

Enhancing knowledge and skills of Fijian women seafood vendors

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To enhance the knowledge and skills of 30 women seafood vendors on proper seafood handling, hygiene and processing, the Wildlife Conservation Society hosted a three-day training from 10–12 November 2020. The training also provided the opportunity to introduce new information on the size-at-maturity of key commercial fish species in Fiji, and the 4FJ Fish Smart Campaign.

Background

In Fiji, women play significant roles in small-scale fisheries, and are increasingly involved in a wide range of activities such as gleaning, fishing, post-harvest processing, selling and marketing of seafood. Often, women are considered primary income supporters for households, contributing to food security and local livelihoods (Vunisea 2016). Despite their level of involvement in the fisheries sector, however, women are largely undervalued, overlooked and receive little direct support from government or non-government organisations (Mangubhai et al. 2018). Women also have poor access to information and financial resources, and receive little training to build their capacity to manage their fisheries for food and/or livelihoods (Thomas et al. 2020).

In the Northern Fisheries Division, women seafood vendors at the Labasa market depend greatly on selling fish and other invertebrates as their main source of income (Vitukawalu et al. 2020). These women play crucial roles within their households, while contributing to small-scale fisheries (Thomas et al. 2020). Despite women's contribution in the fisheries sector, women encounter barriers and constraints at the market place that impede their ability to earn a livelihood. At the Labasa market, a major issue highlighted by women seafood vendors is the lack of training on seafood spoilage, and post-harvest handling and preservation methods (Vitukawalu et al. 2020).

A training held in Labasa – on the island of Vanua Levu – brought together 30 women seafood vendors from the Labasa and Nabouwalu markets, and the coastal communities of Bua and Macuata provinces. The training provided a great platform for these women to meet and share common issues they faced while fishing in their customary fishing grounds and then later selling at market places. Participants developed an understanding of size-at-maturity and why it matters for sustainably harvesting and managing fisheries. They also gained knowledge and skills on the proper methods for seafood handling, hygiene and processing to ensure a long shelf-life for their product, and to meet health safety standards for their customers. The workshop provided the non-governmental organisations cChange and the Wildlife Conservation Society to present the 4FJ Fish Smart Campaign that is aimed at increasing participants' awareness on the importance of protecting the future of Fiji's fisheries for food security, livelihoods and the sustainability of the oceans.

Challenges faced by women in the fisheries sector

During the first day of the training, women vendors identified the various challenges they faced both on their fishing grounds and at market places.

1. There has been a decrease in the size and abundance of fish and invertebrates caught and sold at the markets. In most cases, women spend more time and effort in catching fish and invertebrates because there are less and less in their nearby customary fishing grounds (*iqoliqoli*). Additionally, women highlighted their concerns about the destruction of key habitats within their fisheries grounds such as mangroves (e.g. harvesting for firewood) and coral reefs (e.g. cyclone damage), which could be contributing factors to the decreases in fish catches.
2. The price of fish sold by fishermen to middle-women vendors has increased while the number of fish sold in a bundle has decreased. This issue stems from the fact that now, fewer fish are caught and sold, which means for some fishers, it is difficult to make enough money to cover their fishing expenses.
3. There has been a lot of confusion over “size-at-maturity”, and women seafood vendors have highlighted the need to have more awareness training on this concept, especially with regard to the species of fish that are commonly caught or sold by women.
4. Many women highlighted their concerns about increasingly threatened fisheries such as mud crabs, groupers (including coral trout), rabbitfish, Spanish mackerel, saltwater clams, lobsters and octopus. For most women, the importance of having proper fisheries management within their communities is crucial to sustaining these overharvested species.
5. The absence of ice plants within market vicinities was highlighted by most women. Ease of access to ice would help maintain the freshness of their catch, thus allowing them to sell their catch at a higher price. Currently, ice plants are located far from market places, which means that vendors incur costs in order to transport ice to the markets. It was noted that even if vendors bought ice, there is no proper place to store unused ice and hence in most cases, the ice is wasted. The lack of electricity is a barrier to installing freezers to store fish and ice safely.

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Mafa Qirolele of cChange Pacific introduces the 4FJ Fish Smart Campaign to women seafood vendors in Labasa, Fiji. ©Bulou Vitukawalu, WCS

6. Women in coastal communities expressed concerns about the issuance of fishing licenses by government authorities to outsiders to fish within their customary fishing grounds. This increasingly pressure on their fish stocks was another reason the women felt their fish catch had decreased compared to the past.
7. Strong views were expressed on racial discrimination, which exists within the town council administration. For instance, *iTaukei* (indigenous Fijian) seafood vendors at the Labasa and Nabouwalu markets stated that, in most cases, the administration would prioritise issues raised by Indo-Fijian vegetable vendors, while ignoring the concerns raised by *iTaukei* seafood vendors.
2. The Fijian government and non-governmental organisations should create more awareness programmes on the use of sustainable and eco-friendly fishing gear to ensure that communities practice sustainable fishing methods. The Ministry of Fisheries should enforce strict rules and penalties on the use of certain gear types, such as nets with mesh sizes less than 5 cm.
3. There is a need to raise awareness in communities about conserving marine and terrestrial resources. As resource owners, communities (including women) need to be empowered and better informed on the sustainable use of such resources. Additionally, coastal communities need to be encouraged to plant and protect more mangroves, which provide breeding grounds for fish and invertebrates.

Participants highlighted a few recommendations and action steps that might help address the challenges faced within the fisheries sector.

1. Expenses associated with fishing affect the profits women make from selling fish at the markets. To solve this issue, women suggested they needed to find ways of minimising costs and expenses, such as finding other alternatives to obtain fisheries resources. For example, choosing to go fishing in a rowing boat instead of a boat with an engine would save money on fuel expenses.
4. Improving communication between women seafood vendors and the relevant authorities to ensure their grievances are heard is crucial. Finding ways for these vendors to voice their concerns is necessary in order to achieve change.
5. More workshops and awareness are needed for stakeholders (including other fishers and seafood vendors) invested in the fisheries sector, especially on topics such as size-at-maturity, spawning times and relevant fishing laws.

Seafood handling, hygiene and processing

In Fiji, seafood is often in high demand and requires good handling and hygiene practices for a sustainable supply. Post-harvest fisheries in Fiji is an area that is still developing and, thus, needs much more commitment and effort to ensure sustainable, safe and high-quality fish reach the market (Lako 2020). Days 2 and 3 of the training workshop helped seafood vendors gain valuable knowledge and skills on proper seafood handling, hygiene and processing methods. Dr Jimaima Lako, a Food and Nutritionist Scientist at the Fiji National University, conducted the training.

The training was divided into four components:

- post-harvest practices and handling;
- seafood spoilage and sickness;
- basic food preservation concepts; and
- seafood processing and preservation techniques with recipes.

Specifically, the women gained hands-on experience in:

- hygiene and handling of fish on arrival and while processing, including the correct way to gut fish safely to reduce the spread of disease;
- assessing the quality and freshness of fish through visual evaluation techniques;
- filleting fish for fresh and old stock for value-adding and preservation; and
- practicing basic and simple seafood value-adding by pickling fish, saltwater clams (*kaikoso*), seaweed (*lumi* paste) and brined seagrapes (*sama*).



Susana Duguci (age 42): *The difficulty we face as vendors is fishers themselves are selling us small fish so we don't really have much choice. In order for our business to continue, we buy fish to sell. These are fish that are normally confiscated by the MoF [Ministry of Fisheries] if they come across it. So we lose money. All these people need to be charged: the fishers, the middlemen and probably the buyer if met at the right place and at the right time.*

Madhu Lata (age 48): *I agree. I think selling small-sized fish is a big issue at the moment. [The Ministry of] Fisheries should be more alert, and more awareness should be taking place especially with the fishers who come to sell fish to us at the market. A lot of enforcement is also required.*

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