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NOTE FROM THE COORDINATOR

Welcome to the second issue of the Women in Fisheries Special Interest Group bulletin. With evident active participation of women in development in general there is similar increasing emphasis on women's participation in fisheries. As is obvious from this issue there is in existence a more direct approach to and an acknowledgment of women's role in fisheries development. The current trend of increased gender awareness in development is illustrated in the brief articles on women's roles in the Indian and Canadian Fisheries and by the inclusion of gender perspectives in a Regional Marine Awareness training workshop.

The examples from Canada and India (p. 14–16) are extracts from papers submitted at an international conference run by the International Collective in Support of Fishworkers in Senegal, West Africa in 1995. They present a holistic approach where women's groups are part of fishworkers organisations. In this context women's affairs and problems are not developed or targeted in isolation but are part of the broader platform of fishworkers. This takes into account the reality in Pacific and other developing nations where women's fishing activities are usually performed alongside men's activities. In such environments domestic tasks are compatible with men and women. Although adhering to traditional norms, both men and women assist one another in semi-commercial activities such as artisanal and semi-subsistence fishing.

At the above-mentioned Regional Marine Awareness workshop, minimal emphasis was given in country reports to women's participation in fisheries. A major contributing factor may have been the fact that nearly all the participants were men. On the other hand it could be a more realistic measure of the current status of women's fishing activities

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in the Pacific region. Despite the major participation of women in fisheries in the Pacific region, the acknowledgment or official recognition of their activities still needs to be significantly addressed. With the increasing emphasis on resource management especially towards community-based or participatory approaches there is a dire need to include women.

In addition to this the survival of small-scale fisheries which are increasingly seen as more sustainable than large-scale fishing activities are primarily family based. Therefore they significantly depend up on women's fishing participation and support. Women's fishing activities include processing, preservation and distribution or marketing. It therefore follows that any development ventures or schemes implemented should include women who will at the end process and market the products.

This issue includes:

A section on the Women's Fisheries Development Project. This is followed by a look at what is happening within the region with a reference to a recent Regional Marine Awareness workshop where country representatives were required to include gender in their presentations. There is also a note on the Women in Fisheries Network and an account of how Tongan women successfully learn how to process fish. To close this section, Kelvin Passfield sent a tale of smelly worms from the island of Nanumea in Tuvalu.

The following section, 'What's happening outside the region', includes articles on the role of women in fisheries in Canada and India. Although differences may exist in the North and South because of development pace and the size of countries and populations, the underlying fact is that there is not much difference in real situations that women face.

Wherever women work in fisheries, they are always less significant in terms of remuneration, perceived contribution to the economy and acknowledgment. The articles highlight women's attempts to be recognised.

Aliti Vunisea





News from the Women's Fisheries Development Section

by Patricia Tuara Women's Fisheries Development Officer, SPC

What services does the Section provide to women in the fisheries sector?

Like all SPC programmes, the work programme of the Women's Fisheries Development Section is determined by the needs of SPC member countries. Requests from countries are received and actioned accordingly.

Based on the requests, the Section provides the following four services: 1. Information—for and about the activities of women in the fisheries sector. Information is provided both informally in response to requests, as well as formally through the provision of this Bulletin. In addition, training materials such as a video tape (Shellcraft: An incomegenerating venture) and two training manuals (Setting up a Small-Scale Business—a Guide for Women in Fisheries, and Practical Methods for Preserving Seafoods—Salting and Drying) have been produced.

- **2.** *Research*—the collection of data on the activities of women in fisheries. The production of national assessment reports.
- 3. *Training*—the organisation and delivery of incountry workshops.
- **4.** Support to income-generating projects—promotion and support for small-scale incomegenerating projects.

How can you receive assistance from the Section?

The Section has a network of in-country contacts which are comprised of both fisheries and women's government and non-government organisations. You can, therefore, approach either the Women's Affairs office, the National Council of Women, or the Fisheries Department in your country for information. Initial contact with the SPC can be made on an informal basis directly with the Women's Fisheries Development Officer. Formal requests for assistance will need to be channelled through the SPC official contacts in your country (usually the Ministry of Foreign Affairs, or the Office of the Governor). All such requests must be addressed to the SPC Director-General, at the following address.

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Secretariat of the Pacific Community
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Documenting the activities of women in the fisheries sector

One of the services provided to SPC members by the Women's Fisheries Development Section (WFDS) is the production of national assessment reports documenting the participation of women in fisheries activities. An in-country survey is carried out to determine how women are involved in the fisheries sector, to identify areas where assistance is needed, to identify national services available to them (government and non-government), and to collect information as the basis for determining the type of support required from the WFDS.

In 1997 the Women's Fisheries Development Officer visited the Republic of the Marshall Islands, and the Republic of Nauru to collect information for the production of the national reports. Excerpts from both reports are provided below.

'An assessment of the role of women in fisheries in the Republic of Nauru'

The harvesting of fisheries resources by women in Nauru

flat, collecting octopus using either their hands, steel hooks or sticks to scoop them out of holes in the reef, catching eels using traps, and collecting periwinkles by hand. Low tide reef gleaning is carried out during the day when the tide is very low. Reef fishing at night includes the same activities as those carried out during the day, with the addition of the collection of crabs and lobsters (when in season) by hand, the netting of fish trapped in holes in



Women in Nauru use very few tools when harvesting seafoods on the reef. The periwinkles, octopus and other reef stock are mainly collected by hand or by using scoop net, sticks and steel rods.

the reef after the tide has gone out, and the use of rod fishing from the edge of the reef into deep gullies. Some women use bleach to paralyse fish so that they can be easily harvested. Although there are abundant stocks of sea urchins and beche de mer, the women do not collect these as they are not favoured in the Nauruan diet.

During high tide, the women fish from the beach using a fishing rod and line, or the line by itself. The second method is preferably carried out at night.

Depending on the area that is being fished, women use different skills and nets when netting for fish. Groups of women set long nets in the inshore area to trap fish. Although not common, one Nauruan woman has used the throw-net method of fishing, casting her net in different ways to distinguish fishing in the boat harbour (where she stands on a high-

er level and throws the net vertically downwards into the sea), from fishing in the reef area (where she throws the net horizontally out into the sea).

Women use the set net and the scoop net when collecting fish from their traditional rock FADs (Fish Aggregating Devices). The set net is anchored around the base of rock pilings. The rocks are then lifted one at a time and set elsewhere. The scoop net is then used to scoop up any fish that remain behind as their rock shelter is dismantled.

It is not usual for women to travel on boats beyond the reef for deep sea fishing. However those who do so tend to accompany menfolk.

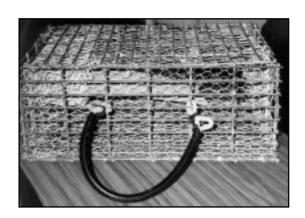
Although not a common practice, a few women dive for periwinkles. . . '



Although not common, a few women use nets when fishing in Nauru.



Nauruan eel traps are now made of wire mesh and steel. In the past they were made of bamboo.



'An assessment of the role of women in fisheries in the Republic of the Marshall Islands'

Fisheries activity amongst women on the outer island of Arno Arno

'... The women on Arno Arno collect shellfish, crabs, clams, and trochus mainly for family consumption. As the residents tend to cook over an open fire, seafood cooking methods are rudimentary and include boiling (sometimes in coconut), frying, and barbecuing. The women also use the traditional method of cooking in an earth oven, whereby fish and other foods are wrapped in leaves, buried in a hole in the ground, and covered with hot stones. Other methods of processing include salting, drying, and smoking of fish and the making of shellcraft. In terms of marketing, the women sell their processed (salted, dried, and smoked) fish locally through their husbands or on the main island of Majuro. In addition, their shellcraft is sold through outlets in Majuro. There are no government-funded fishing projects for women on Arno Arno. . .'

Publication of both the Marshall Islands and Nauru reports is scheduled for early 1998. Follow-up work in both countries includes in-country workshops and support for income-generating projects. In Nauru, the WFDS will be funding the production of a video and booklet on the fishing techniques of women.

The WFDS has received requests to visit Tuvalu and Niue to document the activities of women in the fisheries sector.



A young Marshallese girl sells bottles of octopus. The octopus is preserved in vinegar and spiced with chillies.

WHAT'S HAPPENING WITHIN THE REGION



Gender awareness as a component of Marine Awareness Workshop Pacific Regional Group Training Exercise, 12 to 15 August 1997, University of the South Pacific, Suva

by Aliti Vunisea, Coordinator

This workshop was designed and funded by the International Ocean Institute and The Marine Studies Programme of the University of the South Pacific as a training programme for trainers on general marine awareness.

Gender was included as a vital component of this workshop. The minimal emphasis and recognition given to the participation of women in fisheries was evident during the discussion.

Most of the participants who were men appreciated the inclusion of gender issues in the workshop and took a keen interest in following up or emphasising the importance of women's participation when they returned. From these it can be assumed that men can and will willingly assist or further women's interests if they were aware of their immense contribution to family nutrition and commercial enterprises.

The following are what some participants had in their reports.

Palau

Palau is traditionally a matriarchal society. However the modern National Congress is dominated by men. Women are not prominent in business fields, nor are well represented in high level government positions. Decisions about natural resources management and use are largely being made by men. However women's groups do exist and there is a women's conference each year.

Tonga

The general report did not directly address women's participation although fishing has always been an important subsistence activity, with the shallow-reefs and lagoons surrounding the islands providing a vital source of protein for the local population. A paper on marine awareness in Vava'u, however, pointed out that women fished in the daytime and that their fishing roles has not changed much. Local women's role was described as having expanded, from exposure to the women of the expatriate community. One diving operation was set up by a woman and until recently was completely managed and run by women. Development has provided some employment for both sexes. However for the majority, life in Vava'u is much the same.

Cook Islands

Traditionally the menfolk of Ravakai would have been involved with fishing the deeper areas of the lagoons, the inshore ocean and the outer reefs while the women and the children gathered resources in the shallower areas of the lagoon, mangrove swamps and the shores. This has not changed overly much through the years, although men are often seen netting the lagoon or catching octopus and crayfish on the reef.

Solomon Islands

Right now there is no gender discrimination in the marine sector as both female and male are required

to be the custodians of the marine resources for their common benefit. Women are increasingly involved in the fishing industry and just recently the first Solomon lady joined the School of Marine and Fisheries and trained as a deck cadet.

Samoa

Conservation of the marine environment has been the focus of many people. The majority of the people however are men. In government departments and with the Samoan village system, the men are considered to hold great authority in decision making. Although the men make the majority of the decisions, women tend to organise and carry out activities and plans in a more logical sequence. Some women are qualified scuba divers. Encouragement and promotional works continues to entice women to participate in marine conservation activities and decision making.

Papua New Guinea

The issue was not addressed as women's contribution is regarded as trivial.

Role of women in Samoan society: The sacred convenant

Extracted from: 'Women and Rural Fisheries Development:: A Case Study of Auala-Savaii' by Tasha Shon.

A major research project finding as part of a GE304 'Resource Management and Conservation' assignment, 1997.

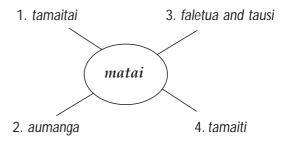
In order to understand the potential of women in fisheries development in Samoa, we must first understand the land rights of Samoan women, the organisation of Samoan society and the position of females within the fa'amatai (see diagram below), since most of the land is still held according to custom. The land registry of the Lands and Survey Department of Western Samoa shows that customary land forms 81 per cent or 567 000 acres (229 500 ha) of all the land in Western Samoa, and freehold land, which I discuss briefly towards the end of the paper, is only about four per cent or 27 400 acres (11 100 ha). I will not discuss the rest of the land which is accounted for by the Western Samoa Trust Estate or WSTEC land, approximately four per cent or 30 000 acres (12 000 ha), and Government public land, approximately 11 per cent or 77 700 acres (31 400 ha).

The core of the *fa'amatai* is the *matai*: the title or the title-holder heading the *aiga*, the extended family, who is the trustee of all *aiga* lands. The *matai* can be male or female. Every willage in Western Samoa recognises the social structure that has been called the 'socio-metric wheel' on which Samoan society turns. The hub is the group of *matai* but we can see that the first and third spokes pertain specifically to females (see diagram).

The first spoke of the wheel represents the *tamaitai*, or daughters of the group of *matai*. They are the most privileged group within the extended family and within the village, and are known as the *feagaiga*. As female heirs to *matai* titles, they have rights equal to male heirs concerning access to and use of the family or customary lands held in trust by the *matai*. The *tamatai* Samoa knows she has this right as the responsibility of the tilling and cultiva-

tion of land is not regarded as the responsibility of the daughters of the *matai*. But if the *tamaitai* marries and decides to reside with her own family she and her husband automatically have access to land for cultivation and for earning their livelihood. If a *tamaitai*, who has married and gone to live with her husband's family, divorces or her husband dies, then, again, she can return to her own people secure in the knowledge that she has ready access to her *aiga* land and permission to build a house and cultivate for her sustenance.

The Fa'amatai



The third spoke of the social wheel, the *faletua* and *tausi* are the wives of the group of *matai*, the chiefs or orators. The relative status of the females in this group depends on the status of their husbands. Since traditionally, marriage within families in a village was discouraged, the *faletua* and *tausi* are 'aliens' or *fafine nofotane*, literally, the 'wives of the men'. The *faletua* and *tausi* are *tamaitai* of other villages and other extended families who function as 'in-laws', spouses of the chiefs and orators in the village into which they have married.

Formally, the *faletua* and *tausi* have no land rights in the village of their husbands other than the right

of use of land for the duration of the marriage. Any influence they might bring to bear in the matter of land is only through the personal pressure they might exert on their husbands, the *matai*.

The second spoke of the wheel, the *aumanga*, are the untitled sons of the *matai* group. Their wives, like the wives of the *matai*, have no land rights, but they are the mainstay of the maintenance functions performed by their husbands. The *aumaga* are the tillers and planters in Samoan society and their duties involving the preparation, cooking, and serving food, especially on formal occasions.

So far, we have seen that the rights of Samoan women to land are fairly straightforward. Ideally, they are not tillers of the soil or planters of the plantations and crops for the general economy. Their planting responsibilities are confined to plants used to make items such as the fine mats, and the siapo, the lama, and medicinal herbs and plants. As feagaiga, women are further removed from any manual work involved in the cultivation of land. Thus, customarily the Samoan woman does not work the land and has no access to land other than the aiga land of her family or the use of land held by her husband's aiga. As an heir to a matai title, however, as related in the brief description of the fa'amatai, a tamaitai is also an heir to the aiga land, the titles of which are held in trust by the matai.

If a tamaitai is selected by the extended family to be the matai, or title-holder, she assumes the responsibility of seeing that the family heritage is utilised properly and allocated fairly to the heirs who require or wish to cultivate the land. She has the duty of protecting the land as well as the standing of the matai title as would a male matai, for a matai is neither male nor female but merely the trustee of the aiga heritage and aiga land.

Each extended family has its main *matai* title and also lesser *matai* titles that serve the main *matai* title and village or district. It does not matter how many lesser *matai* titles a family has, the main *matai* title is the head of the *aiga* and upon his or her head falls the burden of responsibilities, as well as the privileges of the rank of main *matai*. Perhaps this is the reason the average *tamaitai* refrains from seeking a *matai* title, especially the main *matai* title.

There has been an increase in the number of female *matai* in the last fifteen years, but this increase is a direct result of the imposition of the *papalagi* (foreign) political institution of 'chores' by ballot. The majority of female *matai* 'for the ballot' are lesser *matai* titles, or *matai* in name only. In between general elections, this type of *matai* reverts to her usual status as *tamaitai* or *faletua* or *tausi*. For example, in the village of Lopa in the A'ana district, there are

approximately 350 registered *matai*. Fewer than 20 of these *matai* are women and, of them, only 2 hold main *matai* titles. One of the main *matai* title-holders lives in Apia and does not participate anymore in social or political functions in the village. She wanted the *matai* title only to enable her to run for parliament. The other female main *matai* title-holder has accepted all the responsibilities as the head of her *aiga* and also head of a sub-branch of the top-ranking title of the village. She succeeded a male *matai* and has not made any changes in her distributions of *aiga* land; nor does she cultivate any of the family land but she has assisted financially one of the lesser *matagali* of her *aiga* to establish a piggery on part of the property.

This female *matai* lives in Apia on freehold land that she and her husband purchased but she also has a house in the village on the house site that is traditionally the seat of the *matai* title she is now holding. The name of the house site is used to distinguish the *matai* title-holders from others belonging to the two other sub-branches of this *matai* title which is the highest ranking title in the village of Lopa. The heirs to the title also refer to themselves as heirs of the house site.

Within the extended family of the female *matai*, six females hold lesser *matai* titles which were bestowed solely for the political ballot. Ordinarily, these women operate within the village as *tamaitai* or—in the case of one—*faletua* and *tausi*. As far as land rights are concerned, they have none other than their rights as heirs to the *matai* title which at present is held by their kinswoman.

In the village of Lala on the island of Savaii an interesting variation on the traditional relationship between the woman and men is when men 'are' female. These women are heirs to customary land in a different sense from the *tamaitai* heirs to *matai* titles.

Women landowners remain a small category. The land registry shows that fewer than 200 acres (80 ha) of the total 27 400 acres (11 100 ha) of free-hold land is registered in women's names, and that these are widows, beneficiaries of their deceased husband's estates. Most women owners in and around Apia have been content to maintain the properties willed to them, but others have subdivided and sold the parcels of land at high prices since freehold land is so scarce. One or two, like the now legendary Aggie Grey, invested wisely and were able to extend their land assets. Today, Aggie Grey is probably the Samoan woman with the largest freehold landholdings in the country.

To conclude this section briefly: in Samoa a woman's right to land as a tamaitai heir to her aiga

lands through *matai* titles is customarily strong and legally binding. This right exists, recognised by her *aiga* and the law alike, whether she be an unmarried mother, a divorcee, the wife of an alien, a spinster, or a school girl.

As a postcript: in 1972, the Western Samoan Parliament passed a Non-Alienation of Lands Act which details the conditions that must be fulfilled before freehold properties can be bought by aliens or continue to be held by absentee owners. The same legislation re-emphasises and firmly under writes the non-alienation of customary or *aiga* land.

The most important point here is that the relationship between Samoan women and their land, as well as their position in society, affects and is similar to their roles and responsibilities as fisherwomen in Samoan society as well as the development of women in rural fisheries. Evidently the issue of women in fisheries development is complex throughout the South Pacific. However, since women's roles and responsibilities as fisherfolk are intertwined in an inextricable web of social expectations, customs, and traditions, the issue of women in fisheries development is often convoluted and oftentimes discouraging.

Project of participation

During this period of research, I participated in an aquacultural project that was coincidentally setting underway in Auala-Savaii, apart from the development of the Fisheries Management Plan. The village women's committee had decided to undertake an aquacultural project that improved water supplies as well as nutrition for families in Auala village. Due to the timing of the semester, I entered the project in its last stages. The following is a report on literary research and personal observations on this prawn farming project in the village of Auala.

The setting

Auala (population approximately 900) is a village on the Western coast of Savaii, the larger of Samoa's two main islands. The semi-subsistence economy village is cheerful and well maintained. It has a fairly small coastal frontage fringed by a reef (about 2 miles or 3 km).

The faaSamoa system of chiefly rule

The village, which is typical of Samoan life, lives in extended family groups under this system: the family Chief (*matai*) has control over family lands and allocates them for the benefit of family members. In return the family members work to maintain the prestige of the family title. All natural

resources belong to the whole village under the control of the Village Council of Chiefs (fono).

FaaSamoa gives fierce autonomy to the village, which expects to work for its own needs in health, education and infrastructure rather than relaying on the government. All families are represented on the fono and the 100-strong Women's Committee (WCOM). WCOM's first responsibility was village health, but in recent years it has become the main provider of continuing education and a focus for development such as poultry projects and a village tourist hospitality scheme. Women are expected to join WCOM on leaving school and share in the financial and status rewards of projects.

Cash, water and modern development

Village families could no longer satisfy needs using only their own land and labour resources. They needed cash for school fees, seeds, fertilisers, medicines, soap and toothpaste. Yet there were few ways of earning cash in Auala. The market is too far away, and cars too few, for cash-cropping to be practical on a small scale.

Since the building of a coastal highway, families had shifted from the coastal site to the roadside to benefit from transport and pipe water. Despite the fact that the water supply is sporadic and of poor quality, such families came to depend on it instead of the abundant freshwater springs on the coastal site, which ended up polluted and unprotected. The poor quality of water led to skin disease among children in the village.

The project: prawn farming

Concern about fish stock depletion had been growing for many years. Tinned fish was judged to be a poor replacement. The idea grew for an aquacultural project, and it was popular both for the potential cash and the chance to eat fresh fish. The committee knew there was a demand for fish in neighbouring villages as well as the more distant market. A WCOM member was sent to the Fisheries Division, which was helpful and promised to support the project if WCOM decided to pursue it.

Reservations were expressed about the taste of freshwater fish. People preferred prawns to *tilapia*. There were also concerns that the project would take away fresh water. WCOM approached an aid agency for funding, which agreed to the project.

The aid officer underlined the educational benefits, learning about nutrition and new technology, and suggested that education in new recipes was also important so that people would acquire a taste for freshwater fish.

The planning group for the project comprised the WCOM executive, an aid agency officer, fisheries officers, and myself, a volunteer coordinator and observer (I actually only entered the project in its last stages). The project had been planned as a twoyear learning programme incorporating a practical and an educational component; all written materials would be in Samoan. Workshops were planned, one for each stage.

- 1. Location and preparation of site.
- 2. The prawn project.
- 3. The addition of sea water mullet.
- 4. Freshwater/sea water dilemma.
- 5. A status report on the project.

WCOM controlled the project but men assisted with some of the heavier work.

Location and preparation of the site

All available supplies were plotted and their use discussed. People realised that many springs had been forgotten and some were polluted. One of the first steps WCOM took was to fence one of the best springs and designate it solely for drinking and household use. WCOM identified a large pool suitable for aquaculture, about 137 m by 9.1 m and 0.91 m deep, fed by two springs. Because it was lower than sea level, a sandbar had prevented it draining into the sea, but seawater washed into the pool at high tides. During the rainy season the rising pool would flood out to sea to cleanse itself.

The pool was full of rubbish and was unkept. The family that owned the pool and land around was quick to agree that the project was in the village interest and donated the pool. It took seven months to clear and clean the pool while fisheries extension officers tested it for oxygen content, salinity, temperature and the phytoplankton that prawns require. Then a sandbag dam was placed at the mouth to prevent sea water entering. The women realised that this site was ideal for washing and bathing: women would no longer have to walk up to the feeder springs to do so. As long as locally produced soaps were used, there was no danger to the prawns. A bathing area pool was excavated. It was superior to the previous location and people soon preferred it to the piped water supplies.

The prawn project

The first batch of prawns arrived, but needed to be kept in holding tanks at the Fisheries Division for two months. On release, they would be ready for harvesting after six months. Further breeding stock batches were to arrive from Fiji every three months. Two workshops were held with attendances of 35 to 50. They emphasised these instructions:

- continue to swim in the pool;
- continue to wash in the user area but use only
- do not throw rubbish into the pool;
- do not spray 'Grammoxene' near the pool; and
- follow the directions of the pool manager.

All duties were shared among WCOM members, but a pool manager had been appointed to ensure that routine tasks were undertaken.

The addition of sea water mullet

After the prawns were established, the extension officer suggested that the pool might also support sea water mullet. Prawns were costly, many were lost and it had been discovered that they were not breeding stock, which it was illegal to import whereas young mullet could be caught in the adjacent mangroves and their taste was preferred to that of prawns. Over a six-month period, 3500 mullets were caught and released into the pool. The women were taught to judge their quality by simple manual tests.

During the same period nutrition workers gave cookery demonstrations. They also taught that a seine net should be used for harvesting so that only mature prawns above a certain size were caught.

Freshwater / sea water dilemma

The mullet did not flourish, because of low salinity in the pool. The fisheries extension officer proposed a pipe with a one-way valve to introduce seawater at a controlled rate. This raised a dilemma for the women: they were excited by the prospect of raising mullet, but had also appreciated clean fresh water in which to wash and bathe their children. At the end of a prolonged debate the village decided not to introduce sea water to the pool.

Status report on the project

WCOM harvested two batches of prawns. For future development two problems had to be solved:

- an alternative freshwater fish was to be found, no one wanted to eat the *tilapia* in the pool;
- prawn breeding ponds were to be set up in local spring inlets, since importing prawns would be too expensive in the long term.

Project evaluation

- The village families enjoyed the addition of prawns to their diet.
- WCOM members acquired the knowledge and skills to develop the project and look after fit systematically.

- WCOM and the village learnt to care for village's natural water supplies. As a result, health may improve.
- The villagers learnt more of the need for communal responsibility over communal assets.
 Workshops enabled them to make informed choices about these assets.
- When considering the impact of change, they realised that modern methods, such as piped water, were not necessarily superior to traditional ways.

Why the project was successful

Three very important factors:

- WCOM worked together from planning right through to harvest and beyond.
- There was a constructive combination of skills and local responsibility between WCOM, the fisheries extension officers (giving technical expertise), and the aid officials (expanding the project from development to an educational program) which took in all opinions
- The women learnt the effects of environmental neglect through a practical problem. As a result, their new attitudes to protecting water holes are likely to affect their other ideas about village life.

Comments on this case study

- Women gathered together to act when faced with depletion of resources.
- Official support and advice were crucial.
- The project had unexpected benefits for village life.
- Aquaculture is a difficult activity that requires good management—and the women were well able to organise supervision of the project alongside other daily concerns.

Auala village (as other villages in Samoa) could not fully accept *tilapia* in their diet because of its taste, yet the fisheries officials viewed it as a most suitable species. Official patience and understanding are necessary ingredients of success.

Solution & future developments

To address the imbalances and the injustices that women have experienced in the past, and to ensure successful women-in-fisheries development, it is crucial that the framework for all fisheries development be based on three important concepts: sensitivity, integration, and support the 'SIS design'.

Sensitivity: Planners and field staff must be sensitive to local patterns and methods of work, traditional attitudes and habits and existing economic and social structures, including women's roles.

They must understand and be empathetic towards the real and perceived needs of the people the project is designed to assist. They must allow women to be involved in the decision-making process: sensitivity cannot occur if planners ignore what the women have to say.

Integration: Women's development should not be planned separately or treated in isolation. It must be part of regional development strategies and/or local government directives. Women's development programmes that are mounted separately often isolate women still further from the mainstream economy. Activities can be specific to women but still part of the mainstream. Out ultimate goal should be complete integration of development activities. This, however, will only occur when women have been accorded true equality within society.

Support: Women must be given appropriate organisational, technical, and financial support for their domestic, economic and social activities so that they can make better use of their time. This may mean introducing technologies that will improve the efficiency of their activities, not displace them. It may also entail providing equipment and training to bring them into the realm of modernising for advancement.

This support can be demonstrated in various ways:

- research aimed at developing improved technologies in fish processing or non-fisheries enterprises in which women are engaged;
- provision of banking services and credit facilities;
- · extension services and training;
- improved facilities that will ease the burden of such domestic chores as collecting water and fuel;
- better sanitation, housing and medical facilities;
- nursery day schools;
- introduction of improved methods of food preparation and cooking; and
- ensuring women have equal legal rights to property and other assets.

Anyone proposing to establish an income-generating project with and for the women within a village will need to look at the other factors that affect the women's lives. To achieve success within the project, consideration may need to be given to child care, sanitation and water supply. Therefore, the planning process should involve not only fisheries advisers but also rural development advisers, youth workers and, possibly health care workers. The project will thus become better integrated and address the principal factors that could contribute to its success or failure.

Conclusion

From this research, it is evident that women in Samoa are still being excluded from the decisionmaking 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 prawn project that followed just proved how valuable women are in rural fisheries development and how their initiative and action contributes to the sustenance of Samoa's marine environment as well as local economy and well-being. Since women's roles are dictated by the fa'a Samoa (as we have seen in their land rights), it is very difficult for them to go beyond tradition for the mere sake of change and development. Together with various organisations that support women and their efforts to sustain the local Samoan environment, terrestrial and marine, the future looks bright for women in rural fisheries development as well as the involvement of women in any environmental, social, economic, and political interests and efforts they decide to pursue in the future.



Women in Fisheries Network focuses on successful management of marine resources

by Phillippa Teakel, Co-ordinator of the Women and Fisheries Network

The Women in Fisheries Network was founded in 1992 by a group of women concerned with raising awareness of the importance of the role of women in semi-subsistence marine resource activities. Women in Fisheries has a Board of Trustees consisting of women who work in the areas of marine resources, environment, and women and development. The members range from fisherwomen to scientists and researchers who are concerned about the role women play in marine communities. Projects run by Women in Fisheries are conducted as issues arise in the community, and balanced between research projects and grass roots activities for women who live in both rural and coastal areas.

'Women in Marine Resource Management'

In January 1998 the Women in Fisheries Network held a week-long workshop entitled Women in Marine Resource Management, which provided women from the community with an opportunity to develop skills in training others. The emphasis was on successful management of marine resources. Several women's organisations were interviewed prior to the workshop, and participants for the workshop were selected from their members. The workshop was aimed at women who are already working in some capacity in the community. Twenty-two participants from Viti Levu, Lau, Gau, and Rotuma attended the workshop in all.

The workshop had two purposes:

1. to provide workshop participants with information on issues which affect women in marine communities, and look at some solutions to these issues; and

to teach some skills in training adults, so that workshop participants would be encouraged to take their information back to their communities and inform others.

The first two days of the workshop were divided into information sessions convened by skilled resource staff. They were followed by small-group discussions on issues identified as areas of concern. Sessions included the ecological functions of corals, mangroves and seagrasses, and the major issues threatening them; approaches to integrated coastal management; waste-management issues and solutions; and income-generating activities for women.

The following day was spent looking at adult education and methods of training people in the community. This provided some formal, low-key skills for women who already have experience working with community groups. On the last two days of the workshop, speakers from the community presented information to participants which would assist in providing solutions to some of the issues identified earlier in the week. Projects such as fuel-wood planting were discussed, and other speakers talked on subjects such as the impact of eco-tourism, uses of herbal medicines, and income-raising activities such as worm farming and citrus growing.

By the end of the week, the workshop participants had learned much about the issues and concerns of coastal communities. They had been provided with some solutions which they could implement in their own regions, and had been introduced to some skills in adult education which would assist them to pass on their knowledge to others. This was a very successful workshop. Follow-up sessions targeting some of the issues will be held during the year.

Tongan women learn how to process fish

by Silika Ngahe, Fisheries Technical Officer, TONGA, currently Fisheries Information and Training Associate with SPC

Following a request made by the Secretary for Fisheries in Tonga in 1997 during a UNIFEM and UNDP joint mission, arrangements were made with Fisheries in Fiji to facilitate a workshop for women of Tonga (Vava'u, Ha'apai and Tongatapu).

The workshop took place from 26 to 30 January 1998 and was attended by 14 participants altogether, 12 women and two men; eight were selected by the Ministry of Fisheries and six by the Women's Development Section of the Prime Minister's Office and Langafonua-'a-Fefine Tonga. There were three participants from Ha'apai Island, two from Vava'u and nine from Tongatapu. Four participants were Fisheries Extension Officers, four were from the private sector and six were representatives from village groups. The participants were selected because of their roles in their various communities. It was planned that they would go back and train others who may be interested in the technology of fish smoking.

This workshop was initiated and funded by UNDP in collaboration with the Ministry of Fisheries and

Women's Units, Prime Minister's Office. The training sessions were participatory in style, but included lectures supported by audio-visual materials. The participants gained their first hands-on practical experience assembling the smoke house. Most of the sessions were conducted in groups, so that each participant could have a chance to either scale, clean, loin, skin and finally fillet the fish. They were also given a small exercise to work out the recovery rate and, finally, the yield of their final product.

During the closing address the Secretary for Fisheries mentioned the important role the women played in the economy of the country. He was hopeful that this humble beginning would develop further and contribute positively to the economy of the country. He also looked forward to further close working relationships with regional countries.

Finally, he said a big *malo 'aupito* to the Ministry of Fisheries, Tonga for hosting of the workshop, to Fiji Fisheries for providing technical assistance and to UNDP for sponsoring the workshop and helping us achieve such a successful result.

A tale of smelly worms

by Kelvin Passfield, Fishery and Environmental Resource Consultants Ltd. PO Box 817, Rarotonga, Cook Islands. Email: passfield@gatepoly.co.ck

While working on a dried fish project in Tuvalu, I observed several unusual fishing techniques. One of these was on the northernmost island in the Tuvalu group, Nanumea, situated approximately 5.5°S and 176°W. This particular fishery, which is undertaken by women, was not for fish, or in fact for any seafood at all, but for worms.

Ponu ponu worms are prized by the people of Nanumea for their smell. These worms are collected by women in the sand at low tide, on the beaches on the ocean side of the atoll. The women stand in a sandy intertidal area on the seaward side of the island, in 15 to 30 cm of water. They create a small whirlpool current by swirling their foot in a circular motion. This causes the sand, and underlying ponu ponu, to become suspended for several seconds. When the sand settles out again, the ponu ponu are left lying on the surface, from where they are easily collected.

They are killed by submerging them in kerosene or cheap perfume. Alternatively, they may be smoke dried. They are used mainly as a source of pleasant smell in the flower garlands worn by the locals. They are also added to coconut oil, which is rubbed into the hair and body, again for the smell.

I collected some samples of the *ponu ponu* from one group of ladies, and dropped them into my small bottle of spirit I carry around for cleaning the floppy-disc drive heads of my note-book computer. They were subsequently delivered to the Australian Museum in Sydney for identification.

Their response: These are not worms but members of the phylum Hemichordata, and are commonly known as 'acorn worms'. I was interested to read in your letter that they are used for their pleasant smell—they smelled none too pleasant when I tipped them out!! However the tissue is in good condition and they have been incorporated into collection.

Acknowledgments: I would like to thank Tafito, Tagivasa, and Lina, the ladies from the Nanumea Community Fishing Centre, for collecting the *ponu ponu* and for the information concerning their use; and Kate Attwood, Technical Officer (Inv. Zool.) at the Australian Museum, for identifying the *ponu ponu*.

WHAT'S HAPPENING OUTSIDE THE REGION



The Canada fishery

Extracted from: Canada Report for the International Collective in Support of Fishworkers (ICSF)
Conference, Senegal, West Africa. June 9-18 1996.
Prepared by Chantal Abord-Hugon, Maureen Larkin & Barbara Neis.

The impact of the groundfishery collapse on communities and women in Newfoundland

The closure of the cod fishery has left hundreds of communities devastated, and with no economic alternatives. Not only did fishers and fishplants workers lose their jobs, but communities depending solely on the fishery have seen a rippling effect with the closure of small businesses and stores. The community as a whole is suffering the effects, although the specific impact on women has received far less attention.

Since World War II, women had gained a space in the fisheries as a paid workforce forming 50 per cent of processing workers and 12 per cent of fishers. They had gained financial independence and a better self image. With the closure of the cod fishery, the government implemented adjustment programmes based on paid work. Women who have been involved in the fishing business had smaller salaries and less time working. This makes them less eligible for these programes.

There is also much inequality in the implementation of these compensation programmes. Sixty per cent of male fishers are eligible to participate in this programme until it ends in 1999, compared to 10 per cent female fishers. Fifty per cent of male fishplant workers are eligible, compared to 27 per cent of female plantworkers.

It is obvious that in their traditional family and community role of care givers, women are bearing much of the stress of this crisis. The government programmes are aimed at reducing participants in the fishery by half. Men and youth are moving away from the communities, thus leaving them in the care of women. But removing individuals ignores the household and community basis of the fishing industry. This approach will have the effect of excluding more women from direct involvement in the fishery.

Women have been less present in fishers' organisations and thus have fewer means to influence the decisions that governments are making to shape the future of the fisheries and the fishing communities.

Globalisation of markets

The globalisation of markets has both positive and negative impacts on Atlantic Canada fishery, and affects men and women differently.

Increased value of shellfish

The value of the landings in lobster and crab has increased. This is the result of a reasonably stable resource but mainly because of access to more luxury markets. More and better infrastructure to handle exports has enabled fishers to access these markets. The increase in the value of crustacean products has had a very positive impact on the economy of coastal communities who are dependent on these species.

However, this positive impact has not been extended to women concentrated in the fish processing sector. They continue to provide low cost labour and their salaries do not reflect the wealth of the crustacean industry. They are also exposed to significant occupational health risks. As well, luxury

products tend to prioritise live products over those which are processed, thus reducing the processing employment created from the resource.

Concentration

The globalisation of markets tends to make the harvesting and processing sectors more capital intensive. This in turn reduces the number of small family enterprises in the industry. In this situation, women provide cheap labour in the processing plants. For those who are not unionised, it is very difficult for them to improve their working conditions. In the harvesting sector, women play an important and informal role in the inshore family enterprise. If these family units are to lose access to the fishery, women will certainly have less options for employment. If women lose access to fishing and fish processing employment, many inshore fishing enterprises will no longer be viable. Concentration, privatisation and resource depletion are also threatening fishing communities access to fish as a major food supplement in their homes. Households in Newfoundland can no longer legally harvest cod, salmon and some other species for home use.

Role of women in existing fishworker organisation

In the harvesting sector, women are practically invisible in terms of membership in fishers' organisations. The first step to claiming space is fulfilling the eligibility requirements for membership. In most of the mainstream fishers' organisa-

tions, to be a member you must be a boat-owner and hold a bonafide or full-time license. Though more and more women are now fishing with their spouses, especially in the lobster fishery, they are still classified as crew members and not as bonafide license holders. Therefore, most do not qualify for membership.

In the past 10 years a few organisations of women have formed but they have a limited membership base and operate in very local situations. In the Maritime Fishermen's Union (MFU), crew personnel can be members if they fish on the shares with the captain. However, the MFU has very few women members. Another barrier is cost. For those few who are eligible, it is expensive to pay two membership dues from the same household. Parttimers and crew members can be members of the Newfoundland Union, FFAW. However, there is the cost of membership dues, particularly during a period of fishery closure.

In the processing sector, approximately 60 per cent of the workers are women. In the Maritime provinces however, the majority of the processing plants are not unionised.

Thus, there are few ways for women to be formally organised in the processing sector. In Newfoundland most processing plants are organised, but with the collapse of the groundfishery, the processing industry is very weak. The unions have not fought for their women members as strongly as they have for male members in the harvesting sector.

India

Extracted from: 'Indian Report: 1993–1996 - Recent Trends in Indian Fisheries' for the International in Collective in Support of Fishworkers (ICSF) Conference, Senegal, West Africa. June 9–18, 1996. Prepared by Aleyam and Nalini Nayak.

What is the role women play in fishworkers organisations

The fishworkers organisations differ from State to State. In some they are well structured and active, in others they are not. The real participation of the fishworkers therefore differs.

Although women are involved in fish-related activities in all States, they often do not find a space in the fishworkers organisations. The fishworkers organisations are oriented mainly to problems that fishermen face at sea—as so called fish producers. As the man is considered the head of the family, for all administrative purposes only the man is considered a worker and all plan and budget allocations

are also made only with the men in mind, even for occupations where the whole family is involved in productive work related to that occupation.

Whenever the fishworkers organisations have been engaged in struggles, the woman have generally been in the forefront. Yet even when women form the backbone of the struggles, they do not find space as official members, office bearers or decision makers.

In Kerala—a State in South India—only because of very conscious intervention, women have been integrated into the organisation in some districts. In this case they are on par with men. In other districts, they are organised in separate forums and

are nominated by the men onto districts committees. In this case they are 'under' the men. In some areas, women have organised autonomously—sometimes with the patronage of a political party. It is generally when women are autonomously organised that they militantly take up issues that affect them directly as workers, and also as marginalised people in general. It is they who take up issues that relate to daily life—like house sites, water, sanitation, health and educational facilities.

In Kerala, despite the active involvement of women and the long history of awareness raising on gender issues, it is still very difficult to find women who accept decision-making roles because men do not easily accept women in these roles. Active fisherwomen find it difficult to be available for organisational work, yet the few women activists are constantly opposed and rudely challenged by male leaders.

What difficulties do women face to take up their place in fishworkers organisations?

There are various reasons why women do not take up their place in fishworkers organisations in India.

Fishworkers organisation are very short-sighted on the whole. Justices workers in the organised industry have mainly fought to have more wages and benefits—a greater share of the cake—so also have fishworkers generally fought to have greater access to the resource. To some extent they have also been concerned with the management of the resource. They have not really related this to their life on shore, to their life in their families, their quality of life. The logic has been: more fish, more money and hopefully a better life. In reality there has been more money from fishing but this need not have resulted in emancipated living conditions. Fishing villages are still very marginalised in terms of development infrastructure. This short sightedness also results from the fact that women's work is not considered important, women's labour is not seen

to contribute to the fishing trade or to the development of the family and community. So much so that even articulate women do not know how to introduce their issues into the organisation.

By definition, if a wife of a fisherman is not involved in fish-related activity, she is not accepted as a fishworker. Hence even if she spends long hours in assisting her husband to prepare for a fishing trip, and even if she actively participates in struggles, she officially is not accepted as a member of the fishworker's organisation.

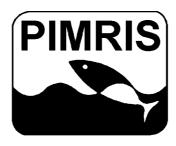
Men often think their wives have nothing to say or should have nothing to say. So much so, that they shun the outspoken women. Men embarrass them by their questions, throw them various challenges that finally force the women to give up.

The social upbringing and cultural conditioning is such that men and women are expected to play specified roles. Only very recently has this begun to be questioned. Women are slowly entering the public realm thereby challenging old patriarchal standards. While these processes encourage women to play different social roles, this makes men feel more insecure, and consequently men become more aggressive.

For fisherwomen who are mostly illiterate, and burdened with the triple duties of child care, household work and fish related activity, it is very difficult to find time, space and a congenial atmosphere to stay on in the movement and to take up leadership positions. So long as men are ill at ease at household chores, this restricts women's mobility.

The growing sexual perversions in society also exert restrictive pressures on women. It is unsafe for women to travel alone, to be out after sunset. Therefore even if women are interested in taking an active part in their organisations, their mobility is again affected.

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 South Pacific Commission (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). Funding is provided by the Canadian International Development Agency (CIDA) and the Government of France. This bulletin is produced by SPC as part of its commit-



Pacific Islands Marine Resources Information System

ment to PIMRIS. The aim of PIMRIS is to improve 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.