communities have specifically defined clans with specifically designated roles. For example in a village there would be the chiefly clan (*mataqali turaga*), the warriors (*bati*), traditional fishers (*gonedau*), traditional carpenters (*matai*). These again differ depending on location and traditional systems of authority.

Thus the community is a complex system that depends substantially on the natural environment. In addition to a defined system of governance there are also programmes of work which people have adapted to suit their needs. For example there are communal working days, and special meeting days for different groups within the village. Traditional, religious and official government programmes have a profound impact on what people do and how they perceive and use resources. The church, for example, plays an influential role in

how people use resources and how people use their time. An underestimation of the influence of the church could mean not taking into account a major factor contributing to resource use. Traditional totems, taboo areas and fishing rituals are practices that are embedded into the whole structure of the village and in most cases are not just management strategies as they may be related to kinship and historical ties and may mark significant happenings within the community.

Community-based participation usually entails involvement of people at the initial stages: getting people's consent for the development of a project or for the implementation of a resource-management venture. There are meetings to create awareness and local people are involved in the initial planning of the project. The donor agency or the NGO at most times has experts or resource people facilitating the whole initiation process.

Development and management projects should involve people's participation at all levels—that is at the initial awareness, implementation, monitoring and assessment. Key locals, especially those knowledgeable on marine resources or those identified as traditional fishers could be used to co-facilitate the programme. In this manner there is challenge for local accountability if the project collapses. It also allows for follow-up programmes by the local community. The local community should be trained or educated on the value of the monitoring process. Monitoring procedures should use local, easily accessible and understandable materials. The use of too much modern technology at the monitoring level undermines the existing knowledge of people. At the same time it creates dependence on external experts and may hinder continuity as the methods used may be too narrowly defined and interpreted. Utilising local people and local knowledge in monitoring species abundance for example, could eradicate biases on seasonal fluctuations and location bias of certain species.

The success and failure of development or management ventures usually are in the forms of reports to the donor agencies. These assessments are usually narrowly defined in that they focus on the specific objectives outlined at the beginning of the project. Such objectives do not always agree with what people perceive as their goals in projects. The targets are usually narrow and the success indicators are confined to these narrow targets. They often do not assess how the development venture benefits people on a wider scale. If people have in the process of the project bettered their living conditions, sent their children through higher education, contributed to the buying of a village lorry, these are successes. Assessment then should be broad-based

and should incorporate people's living standards and socio-economic functions.

At the same time there is a need to view communities as dynamic institutions with changing structures and inspirations.

To adapt to modern day changes there are in existence at the village level new modes of associations and groupings. These are groups that are no longer based solely on traditional or kinship ties. Increasingly, new associations based on gender, age and education are being formed. These include religious groups, women's and men's groups, youth groups and other educational groups which are all part of the complex 'communities' systems.

There is thus an urgent need for a re-look at institutional attempts at management and development. Communities need to be specifically defined according to the different situations in which they occur. An attempt at re-assessing communities can hopefully take into account the marginalised sectors of the communities and in the process see societies as diverse structures, with different groupings, associations and networks.

Gender composition and roles of women can then be viewed realistically, within the total structure of the village or community set up. Fundamental to the understanding of communities is the notion that managing resources is basically managing people. If the people are not managed or included, then management cannot succeed.

Important too will be the assessment of traditional knowledge and skills, not as just descriptions of people's tasks but with an understanding of how they contribute to the functions of societies. For example, an understanding of seasonal abundance of marine and terrestrial species is vital to resource-use patterns in villages. In the modern context, seasonal fluctuation of certain wild fruits can take the pressure off marine exploitation as they offer an alternative means of income generation. People's understanding of the seasons regulate how they forage or fish. In Fiji for example the yam-growing season has a lot of significance for the utilisation patterns of other terrestrial and marine species.

People's familiarity with their coastal habitats ensured their exploitation of a diverse range of species. At the same time the multiple uses of the coastal area were well known and regulated. With the gradual dependence on technology, traditional knowledge of seasons, habitats, tides, storms and their impact on coastal populations is slowly being lost or eroded. In other cases, introduced technology and knowledge are not always compatible

with people's understanding. If existing knowledge, skills and behaviours are not acknowledged, this may result in the loss of the basis of the survival of coastal communities.

Too much emphasis on modern scientific technology may result in over-dependence on structures that people may not financially be able to maintain in the long run. There is thus the need for an integration of modern scientific explanations, methods and skills into existing traditional structures and functions. Communities cannot go back to the way their ancestors lived but there is definitely room for

incorporation of their knowledge and skills into modern-day development and management attempts. Researchers, developers and other people coming in to work with communities should attempt to strike a balance between traditional and modern scientific knowledge by interpreting and using traditional technologies with the modern. As stated earlier, management fundamentally deals with people and how they deal with resources. Thus, understanding the structures and systems that govern people is a primary starting point.

Regional Course on Seafood Business Operations and Management for Pacific Island Women

The Fisheries Training Section of the SPC is continuing its regional training programme on the management of fisheries enterprises with the running of a four-week course on seafood business operations and management for Pacific Island women. The course will be held at the New Zealand School of Fisheries in Nelson from 12 April to 7 May 1999.

The regional training programmes of the SPC target commercial fisheries enterprises in the Pacific with the aim of assisting an emerging regional fishing industry and as a means of creating job opportunities. The main objective of this course is to enable Pacific Island women involved in seafood business operations to upgrade their technical skills and to develop strategies to enhance the commercial viability of their businesses. Course content will remain flexible enough to address participants' specific training needs but will also cover three main subject areas:

1. **Seafood production system:**
an outline of production systems, HACCP principles, seafood handling and quality control, value adding, marketing and trading practices, site visits, practical production trials;
2. **Business management practices:**
the commercial ethic, personnel management and development, problem solving;

3. **Business planning and accounting:**
spread sheets and computers for accounting, interpretation of financial information, the business planning process, management of a businessplan;

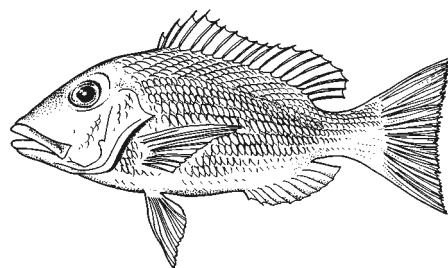
The course has been developed in collaboration with the New Zealand School of Fisheries and the New Zealand seafood industry to meet the regulatory and quality control requirements of international seafood markets.

Therefore, it provides an excellent base for upgrading the skills of Pacific Island women in all aspects of seafood business operation and management.

Enquiries for further information should be addressed to:

Michel Blanc
Fisheries Training Adviser
Secretariat of the Pacific Community
BP D5
98848 Noumea
New Caledonia

Tel: +687 262000
Fax: +687 263818
E-mail: MichelB@spc.org.nc



Awards to be presented for grassroots development

Awards for outstanding contributions to grassroots development will highlight celebrations in Solomon Islands to commemorate the 53rd anniversary of the United Nations on October 24.

Chief Technical Advisor of the Development Administration and Participatory Planning Programme (SIDAPP), Doctor Nestor Pestolos today announced the awards, sponsored by the United Nations Development Program in cooperation with the Ministry of Provincial Government.

Dr Pestolos says the awards, to be known as 'SIDAPP Pipol Fastaem' will recognise individuals

or organisations who have contributed to people's unity in pursuing common goals and aspirations. He says SIDAPP hopes that through these awards, more attention will be drawn on the need for critical support to development activities initiated by people in disadvantaged and remote rural communities.

Dr Pestolos says the first awards will be given to the provinces of Malaita, Isabel and Rennell and Bellona and other provinces will be included next year.

Source: PACNEWS - Honiara

Move made to up the pace of women's participation

by Giff Johnson

The reaction of many governments in the Pacific region to the women's movement in the 1980s was to create a small women's office, and then the rest of government bureaucracy promptly forgot about the need to advance women's interests, an official from UNIFEM, United Nations women's program, said during a recent visit to Majuro, Marshall Islands.

Now, the focus of the effort to move women into the mainstream of development activities has shifted gears in the Marshalls and other Pacific Islands to remove the burden of "women's interests" from a single women's office to the entire government, said Rosa Linda Miranda, a UNIFEM consultant who directs the Asian Pacific Centre for Women in Politics in Manila.

A key initiative in the Marshall Islands, with UNIFEM support, is to focus more on changing attitudes about women's participation and involving government personnel in workshops that encourage the involvement of women in the daily activities of each government office.

A just-concluded evaluation of women's programs in the Marshalls by Miranda has a series of recommendations for speeding the process of "mainstreaming" women's participation in national development. Those recommendations will go to UNIFEM and its donors for review and possible future funding later this year at a meeting in Fiji.

Source: PACIFIC, September/October 1998



WHAT'S HAPPENING OUTSIDE THE REGION?



India

The GTZ – IOI India Coastal Eco-villages Project

Prof. R. Rajagopalan
Director, International Ocean Institute, Operation Centre (India)

This paper along with a set of captioned photographs was presented at the Eco-Villages Workshop organised by the International Ocean Institute in Malta on 13 and 14 November 1997.

Prologue

Kulasekarapattinam Vadakoor is a long name, but it refers to a small hamlet in the coastal Tuticorin District of Tamil Nadu in South India. The hundred odd families of this hamlet are all *dalits* (meaning oppressed), belonging to a caste formerly considered untouchable. Pappa is a typical inhabitant of the hamlet, mired in poverty. Her husband works as a coolie or a labourer and he cannot find work every day. The family used to work as agricultural labourers, but the scanty rainfall over the last 7 or 8 years has severely depressed agricultural operations and employment levels. Pappa does not own any land and even her hut is located on government property and the family can, in fact, be evicted any time. Water is scarce in the area with most wells dry. What little ground water one can get is also saline. Pappa has to wait long hours to get her turn at the public tap. Even this supply is erratic and some days Pappa buys water from the richer folk in the area.

Desperate to increase the family income, Pappa once went to a local money lender, from whom she borrowed enough money to buy a female goat. But she had to enter into the following oral agreement with the lender: Pappa was to rear the goat and when it yielded little ones, half of them would go to the lender. This practice would continue in perpetuity even as the small goats grew big and yielded

more little ones. Pappa does get some income by selling the goats, but she is in bondage with respect to the lender. It is not easy for her to get out of this plight for one main reason: the money lender belongs to a higher caste.

Rani is a neighbour of Pappa. The name Rani actually means a queen, but there is nothing regal about her person or her home. For several hours every day, she stands on the sea shore in knee-deep water collecting shells with a large sieve. She dumps the catch on the shore and goes back into the water for the next lot. One can guess that, at the end of the day, she sells sea-shells on the sea-shore! The middle-man who buys them from Rani and others dumps them in a truck and speeds away. Rani has heard that the shells go to a far off place called Gujarat, but she does not know why someone in Gujarat wants so many shells. But she does know that she can make more money by burning the shells and making it into lime. But she would have to buy coal and, to make the operation worthwhile, she would have to buy more shells from her neighbours. For this she needs working capital and she cannot raise the money. The local money lender would gladly give her as much as she needs—at an interest rate of 120 per cent per annum!

Pappa and Rani are not alone in their predicament. In the same village and in other coastal villages in the area, hundreds of *dalit* families are in the same

kind of no-exit situation. And they form the target for the GTZ-IOI India Project.

ANAWIM Trust

Conscious of the low economic and social status of the villagers as well as the prevailing inequities and discrimination, the ANAWIM, a local non-government organisation, has the objective of making the villagers self-reliant and self-sufficient. The hope is that, in due course, the villagers would realise their potential and capabilities, improve their livelihoods and be able to live in dignity.

Towards meeting these objectives, the strategy of ANAWIM was to begin working with the women in the villages. Training courses in tailoring and typewriting were started in the villages as an entry point activity. The next step was to help the women to form themselves into formal groups. Each group met once or twice in a month to discuss the common problems.

A nominal monthly subscription was collected from each member and the money used to extend credit to needy members at a low rate of interest. A few training courses on health and hygiene as well as on starting home industry were also arranged by ANAWIM.

By the end of three years the groups were active in several villages and were also gaining in self-confidence. Their expectations were also rising and they wanted ANAWIM to help them to start income generation activities. At this point, IOI India entered the scene and decided to implement the GTZ project through ANAWIM.

Objectives of the project

IOI India began planning the eco-village projects with the idea that they should be pro-poor, pro-women and pro-nature. The latest but relevant eco-friendly technologies should be introduced in the villages and blended with the local traditional wisdom. There was in fact perfect synergy between the objectives of IOI India and ANAWIM. It was then easy to formulate the project objectives :

1. Preservation and restoration of coastal ecology through measures like regeneration of mangroves, afforestation, watershed development, reduction of pollution, etc.
2. Improvement of the livelihood of the coastal communities, especially women, through self-help and income generation activities.
3. Testing of eco-friendly technologies for meeting the first two objectives.

Project activities

Discussions between ANAWIM and IOI India led to the planning of the following activities:

1. Strengthen the women's groups where they exist and form such groups in new villages.
2. Conduct a socio-economic survey of the villages by involving the members of the women's groups.
3. Using the survey results and the existence of the women's groups, conduct a participatory rural appraisal.
4. Assess the needs of the villagers as well as the technologies required to meet the needs.
5. Search for appropriate eco-friendly technologies in India and other parts of the world using the IOI network.
6. Conduct trials of selected technologies and set up demonstration units for the successful ones.
7. Extend micro-credit to as many women as possible, using a rolling fund.
8. Build awareness among the women of coastal ecology through appropriate training programmes.
9. Continue to organise courses on health and hygiene as well as home industries.
10. Include the youth and the men of the villages in the development process at the appropriate stage.
11. Get the project evaluated by an independent source.
12. Propagate those aspects of the project that are replicable elsewhere.
13. Maintain a continuous documentation of the project as it develops.
14. Withdraw from the villages at the end of three years and begin the activity in new villages.

Work done so far

Women's groups have been formed in all the twenty villages and they are now being strengthened and expanded in membership. At the next stage, horizontal linking of groups belonging to a cluster of villages is being attempted. The objective is to increase interaction at the inter-village

level. A socio-economic survey of all the twenty villages has been made with the active involvement of the members of the women's groups. The completed questionnaires are currently being calculated and analysed.

Training programmes continue to be held on a variety of topics including health and hygiene, coastal ecology and home industries. A beginning has been made to involve the youth in some of the villages by getting them to start tuition centres to help the village children. The next step would be to persuade the youth to take up environment-related activities like cleaning and desalting village ponds, clearing fields of unwanted growth, etc.

After discussions with the women's groups and experts from outside, the following list of possible eco-friendly technologies has been prepared.

- Harvesting rain water
- Deepening, desilting village ponds
- Recharging aquifers
- Geological prospecting for perennial water sources
- Low-coast desalination stills
- Increasing tree cover, setting up nurseries
- Planting salt-absorbent trees, grasses/fodder with economic value
- Drip irrigation
- Biotechnology
- Vermiculture
- Spirulina, seaweed or culture
- Artemia, mushrooms, gherkins, etc.
- Fuel-efficient stoves
- Zero-energy cool chamber for storing vegetables
- Solar lanterns
- Low-cost wind energy for pumping
- Rope and washer pump
- Fly ash processing
- Goat rearing
- Grinding business
- Lime making
- Palm-leaf mat making
- Cloth business
- Tailoring
- Poultry
- Utensil business
- Wire basket making
- Vegetable vending

Funds for the Micro Credit Scheme came from the IOI India funds and not from the GTZ grant.

Current and potential problems

In recent times there have been communal tensions and caste clashes in the southern districts of Tamil Nadu. Fortunately, however, there have been no incidents in our project area. The reason is that the

inhabitants of the project villages are a peaceful lot. However, when they become very conscious of their rights and start asserting themselves, the story could well be different.

It is also difficult to get the village women to leave their work to come and attend training programmes. The loss of even a day's income is a major deterrent. The project provides for their meals as well as transport expenses, but this may not be enough compensation.

Even though the beneficiaries under the Micro Credit Scheme were selected by the groups themselves, those who have been denied loans are unhappy and some have left the group. In the same way, villages not covered by the scheme so far are also dissatisfied.

In some villages where the same enterprise has been chosen by more than one beneficiary, an equitable sharing of the market is necessary. It is not clear yet whether the beneficiaries would co-operate with one another.

There is also a need for detailed documentation of the micro-credit programme. The examination of the viability of each project and monitoring the beneficiaries' activities are very important.

Lessons learnt so far

- Locating a local NGO with a good track record is a prime requisite for implementing an eco-villages project.
- Large NGOs have their own, often inflexible, agenda and we cannot impose our objectives on them.
- Academic and research institutions may not make good partners in the eco-villages projects.
- Each village is different. The women's groups work with different levels of efficiency and effectiveness in different villages. The problems are also different from village to village.
- When the target group possesses no land or any other resources, any activity with a production orientation is useless.
- Information on appropriate eco-friendly technologies is not easy to come by.
- The choice of technology is also not easy. Even experts with experience in rural areas seem to have widely differing opinions on the appropriateness of a given technology.
- To ensure the sustainability of the activities, it is necessary to include, in due course, all sections of the villages including the youth.

Canada

Turning the tide

For several recent summers, Josie Thombs has been the lone woman among an all-male, deep-sea fishing crew:

I'm a fisherman. That's what the crew calls me and so that's what I accept as right. After all, it's their tradition. I do exactly what they do and they don't treat me any differently from the guys. I saw a beautiful boat once and had always fantasised about what it would be like to work on one. So I put a note on it saying, 'I'll work for cheap'. We went for 70 days straight the first trip out. It

was like boot camp. Part of that lifestyle seeps into your bones and that's what calls me back. But it's a love/hate relationship. By the end of the summer, I want to get off the boat more than anything. But by the end of the winter, I always want to get back on again. It takes a certain mind-set to tolerate that environment for a long time, and I don't think it's for everybody. I'm not suggesting that I'm stronger than anybody else. I just see the romance in it.

Source: Dalhousie, Alumni Magazine, Spring 1998

Africa

Zula Fisheries Community Development Program, Eritrea

Communities in Eritrea, in the horn of Africa, were devastated by years of war and natural disaster. Widespread famine necessitated a dependence on food aid. The fishing industry had completely disappeared. When the war ended, many returned from exile to communities where unemployment was high and food production could not meet local needs.

The Village Assembly of Zula, the local women's associations and the government started a program to build a local fishing industry, provide a local source of food and create employment. They planned a small-scale initiative, to protect the environment and prevent depletion of fish stocks.

Four villages now have community-based coastal fishing, using boats suited to conditions in the Zula Bay. The catch is sold locally and in Massawa, offering the fishing families a new source of income and local consumers new choices for consumption. Foot fishermen, who cast nets from the shore, are also supported by the project. Women are learning how to clean and prepare fish and nutrition education. The program is expanding to other communities.

Source: Oxfam, Canada, 1998

In Burkina Faso, FAO's TeleFood Fund helps women sell their fish

What a difference four freezers, 60 scales and 20 iceboxes can make. The equipment, bought through FAO's TeleFood Special Fund, has enabled two women's groups in Ouagadougou, Burkina Faso, to freeze fish so they can be transported in the intense heat of West Africa.

The women, who earn their living by reselling fish they buy from a wholesaler, had approached a bank for credit so they could buy the equipment. But the bank asked for guarantees they could not provide. The TeleFood Fund decided to give them a chance. Here are three profiles of women who have benefited from the project:

- Aliseta Nana provides fish to a number of restaurants in Ouagadougou. In the dry season, when the temperature can reach 40°C to 50°C,

her fish spoils very quickly. Now, with her icebox, Ms Nana has the chance to sell to more customers, and the restaurants have the chance to buy better quality fish.

- Sofie Makulma sells fish door-to-door all over the city. An icebox allows her to preserve her wares as she goes about her business.
- Edit Ouedraogo runs a fish stall in the market. If she can offer more and better quality fish, more people will stop and buy from her stall. She will not be forced to lower prices at the end of the day to be sure to sell all her fish. Now, she can always store fish on ice and sell it the following day.

Source: Food and Agriculture Organization of the United Nations, 1998

In Mauritania, a new way to preserve the catch

Mauritania is a desert land with two million people and one percent arable land. Located between Morocco and Senegal, its marine fisheries are among its few resources. But getting fish from its Atlantic coast to its vast hinterland is a problem because of spoilage.

The TeleFood Fund has donated US\$7 878 to a Fishing Cooperative in the capital Nouakchott so that it can improve a fish-drying operation.

In January, the project started with the identification of the site for the new drying plant and of experts who could teach 50 women how to process

the fish. In March, drying tables were constructed and equipment such as tubs, knives, aprons and gloves were purchased. A tonne of salt was acquired for US\$180.

By April, production got under way at the beach-front plant, a hopeful step in the challenge of improving the lives of the women workers and their families but also of getting a good source of protein to faraway citizens.

Source: Food and Agriculture Organization of the United Nations, 1998

BOOKS and PUBLICATIONS



Fish Processing Technology in the Tropics

Jasmin Espejo-Hermes,
(336 pages, US\$20 + postage)

Can be ordered from the publisher:
Tawid Publications
102B. Gonzales St. North Xavierville
Quezon City, Philippines
Telefax: (632) 426 0578

The Pacific Small Business Ideas Book

Andrew Shadrake
Development Solutions
PO Box 2307
Wellington
New Zealand
E-mail:
PacificIdeasBook@developmentsolutions.co.nz

This small (77 pages) book provides basic information on suitability, requirements and contacts for 60 small business ideas for the Pacific, including Dried Fish, Smoked Fish, Giant Clam Farming, Tilapia Fish Farming, Prawn Farming, Packaging Local

Produce for Tourists and Eco-Tourism. It also contains tips on what to consider before setting up a small business and where to get more help. The book provides the initial ideas and information to allow people to decide which small businesses may work in their area and situation. It then directs the person to relevant contacts and more detailed written information.

Women, Marine Awareness and Marine Conservation in Samoa

Posa Skelton and G. Robin South
Technical Report
Marine Studies Program
University of the South Pacific
PO Box 1168, Suva
Fiji

This technical report examines the current involvement of women in marine awareness and conservation issues in Samoa. It identifies the importance of the role of women in all sustainable development strategies and looks at options for strengthening this role.

SPC Publications:***Setting up a Small-scale Business – A Guide for Women in Fisheries***

Primarily written for women who are interested in setting up a small-scale fisheries business, this manual covers topics ranging from undertaking pre-feasibility research, producing a business plan, as well as setting up, monitoring and evaluating a business.

The information provided is applicable to anyone interested in setting up a business. Written as a training manual, the booklet can be used in a workshop setting. It comes complete with group exercises and appendices for overhead transparencies and handouts.

Practical Methods for Preserving Seafoods – Salting and Drying

How to preserve food so that it can be stored over a period of time is a question that is often asked by women in many island countries. The purpose of this manual is to provide information on how to prolong the shelf life of seafood, keeping it in good condition for later consumption. Focusing on the

two preservation methods of salting and drying, the manual aims to teach the principles and methods of both techniques. Written as a training guide for trainers, the manual features detailed information, practical exercises, audio-visual teaching aids, and photos.

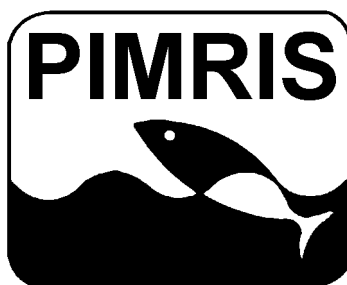
Both manuals were produced in 1997 by the Women's Fisheries Development Section, with funds from the Canadian International Development Agency. Complimentary copies have been sent to national contacts in fisheries and women's affairs departments, plus national councils of women. All others interested in obtaining copies will need to pay 1000 CFP (approx. US\$ 10.00) per copy.

The person to contact is:

The Publications Distribution Assistant
Secretariat of the Pacific Community
B.P. D.5, Noumea Cedex 98848
New Caledonia
Phone: (687) 262000
Fax: (687) 263818
E-mail: IdaT@spc.org.nc



PIMRIS is a joint project of 5 international organisations concerned with fisheries and marine resource development in the Pacific Islands region. The project is executed by the Secretariat of the Pacific Community (SPC), the South Pacific Forum Fisheries Agency (FFA), the University of the South Pacific (USP), the South Pacific Applied Geoscience Commission (SOPAC), and the South Pacific Regional Environment Programme (SPREP). This bulletin is produced by SPC as part of its commitment to PIMRIS. The aim of PIMRIS is to improve



Pacific Islands Marine Resources
Information System

the availability of information on marine resources to users in the region, so as to support their rational development and management. PIMRIS activities include: the active collection, cataloguing and archiving of technical documents, especially ephemera ('grey literature'); evaluation, repackaging and dissemination of information; provision of literature searches, question-and-answer services and bibliographic support; and assistance with the development of in-country reference collections and databases on marine resources.