

Women in fisheries

Up against several barriers

The women of Fiji still remain critically disadvantaged in the country's fisheries development process

As in other Pacific islands, women in Fiji dominate subsistence fishing and are also increasingly involved in the local commercial fishing sector. The importance of women's fishing activities is evident in the vital contribution of the subsistence and small-scale commercial fisheries in Fiji. The women's involvement in other fisheries sectors is diverse

Their involvement has increased significantly with the emergence of fish processing as a growth area within the manufacturing sector in the post-coup years in Fiji. The expansion in the industry during this time have largely been attributed to the contribution of women workers.

Total employment (staff, workers and management) for the Pacific Fishing and Canning Company (PAFCO) in 1993 was reportedly over 1,000, with the majority being female production workers paid hourly.

In addition, women's inclusion in the production process—they make up about 90 per cent of the total workforce in the cannery—is said to be a replication of the practice of assembly lines, which utilize women's manual skills, speed and efficiency.

Women form the core of the industrial fisheries labour force through their involvement in post-harvest or processing activities. This mode of involvement conforms to perceived gender biases in development, where women are largely employed in areas pertaining to traditional labour divisions.

Given the increasing emphasis on the exploitation of the migratory tuna and the attempt by Pacific Island countries to

process their own catches, there will most probably be greater involvement of women in commercial fishing in the near future.

Women contribute significantly to the artisanal fisheries sector, especially through small-scale village-based commercial activities. This increased participation can be attributed to the growing commercialization of non-fin fish species, especially shellfish. According to the Fisheries Division Report for 1993, for the past three years, sales of non-fin fish (shellfish, crustaceans, octopus, bech-de-mer, seaweed, etc.) have totalled an average of 2,000 tonnes, worth US\$ 4.5 million. *Kai* or freshwater mussels, which are exclusively harvested and marketed by women, comprise about 48 per cent of this volume.

The main sales outlets for artisanal fishers are municipal markets, hotels, restaurants and cafes, butchers and fish merchants, retail shops, supermarkets and roadside stalls, with women dominating selling activities. The past years have witnessed a decrease in fin fish sales at municipal markets, with non-fin fish becoming more popular.

Despite the women's contributions, their participation in the artisanal sector is hardly acknowledged. Except for the mention of the 22 non-fish gleaning licences issued to fisherwomen in the Northern Division, most women fish without licences and are thus largely categorized in the subsistence sector.

Post-harvest activity

In addition to their own fishing activities, women also provide the necessary post-harvest activities for men's catches. Although formal production has, in most cases, doubled in intensity and volume,

processing and preservation activities remain unchanged. Hence, major processing activities like smoking, drying and salting are still traditionally practised by women.

In addition, the preservation, distribution and marketing of catches remain the responsibility of women. Therefore, artisanal fishing could be described as being principally dependent on women's support. Increased modernization and associated commercialization in the rural areas of Fiji will eventually make women get more involved in the future development of the artisanal fisheries sector.

Subsistence fishing is an essential component of the fishing industry in Fiji. For the substantial rural coastal populations and communities situated alongside inland waters, this fishing sector is a major source of food. In addition, increasing urban populations are also dependent on marine food sold in local markets.

Fishing methods employed by the women on the coastal flats are generally very simple, with tools and technologies primarily traditional. Methods utilized are diverse, with specific methods employed for different species. These are usually simple, on most occasions involving the use of hands and simple tools. These revolve around a few

principles or basic methodologies. For freshwater locations, these include netting activities and trapping or stupefying fish.

To exploit sea resources, the women net, set up barriers and traps, use hand-lines and glean or collect on the dry reef flats.

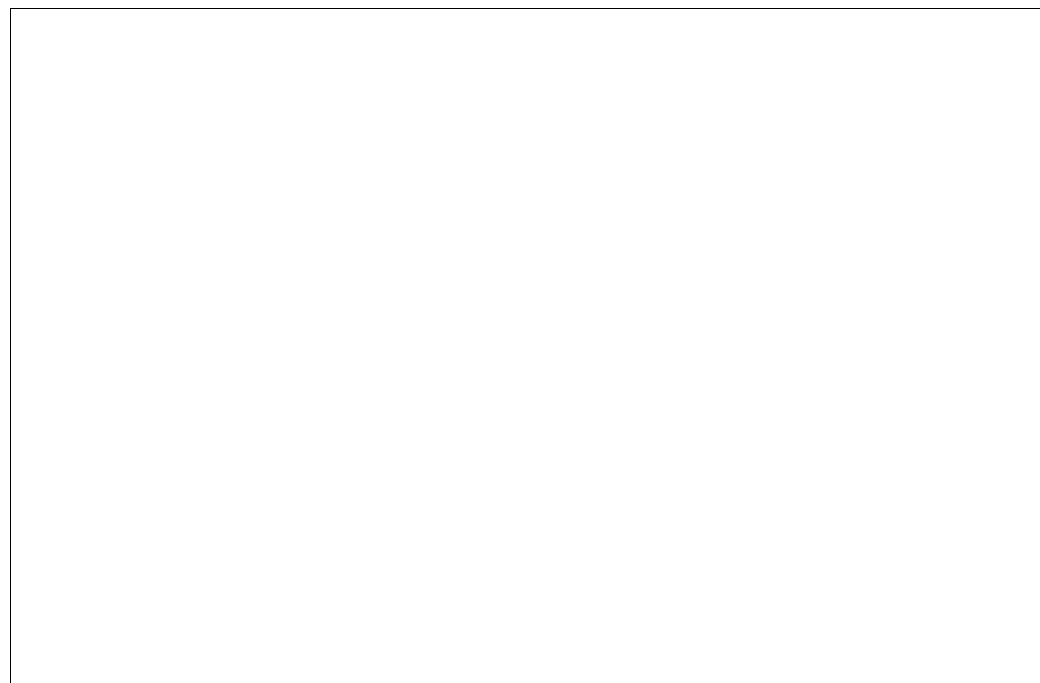
Such fishing activities usually require keen eyesight and skill with the use of hands and feet. In addition, the intimate knowledge and understanding that women have of their immediate environment enable them to easily identify and catch prey.

So, even if the methods used sound and look simple, they are, in reality, complicated and require extremely adroit use of the senses, and skilful utilization of fisheries knowledge.

Net fishing, using small hand-nets and larger nets, is common in inland areas. The hand-nets are used for fishing in groups along rivers, lakes and ponds. The nets are firmly lodged in mud or sand, while the women feel into holes, under grass or weeds, with their bare hands.

Amazing ability

The women have the amazing ability to grip and pull fish or eels out of small crevices, holes or from under weeds. Those that escape are trapped in waiting nets. Larger nets are used to block off creek or stream openings.



Fish are then chased into these nets by splashing on the surface of the water. Another variation of net fishing is when a group of about 10 to 16 women wade around in a lake, in waist-deep water, removing weeds and grass. The activity is continued until the water becomes muddy, thus stupefying fish and eels.

Consequently, fish swim either to the surface to get clearer water, try to escape along the dry banks or lie still at the bottom of the lake. When a woman steps on a fish, she keeps her feet on it, dives down, and grips it by the gills, before killing it. Fish that escape to the surface of the water are caught in nets, while those that escape to the banks are caught barehanded.

In recent years, large gill-nets are increasingly used in inland locations. Although the use of large nets in rivers for commercial purposes is not allowed legally, the introduction of species such as the grass carp and the availability of freshwater fin fish in major rivers have motivated the use of nets,

More recently, the women have moved away from netting to fishing with lines. Just like their counterparts in coastal locations, the women are familiar with the best times, winds and weather for fishing. Line fishing is used during, and after, major flooding, when the fish leave

their abodes and feed in calmer areas of ponds and rivers.

The women often identify fish by how they bite or nibble on the lines. For example, when the women use kneaded dough as bait for mullets (*kanace*), spotted scat (*vetakau*), mangrove jack (*damn*) and tilapia (*maleya*), they can tell the differences in feeding patterns. For instance, mullets nibble on the dough, spotted scat touch lightly on the bait, while the mangrove jack and tilapia pull strongly on the bait.

Sometimes, when the women identify the fish feeding on the line, they immediately change their hooks, bait and lines to suit the particular fish. Thus, when line fishing, the women are armed with a range of lines and hooks.

Another major resource for inland areas is the freshwater mussel (*kai*), which is usually caught by diving to depths of two or three meters, using goggles and small wire-mesh baskets or pieces of cloth. Once the *kai* are sighted, the women dig them out with their fingers and fill their baskets.

Storage method

More common for storing *kai* is the use of a piece of cloth, called *sulu* or *lavalava*, with one end tied around the women's waist and the other around the neck. The *sulu* will then form a sort of space where

the *kai* is stored while the women fish. If full, the weight of the *sulu* could drag the wearer down. In the course of my research, a young mother died in Nadali village from this practice.

The women's commercial exploitation of *kai* has become very organized. For instance, some villages along the Rewa River, the largest river in Fiji, are entirely dependent on *kai* as a commercial resource. The villages of Nakini, Naganivatu, Natoalka, Deladamanu, Nacokaika and Kasavu have, over the years, organized a fishing programme whereby villages do not fish at the same time.

The villages are divided into two groups, which take alternate turns at fishing and selling in the market. In this manner, an oversupply in markets is avoided, and the women are also free to attend to other duties during their week off from fishing.

For coastal locations, gleaning and collecting on the sand flats are the women's major fishing activities. Other specific fishing activities differ, depending on the location and accessibility to urban markets. In fact, there is a marked difference in the use of time between areas participating in the commercial economy and those fishing basically for subsistence.

For example, in Totoya, the women's activities are very flexible and selective in nature. The species targeted depend principally on the season and the weather. For instance, during the south-east trade winds, the women exploit octopus on the dry reef flats. When it is the season for seaweeds, their collection is the women's main activity.

Apart from the sporadic nature of fishing, the technology used also differs from that used in urban areas. For example, netting is still widely practised in rural isolated areas, while in urban locations, where there is a higher emphasis on selling, the women do not net regularly. Surprisingly, netting is still significantly used by the women who reside on the coastal fringes of the main towns.

Line fishing is a popular women's activity in Fiji. It has many variations, depending

on the location and target species. Line fishing can be done from boats, on feet or while swimming. In inland areas, short rods are sometimes used. Baits include worms, fish pieces, octopus, shellfish such as *kaikoso* or hermit crabs (*kasikasi*).

There are many variations in the methods used. Some exceptional ones include *siwa nunu*, which is practised in areas such as Cicia and Totoya in the Lau group of islands. In this case, the women hold fishing lines and dive along the reef slopes. When the fish is sighted, the bait is thrown at it, and, as soon as the fish bites, the line is suddenly pulled in. *Basikeli* (bicycle fishing), which is practised in Totoya, is where the women swim in deeper lagoon areas and fish with lines. Since the water is deep, they stay afloat by treading water while fishing. This is why the fishing style is likened to bicycle riding.

The women also have unique ways of adapting methods and gear to suit the occasion. In Totoya, during moonless nights, I saw the huge bay adjacent to the village covered with lights. The women have recently discovered that certain mackerel species have a taste for flour dough. Coupled with this is a weakness for bright lights.

Thus, on such nights, the women are out in punts in the bay, with their pressure lamps suspended from sticks firmly lodged in the boat. The light attracts these fish and they congregate around the boat. Using kneaded dough as bait, the women drop their lines over the side of the boat and the fish snap them up. The villagers call this type of fishing 'Korea', because it is likened to the method of Chinese or Korean fishermen who used lights to catch bait fish in Fiji's lagoons.

Other methods used include the setting up of barriers, fish fences and traps. Stone weirs or *moka* are usually erected within the coastal area to catch fish that feed with the tide. Fish fences are still used, especially along estuarine locations.

Net fishing

Net fishing is commonly used in isolated rural locations and is only occasionally used near urban areas. The use of large gill-nets has greatly increased with the

Pacific invisibility

In documenting women's participation in development, the status and roles of Pacific women have commonly been evaluated using Western models and perceptions. When I started on this project, I spent substantial time with women from my village, in Nadali, near Nausori town – women who spent endless hours diving for freshwater clams (*ka*) or line fishing for grass carp (*ika droka*) or flagrail (*Kuhlia pepstris*), maleya or tilapia (*Oreochromis mossambica*) and duna or eels (*Anquilla*).

I used these opportunities to engage women in informal discussions. During one of these, I was surprised that many of the women, including my mother, who was a regular fisher, seemed taken aback when I suggested that the fishing activities they engage in were an added responsibility to standard domestic chores.

The majority of the women did not see fishing as work, and in response, asked what they would do for leisure if there was no fishing. Going to the films, visiting relatives, or other such social activities were, in most cases, regarded unbecoming in our society. Hence, fishing was the opportune time to spin yarns and catch up with the news, while also doing something useful.

Obviously, from this experience, it is clear that the case of women in Pacific has to be addressed differently, keeping in mind the roles assigned them within social concepts prevalent in the Pacific Islands.

This is not to say that Pacific societies do not customarily recognize women's rights. In Polynesia, for example, female are not considered intrinsically inferior to males. In Samoa, even though women are largely dependent on their husbands for social status, those who are unmarried, divorced or widowed and continue to reside in the village are known as the 'ladies of the village'. Such women hold high ceremonial status which is independent of male rank and which grants important decision-making powers within their families. In Fiji, women of chieftainly birth also hold special status and can ascend to chieftainly positions if they were the first-born ones in their families.

Thus, there is a need for a better understanding of what women actually do and how they are regarded socially within the context of Pacific societies today.

Traditional fishing activities are normally segregated, with men's fishing activities focusing on deep-sea areas and women's activities confined to shallower, inshore areas. Women, however, generally support men's fishing activities through preparing and repairing fishing equipment, cooking food and taking part in required rituals. Recently, women have started to participate in more traditionally male-dominated activities like offshore fishing in Tonga, Marianas and Fiji.

Such increased women's workload, resulting from the expanded fishing activity, is a removal from 'distinct traditional gender roles existent in Polynesia and Melanesia.'

Women's fishing activities are generally referred to as gleaning and collecting on reef flat. This definition does not accurately portray the immense knowledge and skills that women's fishing activities entail. Nor does it reflect the importance of women's fishing activities, especially to the total household production.

Early Pacific societies were self-sufficient in food, much of which was acquired through family fishing, foraging and collecting efforts. Women's subsistence fishing activities were a major component of these activities. Even in current times, women fishers are portrayed as basic providers of family protein through their fishing ventures.

The advent of commercialization in rural communities has resulted in a greater emphasis on economically viable products. This has motivated the evident shift from the consumption of local food to less nutritious, imported food. These trends have also been intensified by the change in emphasis in women's fishing efforts, from subsistence to commercial.

Women are also the major informal traders throughout the region, dominating municipal markets and other roadside and street outlets. If the 'self-employed' category is used as an indicator of informal sector activity, then almost a quarter of Pacific women are engaged in informal trade. In Fiji, women operate from a homes, roadside stalls and streets, selling a diverse range of foodstuff. However, another explanation holds that women's immense involvement in the informal sector was a

response to poverty. This significant informal participation reinforces women's undervalued roles because the formal sector is usually rated higher than the informal.

Women also possess an extensive knowledge of traditional post-harvest activities, which is not recognized enough. This is because current fisheries development emphasizes production, with the post-harvest sector being given low priority.

As a result, women's dominant participation in post-harvest and processing activities is regarded as secondary in fisheries development. It has been argued that post-harvest activities performed by the women of Vanuatu contribute very significantly to the nutritional and income levels of households. Modern fisheries development, therefore, need to blend traditional processing knowledge with new strategies.

The concept of access to resources has been addressed only minimally in the literature on the Pacific. In the majority of the Pacific Island countries, resources are clan-owned and mostly through patrilineal descent. When women marry, they become a part of their husbands' clan but can not own or have legal control over resources in their new home area. At the same time, they lose resource rights in their places of origin. Thus, in the modern context, women are usually landless.

Exceptions occur where there are traditionally matrilineal descent systems, such as in Bougainville in Papua New Guinea and Nauru. These two societies have been affected by mining, which has eroded the control of resources by women. For example, female landowners in Nauru do not have much influence over negotiations for compensations or for the management of phosphate. Thus, even where women have resource access, they lack economic, political and social authority to control it, especially as resources take on increasing commercial importance.

In spite of Pacific women's increased participation in the market economy, they are generally regarded as basically involved in subsistence fishing, with minimal defined participation in commercial fishing activities. Commercial fishing, in this context, does not regard essential post-harvest activities as active commercial participation. Neither is

women's domestic work viewed as necessary for the success of men's commercial fishing.

Another major obstacle in the documentation of women's economic participation in the fisheries sector is how their fishing activities are not seen as economically productive. The failure to recognize the mixed subsistence nature of the village fishery results in an undervaluation of their participation.

Apart from this, the involvement of women in fisheries is usually not well documented. For example, female participation in the fisheries sector in 1993 for Fiji, Samoa and Tonga were recorded as only 13-17 per cent of the total workforce. This low statistical measure of the women's economic participation is due to the subsistence sector not being enumerated. The obvious indifference to women's fishing activities and the non-recognition of their work in the subsistence sector prompted the description of them as "invisible fisherfolk".

The current industry-oriented fisheries development leaves women's small-scale commercial and subsistence activities unmonitored and undeveloped. Wherever women have been incorporated into the industrial sector, this has been in gender-related types of employment, such as fish processing. Among major constraints to women's fisheries development are the lack of access to technology and the absence of fisheries extension assistance.

This trend is not surprising, considering that it was only during the past decade that women's contribution to fisheries began to be recognized. Recent literature has begun to record the substantial involvement of women in processing and marketing, especially in Papua New Guinea and Vanuatu.

Women continue to be largely responsible for post-harvest activities in all the different sectors of the fishing industry. This has been increasingly so with the establishment of tuna canneries in Fiji, the Solomon Islands and Western Samoa.

Various international and regional organizations specifically address women's issues throughout regional co-operation and with assistance from bodies such as the UNDP and the FAO, research and awareness into women's concerns are being highlighted.



availability of faster and bigger boats, but it is an activity restricted to male fishers.

In areas such as Nukui, where net fishing is an important activity, there exists a wide range of practices. For example, *qoli rai* is when a school of fish is sighted and the nets are put out to encircle the catch. This is usually done within the outer reefs.

At other times, large nets are used to catch fish hiding under rocks. For this method, rocks are usually surrounded by nets while *duva*, or fish poison, is crushed and squeezed in to the water around the rocks. Since this is practised on the outer reefs, the larger species get trapped in the net when they try to escape.

The *yavi ran*, or leaf drag, is widely practised in Fiji, with variations, depending on the location. Both men and women participate in this activity which, in most cases, is for communal purposes. Customarily, men and women swim towards the shoreline, a few of them holding the drag-net. When they near the shore, those with the drag then close in towards one another. When the shallower areas are reached, the fish are harvested using both hands and scoop-nets.

Gleaning and collecting are the major fishing activities of women in the subsistence and small-scale artisanal sector. Surprisingly, these activities are

not confined to women in rural areas, as women residing in semi-urban areas also extensively gather or collect from urban foreshore areas.

Gleaning includes collection of a wide range of non-fin fish along the inshore coastal areas. Bivalves, crustaceans, octopus, seaweeds and other miscellaneous items are usually the target of these gleaning activities. Recently, some previously caught species are being neglected. This decline in harvest is because such species now hold little economical value. Examples are *ibo* and *vetuna* (both sea worms), *dio* (oysters) and *woce* (a small edible brachiopod). Once, most of these species were coastal delicacies and were usually eaten raw.

Traditionally, there has been a complementarity in the organization of Fijian labour, with women being engaged in domestic duties and nearshore fishing or foraging activities, while men farmed and were responsible for deep-sea fishing.

At least in Totoya and Nasau, men worked in gardens and only occasionally fished. Recent developments have led to a transformation of such roles with the emphasis in production getting focused primarily on economically productive activities and men engaging more in fishing activities. The argument here is that the traditional context of labour division can no longer be casually applied to all rural situations.

Generally, it can be argued that women have been largely disadvantaged in institutionalized fisheries development in the Pacific Islands. Apart from traditional and social constraints, they are hindered by technological innovations, which principally target male fishing activities and marginalize the participation of women in fishing.

Increased participation

Although there has been increased participation of women in formal employment, this has, unfortunately, predominantly been in menial, underpaid jobs. An overview of the Asia-Pacific region shows that Asia has been more advanced in addressing the issue of women in fisheries. This has come about through government support and the

accomplishment of programmes which targeted small-scale fishing enterprises.

Tradition is not static, and thus the ideologies which revolve around its usage are not static either. Due to women's dominant role in the subsistence fishing economy, and their contribution to the family diet, any shift in their fishing patterns will have several kinds of impact on local village societies and practices.

Despite women's increased participation in the fisheries sector in the Pacific and in Fiji, in particular, their activities remain officially overshadowed by those of male fishers. 3

Fiji

This article is based on the draft of a Thesis by Aliti Vunisea of the University of South Pacific. Suva, Fiji