The participation of women in fishing activities in Fiji

Aliti Vunisea1

Introduction

Women play critical but still poorly understood, undervalued and underappreciated roles in fisheries supply chains. Gender issues are not on the policy agenda, which is sustaining a vicious cycle where only limited resources are dedicated to understanding the gender dimensions of fisheries and how to address them. While small-scale fisheries and nutritional security are strongly linked, much more attention needs to be given to recognising, strengthening and protecting the role of women in both coastal and offshore fisheries in Pacific Island countries (ESCAP 2014).

Knowledge of gender roles is an important part of fisheries management because it allows interventions to be tailored to specific groups of fishers. Long-standing gender patterns continue, with men predominantly targeting finfish while women target invertebrates (SPC 2013). Women's participation has dominantly been in the inshore fisheries, with primary involvement in the subsistence sector and the small-scale commercial fisheries sector. Involvement in the offshore fisheries sector has been in certain areas only, predominantly in the processing and post-harvest sector at the Pacific Fishing Company (PAFCO) in Levika, Fiji, and the selling of cooked and uncooked fish in markets, roadsides and other outlets. While there has been increased acknowledgement and documentation of the participation of women and gender inclusion in the fisheries sector in recent years, these have been mostly in specific areas. In 2011, studies on the participation of women in Pacific Island countries, which included Fiji, indicate that women's participation in fisheries science and management accounted for only 18% of total staff working for fisheries in science and management in government fisheries, environment institutions and environmental non-governmental organisations (NGOs) in Pacific Island countries and territories. In contrast, women account for more than 60% of administrative and clerical staff in government fisheries divisions.

For the purpose of this report, women fishers relate mostly to ethnic Fijian women (*i Taukei*) who engage and dominate in Fiji's fisheries sector. Although women from other major ethnic groups in Fiji generally do not engage in fishing activities, studies to identify and document participation of other ethnic groups should be pursued to establish ethnic participation in other aspects of the fisheries sector in Fiji, such as value-adding or selling.

Progress on the inclusion of women in Fiji

Overall, gender mainstreaming processes to achieve the government's commitments to gender equality are still not well integrated into the government institutional structure, planning, and budgetary processes in Fiji. Despite the considerable progress made in the various sectors, the gaps in the implementation or achievement of government policy on gender are numerous, and need to be addressed in institutional arrangements and in the planning and budgeting process (ADB 2006).

Traditionally and historically, fishing beyond the reef was the domain of men, while women concentrated their activities on fishing and collecting invertebrates within lagoons and inshore areas. The dominant participation of women in the inshore fishery, and their involvement in the postharvest sector, marketing and distribution has been documented in numerous writings and reports (Matthews 1993; Tuara 1995; Vunisea 1996; Lambeth et al. 1998). Recent writings and reports, too, highlight the fact that fishing participation of women has not changed much and women still dominate the inshore fishery, with primary involvement in post-harvest activities, marketing and distribution of marine products (Kronen and Vunisea 2007; Tawake et al. 2007). With technological changes, however, come changes in fishing trends and demands – and new fisheries have emerged through the years.

The cultural roles of women

The cultural roles of women continue to define and determine their spheres of influence at the community level, and dictate their roles and participation in the various fisheries sectors. Nainoca (2010), in her discussions on traditional environmental knowledge (TEK), makes reference to the different institutional levels in which people live in communities and the need to further understand how TEK and other customary matters relate or contribute to management at these levels. Veitayaki (2002) and early writers on Fijian lifestyle and livelihoods describe these levels of kinship at length in relation to marine resource management, food and social security in communities.

Traditional knowledge and practices in the Pacific are often gender-defined, as is the case in Fiji. Gender often dictates where women and men work and separates traditional knowledge held by women and knowledge held by men. Traditional or local knowledge is therefore important for

¹ Lot 13, Cakobau Road, Nausori, Fiji Islands - vuniseyaliti@yahoo.com

understanding gender roles and responsibilities, but it must be kept in mind that traditions and customary practices have undergone a lot of changes, and in some areas people only know modified versions of what was traditionally practised. Moreover, while it is important to be gender sensitive, there is a need to recognise the danger of stereotyping women as vulnerable in ways that might obscure their strengths and resilience to change (Campbell 2010).

Writings and discussions on cultural roles of women have tended to focus on the hindrances women face through culture, with little mention of the many avenues that exist to enhance women's roles. Women also have certain roles and status, depending on the clans they belong to or are married into. Women have made progress in many areas of work and in the public and private sectors in Fiji. This has been the case for most urban and peri-urban based Fijians. Most women who live in the villages and in rural locations live within constrictive unwritten traditional rules and expectations, subjecting women fishers to two modes of influence: the cultural and restrictive demands of village life and the modern market demands women are exposed to through their marketing and participation in fisheries. The issue of women straddling two worlds through their marketing experiences, as highlighted by Vunisea (1995, is still an issue today, because marketing and engagement in the modern economy does not mean a reduction of domestic chores, child rearing and other village responsibilities. Further research is needed to better understand how women are meeting their cultural obligations while increasing their engagement in the fisheries market sector.

Women in formal and informal sectors

Gender disparities are evident in most areas of work in Fiji, including the fisheries sector. The majority of women's involvement is in the informal as opposed to the formal sector. With only 109,000 females in the formal labour force, and 121,000 doing 'household work', more than a half of women's work is being defined away as 'economically inactive' because it is in the household (and unpaid) category (Narsey 2011). Most fishing activities for household consumption done by women are in the subsistence sector, thus are not enumerated and fall into the 'unpaid work' category. In fact, women spend more time than men on work overall, have fewer hours in paid work, and in general have less discretionary time than men (UNDP 2008).

Government efforts to assist women in business have been limited and largely restricted to microfinance. In its plan of action, the Ministry for Women, Social Welfare and Housing has identified activities to increase women's access to finance and address legal barriers to women's participation in the economy, although the focus is on women at the microenterprise level, rather than on larger businesses owned by women that have significant job-creation potential (AUSAID 2008). Discussions with the Department of Women indicate there has not been much success noted on projects implemented by the department or in projects women groups initiate. The Department of Women has identified a number of factors

that impede project success by women. These include lack of capacity to write proposals for funding, and lack of knowledge on project implementation, monitoring, evaluation and reporting. These are areas where women's groups could be assisted to access financial support to be able to improve their livelihoods. Work with women fishers needs to be aligned to national planning priorities, and there is a need for their involvement or contribution to policy level discussions with government line ministries to advance their concerns at a higher political level.

Customary ownership and access to traditional fishing grounds

Customary ownership of rights to fishing grounds (*i qoliqoli*), which extend to the outer reef slope, determines how community groups, including women, participate in fishing (Fong 1994; Waqairatu 1994; Veitayaki 1995). Customary marine tenure is complicated because ownership is not a straightforward arrangement and is not uniform across Fiji. There is no strictly defined user system that systematically disadvantages women within their own fishing ground but other traditional practices where ownership of land, for example, is patrilineal in nature, strongly affect marine tenure use systems.

There are 385 marine and 25 freshwater fishing grounds in Fiji and these areas define where people fish and they also influence the type of fisheries communities engage in (Fiji Department of Fisheries 2014). An advantage of communities having custodianship over their traditional fishing areas is that local management can be implemented and monitored by them. Examples of these management practices include tabu areas, which are temporary closures to all forms of fishing or bans on fishing for certain species, limitations of the number of fishers or amount of harvest, and temporary moratoria on fishing (Aalbersberg et al. 2005). The traditional fishing grounds also have allocated i kanakana areas, which are fished exclusively for household needs. These i kanakana are reserved for "food for the community" and can be actively managed by local communities. Freshwater i qoliqoli and i kanakana are used and operated similar to marine areas, where there are areas exclusively fished for household needs, and temporary bans are placed on the fisheries during certain times. These traditional management systems are being used in a modern context as a fisheries management tool by local communities across Fiji with the support of the Fiji Locally Managed Marine Area network (Govan 2009a and 2009b). Recent changes to regulations and policies on fisheries licenses issued has implications for use of these fishing grounds by the communities, especially if outside fishers are accessing the same fisheries resources.

Traditional fishing area rights are defined and owned by *vanua* or *tikina* (social units that include a number of villages in a district) which regulate their use and exploitation. People are expected to use their own allocations, and those seeking to use grounds belonging to others are expected to get permission from the owners. Women have varying

ownership and user rights to fishing grounds, which differ according to clans they belong to and whether they married into the village. Those belonging or married to chiefly clans have more rights than those married to other clans. Those from the village usually enjoy more privileges than those married into a village. While the villagers understand the traditional fishing boundaries, officially drawn maps of those same boundaries do not always concur with the perceptions of resource users.

For women, ownership and access to marine resources and to land influences their participation in the fisheries sector. Setting up roadside stalls, selling from central points in villages, arranging barter of goods and negotiating deals with outside groups or fishers from the next village, setting up alternative income-generating ventures – all these depend on their status, traditional roles in the community and access to resources. Further work in identifying changes to the status of women in communities given the modern economy and how they can use existing relationships and status to further their fishing and marketing activities should be an area of further research.

Department of women

The Department of Women is mandated to work on issues relating to women in Fiji under the Ministry of Women, Children and Poverty Alleviation to achieve gender policy goals (ADB 2006). The work of the department is guided by the Fiji National Gender Policy which was adopted in 2014. Prior to this, women-related issues were dealt with under the Women's Plan of Action (1999-2008). Fiji has ratified eight human rights and gender rights-related international instruments that assist in progressing the situation of women in the country. Statistical data needed for gender analysis are, however, sparse, sometimes of poor quality, and often out of date. The ministry needs to define its data requirements to support its role in advocating and advising on gender planning and mainstreaming across sectors, but in a mainstreaming environment, the collection and analysis of gender-sensitive data appropriately belongs to the Fiji Islands Bureau of Statistics (ADB 2006).

ADB (2006) raises the need for the Department of Women to work with other line ministries to support them in specific areas such as data and statistical reporting. The assignment for achieving gender policy goals is, however, problematic as the department is not a policy agency but a line department, focusing on general community development. In relation to tuna fisheries, there are few linkages between the gender policies of government under the Department of Women and those of the Department of Fisheries under the Tuna Management Plan (Sullivan and Ram-Bidesi 2008).

The policies mentioned above can be leveraged to progress the case for women engaged in the fisheries sector. The challenge, however, is in the capacity of the ministry to support women fishers and how effective collaboration work can be between the ministry and other stakeholders.

Involvement of women in the Fisheries Sector

Since the 1980s, work on women in fisheries has gone through several phases. The initial emphasis on progressing women's issues under the 'women in development' approach resulted in programmes and projects that focused only on women. Having specific 'women in fisheries programmes' reinforced the tendency of national fisheries agencies to work only with men (Lambeth et al. 1998). Issues relating to women tended to get offloaded onto the women in fisheries programme, or onto women's agencies that have no experience, resources or expertise in fisheries management. By the late 1990s and early 2000s, there was a shift to have women's projects included in mainstream fisheries development, removing the separation of gender. The argument was that successful fisheries development and management needed to deal with the entire community involved in harvesting, processing and marketing marine resources. This caused the shift to gender-inclusive approaches where women's issues and concerns become part of core development priorities and trends. Recently in Fiji, the focus of the gender work in government is through gender mainstreaming into the sectors. The challenge will be how this process is implemented and monitored and how successful this will be in enhancing women's roles and participation in the fisheries sector.

Policy and legal mechanisms

Gender work in Fiji is directed by eight major international agreements on gender equality and the advancement of women. Three of these are the Committee on the Elimination of Discrimination against Women (CEDAW), the Millennium Development Goals (MDGs) and the Pacific Platform for Action, which provide an opportunity for reporting on the state of women in the county. These international and regional agreements provide the basis for development of law and policy to address gender-specific issues across all sectors, including the role of women in the fisheries sector. The challenge will be whether the provisions from these instruments, such as those relating to non-discrimination by gender and equal access to resources and opportunities (as required under CEDAW, the MDGs), are reflected in fisheries policies or their implementation. Greater cross-sectorial policy dialogue, advocacy and information exchange are needed to build a more comprehensive and gender-just fisheries policy (Bidesi 2008).

In February 2014, the Fiji National Gender Policy was launched and has its mission to "promote gender equity, equality, social justice and sustainable development through the promotion of active and visible gender mainstreaming in all sectors". The promotion of gender mainstreaming will become a part of government work in the fisheries sector and this will provide opportunities for more gender-focused work, which will raise the profile of women's engagement and role in fisheries. The policy also provides the framework under which women fishers' issues can be strategically addressed. While everything looks good on

paper, some oversight and support are required to ensure effective implementation on the ground to effect change.

Over the past few years, the government has sought to address existing legislative shortcomings in the management of marine resources. The Marine Spaces Act Cap 158A and the Fisheries Act Cap 158 are currently being reviewed in an effort to modernise Fiji's laws in line with international and regional obligations relating to fisheries management. Likewise, a new fisheries aquaculture decree and inshore fisheries management decree are being developed. Through technical assistance from the Secretariat of the Pacific Islands Forum Fisheries Agency (FFA), a new Offshore Fisheries Management Decree was gazetted in 2012 for Fiji. For inshore fisheries there is limited potential to use mechanisms within the Fisheries Act (Cap.158), such as license conditions, permit conditions and gazettal of restricted areas to protect tabu areas. However, compliance with, and enforcement of, these mechanisms and fisheries laws in general, is a major obstacle in the effective management of the inshore marine environment (Minter 2008). The act also empowers the Minister of Fisheries to make special regulations relating to methods, species targeted and size limits, amongst many other specific areas. Special ministerial powers, however, could undermine management initiatives if licenses given are counter to management initiatives in place in certain areas.

The Fiji Department of Fisheries

The Fiji Department of Fisheries is the lead agency responsible for the management of the country's fisheries resources. Its vision is "to have fisheries continue as one of the leading sectors in Fiji's socio-economic development and generate economic growth and ensure that resources owners are equitably remunerated". The department has an advisory role regarding the customary rights holders and institutes legislative and enforcement measures to ensure commercial viability. The department also approves licenses for fishing and administers permits to fishermen, and works on bi-lateral and multi-lateral arrangements with other countries on the export of fisheries products and aid to ensure the development of the fisheries sector.

From early 2000, funds were set aside in the Department of Fisheries to address the concerns of women engaged in fisheries. With the Fiji Locally Managed Marine Areas network, women's work is managed with the assistance of the Department of Fisheries. Currently, the department includes women fishers through a gender mainstreaming approach to all its work. However, the department does not have the capacity to roll out and implement projects that include women, and thus there is an opportunity for the Women and Fisheries Network (WiFN) and other partners to work collaboratively with the department to help achieve gender mainstreaming in the fisheries sector.

The main fisheries sectors are offshore (or oceanic), inshore, freshwater and aquaculture. These sectors are discussed below, and include women's participation and status in each sector.

Offshore fisheries

Engagement of women

Pacific Island states have been keen to encourage the development of offshore fishing activities, to generate income and to reduce pressure on inshore resources. The offshore fisheries concerns are often related to access to investment capital, development of joint-ventures, improving products for competitive markets, and technological upgrades for cost reduction or increased production. Such strategies are dependent on skilled labour and entrepreneurship, which most women lack, thus women are largely left out of offshore tuna fisheries development.

Early writings on the offshore fishery highlighted how most initiatives concentrated on supporting men's activities in development and management of fisheries in the region (Lambeth at al. 1998). Early studies on PAFCO highlighted the poor working conditions and low salaries of women as major concerns (Emberson-Bain 1994, 2001; Scoop Independent News 2003). Similar sentiments were raised more recently by Bidesi (2008), who stated that, in the industrial fisheries sector, despite policies aimed at creating employment, women's labour continues to be marginalised.

Recent research on the tuna industry has provided an update on the situation at PAFCO and there has been some positive progress documented. This includes improved working conditions for women at PAFCO, wages are comparable or higher than in other countries and women now entering the workforce are better educated (Sullivan and Ram-Bidesi 2008). However, there exists a bottleneck for women between the unskilled processing work and promotion to skilled or middle management positions. Because unskilled women are generally multi-tasking their household needs, customary roles and waged jobs, their priorities tend to be with the family rather than with advancing their career. As women continue to dominate the processing sector of the industry, special attention must be paid to their specific needs as multitasking members of their communities: as mothers, wives and fishmongers, matriarchs and homemakers (Sullivan and Ram-Bidesi ibid).

In spite of some progress in the offshore fisheries, cultural beliefs and norms continue to influence fishing participation in this sector. In recent years some women in the Pacific have become observers on tuna fishing vessels and some are engaged in shore-based activities. The conditions of fishing vessels and the length of fishing trips, which usually last up to three months, usually deter women from joining as crew members or as observers in fishing vessels.

At PAFCO, while working conditions have generally improved with the upgrade of the factory since the new partnership agreement with Bumble Bee, some issues remain in the working conditions of women. These relate to the need to improve the relationship between workers and staff, and the adoption of a gender policy for PAFCO to assist the company to be more accountable and transparent and avoid any discrimination by unions, NGO groups supporting women and the local community.

In the tuna long-lining sector, the direct participation of women varies according to the nature of the work and the type of business operation. There are various types of companies in the harvesting sector. Some focus on fishing only and have their own vessels and some act as agents for certain contracted vessels. If these companies own a shorebased office, there is direct employment for one or two women as clerical staff (see Table 1 below). All vessel operations and harvesting is done by men. Another type of fishing company is one where the company operates a fishing fleet, uses the processing services of another company and exports the processed fish. In the latter type of operation, women also work as office managers and administrators, while the fishing operations, engineering and mechanical work predominantly employs men (Table 1). Shipping agents that facilitate customs clearance, border inspections and provide other services and provisioning for vessels also employ women in clerical positions.

The exploitation of offshore resources has been promoted as the primary alternative to ease fishing pressure in coastal areas. This is to be by exploitation of offshore species with the use of fish aggregation devices (FADs) (Bell 2011). This alternative would indirectly reduce women's participation in the fin-fish fishery as cultural and social inhibitions to women's participation in the offshore fishery still exist. Because of these customs, most Pacific Island women, including Fijian women, do not participate in deep-sea fishing. Cultural beliefs that women on fishing boats are bad luck, traditional norms that inhibit women's ownership and use of large powered boats, the belief that offshore fishing is a man's domain, and the social obligations of household and family – all these inhibit the participation of women (Tuara 2008).

In general, offshore resources are in relatively good condition, with the exception of bigeye tuna and, to a lesser extent, yellowfin tuna. Women's involvement in this sector is mostly in the post-harvest and processing sectors, but there is potential for involvement in shore-based activities in ports. Increasingly evident in Fiji is how women use the by-catch from vessels in cottage industries.

Growth in trans-shipment activities in Pacific Island ports leads to an increase in shore-based services. Contact with local people is based on the exchange of goods and services, with the sex trade being one service. The spread of sexually transmitted infections, including HIV/AIDS, is an issue of concern, particularly for the tuna industry and its management (Lambeth *et al.* 1998; Vunisea 2005). Demmke (2006) in an assessment of women's participation in the tuna industry highlighted the impacts, costs, benefits, and constraints of women engaging in tuna fisheries. However, there has been little implementation of the report's recommendations.

There is a need for affirmative action to assist women to enter areas of study that enable more practical and meaningful participation in the offshore fisheries sector. NGOS and other stakeholders could work on this as a priority to systematically enable the entry of women into this sector. Recommendations of reports as mentioned by Demmke (2006) should be strategically included in policies and work done in the offshore fisheries sectors.

The inshore fisheries

The inshore fishery is complex, as it involves work with different species and is the major target for export and income generation for coastal populations.

Women are largely involved in inshore fisheries, which includes a diverse range of marine and freshwater finfish and invertebrates. Because there is little information on species, catches and fisheries trends in general, it is difficult to quantify women's contribution to the various types of fishery.

Inshore fisheries are targeted by both subsistence and commercial fishers. It is difficult for small-scale fishers to access the offshore fishery resources and there are difficulties associated with marketing products from the remote areas where abundance is greatest, to the urban areas where the marketing opportunities are the greatest (FAO 2009).

Early work on the participation of women in coastal fisheries (Lal and Slatter 1982; Matthews 1995; Vunisea 1995; Lambeth *et al.* 1998) made reference to the numerous activities women were engaged in and the need for proper acknowledgement of their involvement. Also important is women's perception of their fishing activities at the time—the majority of the women did not see fishing as work. This

Table 1. Employment Longline Vessel Operations, August 2007

Activity	No. of men	No. of women	Total	Percentage of Men	Percentage of Women
Company/boat owner/manager	25	3	28	11	81
Skippers	90	0	90	0	100
Engineers	180	0	180	0	100
Crew	968	0	968	0	100
Workshop and other	105	25	130	19	81
Office administration	46	82	128	64	36

means it is important to keep in mind the roles assigned to women within the social structure and context they live in. Recent studies indicate that women's participation has not changed much, with fishing activities continuing to support subsistence and economic livelihoods (Veitayaki 2005; Demmke 2006; Fay-Sauni 2008, Verebalavu 2009). Women's involvement in the small-scale fisheries sector is significant, however, as is evident by the number of women selling seafood at the Suva, Lautoka and Nausori municipal markets from Thursday to Saturday every week (Verebalavu 2009). The political instability of the last few years has seen an increase in marketing and selling of marine products as a fall-back option for people who have lost jobs, or those taking the opportunity to work in small-scale commercial enterprises.

Evidence suggests that the inshore fisheries of Fiji are in decline. In response to this, many communities in Fiji have established co-management plans for their traditional fishing grounds, using permanent and/or temporary closures (tabu). These communities are supported by various development partners, local and international NGOs, academic institutions and government departments, many of whom are also part of the Fiji Locally Managed Marine Area network (Govan 2009b).

There are huge gender disparities in employment and income-earning in Fiji. These disparities are obvious in labour force engagement, with males dominating the money income, women dominating the 'subsistence only' sector, and a very high number of women in the unemployed category. In the fisheries sector, the contribution of women is lost in enumeration, through the exclusion or underestimation of household work and unpaid family work. The work of women fishers largely falls into the subsistence or semi-subsistence fisheries sector, which in most cases is included under household work (collection of food for household consumption) (Narsey 2007).

The inshore fishery also falls within *i qoliqoli* and *i kanakana* areas, which have traditional mechanisms that have been used by resource owners for generations. These strategies have sustained households, have ensured food security and have been a source for income livelihoods for people. Despite the state of decline of the inshore fishery, their importance to rural/remote communities remain the same. What is important is looking at how aquaculture and other emerging fisheries can enhance and rebuild the fishery. This is where women's fishery roles become crucial, as they are important holders of information on species, their habitats, their seasonality and use patterns. As generalists, women gather all sorts of species through their gleaning activities and thus have a wide knowledge base that they could use for the management and/or recovery of populations.

Fishing methods and equipment used in the inshore fisheries are generally simple, many involving the use of hands and simple tools. The methods and skills, however, are diverse and require an intimate knowledge of the environment and the species targeted. In addition to the collection of invertebrates, women net fish, set up barriers and traps, and use hand lines. Seasonality of different species and the

effects of lunar cycles, winds and other natural phenomena on marine species are well known and used to advantage when fishing. While the role of women may have substantially changed, both in the urban and rural context, the real question is how far these changes have been acknowledged and are being considered in national policies and in fisheries management (Kronen and Vunisea 2007).

Today, many women are educated, are conducting household businesses in the absence of working husbands, and have taken a more influential role in community life. They can earn real income through fishing and controlling family finances. Often, this development has been reinforced through networking among themselves. What is needed is an approach that acknowledges that the roles of women and men may differ, but that there is a need to pay equal attention to women and men in Pacific Island coastal fisheries (Kronen and Vunisea ibid).

Subsistence/semi-subsistence fishing

Subsistence fisheries are focused on providing food for the household, with any surplus sold if women have access to local markets, or given away to friends and relatives through traditional systems of barter (exchange). Women are generalists, foraging and collecting in the inshore areas for a wide range of species. Seasonality of species is known to them and fishing patterns and trends are usually dictated by the species in season, or that which is in demand in markets. Valuable species are taken to a market if accessible (e.g. lobster to a resort) (FAO 2009). An estimation of 70%-80% of the catch from inshore fisheries in the Pacific Islands (reefs, estuaries and freshwater) is used for subsistence purposes, with the remaining 20% going to commercial markets (Gillett and Lightfoot 2001). This figure may have changed, given the increased emphasis on commercial activities and the increase in cottage businesses targeting cooked seafood products.

Women dominate the subsistence fishing sector and, with their daily fishing activities and generations of knowledge, have an intimate knowledge of the coastal zone. Women are also the dominant sellers of crustaceans, molluscs and seaweed in Fiji, with many fishing for household needs and selling the surplus. The most sought-after species for selling in the local markets include seagrapes (nama), Anadara clams (kaikoso), mangrove crabs (qari), mangrove lobsters (mana), seaweed (lumi), giant clams (vasua), shrimp (moci), sea cucumber (dairo), urchin (cawaki), octopus (kuita), freshwater mussel (kai) and sea hare (veata).

Women's fishing activities are within the coastal reef areas, mud and sand flats and mangrove areas. In Fiji, over 70% of the fish landed in municipal markets are coastal or estuarine species, dominated by mullets (Mugilidae), rabbitfish (Siganidae), Jacks (Carangidae), snappers (Lutjanidae) and emperors (Lethrinidae). Of these, over 60% of the species were found to spend some time in the mangroves. It has been roughly estimated that at least 30% of the commercial fishery is intimately tied in with mangroves (Lal 1984). The mangrove fishery is of primary importance to women fishers as they are the main users of the coastal mangrove areas.

Some specific fisheries and women's involvement

Women are expert fishers in the coastal zone and most fisheries species are targeted, both for selling in domestic markets and for household consumption. Many fisheries species have also been the target of value-added activities.

Seagrapes (nama)

Seagrapes Caulerpa racemosa or nama is a type of seaweed collected on reef flats but increasingly women dive to collect from deeper lagoon areas. It is found in most coastal areas, and is abundant in the Yasawa Island group. Nama from the Yasawa Islands is sold regularly at the Lautoka and Suva markets. Edible seaweeds are an important part of the diet of coastal people. Indigenous Fijians have a long tradition of collecting and consuming different species and varieties of seaweeds. Nama is one of the most common species that is regularly harvested for consumption and sale in Fiji. It is almost predominantly collected by women, and left in sacks before being transferred to markets. Work on value-adding has started on the nama fishery, and is an area the WiFN-Fiji can focus efforts on.

Seaweed (lumi cevata / lumi wawa)

Seaweeds, which include Hypnea pannosa (lumi cevata) and Gracilaria maramae (lumi wawa), are popularly collected and sold in domestic markets almost exclusively by women in

most coastal communities in Fiji. Lumi cevata is often sold cooked in municipal markets. Quality handling and the following of hygienic standards is, however, still a challenge.

Sea urchins (cawaki) and sea hares (veata)

Sea urchins (camaki) and sea hares (veata) are also popularly collected by women and are eaten raw. Women in the Muaivuso Peninsula close to Suva are some of the biggest sellers of sea urchins and sea hares. Because these are eaten raw, food handling and hygiene in food standards are important.

Octopus (kuita)

Octopus (kuita) is a lucrative species. It is sold at a slightly higher price and is popularly targeted by women in most reef areas. Women from Verata, Namara and those from the Tailevu province areas are regular sellers of octopus. Octopus is sold smoked in markets and recently served as part of packed lunches. Challenges of quality handling and setting of hygienic standards are areas that need to be addressed.

Reef fish

Different species of reef fish are caught and sold by women. Some women also sell their husbands' catches. The current trend is the selling of cooked reef fish. Women selling on roadsides usually do not fish themselves, but buy from middle sellers and sell.







- A• Seagrapes are mostly sold after they are cleaned, have had sand removed and the salt water washed out. Women sell seaweed that is sold raw, or pre-cooked in local markets
- B• Women selling *moci* on the roadside at Laqere near Suva. Fishing and selling is done by women of all ages
- C• Octopus prepared and smoked in the Yasawas sold at the Suva market

Sea cucumber (dairo)

Sea cucumber that is targeted for local consumption is usually the sandfish *Holothuria scabra* (*dairo*) that currently has an export ban due to severely depleted populations in Fiji. *Dairo* is usually processed and sold cooked.

Crabs (qari)

The mangrove crab fishery is a lucrative product on the domestic market as the price is high at FJD 50.00 to FJD 200.00 per string of crabs, depending on size and number. Crab sales are mostly from the Rewa and Ba areas where there are large tracts of mangrove. Evident from market surveys in Suva and Nausori, is the sale of undersized crabs - this indicates that both sellers and consumers are uninformed or unwilling to follow size limits under fisheries laws. Fisherwomen may not be aware that the continuing sale of under-sized crabs (below reproductive age) will cause rapid depletion of stocks. The recently established Navua Crab Farm has plans to work with communities to provide pens in mangroves where crabs can be bred to a marketable size. Given that women are involved in this fishery, there is an opportunity to get them involved in these initiatives, and ensure the sustainability of their fishery.

Shrimp (moci)

Women residing close to mangrove habitats are also engaged in the shrimp (*moci*) fishery. These shrimps are sold as food and/or fishing bait to fishermen. *Moci* is a main protein source in some coastal communities and is a delicacy for people in the Rewa delta area. It is fished predominantly from within mangrove and estuarine locations. During low tide, tidal pools in or near mangrove areas hold water that women bail out. Once these small pools of water are dry, the *moci* are then caught using hands or small nets. *Moci* is sold at FJD 2.00 a heap and most women sell 10–20 heaps on the roadside daily. From discussions with women who sell *moci* at Laqere in Suva, it was learnt that women often walk long distances to get the *moci* and then have to walk to the roadside to sell.

Mangrove lobsters (mana)

Currently, mangrove lobsters (*Thalassina anomala*) are also cooked and sold in markets, with both women and men participating in this fishery. Women walk through mangroves searching for mangrove lobster mounds and, once the mounds are found, traps are set to get the lobsters out of the mounds. There are special seasons when these mud lobsters are sold. Women in the Rewa area in particular are known for fishing and selling mangrove lobsters.



A range of products sold at the market- Women are generalists collecting and selling a range of species.



Different crabs species sold at most municipal markets.



Kaikoso/Anadara is a popular bivavle sold in most markets in Fiji.

References

- Aalbersberg B., Tawake A. and Parras T. 2005. Village by village: Recovering Fiji's coastal fisheries. World Resources. 144–151.
- ADB (Asian Development Bank). 2006. Country gender assessment. Republic of the Fiji Islands. Pacific Regional Department and Regional and Sustainable Development Department. Philippines: Asian Development Bank.
- AusAID. 2008. Pacific economic survey Connecting the region. AusAID: Canberra. 100 p.
- Bell J., Johnson J. and Hobday A. (eds). 2011. Vulnerability of tropical Pacific fisheries and aquaculture to climate change. Noumea: Secretariat of the Pacific Community. 925 p.
- Bidesi V. 2008. Recognizing women in fisheries: Policy and considerations for developing countries. Yemaya, ICSF's Newsletter on Gender and Fisheries 28:12–13.
- Campbell J. 2010. Traditional island knowledge for risk reduction and adaptation. In The gendered dimensions of disaster risk management and adaptation to climate change. Stories from the Pacific. Page 9. Suva: UNDP Pacific Centre.
- Demmke P. 2006. Development of tuna fisheries in the Pacific ACP countries (DEVFISH) Project. Gender issues in the Pacific Islands Tuna Industry. Forum Fisheries Agency, Honiara. Noumea: Secretariat of the Pacific Community.
- Emberson-Bain 'A. (ed.). 1994. Sustainable development or malignant growth? Perspectives of Pacific Island Women. Suva, Fiji: Marama Publications.
- Emberson-Bain 'A. 2001. In the name of growth Fiji: a story of fisheries development, indigenous women and politics. [http://www.hawaii.edu/oceanic/film/filmdb/2470.html accessed 2 Sept 2016]
- ESCAP. 2014. Pacific perspectives on fisheries and sustainable development. Education and Social Commission for Asia Pacific. Fiji: UNDP Pacific Office.
- Fay-Sauni L., Vuki V., Paul S. and Rokowasa M. 2008. Women's subsistence fishing supports rural households in Fiji: A case study of Nadoria, Viti Levu, Fiji. SPC Women in Fisheries Information Bulletin 18:26–29.
- FAO (Food and Agriculture Organization), 2009. Fishery and aquaculture country profiles. The Republic of Fiji. Paris: Food and Agriculture Organization.
- Fiji Department of Fisheries. 2014. Annual Report 2012/2013.
- Fiji Focus. 2011. Cabinet endorses policy to achieve gender equality. Ministry of Information, Suva: Fiji Government.

- Fong G., 1994. Case study of traditional marine management system: Sasa village, Macuata Province, Fiji, Field Report 94/1 Forum Fisheries Agency. Paris: Food and Agriculture Organization.
- Gillett B. and Lightfoot G. 2001. The economic importance of fisheries in the Pacific Islands: notes on the contribution of fisheries to GDP, employment, exports, and nutrition. A report prepared for the Asian Development Bank, the Forum Fisheries Agency and the World Bank. Philippines: Asian Development Bank.
- Govan H. 2009a. Achieving the potential of locally managed marine areas in the South Pacific, SPC Traditional Marine Resource Management and Knowledge Information Bulletin 25:16–25.
- Govan H. 2009b. Status and potential of locally-managed marine areas in the Pacific Island Region: meeting nature conservation and sustainable livelihood targets through wide-spread implementation of LMMA. MPRA Paper No. 23828, CRISP, SPREP.
- Kronen M. and Vunisea A. 2007. Women never hunt but fish: Highlighting equality for women in policy formulation and strategic planning in the coastal fisheries sector in Pacific Island countries. SPC Women in Fisheries Information Bulletin17:3–15.
- Lal P. and Slatter C. 1982. The integration of women in fisheries development in Fiji. In: Report of an ESCAP/FAO initiated project on improving the socio-economic condition of women in fisherfolk communities. Suva, Fiji: Fisheries Division, Ministry of Agriculture, Forestry and Fisheries.
- Lal P. 1984. Coastal fisheries and the management of mangrove resources in Fiji. SPC Fisheries Newsletter 31:15–24.
- Lambeth L., Hanchard B., Aslin H., Fay-Sauni L., Tuara P., DesRochers K. and Vunisea A. 1998. An overview of the involvement of women in fisheries activities in Oceania. In Monographs from Australian Centre for International Agricultural Research
- Matthews E. 1995 (ed.). Fishing for answers. Women and fisheries in the Pacific Islands. Suva, Fiji: Women and Fisheries Network. 177 p.
- Matthews E. 1993. Women and fishing in traditional Pacific Island cultures. p. 29–33. In: Workshop: People. society, and Pacific Islands fisheries development and management. Technical document 5. New Caledonia, Noumea: Secretariat of the Pacific Community.
- Minter A. 2008. Compliance and enforcement for coastal fisheries management in Fiji. Suva, Fiji: IUCN Regional Office for Oceania.

- Nainoca W.U. 2010. The influence of the Fijian way of life (bula vakavanua) on community-based marine conservation (CBMC) in Fiji, with a focus on social capital and traditional ecological knowledge (TEK): a thesis presented in fulfilment of the requirements for the degree of Doctor of Philosophy in Resource and Environmental Planning at Massey University, Palmerston North, New Zealand. [Available from: http://mro.massey.ac.nz/handle/10179/2670]
- Narsey W. 2007. Gender issues in employment, underemployment and incomes in
- Fiji. Suva, Fiji: Vanuavou Publications. Fiji Bureau of Statistics, AUSAID.
- Narsey W. 2011. Report on the 2008–2009 household income and expenditure survey. Suva: Fiji Bureau of Statistics.
- SPC. 2013. Status Report. Pacific Island reef and nearshore fisheries and aquaculture. New Caledonia, Noumea: Secretariat of the Pacific Community. 60 p.
- Scoop Independent News. 2003. Boycott PAFCO and Bumble Bee products, 17 September.
- Sullivan M. and Ram-Bidesi V. 2008. Gender issues in tuna fisheries: Case studies in Papua New Guinea, Fiji and Kiribati. Noumea: Secretariat of the Pacific Community; Honiara: Forum Fisheries Agency. 59 p.
- Tawake, A., Vuki V. and Aalbersberg B. 2007. Fishing for *Anadara*: A case study of Ucunivanua village in Verata, Fiji Islands. Women in Fisheries Information Bulletin, number 17:27–31.
- Tuara P.N. 1995. The participation of women in fisheries in the South Pacific. 4 p. Paper presented at the SPC regional workshop on the role of women in fisheries development. Iloilo City Philippines, 17-21 July 1995.
- Tuara P.N. 1996. Women's fisheries development section: supporting women in fisheries. Paper presented at the South Pacific Commission Twenty-sixth Regional Technical Meeting on Fisheries. Noumea, New Caledonia. 5–9 August 1996. Secretariat of the Pacific Community / Fisheries Information Paper 11. 5 p.

- Tuara P. and Passfield K. 2008. Issues on gender in oceanic and coastal fisheries science and management in the Pacific Islands: case studies from Solomon Islands, Marshall Islands and Tonga. SPC Women in Fisheries Information Bulletin 22:3–16.
- UNDP (United Nations Development Programme). 2008. Making invisible work more visible. Gender and time use surveys with a focus on the Pacific and unpaid care work. Suva. UNDP Pacific Centre.
- Veitayaki J. 1995. Fisheries development in Fiji: The quest for sustainability. Suva, Fiji: Institute of Pacific Studies, University of the South Pacific.
- Veitayaki J. 2002. Taking advantage of indigenous knowledge: the Fiji case. International Social Science Journal, 54: 395–402. doi:10.1111/1468-2451.00391
- Veitayaki J. 2005. Addressing human factors in fisheries development and regulatory processes in Fiji: The Mositi Vanuaso experience. Ocean Yearbook 21:289–306.
- Verebalavu, J. 2009 Women in artisanal and marine resources at the market. SPC Women in Fisheries Information Bulletin 20:17–22.
- Vunisea A. 1995. Subsistence fishing, women and modernisation in Fiji. p. 101–109. In Matthews E. (ed.). Fishing for answers: Women and fisheries in the Pacific Islands. Suva, Fiji: Women and Fisheries Network.
- Vunisea, A. 2005. HIV risks through the tuna industry. SPC Women in Fisheries Information Bulletin 15:7–8.
- Waqairatu S. 1994. The delimitation of traditional fishing grounds the Fiji experience. p. 79–84. In: R. South,
 D. Goulet, S. Tuqiri and M. Church (eds), Traditional marine tenure and sustainable development in Asia and the Pacific. Suva: International Ocean Institute-South Pacific.