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Inspiring profiles:
Aline Mary Berry



Inspiring profiles:
Shania Shweta Chand



Inspiring profiles:
Lyn Vaike

Empowering
Kiritimati women
in seafood safety
and quality

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Cover picture
 Until now we always worked on land, but now I want to learn snorkelling so I can see the fish underwater too. © Samsi

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A first for Vanuatu: Lessons from the 2024 Women in Fisheries Forum

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*"Where there is information there is progress."
 An Létany Joel, Chairlady of the Houtoua Taa Vanua network and Vanua Taa member*

The participation and contribution of women in fisheries is widely under-represented and therefore remains under-researched (Harper et al. 2017, Sotgiu et al. 2017, Mungubhai & Lawton 2021). Despite increasing efforts in fisheries to describe the roles and engagement of women in fisheries, there is still a gap in knowledge in terms of women's equity and inclusion, as well as widespread inequality in fisheries governance. This is likely because women's roles in fisheries have historically not been classified as 'fishing' (e.g., such as shell-crafting, etc.) and other activities often overlooked. In Pacific Islands Countries and Territories (PICTs) women are often the main providers of subsistence household food, and as community level. This can include providing up to 50% of small-scale fisheries catches (Harper et al. 2017).

Vanuatu is in the Pacific ring of fire and has over 80 inhabited islands. Coastal fisheries are known to be very diverse across all the different islands and provinces, with different species harvested in different areas and therefore, different species methods used accordingly (Campbell et al. in review). Globally, Vanuatu is one of the most vulnerable countries to disasters and extreme weather events, such as tropical cyclones, earthquakes, tsunamis and volcanic eruptions (Atkeson et al. 2021). With impacts of climate change and associated extreme weather events, women in fisheries are impacted various roles which support community, economic and social resilience (Alan & Raman 2017, Chitson et al. 2016, Singh et al. 2022). Literature on the roles of Vanuatu women in fisheries is scarce however previous studies have highlighted their active involvement in several fishing activities, taking on different roles, from fishing, to processing and trade (David 1998, Grew & Viki 2010). Such a range of roles are particularly visible in times of disaster when women are key actors in ensuring food security in household and community level, including through their efforts to recover gardens, recover dry rations from external aid and sell any fish produce as food reserves in the aftermath of a disaster (Obregón et al. 2024). Previous studies have also recognised their efforts as capital mobilisers and entrepreneurs in difficult times (Criswell et al. 2020).

The Vanuatu Fisheries Department (VFD), under the Ministry of Agriculture, Forestry, Fisheries and Biosecurity (MAFFB), has increased their efforts to promote the



Image 1: All participants that attended the Women in Fisheries Forum in Port Vila, Vanuatu on the 26th-27th March 2024

Assessing and advancing climate resilience in Fijian marine ecosystems, fisheries and fishing communities

Salanieta Kitolelei¹, Elisabeta Waqa², Kanae Tokunaga³, Katherine Maltby⁴, Katherine Mills⁵ and Sangeeta Mangubhai⁶

Women and men have their own unique capabilities and knowledge that can help their communities adapt to climate change and its effects on their fisheries. Our project is working in Ra Province to co-develop, learn, understand and advance climate resilience in Vanua fisheries and fishing communities.

View of Naisakadra village, Ra. © Salanieta Kitolelei

Background

Fiji's rich marine biodiversity supports small-scale marine fisheries that are a basis for food security, livelihoods, and culture for many villages and residents. These fisheries, including the marine ecosystems they depend on and the villages and human communities they support, demonstrate resilience, while also being increasingly threatened by climate change (Mangubhai et al. 2019). Fijian nearshore fisheries have thus far shown resilience to marine heatwaves and increased intensity of tropical cyclones due to a combination of strong ecological and social factors (Burch et al. 2023). Fijian reefs have likely contributed to and counteracted these features have likely contributed to the observed recovery and resilience of its fisheries and communities. Fijian communities have strong social ties and relationships as well as traditional ecological knowledge of marine species and habitats that contribute to their resilience to various types of disturbances.

In Fiji as elsewhere, climate impacts, responses, and resilience are not experienced in the same way across all groups within a fishery or community. Fijian women and men in Fiji can hold different traditional ecological knowledge, including on fisheries (Thomas et al. 2021; Kitolelei et al. 2022). This knowledge has helped them adapt to change, sustainably utilize resources and conserve their biodiversity (Lauer and Awasani 2009) and respond and recover from severe tropical cyclones (Chaston Radway et al. 2016, Thomas et al. 2019). Furthermore, women and men use different (as well as overlapping) habitats for their targeted fisheries species (Thomas et al. 2021). For their targeted fisheries species, women could contribute to which also affects the ways they are impacted by disasters. Following Cyclone Winston, women more generally fish in coastal habitats by moving between habitats as needed depending on cyclone impacts, most generally fish together offshore and may have needed longer to repair damaged boats and engines (Chaston Radway et al. 2016).

While fishing communities and ecosystems have withstood, rebuilt, temporarily transformed, and eventually recovered from several prior cyclones, it is not clear whether they will continue to be able to do so. Small-scale coastal fisheries face cumulative effects of multiple stressors (e.g. cyclones, sea level rise, overfishing, land-based pollution, heatwaves, disease, overfishing, land-based pollution, sedimentation) that are increasing in frequency and intensity thereby reducing the scope for climate resilience in the context of multiple stressors. In addition, different circumstances and characteristics of fishing communities, including individual groups within communities (e.g. women, men, children, youth, fishers, etc.) mean that they are not all equally resilient or resilient in the same ways to climate impacts.

In 2023, an interdisciplinary global working group advanced approaches for assessing and operationalising climate resilience in marine fisheries by conducting a literature review to identify ecological, socioeconomic, and governance attributes of marine fishery systems that

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Editor's note

This 40th edition of the Pacific Community's (SPC) *Women in Fisheries Information Bulletin* has 15 original articles from the Pacific region, Nigeria and Timor-Leste. It is inspiring to see so much work going on in the gender and fisheries and aquaculture space, and not just in the Pacific. We are grateful to our authors for publishing their work so that others may learn and benefit.

In this edition, the Vanuatu Fisheries Department hosted its first Women in Fisheries Forum to provide a platform for ni-Vanuatu women in fisheries to share their concerns, success stories, challenges faced, and opportunities for the future. The Fiji Ministry of Fisheries describe an example of a fishers' cooperative in Fiji and how groups of fisherwomen and fishermen are working together. The Kiribati's Ministry of Fisheries and Marine Resources Development is supporting the creation of women associations dedicated to fisheries management and community development. We have articles on fisheries value chains, an octopus fishery, food safety training, and social responsibility assessments of the tuna industry. Ayodele Oloko writes on the plight of female fish traders in fish-for-sex transactions in Sub-Saharan Africa, which ties well topically to a workshop the Pacific Community hosted on gender-based violence in fisheries in the Pacific. Finally, the Kiwa Initiative has developed three Pacific-centric tools to support nature-based solutions practitioners which includes fisheries – an introductory booklet to human rights, a guide to conducting a human rights risk assessment, and a guide to gender equity, disability and social inclusion analysis.

We welcome several new lead authors to the bulletin who shared their work – Shania Chand, Jenny House, Pretika Kumar, Vasemaca Malverus, Mark Nicholson, Rusila Savou, Tarateiti Uriam Timiti and Lyn Vaike. Keep those stories coming. *“Sharing knowledge is not about giving people something, or getting something from them. That is only valid for information sharing. Sharing knowledge occurs when people are genuinely interested in helping one another develop new capacities for action ...”* – Peter Senge

Sangeeta Mangubhai

Women's participation promotes effective and equitable fisheries management but is hindered by restrictive gender roles in Fiji

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Conservationists and fisheries managers have historically focused somewhat narrowly on achieving environmental goals, at the expense of environmental justice. But justice in environmental governance is instrumental to achieving social and ecological goals, and is a moral imperative. In recent years, there has been increasing recognition of the importance of justice in fisheries management and marine conservation. Procedural justice, which concerns how decisions are made and by whom, remains an under-examined dimension of justice in environmental governance broadly and in particular, fisheries management.

Introduction

When examining procedural justice in fisheries management, it is critical to consider that fishers are not a homogeneous group but differ according to their individual gender, age, migrant status, marital status, race, ethnicity, and other, intersecting identities. Gender, in particular, has received increasing attention in fisheries management circles in recent years, as scientists and managers recognise the important but often marginalised roles women play in the fisheries sector. Much of the early and ongoing work on this topic has been published in this bulletin. A recent review found that 80% of published studies on women's participation in small-scale fisheries management showed low or no participation, and that their exclusion resulted in negative outcomes (Chambon et al. 2023).

In this study, we examine procedural justice in coastal fisheries management in Fiji through an intersectional lens. We ask: what are the benefits of and barriers to iTaukei women's and men's participation in fisheries management, and how do these vary according to their intersecting identities (e.g., age, migrant status, marital status)? We surveyed 655 key informants in 146 villages and conducted *talanoa* sessions and 54 semi-structured interviews in four of those villages, which have been anonymised to protect respondents' confidentiality.

Background: Women's roles in Fiji's fisheries

In Fiji, women's fishing is critical to food security in rural villages: the fresh fish caught by women is the main source of protein for most of their households (Thomas et al. 2021).

Their fishing and post-harvest processing and marketing activities also contribute significantly to household income (Thomas et al. 2021). Women's roles in fisheries in Fiji differ according to their intersecting identities. For example, while iTaukei (Indigenous Fijian) women are predominantly involved in harvesting and marketing of inshore species, such as mud crabs (Mangubhai et al. 2021), Indo-Fijian women are usually traders involved in buying the mud crabs and reselling them (Reddy 2020). Yet women's diverse roles are often undervalued, overlooked, and poorly understood (Thomas et al. 2021). Most fishing activities done by women are for subsistence, and thus fall into the "unpaid work" category and are not counted alongside the fishing activities done by men for commercial purposes in official statistics (Vunisea 2016). Yet women spend more time than men on work overall, work fewer paid hours, and in general have less discretionary time than men (Narsey 2007; Vunisea 2016).

Despite their important roles alongside men in the fisheries sector, recent research has shown that women's participation in management is guided and, in some cases, limited by societal expectations of women, for example the expectation that women will take care of the home and children (Barclay et al. 2022). But excluding women from decision-making excludes valuable ecological knowledge; since women tend to participate in the sector differently than men, they have different and, in some cases, wider and deeper knowledge than men to contribute to effective fisheries management and recovery (Kitolelei and Kakuma 2022; Thomas et al. 2021; Vunisea 2016). The roles and responsibilities of women in Fiji are shifting (Thomas et al. 2021); still, restrictive gender norms hinder progress toward equality in fisheries management (Mangubhai and Lawless 2021).

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Key research findings

Survey findings

Women’s participation in coastal fisheries management is low. Of the five groups surveyed, key informants representing women (n=145) were the most likely (70%) to report “no meetings” or “no participation” and the least likely (3%) to report “full participation” in fisheries management in their village (Figure 1).

More participation by women is associated with greater perceptions of the benefits of fisheries management. Although most women (80%) perceive benefits, the proportion declines with decreasing participation (Figure 2a). Following a similar trend as participation, as perception of fairness decreased, so did perception of benefits (Figure 2b). More participation by women is also associated with more support for fisheries management (Figure 3a), and women who perceive more benefits from fisheries management are more supportive of it (Figure 3b).

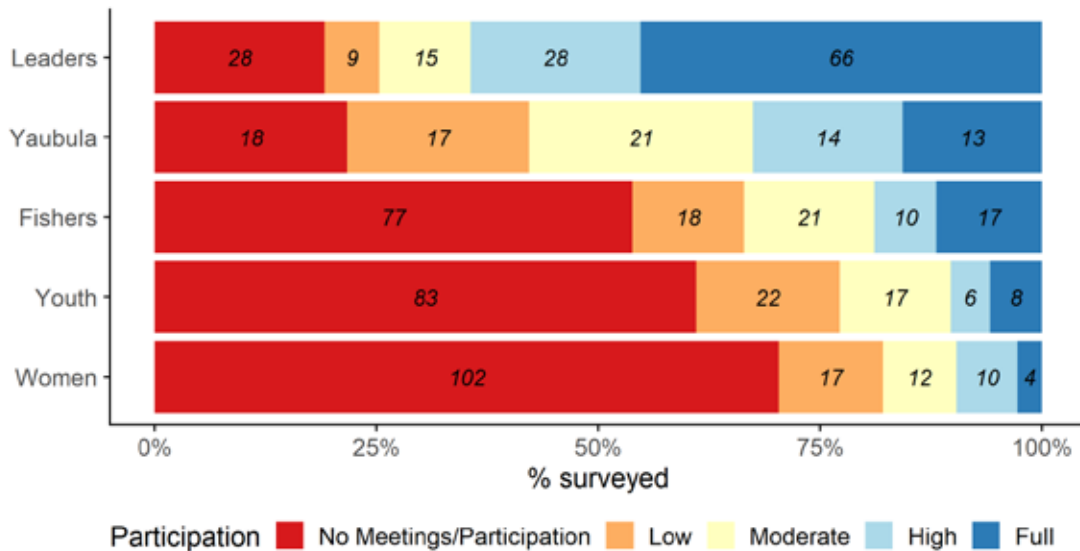


Figure 1: Level of participation by group according to key informants.

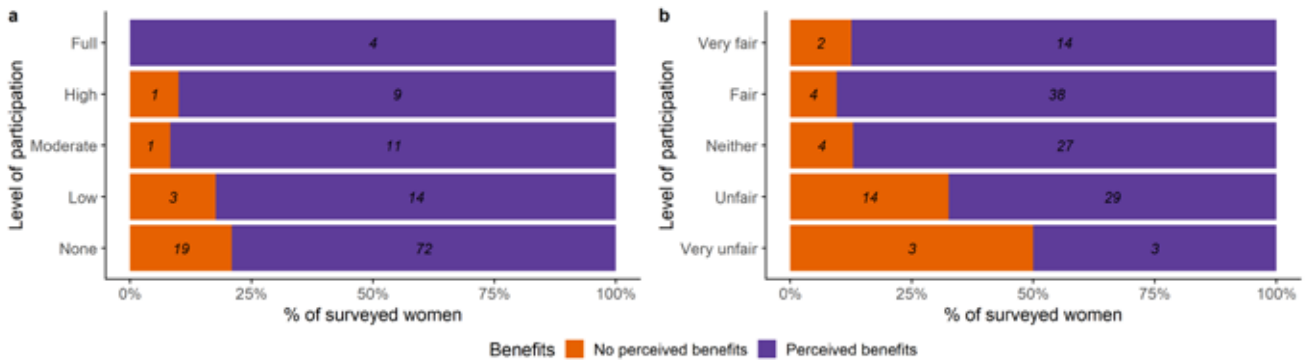


Figure 2: (a) Women’s perception of benefits by level of participation according to key informants (n=137); (b) women’s perception of benefits by perception of fairness according to key informants (n=137).

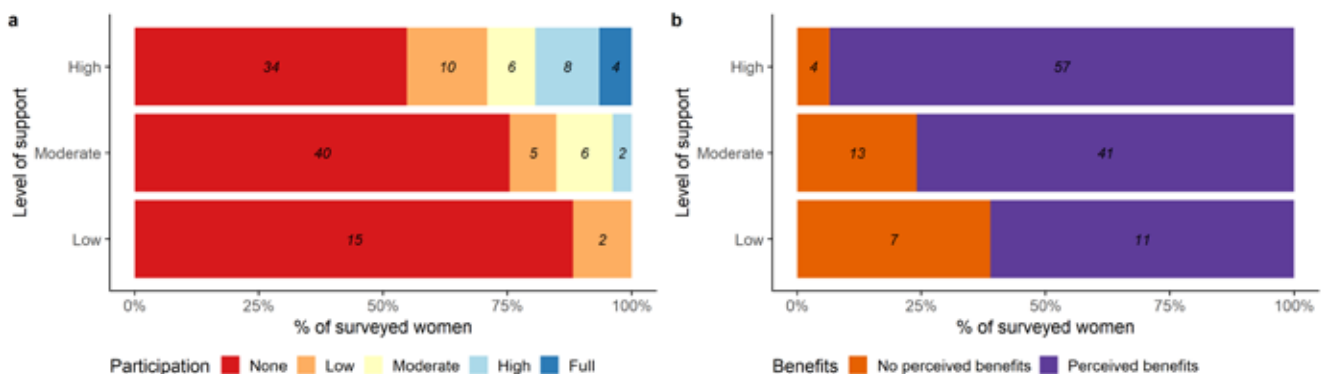


Figure 3: (a) Women’s support for fisheries management by level of participation according to key informants (n=137); (b) women’s support for fisheries management by perception of benefits according to key informants (n=137).

Interview findings

Perceived benefits of participating in fisheries management

Thirteen respondents noted increased abundance of fish and other marine life as a result of their participation in fisheries management. Other ecological benefits mentioned by respondents included improved coral reef habitat, the reappearance of rare species, increased size of target species, the presence of more fish close to shore, and the indirect benefit of improved freshwater management in the village.

The most common social benefit was enhanced awareness and knowledge of fisheries management in the village. A young man from Village 3 echoed many respondents when he said, “I get to know about what’s going on in the community, what is *tabu* and what is not.” An older man in Village 4 highlighted the content shared at these meetings, noting, “I get to know some Western ideas that blend well with what we believe as traditional fishers.” Respondents also noted personal and spiritual development benefits to participating in fisheries management, for example a middle-aged woman and leader of the women’s group from Village 1 said, “I am very shy, so to be able to speak in public was always a challenge. So, having this role [as the women’s leader] has forced me to face my problem and be able to speak in public and address my audience. That is something that has become a benefit of me being part of these meetings.” Relational benefits were also noted by respondents. For example, an older woman living in Village 2 commented, “I love to go to be part of the discussions with the other women. We talk about so many other things that are helpful... It has brought the women together closer.” Others noted the relational benefit of intergenerational meeting. A middle-aged man from Village 3 noted, “Another benefit of these *tabu* is the positive change in attitude for our young ones who have learnt to abide by the rules of the *tabu*.”

Women’s participation is perceived as important

When asked, “Do you think it is important for women in the village to participate in fisheries decision-making?” all but one respondent (a middle-aged man from Village 4) agreed that women’s participation is important. Both women and men referred to women’s role as the “backbone of any village community” (elder man from Village 4), as well as fairness. For example, a young woman from Village 4 said, “The women are the ones doing everything for and in the village. Women run the village basically. So, it’s only fair that their voices be heard in decisions as such.” A middle-aged man from Village 3 connected fairness with women’s knowledge of fisheries, “Everything that happens is because women make it happen. So, it is only right that women also be part of the decision-making, as they are the ones that know our fisheries better than men.” A middle-aged woman from Village 1 said plainly, “Since we are also humans, I ask that we be included in fisheries decision-making.”

Both women and men expressed that women as a group, are more knowledgeable than men about the ocean because they are the ones doing the majority of the harvesting in the village to feed their families. A young woman in Village 2 argued, “It is the women that do everything in the households, from

gathering firewood to fishing for food. So, the women know so much more about our seas and land than the men.” A young woman from Village 2 suggested that women’s participation improves fisheries management, “Women often have deep reflections and thoughts that they share about fisheries management because they are the ones fishing and gleaning and know the conditions of our reefs and ocean better.”

The loss of women’s access to fishing areas was frequently mentioned as a cost of failing to include women in decision-making. In three of the four villages where we conducted in-depth interviews, *tabu* areas had been established directly in front of the village, where women fish for food for their families. As a result, women had to travel much further to fish, adding to their time burdens and demanding more physically from them. A middle-aged woman in Village 3 explained, “This *tabu* we currently have, if women were included in the discussion, we would have raised our objections to the places they have placed the *tabu*, as it has made it harder for us to go fishing, as it means a long walk for us to where we are allowed to fish. Because we are the ones that go fishing for household consumption more, we know better as to which places should be *tabu* and which ones should be open for fishing.”

The chairman of the village committee in Village 1 explained that women had been included after-the-fact to correct the problem by removing the *tabu*, “We had a meeting some months ago where the women asked about the *tabu* areas again. I opened up the discussions to have the women speak. Most women asked that the *tabu* be lifted. The outcome of the meeting was that the *tabu* was lifted and the women were allowed to fish from these areas where they couldn’t before. It has made their life easier.” A young man from Village 2 explained that opening the areas to fishing was a direct result of women’s participation in fisheries management, “The area closer to the village is not *tabu*. This to make it easier for women to just go fish, come back, fish, come back. Because it is closer to home. A few reefs in front of the village are open to allow for this, and this was because women asked at the meeting.”

Restrictive gender roles limit women’s participation

Women and men referenced restrictive gender roles to explain why women’s participation is low. An older man from Village 4 said, “Only the men decide these things, not the women. Women have their place in other things and roles.” A young woman from the same village explained, “If a woman speaks up [at the village meeting], she will be snubbed, as it is still not accepted for women to be part of the decision-making.” However, many women expressed frustration at these restrictive roles. A middle-aged woman from Village 4 said, “The biggest challenge we face as women is the opposition from our men. Most of the men in this village still believe women are not to speak at meetings about matters like this. When we want to speak, they make a fool of us and tell us to stick to the kitchen.” Yet gender roles are shifting, opening a door for women’s participation to shift, too. A middle-aged man in Village 1 said, “The women are always neglected in our tradition. They are always left out of decision-making. We need that to change because their roles in the traditional definition have changed as well. They have become more the provider than most men.”



Participation
 “When we want to speak, they make a fool of us and tell us to stick to the kitchen.”
 -Middle-aged woman



Knowledge Resource
 “The women are the ones that do most of the fishing and gleaning for their households so they need to be part of the decision-making process.”
 -Middle-aged woman



Working with Men
 “The best way to address this is to learn to work together. It is time for women to move in and be part of the decisions. They always bring great ideas and solutions to some of our issues that men may not have seen.”
 -Older man



Personal Development
 “When I was appointed to take up this role, I was a shy and voiceless woman. I prayed that God grant me the confidence to be able to carry out my duty well. I feel that I have grown in that area very much.”
 -Middle-aged woman



iTaukei women are not homogeneous, and interviews suggest that their interaction with fisheries management differs according to their intersecting age, marital status, and migrant status. For example, a young woman who married into Village 4 said, “The men decide these things. The women and young ones like me who marry into the village, we just attend the meetings to listen. I don’t usually feel comfortable voicing my thoughts on issues discussed. For us, I feel we are too young, and also women are at these meetings to listen, not to decide.” A middle-aged woman who married into Village 2 connected her challenges with fisheries management to the centralised system. She said, “Anything about fisheries in this village, I have no right to speak on. An example is the licenses they are issuing for the harvest of sea cucumbers in the months of July and August. The licenses can only be given to people from here who are registered in the *Vola ni Kawa Bula* [the official register of Fijian landowners]. That approach discriminates against women who marry into the village, even though they have been performing their roles in the village in terms of village obligations.”

Women and men have very different perceptions of how much women are participating in fisheries management in their village. When asked, “Do women participate in fisheries management in this village?” 20 out of 24 men (83%) answered yes; meanwhile, only 11 out of 31 (35%) women answered yes. Interview responses indicate that, while women have a representative at village fisheries management meetings, this representative does not hold decision-making authority. For example, a middle-aged woman from Village 2 described the last meeting she attended, saying, “The men

led the meeting from beginning to end. The women, we are present but only as listeners... The women’s representative, even if she is present at the *bose vanua* [meeting of the district’s chiefs], she does not speak. She has a seat at the meeting, but as a listener participant.”

Locally led pathways to increasing women’s participation

Women universally expressed a desire to participate more. Women and men both highlighted the role that men can play as allies supporting women’s participation. “We start from our homes if we want change in the community” (young woman from Village 1) was a sentiment echoed by many. An older man from Village 3 said, “The best way to address this is to learn to work together. It is time for women to move in and be part of the decisions. They always bring great ideas and solutions to some of our issues that men may not have seen. Some of these women are even better educated than their men. So, we need to work together and complement each other.”

Already, women find ways to shape decision-making. A middle-aged woman in Village 1 said, “Us women, we are *liga kaukauwa* [a Fijian idiom, ‘make things happen out of nothing’]. When we want something, we will make sure we get it, regardless of the obstacles... when the men want to do something, it is the women and their support that make it happen.”

Some pathways offered by external entities attempted to address gender equity but fell short, for example a young woman in Village 1 suggested, “More awareness workshops

that include men and addresses the importance of working together with women on issues like these. Women also need to be part of the workshops. Most times when workshops like these are brought to the villages, the women are more concerned about the food to feed the participants and end up in the kitchen rather than being present in these workshops.” A middle-aged man from Village 1 diagnosed the problem thusly, “People try to please the NGOs and government officials that come to us and easily accept what’s being presented to us, sacrificing their own opinions and beliefs.”

Conclusion

Our study shows that procedural justice in fisheries management is directly tied to environmental sustainability goals. Participating in coastal fisheries management yields perceptions of numerous ecological and social benefits for participants. Women are more likely to perceive benefits from fisheries management and to support management when they participate in it and when they perceive decision-making to be fair. Furthermore, women’s participation is critical to maintaining their access to their fishing areas, and is likely to increase their compliance with regulations. Women and men agree that women’s participation in fisheries management is important because they are fishers and because they have valuable ecological knowledge to contribute. However, women’s participation is strongly limited by restrictive gender roles. This was especially true for young women and women who married into a village. This study supports prior research demonstrating that token participation is not adequate; though each of the four villages had a women’s representative on the fishing council, having this representative present at meetings did not lead to true decision-making authority. Most women expressed a desire for greater participation. Advances toward greater gender equality in village-level fisheries management must be locally driven, with respect for iTaukei customs and support for community-level champions, and should account for intersecting identities.

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Women playing multiple roles in the Lakeba Fishers Cooperative

Pretika Kumar,¹ Diana Divalotu,¹ Frank Jeremia¹

The Lakeba Fishermen's Association was formed in 2019 and registered as a Fishers Cooperative in 2023 to reflect the inclusion of women working in fisheries. The cooperative is currently made of both women and men fishers from the eight villages on Lakeba Island in the Lau Group, Fiji. Of the 65 members, 11 are women fishers.

In 2023 the Ministry of Trade, Co-operatives, Small and Medium Enterprises and Communications (MTC SMEC) in partnership with the Food and Agriculture Organization of the United Nations (FAO) and the Ministry of Fisheries and Forestry, provided a cooperative management training to 12 fisher groups and associations across Fiji, including the then Lakeba Fishermen's Association. Following the workshop the members registered to become Lakeba Fishers Cooperative, and was expanded to include women fishers to recognise their contribution to fisheries. The cooperative established some common goals for itself: (a) meeting market demand by enhancing fishing capacity through powered fishing vessel; (b) fishing training on preservation methods and value adding; (c) maximising fishers, cooperatives economic return through fishing business through sustainable utilisation of fisheries resources; and (d) [to meet] basic need and village obligations.

What commodities does the cooperative buy

The main commodity bought by the cooperative includes a range of species of finfish, mud crab (*Scylla serrata*) and lobsters (*Panulirus versicolor*, *P. penicillatus* and *P. ornatus*). The cooperative buys these fisheries products from

individual fishers and its members and sells it to the markets in Suva. The most common food fish sold by the cooperative includes longface emperor (*Lethrinus olivaceus*), yellow lip emperor (*L. xanthoculis*), Pacific yellow emperor (*L. atkinsoni*), thumbprint emperor (*Lethrinus harak*), great trevally (*Caranx ignobilis*), Indian goatfish (*Parupeneus indicus*), camouflage grouper (*Epinephelus polyphemadion*) and surgeonfish (*Naso unicornis*).

Food parcels are sold every Friday at the Lakeba Fishers Market which is owned by the Lakeba Fishers Cooperative and managed by female members. Farmers from around the island also use the facilities at the market to sell their agricultural produce. The fees for the usage of the facility are paid directly to the Lakeba Fishers Cooperative, providing an additional source of funding.

Cooperative boosting women fishers in Lakeba Mud crab fishery

There are four villages that harvest mud crabs: Waitabu (3 harvesters), Nukunuku (4 harvesters), Yadrana (7 harvesters) and Tubou (3 harvesters). Sixteen of the 17 harvesters are

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Fresh mud crab and mullet ready for sales at the fishers market. © Frank Jeremia

women, and all hold a valid fishing licence to harvest mud crabs. The mud crab fishery plays a vital role in terms of providing a livelihood to the fishers. The majority of the mud crab harvesters are semi-commercial fishers who catch mud crabs every week. The harvesters use both traps and traditional methods (stick is used to drive the mud crab from the hole and is caught using hands) to harvest mud crabs. The harvesters deploy mud crab traps three times a week during high tide and use fish, jellyfish and octopus as bait. The traps are secured to the prop roots of mangroves and left for four hours before it is checked and re-deployed. The women fishers mostly use the traditional methods to catch mud crabs during low tide, when it is easier to spot the animals in their holes. The mud crabs are sold both frozen and live to the Lakeba Fishers Cooperative at \$18/kg which is then sold to the market in the capital Suva. The crabs are kept in the freezer at the fishers market prior to shipping to Suva. The live crabs are covered with damp cloth and kept in baskets made from coconut leaves at the market facility.

Value added products

Women fishers and wives of the cooperative members sell food parcels every Friday. The women from the eight villages on Lakeba Island take turns every week to sell the food parcels at the fishers market. The fish used in the parcels include snapper, mullet, goat fish and trevally that are largely caught using a handline. The fish parcel would include fried fish with *rourou* (taro leaves) while some are cooked with coconut milk, which is served with cassava and salad at FJD10. The female fishers also sell *vakalolo* (Fijian dessert) at FJD5 per serve made from steamed taro (*dalo*) and breadfruit wrapped in giant philodendron (*drau ni via*) leaves. On average, one fisher woman can earn around FJD100-150 per week from

selling food parcels. The money earned from the sales is used to buy groceries, pay for the household appliances, bills and contribute to the basic needs of their family.

Conservation initiatives established by women fishers

A number of conservation initiatives have been established by women fishers in the Lakeba Fishers Cooperative.

- 1 There is a mud crab fattening project at Nukunuku and Waciwaci villages. Women fishers from these villages have constructed small cage structures using the bamboo and 25 litre plastic containers that are used to fatten the small-sized, mud crabs prior to sale. The mud crabs are fed with jellyfish, small fish and vegetable peelings to make them grow bigger. This technique is used because the boat services in the maritime islands are irregular (once a month) and the mud crab fattening project helps fishers maintain or increase the body weight and get better market price.
- 2 The Cooperative assists the Fisheries Officer based in Lakeba by checking the fish size and data collection. The women fishers who manage the fishers market weigh, measure and record the fish landing data from the individual fishers and submit these catch data to the Ministry of Fisheries and Forestry on a monthly basis.
- 3 The establishment of community-based Marine Protected Areas at Tubou, Vakano, Nukunuku and Waciwaci villages. Furthermore, the women are involved in coral planting and monitoring the recovery of reefs at these four protected areas.
- 4 Mangrove planting along the coasts of Lakeba Island is done by women fishers, together with the youth of the village in efforts to protect the shoreline.

Challenges faced by fishers

Fishers (both women and men) encounter a multitude of challenges when it comes to selling their catch. One of the primary challenges is market access. The fishing communities find it difficult to connect with broader markets, resulting in reduced competitiveness and lower price for the fisheries resources. The shipping service provider travels once every month and air services are weekly. The return fare by sea is FJD280 while return airfare is estimated at FJD700 not taking into account travelling expenses plus additional baggage expenses.

In addition to this, price volatility is a common issue for fishers in Lakeba as they lack necessary infrastructure, technology, and market information to negotiate fair price for their catch. The Lakeba Fishers Cooperative tries to address these issues by buying fish and other marine species from its members and fisher associations from nearby islands and connecting them to markets on Viti Levu. Suva Market which enables fishers to access a wider customer base and get better prices for their catch. The major buyer for the mud crab fishery is Star Dragon General Trading Company Pte Ltd which has the buying target of 500 kg per month from the harvesters while the finfish and lobster is sold to Northern Foods Pacific Pte Limited.

Despite the challenges the women fishers are working closely with the cooperative members to boost fisheries in Lakeba. They are learning new skills such as fishing techniques, business management and marketing. For example, value adding training was conducted by FAO and Ministry of Fisheries and Forestry for women fishers. Women fishers also have diversified their livelihoods and sell meat and handicrafts at the fishers market during bad weather when they cannot fish. Finally, women fishers have also formed a network with other women groups from around the island and they share knowledge, resources and information to improve livelihood and protect the natural resources.



Fisher women and men often work together to slice meat for sale in the fishers market. © Frank Jeremia

Support provided by the Ministry of Fisheries and Forestry

The Ministry of Fisheries and Forestry recognised the efforts and contribution of the Lakeba Fishers Cooperative towards sustainable fisheries, particularly the important role women fishers play in taking ownership of their natural resources. Hence, to boost the cooperative the ministry has assisted fishers with deep freezers, aluminium table for the fisher market, 75 hp engine and a 28-foot boat. Together with these there is a subsidy on ice at 13c/kg for licensed fishers and continuous technical assistance provided by fisheries officers.

The plight of female fish traders in fish-for-sex transactions in Sub-Saharan Africa

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Kafayat Fakoya³ and Isa Olalekan Elegbede^{3,4}

The natural resources on which small-scale fishing communities in Sub-Saharan Africa depend are crucial for both their economic sustainability and as a nutritional resource in challenging times (Brashares et al. 2014; Fakoya et al. 2022). Yet, the widespread depletion of fish stocks across the continent (Belhabib et al. 2015; Okafor-Yarwood et al. 2019) results in numerous adverse socio-economic and developmental consequences, including abusive labour conditions, food and nutrition insecurity, harmful fishing practices, and fish-for-sex exchanges (Belton and Thilsted 2014; Elegbede et al. 2023a, 2023b). Previous qualitative studies by Fiorella et al. (2015) have explored how declining fish stocks influence fish-for-sex exchanges, revealing that severe fish shortages might prompt transactional sex, thereby altering gender power dynamics (Kyei-Gyamfi 2023). Such fish-for-sex exchanges represent a form of transactional sex documented worldwide, particularly prevalent in Sub-Saharan Africa and Asia (MacPherson et al. 2012).



Female fish traders in Nigeria. © Ayodele Oloko

“During lean fishing periods I befriend the fishermen because some only give fish to women who agree to have sex and satisfy them emotionally. I usually go to his house in the evening to cook and have unprotected sex with him after his fishing expenditure. I don't like it because I fear getting pregnant and infected with sexually transmitted diseases. Nevertheless, I enjoy the constant fish supply, which I sell in the market to support myself financially”
Female fish trader from Nigeria.

The phenomenon delineates relationships established between female fish traders and fishermen, where these traders enter sexual relationships to ensure a consistent fish supply. Kwena et al. (2013) assert that these female fish traders partake in fish-for-sex (FFS) relationships to ensure a steady supply of fish, crucial for their business and survival, particularly during sparse periods.

However, the situation becomes more intricate as these traders often experience exploitation during FFS transactions in environments characterised by low condom usage (Kwena et al. 2013; Kyei-Gyamfi 2023). There is a direct connection between these practices and the increase in HIV/AIDS infection rates in Sub-Saharan Africa (Fiorella et al. 2015). Despite persistent exploitation in key fishing areas, substantial gaps in documentation remain concerning these practices in the continent (Béné and Merten 2008).

The fishing industry structure consists of men primarily engaged in catching and managing fish, while women take on roles such as smoking, drying, and selling the fish (Harper et al. 2023; Oloko 2024). Although some women hold influential positions, the majority are relegated to lower-level roles in the fisheries sector, with restricted access to resources and income compared to men in Sub-Saharan Africa (Rice et al. 2023). Consequently, this economic disparity, perpetuated by the fishermen's control over fish supplies, significantly disadvantages female fish traders. A distinctly gender-based division of labour and daily cash factors compel fishermen to adopt risky behaviours such as engaging in sexual activities with multiple partners, having unprotected sex, and abusing substances (Béné and Merten 2008; Kissling et al. 2005). The susceptibility to substance abuse is intensified by climate change stressors, and illegal, unreported, and unregulated fishing (Sumaila et al. 2011; Oloko et al. 2023).

The literature suggests that it is crucial for governmental and international entities to address the detrimental effects of gender-based market forces within the small-scale fishing sectors (Oloko et al. 2022). Additionally, women fish traders' participation is essential in discussions related to fisheries policies, ensuring their perspectives are thoroughly represented and highlighted. This becomes increasingly

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vital considering the projected impacts of climate change, which is expected to exacerbate the severity of disruptions in fish supply (Cheung et al. 2017). Aside from its economic benefits, the cooperative model should be leveraged for its ability to disseminate sexual health knowledge and provide a collective approach for women to address broader societal challenges, such as poverty and sexual exploitation in small-scale fishing communities. This cooperative initiative creates effective avenues for empowering female fish traders and transforming the market dynamics in the small-scale fishing sector, especially in Sub-Saharan Africa.

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Octopus harvesters in Fiji

Rusila Savou,¹ Epeli Loganimoce² and Jokim Kitolelele³

The Fijian octopus fishery is predominantly operated by women fishers, with a few male participants. These fisherwomen undertake various roles, including collection, processing and marketing. Despite their significant involvement, women's participation in the octopus fishery is often overlooked in Fiji. This article sheds light on their contributions, offering valuable insights for researchers and decision-makers.

Introduction

There are 23 octopus species in the Pacific (Loganimoce et al. 2023), including the day octopus (*Octopus cyanea*) and white striped octopus (*Callistoctopus ornatus*) found in Fiji. While both are present, the day octopus is more common and likely the main species sold in local markets (Lee et al. 2020).

Octopus is known locally as *kuita*, *subua*, *kita*, or *ita* across different parts of Fiji. It is a delicacy and one of the most sought-after species and fetches a high price.

The involvement of women in coastal fisheries is substantial where they are well known for gleaning the inshore mudflats and inshore reefs (Thomas et al. 2021). Women hold traditional ecological knowledge including the seasonality of species and therefore when is the best time to catch them (Vunisea 2016). In the Pacific Islands, an estimate of 70%

of inshore fisheries catch is used for subsistence purposes (Gillett and Tauati 2018). Octopus has been sold at the municipal and non-municipal markets from 1986–1992 at an average of 6.8 mt per year with slight fluctuations (Anon., 1987–1993). Octopus in the municipal market was sold by the kilogram in 1992 at FJD 3.52 per kg which has increased from previous years where the prices varied between FJD 1.62–3.08 per kg. The prices further increased to a mean price of FJD 7.13 per kg after a market survey in 2016 (Lee et al. 2020). The high prices in octopus makes it lucrative and hence the sustainable management of this fishery is important. However, to date there have not been many recent studies of octopus in Fiji. The main objective of this study was to collect data for assessing and managing octopus stocks in Fiji, identify knowledge gaps, and explore opportunities to improve the value of the product.

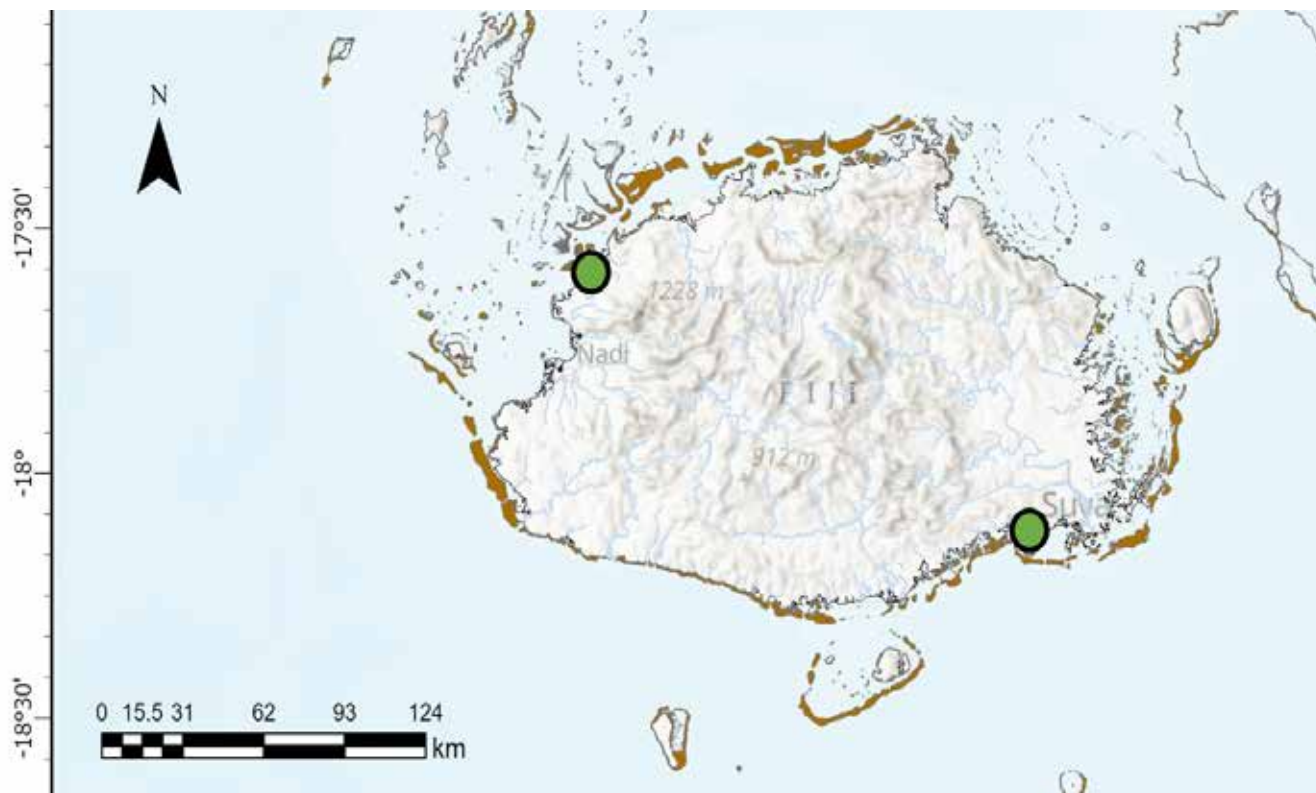


Figure 1. Locations of the two markets in Suva and Lautoka on Viti Levu Island where vendors were interviewed and data was collected.

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Methods

In-person interviews were conducted with seafood vendors, who were mainly comprised of iTaukei, in the western and central divisions in Viti Levu; the municipal market in Suva and the fisheries wharf in Lautoka. The Lautoka fisheries wharf differs from other markets as it is operated and monitored by the Ministry of Fisheries and serves as a landing site and market for local fishers.

Vendors in the two markets were categorised into two groups: fisherwomen who target octopus, and fishermen who occasionally catch octopus opportunistically (i.e. when encountered on the reef). Interviews were conducted with vendors who sold fresh octopus in the two markets and questions focused on the octopus fishery including traditional knowledge, harvesting methods, travel time to harvesting grounds, harvesting time and key habitats they harvest from.

To determine the volume and price of the octopus sold at the two markets, individual weights were measured using a scale (to the nearest 5 g), and the price individual animals were being sold for, and the sex of the individual octopus. Sex was determined by external features – namely the hectocotylus a specialised arm (third right arm) possessed by males used to transfer spermatophores (Hanlon and Messenger 2018). Data were collected during peak and off-peak seasons from 2020 to 2022 with some gaps due to COVID-19 restrictions during 2020–2021.

Traditional knowledge on octopus

All octopus harvesters agreed on one fact: that the *cold season* marks the beginning of octopus season which begins in May and ends in September with octopus abundant from June to August; most harvesters stated that August was when octopus is most abundant. Some of the older fisherwomen mentioned the flowering of the *drala* (*Erythrina variegata*) and *vasili* (*Cordyline fruticosa*) plant as indicators of the octopus season. These indicators align with the Fijian traditional calendar that links planting and fishing activities (Veitayaki 2002). For abundance during the octopus season, a harvester mentioned that “during the octopus season, octopus is plentiful when the moon is still visible in the morning known locally as *vula sigavaki*”. This is known as the daytime moon which can be seen in the morning after a full moon (<https://earthsky.org/space/when-can-you-see-a-daytime-moon/>, 29 January 2013).

Harvesting of octopus

Harvesters from Suva and Lautoka travel by boat to reefs near their villages. In Suva, travel time ranges from 10 to 15 minutes, while in Lautoka, it is 20 to 30 minutes. The harvesting methods include gleaning and spear fishing. The fishermen who primarily target fish use their spears to catch octopus, whereas the fisherwomen and a few men harvest octopus by walking along the intertidal reef flat during low tide or snorkeling along the reef edge as the tide goes down searching for octopus dens which are often hidden by small stones, rubble and pieces of shell. Once a den is spotted,



Figure 2. Weighing of octopus using a hanging scale. © Rusila Savou



Figure 3. Hectocotylus, specialised third right arm. © Rusila Savou



Figure 4. Octopus harvester in Namaqumaqua village inserting the iron rod into the octopus crevice (a); octopus reaches out for the rod and is pulled out (b); then immediately the mental in inverted (c). © Rusila Savou

two iron rods are inserted into the octopus crevice, lightly prodding the octopus and encouraging it to reach out for the rod. Once it grips the rod, the harvester pulls the octopus out and immediately turns the mantle inside out to remove the heart, effectively killing the animal. In the past, harvesters used mangrove branches to catch octopus. Top of Form Harvesters in Suva fished for octopus for five days and sold their catch at the market on Saturday; the harvesters in Lautoka fished for only two days and sold their catch on either Thursday or Friday.

Octopus sales

In the Suva market, octopus is either sold fresh, smoked, or served as packed lunches. It is noted that smoking of octopus is done by fisherwomen from villages which are far from Suva, for example from Verata in Tailevu whereas fisherwomen from the Rewa province mostly sold fresh or frozen octopus. The price of individual octopus for both markets is dependent on the size of the octopus. Sizes and corresponding price ranges were classified into three: small 0.5–1.5 kg (FJD 5–15), medium 1.5–2.5 kg (FJD 20–30), and large ≥ 2.5 kg (FJD 35–50). During off-peak season, octopus sold are mostly in the small size range at double the price.

Challenges faced by octopus fishers

Proper protective clothing during harvesting is a major challenge for harvesters since octopus peak season is during the cold season, thus preventing sickness such as flu, pneumonia and hypothermia.



Figure 5. Octopus sold in the markets fresh (a) and smoked (b). © Rusila Savou

During surveys, it was observed that some fresh octopus caught earlier in the week, despite being frozen, experienced quality degradation due to improper handling and storage. This highlights the necessity for raising awareness regarding the proper handling of octopus post-harvesting and the establishment of hygienic standards. Additionally, octopus fishers have demonstrated interest in implementing value-adding techniques to enhance the marketability of octopus.

Conclusion

Fisherwomen hold prominent roles in the octopus fishery, engaging in harvesting, processing and marketing. They possess valuable traditional knowledge regarding octopus seasons and harvesting techniques. Data from octopus sales aid in assessing fishery status. Given the absence of specific octopus fishery management legislation in Fiji (Loganimoce et al., 2023), there is a pressing need for implementing control measures and a management system.

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Octopus arm reaches out for the rod



Mentel inverted

Bolstering women in fisheries value chains in Fiji

Adi Alani Tuivucilevu¹

Introduction

Official statistics published by the Fiji Bureau of Statistics (FBOS) showed that fishing and aquaculture contributed FJD61.1 million to Fiji's real gross domestic product (Real GDP²) in 2020 (Ministry of Fisheries, 2021). Production from small-scale fisheries accounts for 40% of global catches and small-scale fishers and fish workers represent 90% of people involved in fisheries value chains around the world, 40% of whom are women. (FAO, Duke University & WorldFish, 2023). Women fishers, contribution to the formal economy has long been overlooked and there are calls to bolster these overlooked roles (Ibid.).

To support this call, WiFN-Fiji (Women in Fisheries Network-Fiji) has been actively advocating for the strengthening of women in fisheries value chains as women in Fijian coastal communities play an essential role in providing protein for the average household as the latest rapid gender analysis of the fisheries sector in the Ministry of Women-led Gender Transformative Institutional Capacity Development Initiative in 2022 (Ministry of Women, Children and Poverty Alleviation, 2022) provides the latest data confirming that women account for 51% of inshore fishers while 43% of Fijian women who fish do so for a source of income and 99% to provide food.

Livelihood diversification for Namara women in fisheries value chain

Business activities in the Namara District in Tailevu are mainly related to small-scale coastal fisheries in which women fishers make up a good number of users and who face challenges due to overfishing. The lack of skills and opportunities to diversify sources of income-generating activities has therefore posed a big challenge for these women fishers.

With the primary objective of equipping the Namara women fishers with the necessary skills and knowledge to diversify their income streams the WiFN-Fiji organised a workshop in April 2024, to engage the women fishers of Namara in various skill-building sessions including tailoring, contemporary weaving, jewellery making, and fabric art, all with the aim of broadening their economic opportunities beyond traditional fishing activities – consequentially to allowing the local fisheries resource to recover. The four-day event was a training-of-trainers workshop engaging with representatives from the six villages of the District of Namara namely Naisausau, Matamaivere, Nakorolevu, Tubalevu, Nakalawaca and Naikawaga.

The village of Nakorolevu, has since then conducted their own training within the village empowering their with the

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² Real GDP: total value of all goods produced in a country in a year after inflation adjustments.



Representatives from the Namara District with the Permanent Secretary of the Ministry of Women, Children and Social Protection Ms Eseta Nadakuitavuki at the closing of the Building Resilience for the Namara women through alternative income generating activities training workshop in April 2024. © WiFN-Fiji



Women fishers from the Namara District participating in the Building Resilience for the Namara women through alternative income generating activities training workshop in April 2024. © WiFN-Fiji.

necessary skills and knowledge to diversify their income streams. The Namara district women are scheduled to undergo a financial literacy training with the aim of strengthening the organisational capacities of the women fishers, particularly in terms of simplified accounting, business creation, guidelines on governance, financial management, budget preparation, creating profit and loss statements, using financial data to make informed decisions, risk assessment and mitigation strategies, financial analysis and decision making.

Creating market linkages for Muanaira oyster farm

When the United Nations agreed the Sustainable Development Goals in 2015, they called, through SDG 14b, for market access to be provided to artisanal fisheries. (Gorez, 2022). Through its various training workshops with its members, WiFN-Fiji identified a recurring cry for help among women fishers for easier market access. Women fishers have repeatedly highlighted the difficulties faced when trying to access markets for their products.

Repeated researchers have mentioned the need to facilitate easier access for women fishers to markets. A summary report by Wildlife Conservation Society titled “*The critical contribution of women fishers to food security and livelihoods in Fiji*” (Wildlife Conservation Society, 2020) recommended that opportunities be explored to diversify the markets that women fishers have access to.

The Muanaira oyster farm is run by the Muanaira Women’s Group in Vutia, Rewa and face the great challenge of accessing markets. The Muanaira Women’s Group works as most women’s groups in Fiji—it is registered formally with the national women’s machinery and is still in the process of upskilling its members to be business savvy in order to manage

the oyster farm more effectively. The Muanaira is an initiative of Fiji’s Ministry of Fisheries and SPC that started in 2018 aimed at generating an alternative source of livelihood to relieve pressure from harvesting in the wild. The women are heavily involved in all levels of the oyster farm value chain, while some of their spouses and children assist the women in harvesting, sorting, cleaning and clearing the cages.

WiFN-Fiji has been working with the Muanaira Women’s Group to create market linkages for the oyster farm and high-end markets. Through this effort, women of Muanaira were able send the first shipment of oysters to Nawi Island Restaurant – a high-end marina that caters to super yachts. This shipment was just the first in readiness for the yachting



A Namara district representative participating in the Building Resilience for the Namara women through alternative income generating activities training workshop in April 2024. © WiFN-Fiji



Figure 4: A member of the Muanaira Women's Group deploying cages in the oyster nursery. © WiFN-Fiji.

season that begins May 2024. This is the first time the women of Muanaira have supplied to a high-end restaurant. In addition, through continuous mentorship on strategic bargaining and negotiating powers, the Muanaira women now regularly supply oysters to the Suva expat community with the selling price of FJD40 a dozen (a 100% increase from the previous FJD20 a dozen).

The most notable success of this project is that it has laid the foundation for the expansion of scope for WiFN-Fiji's work in creating market linkages for the women fishers which has led to the momentum being picked up by other partners who are now assisting WiFN-Fiji with developing a market linkage strategy for these women fishers tapping into the Fijian governments, interest in import substitution especially with the growing demand of the tourism industry. This strategy will map out a pathway for the 20 women fishers and their products to upscale their businesses. The strategy includes consumer surveys, supply chain surveys and supply chain strengthening consequentially to create a consistent supply chain for the different markets that will be identified.

Understanding women fishers, value chain intricate systems and strengthening the roles along these fisheries value chains needs more targeted focus and investments to unleash the full potential of women fishers in the economy as noted by Xiangjun Yao, FAO Subregional Coordinator for the Pacific Islands: "Empowering women in fisheries is not only a matter of gender equality but also a smart investment in sustainable development and food security for the whole community." (Kukharava, 2023).

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Figure 5: Lanieta Kaikadavu of Muanaira making the first delivery of oysters to members of the expat community in Suva. © WiFN-Fiji.

Participatory fisheries monitoring and gender: an example from Timor-Leste

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Abstract

In small-scale fisheries management, the significance of participation is widely recognised but we are still learning how this can be better operationalised to include different groups, such as women. Participatory monitoring is one tool that has been used to increase participation in fisheries management, as it can create many benefits, such as increasing community engagement in marine management, generating data for data-poor fisheries, and empowering fishing communities. Although most participatory monitoring studies have focused on men monitoring their fishing activities, evidence from studies examining women's increased participation in broader fisheries management suggests that monitoring programs should also incorporate gender-inclusive approaches. This article presents key findings from a systematic literature review of gender and participatory monitoring in the context of community-based fisheries management and then summarises the results of a participatory photography project conducted by women doing fisheries monitoring in Timor-Leste, which explored some of the same themes. These studies emphasise the importance of considering gender in participatory fisheries monitoring programme design and implementation and valuing participants, perspectives and experiences.

Introduction

Gender equality and women's participation are increasingly seen as an important part of small-scale fisheries (SSF) management (FAO 2015; Lawless et al. 2021), and participatory monitoring is one tool that has been used to increase women's participation and transform power dynamics in fisheries management (Carvalho et al. 2009; Paul et al. 2016; Aswani and Weiant 2004). Participatory monitoring is known to enhance engagement (Obura et al. 2002), enable people to make informed decisions, and can be an empowering process (Freire 1970). Participatory monitoring can enable community members to respond to their interests and concerns through several stages of the process; from collecting, analysing and understanding data, to decision-making (Obura 2001; Guijt 2007; Evans and Guariguata 2008; Danielsen et al. 2009). Many SSF are data-poor so incorporating participatory monitoring and local knowledge into management can inform and improve management (Wiber et al. 2004, 2009). The extent to which fisher knowledge or participatory monitoring is integrated into management can range from data being sampled by others or provided by fishers, up to participatory governance where local knowledge is used and valued (Stephenson et al. 2016).

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Efforts to use participatory monitoring approaches and integrate local knowledge into fisheries management are not without risk (Nadasdy 1999). To make participatory fisheries monitoring programmes an empowering experience for participants, they must be designed and implemented with an awareness of power dynamics and social norms (House et al. 2023). Participatory monitoring programmes in fisheries have tended to focus on male fishers collecting catch data (Obura 2001; May 2005; Ernst et al. 2010; Prescott et al. 2016). However, as women's involvement in fishing is increasingly recognised and the potential benefits of participatory monitoring become clearer, monitoring projects that involve women are being established (Aswani and Weiant 2004; Carvalho et al. 2009). Participatory monitoring programmes may address the complexities of intra-community dynamics so that women's participation can move beyond activity-specific participation to create a genuinely empowering or transformative process (Agarwal 2001; Rabbitt et al. 2022). However, this will require reflexivity, gender awareness and listening to the perspectives of the participants themselves (House et al. 2023).

This article presents selected findings from two recent studies (House et al. 2023, 2024) that explore the intersection

between gender and participatory monitoring in the context of community-based fisheries management (CBFM). We examine some of the complexities of conducting gender-aware participatory fisheries monitoring and present the experiences of women conducting fisheries monitoring in Timor-Leste.

Gender and participatory monitoring in CBFM: A systematic review

The primary aim of this systematic review was to assess the degree to which peer-reviewed literature on CBFM addresses gender and participatory monitoring. The objectives were to quantify the number of papers engaging with these themes, identify patterns in how they were addressed, and analyse the case studies that integrated both themes using critical interpretive synthesis (Dixon-Woods et al. 2006) to understand the framing, approaches, and key considerations involved. From an initial search of relevant peer-reviewed papers published between 2000-2020 in the Web of Science database, WorldFish database, and the Pacific Community (SPC) bulletins, a pool of 250 CBFM papers was identified. Of these, only 66 papers engaged with both themes and only seven papers presented case studies that addressed both themes in more than one section of the paper (e.g., mentioning the number of women and men in the methods section alone was not included). Our quantitative analysis also determined the nature of the engagement with the two themes, e.g., counting women vs gender analysis or reporting data vs presenting the monitoring process. For full details of the methodology and quantitative analysis, see House et al. (2023).

The seven case studies were then analysed based on a constructivist grounded theory approach (Charmaz 2014). Our iterative analysis focused on how the authors engaged with the themes of gender and monitoring in their papers, rather than the nature of the management activities or programmes described. Several key concepts were identified regarding how gender and participatory monitoring are dealt with in the CBFM literature, which are summarised here.

Engaging with gender and participatory monitoring

Similar to previous studies (e.g. Lawless et al. 2021), this analysis found that justifications for engaging with gender were based on intrinsic or instrumental frames, but if only one was used it was always instrumental reasons. Several researchers aimed to increase women's participation in fisheries management throughout their study, by using monitoring as an entry point. The authors reported processes that may contribute to women's empowerment or gender transformation, including gaining independent incomes, building self-esteem, forming women's groups, learning new skills, and participating in fisheries management decision-making. Instrumental and intrinsic justifications were provided for participatory monitoring, where the inclusion of community members in monitoring was seen as fairer (*intrinsic value*) or as a way to collect data or improve other management outcomes (*instrumental value*). In these cases, monitoring was used to evaluate management interventions (Aswani and Weiant 2004; Crawford et al. 2010), collect data in data-poor fisheries where other survey methods were not practical (Patricio et al. 2019), make evidence-based decisions (Carvalho et al. 2009; Crawford



This data collector is collecting data using her new skills to measure the fish. © Afansina



This fisher is my favourite because he does the survey every day. I want him to rest at home when the sea is too rough. ©Elmanda

et al. 2010), build community members' confidence and engagement in management (Aswani and Weiant, 2004), or as a tool to increase communities' negotiating power with external actors, such as NGOs or the authorities (Carvalho et al. 2009; Paul et al. 2016). Several programs also worked to increase the involvement of the data collectors in decision-making.

Monitoring through a gender lens

In female-dominated fisheries, monitoring was explained as a way to improve the resources that the data collectors relied on for their livelihood. In one case, having female data collectors was a way to increase women's participation in male-dominated fisheries management decision-making (Carvalho et al. 2009). Patricio et al. (2019) explained that monitoring which only targets one gender is unable to quantify the catches from the whole system due to differences in fishing activities or ecological knowledge. Several authors stated that they had to adapt their way of working to accommodate women's lower confidence, capacity, or education level (Crawford et al. 2010; Paul et al. 2016). In a community where illiteracy rates were significantly higher for women, Paul et al. (2016) developed an accessible data collection tool that used icons instead of text. Monitoring methods were also made more accessible by adopting techniques used in women's fishing practices (Aswani and Weiant, 2004). Gender norms impacted the data collection because permission from husbands was required or male community representatives were needed to accompany the participants (Paul et al. 2016). Women's participation in fisheries management requires a nuanced approach that recognises the variation between cultures, context, and management approaches.

Paul et al. (2016) reflected on the nature of participation and showed how monitoring activities can be empowering and extractive at different points within the same programme. If women are expected to participate in monitoring without being involved in decision-making, seemingly participatory projects may serve to be gender reinforcing, rather than transformative. In these cases, participation in management is yet one more thing to do for already overburdened women. The cases included in this analysis describe various forms of benefits to women participants, e.g., income and education or fun, and acknowledge the time burden and potential lost income that participants face because of participating in the programme.

Knowledge valuation and prioritisation in management

Many papers discussed the nature of fisher knowledge and participatory monitoring, how reliable it was, and the extent to which it could be integrated into fisheries management. They often included a section on assessing the reliability of the monitoring data or local knowledge, according to Western scientific standards. For example, due to a history of government mistrust of fishers' catch data, Carvalho et al. (2009) made scientific reliability of the monitoring data a major part of their study. Several papers used Western scientific methods but incorporated local knowledge, with some authors stating that there was a "trade-off between community involvement and scientific rigor" (Aswani and Weiant 2004). In contrast, Zanetell and Knuth (2002) argued that fishers' knowledge should not be seen as a lesser form of knowledge. It is necessary to consider how these ranging perspectives and priorities could be influencing

power dynamics in a monitoring programme, i.e., between the researchers and the participants, between groups within a community, or between the community and external actors. Almost every case mentioned communities' concerns about their declining resources, which are the result of direct, ongoing observation. However, this local knowledge was rarely considered "monitoring". Fisheries research and management must move beyond "knowledge integration" and cultivate an ethic of knowledge coexistence (Reid et al. 2020). For example, a participatory monitoring programme in Kiribati and Vanuatu used participatory monitoring "to catalyse and support community-led conversations and to bridge worldviews of community members to those of national agencies and their partners" (Andrew et al. 2020).

Replicability and transparency

Generally, the methods for data collection were reported in more detail than the methods for community engagement or participant selection. These papers often argued for increased community participation or gender inclusion in fisheries management, so it would be appropriate for them to explain how they approached these issues with transparency. An excellent example is Paul et al. (2016) who described their participant selection process in detail, included feedback from the participants about the methods, and reflected on the relationship between the participants and the researchers.

Marginalisation narratives

The papers focusing on gender framed women as a marginalised and vulnerable group and much of the participatory monitoring literature viewed small-scale fishers the same way. Treating women or communities as homogenous enabled authors to emphasise the conflict or power differential between the community and external actors, or between women and men. This may serve to emphasise a relevant concern, but it also erases the rich and diverse identities that exist within these groups and the dynamics that ensue (Lau et al. 2021).

The authors often described participatory monitoring and gender in terms of power relations, with various characteristics cited as influencing these dynamics, e.g., gender; race; migration history; small-scale fishers vs commercial fishers; and users of traditional management. Most of the papers focused on the marginalisation of SSF communities and the additional barriers faced by women. However, these narratives varied depending on the local context. E.g., Carvalho et al. (2009) designed a monitoring program to enable fishers who were marginalised under apartheid to assert themselves against the management authorities, but they sought women's participation in the program in recognition of the existing gender dynamics.

Women's experiences of participatory fisheries monitoring in Timor-Leste: A Photovoice study

Women fulfil various roles within Timor-Leste's fisheries sector, including fishing and postharvest activities (López Angarita et al., 2019; Tilley et al., 2020). Several efforts have been made to document the nature and value of

women's fishing activities in Timor-Leste, as their role within the sector has been overlooked (Grantham et al., 2020; Mills et al., 2017; Tilley et al., 2020). Fisheries management in Timor-Leste can be implemented at the community level through co-management (Tilley et al., 2019), so local-scale community-led monitoring may be particularly relevant. In this study (House et al., 2024), we used photovoice (participatory photography) to examine women's experiences of a participatory fisheries monitoring program called *Grupus Monitorizasaun Peskas (GMP)*. GMP consists of a network of women's fisheries monitoring groups supported by an international marine conservation non-governmental organisation, Blue Ventures. The members collect data regularly from fishers at local landing sites using a smartphone application called Open Data Kit to conduct catch surveys (House et al. 2021).

Photovoice is a participatory action research technique developed so that "people can identify, represent and enhance their community through a specific photographic technique" (Wang and Burris, 1997). This study was designed to amplify the voices and experiences of Timorese women involved in fisheries monitoring, by creating photo stories in response to a series of prompts and using interviews to develop accompanying captions that explain the message of each photo (for full methodology and more details of the GMP program see House et al., 2024). The research was conducted during the COVID-19 pandemic with the research team spread across Timor-Leste and Australia. Several Blue Ventures staff facilitated the photovoice process and some co-authors had pre-existing relationships with the study participants (see full positionality statement in House et al., 2024).

This article presents selected findings from the seven members of the Ilik-namu GMP group, who developed their photo stories in response to the following prompts over several weeks:

- What are the things that make it easier or harder for you to participate in fisheries monitoring and/or management?
- What impact has participating in the fisheries monitoring programme had on you?
- What impact has the programme had on your community?
- How would you like to participate in fisheries monitoring and/or management in the future?

Motivation, enablers, and constraints for participating in fisheries monitoring

The participants' photo stories contained several positive impacts that they had experienced as part of the monitoring groups, or aspirations they had for their future participation. These motivating factors included individual benefits, such as learning new skills and having new experiences (Figure 1). In addition, altruistic motivations, such as serving the wider community through an improved understanding of marine resources and management measures, were seen as a way of supporting the environmental, economic, and social aspects of the community.

The participants identified three main themes of enabling factors that allow their participation in fisheries management and for fisheries monitoring to take place: i) their relationship with the fishers, ii) other enabling relationships, and iii) accessibility of the survey method and tools. Participants' relationships with fishers were positively characterised, emphasising the collaborative relationship between the fishers and the data collectors, as well as a sense of respect and gratitude. The fishers gave the data collectors access to the fish, allowed the monitoring to take place, and provided additional support by consistently participating (Fig. 2) or sharing knowledge about the fish. Some participants mentioned assisting the fishers with their activities and sympathised with their struggles or suggested ways of supporting the fishers (e.g., safety at sea or improved technologies). Easy access to the fishers was mentioned as an enabling factor for monitoring (e.g., living nearby or being able to find them easily). The participants also mentioned supportive family members, relationships within the monitoring group (Fig. 3), and group activities relating to marine management or environmental stewardship. They also felt enabled because the survey method was achievable, the participants were able to learn the monitoring skills, and the survey schedule was compatible with their other activities. The method, itself, was co-designed with the participants and several of the photo stories suggested additional improvements.

The photo stories also demonstrated social, technological, and logistical or pragmatic constraints. The main challenges were related to interacting with the fishers (Fig. 4), technological issues, or problems related to the timing or schedule of data collection activities (Fig. 3). Several of the constraints mentioned related to enabling factors, suggesting they can be a help or a hindrance depending on the situation. For example, the fishers usually enable the monitoring but can also obstruct it, and methods are effective but can become a barrier when phone signal is poor.

Impact of participating in the programme and the desire to create more change

A dominant theme throughout the photo stories was the idea of creating change, whether it was how the programme has already done so, how the programme could be improved, how the participants wanted to change their community, or personal growth. These suggestions and aspirations fit into the categories of i) personal goals, ii) fisheries monitoring and management, and iii) the wider community. Many of the photo stories contained themes of advocating for others, environmental stewardship, and investing in the future. Participants stated that their suggestions and calls for change in their community were often connected with the skills or knowledge they had learned as part of the fisheries monitoring programme, for example, public speaking or leadership, technical concepts about fisheries or marine conservation, or confidence to interact with fishers.

Numerous photo stories included recommendations or ideas about how to improve the fisheries monitoring programme, itself. These photo stories discussed i) the survey method and schedule, ii) marine conservation/



Until now we always worked on land, but now I want to learn snorkelling so I can see the fish underwater too. ©Samsi

management activities that participants desired to undertake (Fig. 5), and iii) larger goals for marine management and fishery development in Ilik-namu. In addition to marine management topics, participants also created photo stories on themes of other livelihood activities, youth, advocacy for fishers, and collective action.

Discussion

Though we only presented a small sample here, the overarching takeaway from the photo stories is the participants' sense of community and the personal and collective empowerment that they describe. They focused on how individuals and groups are working to pursue their goals, manage their marine resources, and create change. Though participants described personal benefits, and the changes they experienced as a group, they mainly focussed on the impact on the community, which is consistent with Timor-Leste's collectivist culture (Askland 2014). The participants' stories constructed a narrative of personal learning and growth, alongside increased community education and autonomy to manage marine resources, with these two processes continually strengthening each other. As the participants became more knowledgeable and confident, for instance, they influenced and educated the fishers and wider community, just as when the community became more engaged in marine management, the community members supported the participants and their involvement with the monitoring program.

A common topic in the photo stories was the idea of the women participants being supported and enabled by predominantly male fishers, who were viewed as end-users of the data, without whom the program would not be possible. Many of the young women who participated in this project described being afraid of standing up to speak in front of the community, a reflection of their social norms and personal capacity, which determined their ability to participate in community meetings on fisheries management. According to the participants, the monitoring process helped build collaborative relationships, creating a more enabling environment. Though the participants faced resistance early on, there is now open communication, with fishers and data collectors sharing their knowledge or data, whilst being respected and listened to by community leaders. Thus, normalising women being in a role that was previously considered a male domain.

In participatory fisheries monitoring, data collectors can be treated as active agents with decision-making power, or as instruments who merely fulfil an existing goal (House et al., 2023). The photovoice participants positioned themselves as agents of change, working to improve their community and realise their goals through fisheries monitoring. Increasing participants' capacity and expanding their horizons has intrinsic value and was not just a means to the end goal of implementing marine management. The participants also discussed how they could empower the fishers in their community to manage their marine resources and improve their livelihoods, and the opportunities and power which they had because of the program. This contrasts with the marginalisation narratives often perpetuated in discussions about women's participation in fisheries management

(House et al., 2023), as well as the assumption that women are a vulnerable and homogenous group (Lau et al., 2021). These findings show that there were various forms of empowerment happening concurrently and emphasise the need for development programs to consider the aspirations and context of the participants.

The relationship-building, which has taken place between the data collectors, fishers, the wider community, and external organisations, has facilitated collective learning and behaviour change. The participants have already experienced changes, such as being invited to meetings related to marine management, increased community engagement with the ongoing marine management discussion, and fishers modifying their fishing to avoid catching juvenile fish. The findings suggest this learning from the GMP now includes the fishers who interact with the programme, as well as the family members and others who support the data collectors.

Conclusion

These studies examine gender and participatory fisheries monitoring from the perspective of the international literature and through women's lived experiences. The photovoice participants explored their experiences of fisheries monitoring and demonstrated various forms of empowerment (i.e., individual, community-level, or women's empowerment). Their photo stories were consistent with some existing studies and showed how these occur within their cultural context. For example, the view of fisheries monitoring and management the photo stories express shares similarities with Jentoft's (2005) characterisation of fisheries "co-management as empowerment", but they also incorporated a relational lens that highlights intracommunity relations and gender dynamics (Kabeer 1994). The photo stories reflect some views of marine management and livelihoods that reflect the influence of international NGOs, but they frame everything in a more process-oriented and collective way than the way that development NGOs tend to apply concepts such as empowerment or participation (Cornwall and Brock 2005).

The literature review found that a more transparent and reflexive approach is needed for designing, evaluating, and reporting CBFM activities. Researchers should critically reflect on the power dynamics and social processes occurring in their work, as presenting these issues would enable other researchers to improve their study design. In participatory monitoring, the social aspects of methods and the power dynamics involved should be considered and reported with as much clarity as ecological data collection methods. Where classic monitoring and evaluation approaches treat the data collection method and process as an impartial and objective means to reach an assessment outcome, these findings demonstrate the value of process-oriented approaches in monitoring and evaluation, as well as in fisheries monitoring and management. Such approaches can capture the experiential and relational aspects of gender dynamics and women's empowerment and can capitalise on the lessons of participatory monitoring and evaluation by enabling a process of reflecting on the past and envisaging the future. The participants' photo stories emphasised the

enabling relationships that shape their participation in fisheries monitoring, as well as how these relationships are strengthened through participatory monitoring, and thereby contribute to social learning, collective action, and increased awareness and engagement in the discussion around marine management. Several studies have identified the potential benefits of participatory fisheries monitoring for SSF communities or underrepresented social groups, but there is much to learn about how best to operationalise participatory fisheries monitoring as a tool for equitable and sustainable fisheries management.

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Women in fisheries community groups: Diving deeper into community-based fisheries management in Kiribati

Tarateiti Uriam Timiti¹

Women's involvement and ownership of community-based fisheries management (CBFM) processes decreased following the development of CBFM plans in Kiribati. The CBFM team within Kiribati's Coastal Fisheries Division supported the creation of women's associations dedicated to fisheries management and community development to ensure that women's participation continues to be visible throughout the implementation stages of CBFM.

Background

Gender equity, disability and social inclusion are crucial aspects of community-based fisheries management. When collaborating with communities on their management plans, it is essential to ensure inclusivity by involving all social groups, including women, men, youth, and elders in the development of management plans (Delisle et al. 2021). In Kiribati, inclusivity in participation and in the CBFM decision-making process is ensured through a two-stage process. First, elders, men, women, young men, young women work in separate groups to formulate their own priorities and ideas for the CBFM plan. Secondly, a community-wide discussion is then held where all inputs are heard and debated to draft the content of a community-wide CBFM plan. This two-stage process ensures that interests in different fisheries and opinions from otherwise marginalised groups are made visible. However, despite those efforts to include different voices in the CBFM process, the roles of marginalised groups, especially women, following the adoption of a CBFM plan often became unclear and consequently invisible. Recognising this issue, a community women's initiative was established by the CBFM team in six communities in North Tarawa, Butaritari and Abaiang.

The approach

An initiative in Kiribati was established to ensure women's participation in fisheries management remains visible throughout the implementation of a community-based fisheries management (CBFM) plan. The initiative is based on the formation and ongoing support to community women's associations. The idea originated in Tabonibara in North Tarawa in late 2020. During the review of Tabonibara's community management plan, the CBFM team found that women were expressing that they had had little involvement in the implementation and enforcement of the rules of the plan. They no longer felt full ownership of the developed CBFM plan. Faced with this problem, the CBFM team in partnership with the women of Tabonibara decided that bringing women together as an association (with the support of men in the community), dedicated to supporting the conservation and management of marine resources, would help make women feel more involved (Nikiari et al. 2021) and make their roles more visible. Positive feedback from members of the association and flow-on impact on the work of the CBFM team (Nikiari et al. 2021) prompted the expansion of the initiative to five additional communities, another village in North Tarawa, two in Butaritari and

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Timiti Community Women's meeting @ Tarateiti Uriam



FREE TRAINING IN NANIKAAI 29-30 JAN ON PLASTIC BOTTLE REPURPOSING

Te reirei iaon te karaobwai man te
mange ae te plasitc bwatoro nakon
te bwai ni karikirake



**Eang e FREE AKEA BOON TE REIREI. Bongina man te Moanibong 29 Tianuare
nakon te Kauabong 30 Tianuare. Te tabo bon Nanikaai. Tarebonia MFMRD
75021525 ke TAK 75125998 ibukin rongorongona ae bwainin.**

two in Abaiang. While initially focused on enhancing the effectiveness of the CBFM plan by promoting women's active involvement, the women groups recognised broader concerns and priorities that required attention. Through consultations with women in these communities, common issues such as waste management and livelihood opportunities emerged as pressing priorities (Uriam et al. 2022). Such feedback was essential for the CBFM team to plan interventions that meet specific women's needs effectively.

To address these needs that went beyond the expertise of the CBFM team, its members sought support from the Ministry of Commerce, Industry and Cooperatives to conduct financial literacy training to members of these women's associations. The financial literacy training proved to be enlightening and practical, helping participants understand their daily spending habits, identify common household expenses, and other non-immediate financial obligations. Participants also assessed their income-generating activities (including fisheries-related livelihoods) to determine if they were living within their means, revealing that many were indeed facing financial challenges.

One crucial piece of feedback from training participants was the importance for future training to involve both spouses. Recognising that decisions about finances often involve both partners, the women themselves emphasised the need for couples to undergo the training together. Implementing

newfound financial knowledge becomes more effective when both partners share a common understanding. By involving both husbands and wives in the training, families can better manage their finances and make informed decisions together. This inclusive approach ensures that the benefits of financial literacy extend beyond individual participants to the entire family unit, fostering financial stability and unity within households. This feedback will now inform the delivery of further financial literacy activities.

Another prevalent issue identified by all women's groups was improper waste management. This is a widespread problem in Kiribati due to inadequate waste disposal infrastructure and a general lack of awareness on the impacts of littering and pollution on both human health and the natural environment, especially in the outer islands. Recognising this urgent need, women's groups, such as the Tabonibara community women's group, initiated efforts to address the issue and raise awareness (Uriam et al. 2022). Litter is an important matter to women involved in coastal fisheries in Kiribati due to the high level of bivalves being harvested and consumed (Andrew et al. 2020). Similarly, Bikati women in Butaritari launched a cleaning campaign, taking the lead in cleaning and organising their homes and village. They also participated in cleaning public spaces such as pathways and meeting areas. However, ecosystem health remains a concern, prompting discussions on long-term solutions to keep villages clean. This issue needs to be addressed holistically

at the village level, by the island council, the Ministry of Environment, Lands and Agriculture Development and all key stakeholders.

One potential long-term solution involves repurposing plastic waste, an initiative that was introduced during a training session for women. Based on the principles of the circular economy, this training aimed to teach women how to transform plastic waste into useful items like flowers and earrings. The first such training took place during the launch of the Nanikaai management plan in early 2024 and was



At Nanikaai launching event. @MFMRD

led by the Ministry of Environment, Lands and Agriculture Development in collaboration with Tourism Authority of Kiribati. While this approach offers a step towards addressing the issue, it is not a comprehensive solution. To achieve lasting impact, more effective measures, such as enforcing littering rules through women's groups, may be necessary. By empowering women to enforce regulations and promote responsible waste disposal practices, communities can work towards sustainable solutions for waste management that have a detrimental impact on the environment.

A national CBFM stakeholder meeting held in Butaritari in August 2023, provided an opportunity for women from these communities to share experiences and learn from each other (Uriam et al. 2022). Skills workshops, including crafting handicrafts from seashells, seaweed ice-cream making, were organised, alongside additional financial literacy training sessions for those who had not yet participated. Furthermore, representatives from the Ministry of Women, Youth, Sports and Social Affairs presented policies on gender and gender-based violence, enriching the dialogue on women's empowerment and community development.

An interesting finding from the crafting skills workshop was that there was limited knowledge and skills among women regarding marine-based livelihood activities beyond fish selling. Women need to tap into their creativity to explore the wealth of marine resources available to them and devise ways to transform them into valuable products. Fortunately, there are existing initiatives across Kiribati led by pioneering women who have found substantial success in crafting seashell handicrafts whom members of the six associations can learn from. Additionally, there is cultural significance in attached to using seashells for crafting dancing costume accessories, presenting a prime opportunity for the women's group to further strengthen this tradition and potentially develop a sustainable income-generating activity.

Building cohesiveness

While there are already established women's groups at national and island levels, as well as within faith-based organisations, Kiribati lacks community women's groups like the ones described here, which actively promote the participation of all village women and focus on sustainable management of natural resources, environmental conservation, livelihood, and food security. Despite originating from the fisheries sector, this women's initiative's objectives are expansive, aiming to empower women to engage with various sectors for enhanced support.

At the community level, the established women's groups aim to provide additional support to women, strengthening fisheries management efforts, promoting sustainable use of resources, and acknowledging women's capabilities. Moreover, they seek to empower women within households to contribute to improving their lives and fulfill their social obligations financially, including those to the church community.

This initiative may be perceived as a duplication of existing effort on the empowerment of women or as an additional burden upon women. However, community-level

women's groups offer a unique platform that transcends denominational boundaries. Unlike existing faith-based women's groups, which often remain confined to specific denominations, these six community women's groups focus on shared interests within a village in achieving better and more sustainable livelihoods. This inclusive approach fosters unity and collaboration, enhancing the groups' strength and potential for positive outcomes. Additionally, these groups empower members to influence decisions at the village level, enhancing their visibility and recognition within the community. For instance, in Tabonibara village of North Tarawa, the women's group has gained meaningful recognition at the village level, leading to shared decision-making within the community. Normally, executive members of the village committee would handle administrative matters on their own. However, with the establishment of the Tabonibara women's group, members of the village committee can now delegate certain responsibilities to the women, promoting a more inclusive approach.

At an island level, there are established women's groups that welcome all women across the island, boasting an elected executive committee. However, despite its inclusive membership, many women from the different villages remain inactive. Operating from the grassroots level, these community groups have the potential to deeply impact all women within a village. Community-level women's groups complements the island-level women's group and enhances active participation at the village level. By becoming well-established, robust, and dynamic at the grassroots, the community group can ultimately strengthen the island-level women's group, making its function smoother and more effective.

Reflections

As we reflect on this new journey with the women's groups, there are clearly numerous benefits of this initiative, not only for the women involved but for the entire village. All six women's groups have now been formally registered as incorporated societies and have identified various issues and priorities. While some groups have already begun addressing their immediate concerns, others are still in the early stages. Nevertheless, the fact that these six women's groups are now formally established and ready to work with support, is a significant achievement.

To keep these women's groups active and progressing, the CBFM team has developed a clear plan of action. This includes the future launch of a Facebook page to aid in marketing members' products and showcasing the women's groups' achievements through photo and video updates. Additionally, the women will be urged to adopt relevant rules from their fisheries management plans. Seeking out grant opportunities to secure funding for necessary equipment and training is also a priority. Such assistance has been provided to a few communities, and as of May 2024, they had won several grants for items such as boats, fishing canoes, and toilets.

Essentially, the goal is to elevate their visibility at the national and regional level through social media platforms, inviting them to participate in national events like trade fairs, and crucially, raising awareness at the island level.

This initiative aims to tackle the issue of women's underrepresentation in the implementation of management plans. Moreover, it serves as a means to ensure the sustainability of CBFM, impacting families on a deeper level beyond merely managing fisheries resources.

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Women in fisheries profiles

Aline Mary Berry

Mark Nicholson¹, Aline Mary Berry²

A budding influence in the fisheries compliance sector of Vanuatu, embodying resilience, dedication, and a passion for sustainable fisheries, Aline Mary Berry was born into a close-knit family on the island of Tongoa and raised on Santo. Aline's personal journey is a testament to the influence of family and her determination to make a significant impact on her community.

As a Fisheries Community Based Authorised Officer in Luganville, Santo, Aline Mary Berry has spearheaded efforts in coastal fisheries compliance since September 2021. Despite facing challenges such as a lack of equipment, inadequate teamwork, and insufficient support and communication within her department, Aline chooses to remain steadfast. She has tackled these obstacles with perseverance, earning the trust and respect of colleagues and supervisors. Her efforts not only contribute to promoting or enforcing fisheries laws but also to safeguarding Vanuatu's invaluable marine ecosystems.

The Certificate IV in Coastal Fisheries and Aquaculture Compliance training marked a cornerstone in Aline's professional development, arming her with vital knowledge and skills in fisheries monitoring, control, surveillance and enforcement (MCS&E), legislation, inspection procedures, evidence collection, among vital others. This training has been pivotal in her recent growth and successes, furnishing her with the tools to excel in her field and inspiring her to pursue her mission with even greater vigour.

Aline's message to her 2023 cohort is one of unity and encouragement. Reflecting on the solid bonds formed and the shared achievements, she reminds us that, despite geographical divides, the common goal of marine conservation unites us. To those beginning their journey, Aline advises commitment, collaboration, and openness, assuring an enriching and memorable experience.

We laud Aline Mary Berry, whose story might motivate other young people to do better than the current practitioners.

Tell us a bit about yourself and background in fisheries.

My name is Aline Mary Berry. I was born in 1988. I come from a family of eight. I have three sisters and two brothers. Among my siblings, I have a twin sister, and we are the eldest. We are from the island of Tongoa, one of the islands in the Shepherd group, in Shefa Province. However, we were brought up on the island of Santo, in Sanma Province. We spent almost half of our lives in Santo. I work as a Fisheries Community Based Authorised Officer in Luganville, Santo. I started working as a Community-Based Authorised Officer in September 2021 after attending a two-week training on coastal fisheries compliance at Maritime College in Luganville, Santo.

What motivated you to get into fisheries MCS&E?

The person who significantly motivated me to pursue a career in fisheries MCS is my twin sister, Linda Berry. Linda has been a Fisheries Observer for almost nine years now. She is the first female in Vanuatu to join the observer programme, which is mainly dominated by men. Despite the obstacles, she made it through. She encouraged me to become a Community-Based Authorised Officer and recommended me to Mr Yakar for the two-week training in 2021.

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What are some challenges and rewards of the job?

Lack of equipment such as plastic bags (seizures), exhibit labels, hand-gloves, notebooks, and Incident Report Forms at the office. Teamwork is very poor. When I do the airport routine inspection on Mondays, the fisheries driver would drop me off at the airport and leave. Additionally, there is no other fisheries authorised officer with me. It's challenging and unsafe to do the inspection alone. There's a lack of communication from the bosses down to the staff. The information I receive is often inconsistent, making it difficult to know which instructions to follow. The support is lacking. Requests are made for me to undertake tasks, but there is little appreciation or support for my voluntary work. However, there have been rewards. Through my honest work in the field, I have won the trust of my bosses and other department officers, such as customs and airport staff.

What are your thoughts about the Cert IV training and what value (if any) has it contributed to your work?

The Cert IV training was incredibly beneficial for my field of work. It helped me to:

- *Understand MCS +E.*
- *Learn about my country's legislation, my powers, acts, and regulations.*
- *Improve my notebook writing skills.*
- *Conduct both compliant and non-compliant inspections.*
- *Identify the ingredients of an offence after a compliant inspection.*

- *Write an Incident Report immediately after detecting an offence.*
- *Complete a Casefile Report.*
- *Learn how to collect evidence.*
- *I received a high-visibility vest, a cap, and a notebook during this training, which have been very useful in my work. I am proud to have them.*

Any messages you wish to send to your 2023 cohort?

I want to let them know that our team last year was the best team I've ever had in fisheries. Although we come from different Pacific Island countries, we are a big family. I wish them all the best in their work and in applying what we have been taught. As the saying goes, "We are divided by land but united by the ocean."

Any advice for the present cohort?

I encourage those participating in the cohort this year. This training is among the best and will greatly aid your work in MCS+E. My advice is as follows: Ensure your attendance in class is consistent. Read through the notes provided by your lecturers. Complete your assessments and aim to pass them. When doing the CBA, make friends with your teammates and lecturers. Enjoy yourselves. It's going to be a memorable experience.





Women in fisheries profiles

Shania Shweta Chand

Young Pacific researchers supporting gender and fisheries fact sheets for the Pacific

I am Shania Chand, a 24-year-old from Rakiraki in Fiji. I'm a marine science enthusiast with a bachelor's degree and an ongoing pursuit of a postgraduate diploma in the field from the University of the South Pacific. Intrigued by the prospect of delving into the interdisciplinary study of gender in marine environments, I bring forth a passion for understanding and addressing the dynamics at play. Notably, my recent involvement as a junior consultant under the Pacific-European Union Marine Partnership (PEUMP) programme, with the Pacific Community (SPC), marks a significant step in actively contributing to this vital cause and starting my journey towards fostering gender equality within the marine sector. Collaborating with experts like Colette Wabnitz, a social science researcher from Stanford University and Natalie Makhoul, the PEUMP's gender and human rights expert along with her team from SPC, I embarked on a transformative project that looked beyond marine science

to understand human dimensions with a deep dive into gender issues and their implications for the fisheries sector. I contributed to the development of draft gender and fisheries factsheets across seven countries in the Pacific. This project aims to highlight the link between gender and fisheries, uncovering the often unnoticed contributions, roles and forms of engagement of women in fisheries and their untold stories that form a vital part of the Pacific's fisheries landscape across supply and value chains, in formal and informal economies while highlighting gender-specific challenges and barriers, but also positive gender considerations at policy level. The fact sheets also summarise gaps and opportunities in gender responsive service delivery, including at the project and programme level.

In the process, I encountered both challenges and revelations. The search for data often led me to gaps in the literature, highlighting areas where my understanding of gender dynamics in fisheries remains incomplete. These voids became not just hurdles but opportunities, fuelling my determination



to contribute to a more comprehensive knowledge base. As a Pacific Island young woman and marine science graduate I noticed the lack of opportunities throughout my academic journey to critically think about gender issues in the fisheries sector. My involvement in this research task allowed me to think outside the box, across disciplines, and to place people first, understanding gender roles, norms and how these have shaped Pacific fisheries as opposed to studying species and habitats without factoring in human dimensions and gendered structures.

What proved most captivating was delving into diverse cultures and traditions, uncovering unique roles assigned to women in Vanuatu, Solomon Islands, Papua New Guinea, Samoa, Timor-Leste, Tonga and Tuvalu. These insights not only enriched the factsheets but broadened my own understanding of the diverse ways in which women contribute to and are impacted by fisheries practices in the context of Pacific Island states.

The methodology behind developing questionnaires to find out more information to overcome serious data gaps on gender and fisheries became a crucial aspect of my learning journey. It required a meticulous approach, ensuring that our tools were effective in capturing the nuanced gender dynamics within each country because each country had their different cultural aspects and societal dynamics that determined gender roles in their fisheries sector. The experience gained from interviews with individuals from various countries added depth to our findings, providing a more holistic perspective on the challenges and opportunities faced by women in the fisheries sector.

Reflecting on my personal engagement in this sector, I see it as a transformative force shaping my own career aspirations as a young woman in marine science. The evident gaps in social research in fisheries and broader environmental studies underscore the urgency of understanding socio-economic, gender and social inclusion dimensions from the outset. This understanding not only informs my current studies but lays the foundation for future research, studies, and career choices.

In this journey, I have witnessed firsthand the resilience and strength of women engaged in fisheries across diverse cultures. Their roles, often understated, contribute significantly to the industry's fabric, yet these contributions frequently remain overshadowed. This realisation has fuelled my commitment to amplifying their voices and addressing the unique challenges faced by our Pacific women in this vital sector.

These experiences have not only shaped my current role but have also set the course for my future aspirations. I find myself drawn to further studies and research that explore the intersectionality of gender, socio-economic factors and social inclusion in the environmental sciences. The need to bridge the existing gaps in social research within the fisheries and broader environmental studies field has become glaringly apparent to me.

Understanding the socio-economic, gender, and social inclusion dimensions early on is crucial for several reasons.



Firstly, it provides a more comprehensive understanding of the intricate web of factors influencing the fisheries sector. Early exposure to these dimensions equips researchers and practitioners with the tools needed to develop inclusive policies and sustainable practices because it is not enough to ensure environmental sustainability if the benefits are not fairly distributed, women's contributions not fairly recognised and their level of influence in decisions not ensured. Leaving out gender dimensions means that we continue to exacerbate inequalities which further fuel poverty and power imbalances.

Moreover, integrating these dimensions into studies from the outset is key to fostering a more equitable and sustainable future. It ensures that future professionals are not only well-versed in the technical aspects of their field but also possess a deep understanding of the human dimensions that shape environmental practices. This holistic approach is essential for crafting effective and inclusive solutions that address the diverse needs of communities and contribute to the overall well-being of our marine ecosystems.

As I navigate the intersection of gender and fisheries, my personal take is a call to action for continued exploration and understanding of gender issues. It is a commitment to contribute to a more inclusive and equitable future in the field of marine studies.



Women in fisheries profiles

Lyn Vaike

As a Senior Research Analyst at WorldFish Lyn Vaike reflects on her life journey. "My family loved fishing - it was a hobby and after class, my father would either help mum and us children do gardening or go out fishing. The sea was our source of protein and excitement always lightened up our faces whenever dad came back with his catches for the day."

Brief background

My name is Lyn Vaike, a mother of four children. I hail from Reef Islands in the Temotu Province of Solomon Islands. I was born in Lata, the capital of my home province and as my father was a teacher and my mother a librarian, I spent most of my childhood days in three schools where they worked - Luesalemba Provincial Secondary School in rural Santa Cruz in my home province, Selwyn College National Secondary School in Maravovo, West Guadalcanal, and Waimapuru National Secondary School in Makira Province. As all these schools were located along coastal Solomon Islands and of course beside coastal dependent communities, surrounded by the vibrant culture and natural beauty of the Solomon Islands, I developed a deep appreciation for the marine environment and its significance to local livelihoods. My family loved fishing – it was a hobby and after class, my father would either help mum and us children do gardening or go out fishing. The sea was our source of protein and excitement always lightened up our faces whenever dad came back with his catches for the day. We would also buy fish from fishermen and women from the surrounding villages as well.

I pursued my education with a focus on social sciences and gender studies, driven by a passion for understanding and addressing inequalities. I completed my Post-Graduate Certificate in Gender Studies in 2019 and Bachelor Degree majoring in Sociology and Journalism in 2009 both from the University of the South Pacific in Fiji. Over the past decade, I have dedicated my career to advancing gender equality and women's empowerment in various capacities. I have had the privilege of working with both government and UN agencies. My work has involved advocating for gender-responsive policies, conducting research and implementing programmes aimed at addressing gender disparities in different sectors.

Why gender in fisheries?

Gender intersects with fisheries in complex ways, influencing the roles, responsibilities and opportunities available to men and women engaged in the sector. Women play crucial

roles in fisheries value chains, from fishing and processing to marketing and selling seafood products. However, their contributions are often undervalued and overlooked. Addressing gender inequalities in fisheries is not only a matter of social justice but also essential for sustainable development and poverty reduction. By promoting gender equality and women's empowerment in fisheries, we can enhance the sector's productivity, resilience, and inclusivity, ultimately benefiting entire coastal communities.

Current role

As a Senior Research Analyst at WorldFish, my role revolves around mainstreaming gender considerations into fisheries research, policy and practice. I lead efforts to collect and analyse sex-disaggregated data, conduct gender-sensitive research, and develop capacity-building programmes aimed at enhancing the understanding of gender issues among stakeholders in the fisheries sector. I also engage in policy advocacy, partnership development and knowledge sharing to promote gender equality and social inclusion in fisheries.

What I'm looking forward to the most

I am particularly excited about the opportunity to apply my expertise in gender analysis and programming to the dynamic context of fisheries. Not only has that but as I am new in the fisheries space, I very much looked forward to building my knowledge and capacity in the space of gender in fisheries. Solomon Islands will soon have an updated National Gender Equity and Social Inclusion in Fisheries Policy and I see my entering this space as timely as I would be able to meaningfully support the implementation of the policy. WorldFish, a renowned organisation at the forefront of fisheries research and development, presents a unique chance for me to make a tangible difference in the lives of coastal communities. I look forward to collaborating with colleagues, partners, and stakeholders to advance gender equality, social justice, and sustainable fisheries management in the Solomon Islands and beyond.

Co-designing social improvements for Fiji's domestic tuna longline fishery

Jyanti Singh¹, Juno Fitzpatrick¹, Emilie Carroll², Nahla Achi³, Thomas Auger¹, Mere Lakeba⁴, Vilisoni Tarabe⁴, Sangeeta Mangubhai⁵ and Shaunalee Katafono⁶

Leading the charge of application of social responsibility assessment and co-developing improvements for Fiji's domestic tuna longline fishery is a group of women leaders working in the fisheries space: Mere Lakeba from Conservation International (CI) Fiji and the Pacific; Radhika Kumar from the Fiji Fishing Industry Association; Juno Fitzpatrick, and Jyanti Singh from CI's global team.

Introduction

Seafood being the world's most widely traded food commodity, provides about 17% of the world's total global animal protein consumption (FAO et al. 2022; Kittinger et al. 2017). Globally, the seafood sector has recently gained a lot more attention for sustainability (environmentally, socially, and economically) due to the nature of the sector and the sector being mainly driven by environmental and economic sustainability of the seafood industry. Regardless of increased emphasis on social dimension, over the years, the social sustainability of the seafood sector has been ambiguous and less explicit (Alexander and Kelling 2024).

Human rights-based approaches to fisheries governance sustainability efforts have been emerging over the decades due to the prevalent evidence of human rights violations in fisheries and seafood supply chains including certified fisheries (Finkbeiner et al. 2024). Following this, a Monterey Framework for Socially Responsible Seafood (the "Monterey Framework") was co-developed by about 21 different industry, academic, human rights, labour rights, and conservation institutions. This framework was developed to serve as a cohesive response to a continuum of social issues faced in the seafood sector. The Monterey Framework is based on the Food and Agriculture Organisation (FAO) Voluntary Guidelines for Securing Sustainable Small-Scale

Fisheries (the "SSF guidelines"), the core labour rights set out in the International Labor Organization's (ILO) Declaration of Fundamental Principles and Rights at Work, the ILO Work in Fishing Convention No. 188 (C188), the Universal Declaration of Human Rights, the International Covenant on Economic, Social, and Cultural Rights, and the International Covenant on Civil and Political Rights, among other guiding legal and policy frameworks. Additionally, this framework significantly draws from the SSF guidelines, considering food security and poverty eradication. Co-designing of the SSF guidelines included over 4 000 fish workers and other actors from 120 countries over a two year period. Successively, a Social Responsibility Assessment tool for the seafood sector was developed (Finkbeiner et al. 2024).

Conservation International (2021) defines a Social Responsibility Assessment (SRA) tool as a co-developed risk assessment tool for conducting human right due diligence in seafood supply chains. This tool has been built out of the Monterey Framework through inclusion of specific criteria from international standards and conventions representing civil, political, economic, social, cultural, collective, and Indigenous rights. Applying the SRA tool to a fishery allows for evaluating social risks, discovering information gaps, and identifying improvement areas. The SRA is based on the three principles: i) Principle 1 on protecting human rights,

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Group photo of workshop participants. © Epineri Degei





Fishing industry representatives at the workshop. © Leba Miller

dignity, and access to resources; ii) Principle 2 on ensuring equality and equitable opportunity to benefit; and iii) Principle 3 on improving food and livelihood security and comprises of 30 indicators.

Jurisdictional Initiatives for Pacific tuna

Conservation International launched its Jurisdictional Initiative (JI), also referred to as Jurisdictional Approach (JA), for the Pacific tuna fisheries programme in 2021. This is a place-based initiative in commodity-producing regions (within the Exclusive Economic Zone of the state) that drives holistic environmental, social, and economic fishery improvements through policy and market-based approaches that align incentives between key public and private sector stakeholders, using a human rights-based approach to fisheries governance (Kittinger et al. 2021). This programme focuses on working with fishing industries and local governments, local NGOs, the Pacific Community, civil society organisations and national human rights commissions, in all three geographies (Fiji, New Caledonia and Samoa) to co-develop holistic improvement plans across environmental, social, and economic pillars, and to co-implement these priority areas.

Co-designing social improvements workshop

A half day workshop on co-designing social improvement plans for Fiji's domestic albacore longline fishery was completed with national stakeholders including the Ministry of Fisheries, Fiji Fishing Industry Association (FFIA), Fiji Maritime Academy, International Labour Organization (ILO), Fiji Immigration Department, Ministry of Employment Productivity and Industrial Relations, Maritime Safety Authority of Fiji, Fiji Human Rights and Anti-Discrimination Commission, World Wide Fund for Nature (WWF), Traseable Solutions and Fiji Development Bank. Held on 9 November 2023 in Suva, Fiji, the workshop was the first of its kind to co-design social improvement plans for a fishery – the Fiji domestic tuna longline fishery.

The key objectives of this workshop were to present and seek feedback on the findings of the research on responsible recruitment of fishing crews and SRA of the tuna longline fishery in Fiji, and to co-design an improvement plan for the fishing industry and government in alignment with the ILO C188 Work in Fishing Convention, and Pacific Island Forum Fisheries Agency (FFA's) Harmonized Minimum Terms and

Convening of SRA workshop. © Leba Miller



Conditions (HMTCs). In addition to this, a preliminary survey was also carried out to gather feedback from the stakeholders on the economic and environmental priorities for the Fiji's tuna longline industry. About 19 females out of 30 participants, participated from national agencies in co-developing the social improvement plan for Fiji's domestic tuna longline fishery.

Findings

Responsible recruitment

The responsible recruitment study was carried out in partnership with Fish-Wise, a non-governmental organization that provides expertise in sustainability services, human rights action, and seafood traceability practices (FishWise, 2024). A case study was completed on the Indonesia and Fiji migration corridor and risks associated with it. The research identified regulatory actions that could be implemented to promote responsible recruitment in seafood supply chains in Fiji. Findings revealed some of the challenges faced by fishing crews with Fiji' regulatory processes which include:

- Lack of access to grievance mechanisms
- Fear of retaliation
- Lack of access to effective remedy
- Apprehension about migration status
- Lack of information on terms of employment contract

A potential roadmap for responsible recruitment actions was identified from this case study in Table 1 below.

Social Responsibility Assessment

Following the diagnostic application of the SRA tool to the fishery, eight (8) social improvement areas were identified in the context of the two (2) key stakeholder groups (Government and Fiji fishing industry). These improvement areas are shown in Figure 1.

Main outcomes of the workshop

The main outcome of this workshop was co-developing the improvement actions based on the eight (8) broad improvement areas identified through the SRA study. These sets of improvement actions were co-designed for public sector (government) and private sector (fishing industry). As part of this process, a key stakeholder mapping was also done. Table 2 below shows the improvement actions identified for each of the improvement areas and key stakeholders responsible.

Stakeholder mapping

A total of 19 stakeholders were identified during the co-designing improvement plans workshop with a combination of national, subregional and regional stakeholders. The social improvement plan co-designed in the workshop would guide in co-implementing the different improvement areas and priority actions with the stakeholders identified either through partnerships, collaborations, workshops, and capacity building trainings.



Figure 1. Social improvement areas identified through the SRA study of Fiji's domestic tuna fishery.

Table 1 Responsible recruitment actions identified for the domestic tuna longline fishery.

Public sector actions	Private sector actions
<p>Developing national level regulation, in line with the FFA HMTCS, outlining clear requirements for companies to develop policies around human rights that include:</p> <ul style="list-style-type: none"> a Defining clear roles and responsibilities for recruitment agencies. b Monitoring agencies, including reviewing contracts and payment of wages. c Paying recruitment fees to agencies on behalf of workers. d Reimbursing fees that were charged to workers or deducted from their wages. e Safely repatriating workers after contract ends or termination. 	<p>Developing a policy, in line with national level policy and requirements, indicating company commitment to pay for recruitment fees.</p> <ul style="list-style-type: none"> • Pay back all fees that have been deducted from workers for recruitment. <p>Developing a clear policy on worker repatriation.</p> <ul style="list-style-type: none"> • Ensuring safe return of workers to their home after contract termination or if needed for medical reasons. <p>Defining and communicating clear expectations for recruitment agencies.</p> <p>Clearly outlining roles and responsibilities for companies and agencies</p> <p>Ensuring workers can fully understand contracts (in their own language) and have the information they need about their working terms and conditions.</p> <p>Ensuring contracts are aligned with Employment Relations Act (2007), FFA HMTCS, and Certificate Holder (CH) Forced and Child Labour Policies, Practices and Measures to MSC requirements</p>
<p>Developing a grievance mechanism and remediation component that provides workers with</p> <ul style="list-style-type: none"> a Safe and trusted grievance mechanisms, through which they can raise issues. b Access to timely and effective remediation when issues arise. c Meaningful participation in the development of companies' policies and procedures on human rights and specifically responsible recruitment 	<p>Developing policies and procedures to identify and remediate issues.</p> <ul style="list-style-type: none"> • Ensuring workers have access to safe and trusted grievance mechanisms. • Supporting worker participation in the design and implementation of policies, <p>Remediate issues, making sure to meaningfully include workers in the process.</p>
<p>Developing systems for monitoring and oversight of companies with the goal of</p> <ul style="list-style-type: none"> 1 Ensuring companies develop commitments in line with regulatory requirements, including a clear policy around responsible recruitment with expectations for agencies. 2 Reviewing companies' implementation of their policies to ensure they are effectively protecting workers and promoting worker participation where possible. 3 Implementing enforcement measures to incentivize companies to act, including revoking licenses for non-compliance 	<p>Building oversight capacity to monitor agencies.</p> <ul style="list-style-type: none"> • Monitoring agencies' payment of wages for migrant workers. • Reviewing contracting terms and documentation. • Developing and requiring a clear policy on repatriation. <p>Implementing systems to verify the ages of crew members at the time of recruitment to mitigate the risk of child labor.</p>



Figure 2. Key stakeholders identified in co-designing social improvements for Fiji's tuna longline fishery.

Table 2. List of priority actions for key stakeholders for each improvement area identified through the SRA.

Improvement areas	Public sector priority actions	Private sector priority actions
Compliance with FFA's HMTCs	<p>Leading in the delivery of the HMTCs.</p> <p>Providing technical advice on the contents of the human/labour rights policy template, procedures for policy implementation, and training.</p>	<p>Providing inputs on the national policies.</p> <p>Leading development of human/labour rights policy template, policy implementation procedures, and training.</p> <p>Considering measures that break down language barriers with migrant workers.</p>
Occupational Health and Safety (OHS)	<p>Providing technical advice as required.</p> <p>Considering national OHS training connected to licensing to ensure best training coverage outcomes.</p>	<p>Developing template policies and procedures.</p> <p>Identifying opportunities to engage with government and banks to upgrade vessels as needed.</p>
Forced Labour for Migrant workers	<p>Defining clear consequences for forced labour violations.</p> <p>Defining monitoring of forced labor</p> <p>Identifying third-party socialising policies for migrant workers.</p>	<p>Identifying if issues raised in the SRA at company level.</p> <p>Defining a remediation plan.</p> <p>Supporting efforts at the government and FFIA level.</p>
Child Labour	<p>Conducting spot checks on vessels and to review company recruitment documentation.</p> <p>Referring the most serious cases to the National Coordinating Committee on Children.</p>	<p>Establishing, reviewing and/or updating policies and procedures at the company level regarding age verification of workers.</p> <p>Developing clear procedures for reporting violations of child labour to FFIA to remediate issues and protect affected children.</p>
Employment Contracts	<p>Providing input on legal expectations around contracting.</p> <p>Defining contracting expectations in fishers in law.</p> <p>Establishing more stringent requirements for companies around recruitment.</p> <p>Establishing flexible requirements on bank accounts to improve migrant access to safe banking options to protect their earnings.</p>	<p>Verifying company compliance with contracting requirements.</p> <p>Developing approach to monitoring recruitment agencies and defining roles and responsibilities.</p> <p>Companies should have oversight over payment of wages.</p> <p>Providing input on contract laws for the seafood sector.</p> <p>Developing plan to compensate for excessive overtime.</p> <p>Ensuring disciplinary action does not ever include pay reduction.</p>
Corporate Responsibility and Transparency	<p>Accountability/responsibility here is centred on industry.</p>	<p>Establishing system for regular financial auditing by a third-party of all FFIA members (FFIA could take ownership here).</p> <p>Establishing worker engagement channels with special provisions for migrant crew.</p>
Freedom of association and collective bargaining	<p>Consider ratification of ILO 154 regarding collective bargaining.</p> <p>Repeal laws infringing on rights to freedom of association.</p>	<p>Developing clear policies supporting crew's rights to freedom of association (FoA) and collective bargaining.</p> <p>Training by FFIA for companies on how to support FoA for their crew.</p> <p>In alignment with action #6, establish channels for crew engagement.</p>
Ratification of ILO C188	<p>Reviewing and ratifying ILO C188.</p>	<p>Vocalising support of the ratification of ILO C188 with government</p> <p>Adopting ILO C188 in company practices.</p>

Conclusion

The application of the social responsibility assessment diagnostic tool to Fiji's domestic tuna longline fishery and co-designing improvements workshop, highlighted gaps in national labour laws and recruitment policies, and lack of inter-agency coordination and collaborations at a national level in this fishery. It also determined that international standards like ILO C188 and regional instruments like FFA's HMTCs have not been implemented in the jurisdiction. Through the SRA, potential priority actions and key stakeholders were identified to help address these social improvement areas. The use of SRA appears to be an essential mechanism in assessing and driving social improvement pathways in a fishery between public and private stakeholders.

Acknowledgments

Conservation International acknowledges the Walmart Foundation for funding the Jurisdictional Initiative for Pacific Tuna project in Fiji as one of the geographies under which this social responsibility diagnostic assessment has been applied and improvements have been co-designed with local stakeholders. We thank the participants of the workshop for their contribution in validating the eight key improvement areas identified through the SRA, identifying priority actions for the fishery improvement plan, and sharing their knowledge and experiences. Conservation International also acknowledges the support from our key partners like the Ministry of Fisheries and Fiji Fishing Industry Association for their continued engagement in this initiative.

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A first for Vanuatu: Lessons from the 2024 Women in Fisheries Forum

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The participation and contribution of women in fisheries is widely under-reported and therefore remains undervalued (Harper et al. 2017; Korlagama et al. 2017; Mangubhai & Lawless 2021). Despite increasing efforts in fisheries research to describe the roles and engagement of women in fisheries, there is still a gap in knowledge in terms of gender equity and inclusion, as well as, widespread inequality in fisheries governance. This is likely because women's roles in fisheries have historically not been classified as 'fishing' (Harper et al. 2017). Women in fisheries often focus on gleaning, processing, selling and trade, and other activities (e.g., such as shell crafting, etc.). Therefore, their activities, participation and contribution to fisheries development is often overlooked. In Pacific Islands countries and territories (PICTs) women are often the main providers of stable food supplies in households, contributing to food security at household level and at community level. This can include providing up to 50% of small-scale fisheries catches (Harper et al., 2013).

Vanuatu is in the Pacific ring of fire and has over 80 inhabited islands. Coastal fisheries are known to be very diverse across all the different islands and provinces, with different species harvested in different areas and therefore, different fishing methods used accordingly (Campbell et al. in review). Globally, Vanuatu is one of the most vulnerable countries to disasters and extreme weather events, such as tropical cyclones,

“Where there is information there is progress.”
Ms Leisavi Joel, Chairwoman of the Havanna Tasi Vanua network and Vanua Tai monitor

earthquakes, tsunamis and volcanic eruptions (Aleksandrova et al. 2021). With impacts of climate change and associated extreme weather events, women in fisheries are adopting various roles which support community, economic and social resilience (Alam & Rahman 2017; Charan et al. 2016; Singh et al. 2022). Literature on the roles of *Ni-Vanuatu* women in fisheries is scarce however previous studies have highlighted their active involvement in several fishing activities, taking on different roles, from fishing, to processing and trade (David 1989; Gereva & Vuki 2010). Such a range of roles are particularly visible in times of disaster when women are key actors in ensuring food security at household and community level, including through their efforts to recover gardens, receive dry rations from external aid and sell any fresh produce at local markets in the aftermath of a disaster (Obregón et al. 2024). Previous studies have also recognised their efforts as capital mobilisers, and entrepreneurs in difficult times (Clissold et al. 2020).

The Vanuatu Fisheries Department (VFD), under the Ministry of Agriculture Forestry, Fisheries and Biosecurity (MALFFB), has increased their efforts to promote the

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All participants that attended the Women in Fisheries Forum in Port Vila, Vanuatu on the 26th-27th March 2024



inclusion of women in fisheries development, which aligns with the MALFFB Gender Equality Action Plan (2023-2026). VFD does this through supporting their staff through capacity development and training, organising gender and social inclusion training for staff and for communities, and overall working together to close the data gap by collecting sex-disaggregated data on CBFM governance, and catch data from all fishers, including gleaning activities. As part of an aspiration to improve capacity building at the community level, the VFD wanted to hear from women engaged in fisheries activities to improve activities and strategic planning. Drawing inspiration in part from the Women in Fisheries Network – Fiji, National Women in Fisheries Forum held in 2023 (Morris and Tuivucilevu 2024) a similar gathering was proposed.

On the 26 and 27 March 2024, the VFD hosted its first Women in Fisheries Forum (WiFF) in Port Vila, the capital of Vanuatu (see image 1). The forum brought together more than 40 people, including representatives from different stakeholder groups like government departments, civil society organisations (CSOs), non-governmental organisations (NGOs), and male community representatives from Shefa Province. By far the largest group were community representatives, counting 18 women fishers and fish workers. The objectives of the WiFF were two-fold:

- i) To provide a platform for *Ni-Vanuatu* women in fisheries to share their concerns, success stories, challenges faced, and opportunities for the future
- ii) To start a network between the women in fisheries themselves and other fisheries development stakeholders in Vanuatu, including government departments, CSOs, NGOs, and other stakeholders.

Throughout the two days, participants who are active in fisheries value chains (as fishers, market vendors, in aquaculture, in resource management etc.) shared their success stories of how they generally overcome natural disasters, poverty, or built their business (pearl, fish and mud crab farming) to better support themselves and their families (see image 2). Though the forum focused on women in fisheries, it was widely recognised that men were a key aspect for the success of the women. Men that would support the women in developing their business, remaining resilient in the face of challenges faced, and overall supporting their engagement and contributions at any level. Several group discussions were organised, which encouraged participants to share challenges faced but also to think of opportunities that they saw available to them. This included specific initiatives available in country to support women in fisheries in various ways (e.g., subsidies available, information sources, etc.). The forum also provided an opportunity for the women to not only hear about experiences from a Women in Fisheries - Fiji forum spokesperson through a specially recorded presentation, but also to connect with the VFD, other government departments and local partners to create a platform for exchange and learning.

At the end of the workshop, five key actions were identified by participants for the future of women in fisheries in Vanuatu, including:

- 1 **To create the first Women in Fisheries Network for Vanuatu.** The first WiFF held last March only captured the voices of women in the island of Efate and smaller islands nearby. To fairly represent the voices of women in fisheries in Vanuatu, the network should include women fishers from the six different provinces, and ideally fishers from most inhabited islands, as the challenges each fisher may face and the strategies to navigate those challenges will likely differ between islands.
- 2 **To use social media as a platform to support the engagement of network members.** Social media is a key tool for information sharing worldwide. In Vanuatu, it is a powerful communication tool, particularly Facebook, as most individuals access it through smartphones.
- 3 **To support capacity development of women in fisheries.** To actively engage in fisheries development and gain the knowledge and skills to reach their goals, women in fisheries identified that some training and professional development would be needed, such as leadership training, gender mainstreaming, financial literacy and small-business building.
- 4 **To have financial support.** Financial support to help setting up the network, facilitate meetings among network members and support the implementation of activities led by the network will be critical in the next few years. It is hoped that this support will be gained from NGOs, government agencies or private industries.
- 5 **To work together.** All participants agreed that the best way for network members to work together and enhance the strength of the network is for women fishers to engage in already existing fisher groups or associations and/or create new ones, if needed. The support of VFD during these steps will be critical, as well as that of other stakeholders such as (government departments, CSOs, NGOs, etc.)

Overall, the Vanuatu Women in Fisheries Forum was widely applauded. It was a momentous event for VFD and nationally, as it supported the voices of women fishers, fish workers and other stakeholders involved in fisheries development as advocates of change. VFD's Principal Aquaculture Officer said: "*Participating in this forum has enabled [the women] to realise that they are playing an important role & participating in the development, conservation and management of fisheries resources in their own communities*". The VFD and all participants shared the hope that such forums could be hosted regularly, creating a platform to share experiences, concerns and think of innovative ways to remain resilient in the face of the many challenges faced by communities in all provinces of Vanuatu.



Participants of the WiFF sharing thoughts during a working group activity in Port Vila, Vanuatu on the 26 and 27 March 2024

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Empowering Kiribati women in seafood safety and quality

Cherie Whippy Morris,¹ Tereere Tioti,² Shirleen Bala³ and Lore Croker⁴

Background

The University of the South Pacific (USP) is one of four key regional partners currently implementing the Pacific-European Union Marine Partnership (PEUMP) programme to fisheries professionals in 15 countries. USP's responsibility within PEUMP is to build capacity through education, training, research and development for key stakeholder groups involved in fisheries and marine resource management. The education component encompasses technical vocational education and training as well as continuing professional development programs. These programmes provide tailored technical and generic upskilling opportunities to address existing and emerging issues in the Pacific. One of the key principles underlying the overall approach of the PEUMP programme involves integrating human rights and gender equality through a rights-based approach. This is reinforced by recommendations from the Institute of Marine Resources training needs and gaps assessment (IMR 2019) at USP, creating opportunities to incorporate gender equality into USP programmes.

Geographical location, language and finance are key barriers to entry into high-level formal tertiary education programmes. Through in-country training, the PEUMP project provides an enabling environment where women and men, young and mature, from diverse cultures can thrive, contribute their unique perspectives and participate fully in decision-making processes in their country. Furthermore, professional development training enables fisheries professionals to address challenges in food security, livelihood and economic growth, and advocate for meaningful change at

the local and national levels. Fishery resources are essential to Kiribati for government revenue, food security, employment, and livelihoods. However, there is a real challenge to long-term food security from population pressures (Campbell & Hanich 2014). Recent movement of some I-Kiribati residents from central Tarawa and other islands of the Gilbert group to Kiritimati Island presented a unique opportunity to support upskilling of the fisheries industry and institutional development initiatives. Such capacity building aligns to the Kiribati vision 20-year plan, government manifesto, national fisheries policy and the Ministry of Fisheries and Marine Resources Development strategic plan.

About the micro qualification and sponsorship

In 2019, regional experts developed the micro qualification in maintaining seafood safety and quality which was accredited under the Pacific Qualification Framework. This professional qualification is intended for people who work in the seafood industry to ensure quality is maintained throughout the supply chain. This includes deckhands, fishers, unloaders, vendors, market intermediaries (traders), small-scale processors, seafood retailers and/or suppliers (SPC 2019). This micro qualification programme aims to strengthen knowledge, skills, and competencies by demonstrating basic post-harvest seafood handling skills, outlining causes of seafood spoilage and quality control factors and applying inspection techniques and guidelines to maintain seafood quality.

After advertising scholarships in Kiribati and receiving applications from interested fisheries professionals, the selection of eligible candidates was conducted by a committee

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Kiritimati Island trainees of the seafood safety and quality micro qualification with their certificates in professional development. © Lore Croker





1 Filleting



2 Marinating



3 Arranging on tray



4 Sun drying

Steps in processing tuna jerky in Kiritimati Island. © Lore Croker

comprising senior staff from USP, including subject specialists. The committee found an equal number of females and males eligible. The eligibility criteria included: (1) satisfactory completion of year 12 level of education or equivalent; (2) a good command of English reading and writing skills, including basic numeracy skills; and (3) be involvement in seafood handling and/or processing activities. Twenty successful candidates, 11 of which were female were offered scholarships for the micro qualification programme.

Delivery in Kiritimati Island

The micro qualification in seafood and quality programme was delivered by USP in Kiritimati Island, Kiribati from 13-17 February 2024. The facilitation team included Ms Tereere Tioti, Director Kiribati Seafood Verification Agency, Competent Authority, MFMRD, Ms Shirleen Bala, PEUMP

course developer and trainer and Ms Lore Croker, PEUMP communications assistant provided the communication and visibility support.

Twenty trainees in Kiritimati Island attended the training which comprised of theory and practical sessions focused on how to ensure quality and safety of seafood products throughout the supply chain from fishers, processors, market vendors to the consumers' plate. Topics included seafood spoilage, types of seafood hazards, quality control measures (including identifying critical control points) and good hygiene practices. Group exercises required trainees to identify the products of interest and map the supply chain from "hook to plate". This allowed them to identify steps that are important for fishers, processors, and market vendors to implement for reducing or eliminating seafood spoilage and significant risk hazards.



Erimwa (left) and Materetia (right) pose with their certificates at the end of the programme. © Lore Croker

Practical sessions included the observation of good and bad hygiene practices of fish vendors along the roadside and at a fish processing facility. While at the Central Pacific Producers Limited facility, the trainees were also required to observe methods of maintaining the cold chain, and proper methods of packaging and storage. According to the trainees (both women and men), key challenges in Kiribati were inaccessibility of ice, the difficulty of visually detecting fish with ciguatera, lack of understanding on seafood spoilage, quality controls and proper hygiene practices to maintain safe and quality products for the public. The final practical session focused on product development, where trainees learned to craft items like smoked milkfish and sundried tuna jerky. All 20 trainees successfully completed the micro qualification with 55% being women involved in training and formal seafood fishing, processing, and sales.

Evaluation and Conclusion

The micro qualification in seafood safety and quality feedback through a post-evaluation survey was encouraging and indicated that 100% of the trainees agreed the programme was informative and thought that the training materials provided were good to very good. The trainees' general perspectives on the programme included: the theory and practical sessions were highly informative; group sessions shared valuable insights; the use of simple language made the content easy to understand and the presentation was exceptionally well delivered.

Erimwa Teinging, an officer at Central Pacific Producers Limited (CPPL) in Kiribati, found significant value in undergoing the micro qualification training: "This training has strengthened my knowledge and will be useful in my current role at CPPL where we export lobsters and fish while also supplying local markets." Materetia Abaiota, the officer in charge of the Solar Salt Division at the Ministry of Line and Phoenix Islands Development, participated in the seafood safety and quality training alongside Erimwa

Teinging. Materetia stated: "These trainings have equipped me with knowledge and skills to strengthen safety and quality practices at the Solar Salt Division, (a government-owned enterprise). It has also motivated me to venture into establishing my own seafood business." Materetia's involvement in the training signifies a proactive approach to enhancing safety and hygiene practices within the Solar Salt Division. Erimwa and Materetia showcase how specialised training empowers professional women to enhance both individual expertise and community development.

Providing Pacific Islanders, especially women, with access to quality education, training and mentorship opportunities can empower them with the knowledge and skills needed to overcome barriers and pursue fulfilling careers in fisheries and related sectors. Evaluating the impact of the micro qualification learnings on Erimwa and Materetia six months down the line would involve assessing their performance improvement, skill development, personal development, and career advancement.

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Assessing and advancing climate resilience in Fijian marine ecosystems, fisheries and fishing communities

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Women and men have their own unique capabilities and knowledge that can help their communities adapt to climate change and its effects on their fisheries. Our project is working in Ra Province to co-develop, learn, understand and advance climate resilience in iTaukei fisheries and fishing communities.



View of Nabukadra village, Ra. © Salanieta Kitolelei

Background

Fiji's rich marine biodiversity supports small-scale marine fisheries that are a basis for food security, livelihoods, and culture for many villages and residents. These fisheries—including the marine ecosystems they depend on and the villages and human communities they support—demonstrate resilience, while also being increasingly threatened by climate change (Mangubhai et al. 2019). Fijian nearshore fisheries have, thus far, shown resilience to marine heatwaves and increased intensity of tropical cyclones due to a combination of strong ecological and social factors (Eurich et al. 2023). Fijian reefs have high biodiversity, biomass, and connectivity; these features have likely contributed to the observed recovery and resilience of its fisheries to climate-related disturbances. iTaukei communities have strong social ties and relationships as well as traditional ecological knowledge of marine species and habitats that contribute to their resilience to various types of disturbances.

In Fiji as elsewhere, climate impacts, responses, and resilience are not experienced in the same way across all groups within a fishery or community. iTaukei women and men in Fiji can hold different traditional ecological knowledge, including on fisheries (Thomas et al. 2021; Kitolelei et al. 2021). This knowledge has helped them adapt to change, sustainably utilise resources and conserve their biodiversity (Lauer and Aswani 2009) and respond to and recover from severe tropical cyclones (Chaston Radway et al. 2016, Thomas et al. 2019). Furthermore, women and men use different (as well

as overlapping) habitats for their targeted fisheries species (Thomas et al. 2021), which also affects the ways they are impacted by disasters. Following Cyclone Winston, women could continue to fish in coastal habitats by moving between habitats as needed depending on cyclone impacts; men generally fish further offshore and may have needed longer to repair damaged boats and engines (Chaston Radway et al. 2016).

While fishing communities and ecosystems have withstood, rebuilt, temporarily transformed, and eventually recovered from several prior cyclones, it is not clear whether they will continue to be able to do so. Small-scale coastal fisheries face cumulative effects of multiple stressors (e.g., cyclones, heatwaves, disease, overfishing, land-based pollution, sedimentation) that are increasing in frequency and intensity thereby reducing the scope for climate resilience in the context of multiple stressors. In addition, different circumstances and characteristics of fishing communities, including individual groups within communities (e.g. women, men, elders, youth, fishers, etc.) mean that they are not all equally resilient or resilient in the same ways to climate impacts.

In 2023, an interdisciplinary global working group advanced approaches for assessing and operationalising climate resilience in marine fisheries by conducting a literature review to identify ecological, socioeconomic, and governance attributes of marine fishery systems that support climate

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resilience (Mason et al. 2022); analysing case studies of 18 fisheries around the world to examine these attributes in practice and identify fishery resilience pathways (Eurich et al. 2024); and developing a toolkit for climate resilience assessment and planning in marine fisheries that launched in January 2023 (ClimateResilientFisheries.net).

Attributes of climate resilient fisheries spanned ecological, socioeconomic, and governance dimensions of fisheries and could be organised into domains recognised as important for supporting adaptive capacity (Cinner et al. 2018), including:

- **Assets:** resources that can be drawn upon to respond to change
- **Flexibility:** ability to switch strategies or make other adjustments
- **Organisation:** relationships, networks, and institutions that operate at different scales
- **Learning:** process for recognising change, driving factors, and possible responses
- **Agency:** capacity to act on choices.

Using the climate resilient fisheries planning toolkit, our project will co-develop fishery-specific and context-appropriate climate resilience strategies in three selected villages in Nakorotubu, Ra on the eastern coast of Viti Levu, Fiji. As we implement our project over the next two years (2024-2025), we will be considering the gender dimensions of fisheries and work with communities to design gender-responsive resilience strategies.

Research approach

The overall goal of our project is to understand and advance gender-responsive climate resilience in small-scale Indigenous coastal fisheries in Fiji. In each community, our project will co-develop and co-conduct a forward-looking participatory climate resilience assessment and planning process to (1) understand past and future vulnerabilities to climate impacts, (2) identify resilience features of the fisheries and factors that

support or constrain resilience, and (3) develop strategies for enhancing climate-resilient fisheries that are gender-sensitive and appropriate. These goals will be accomplished through three objectives:

- 1 Working closely with three Indigenous communities in Fiji, conduct a climate resilience assessment that considers climate impacts, adaptation responses, and resilience attributes of the coastal fisheries system.
- 2 Identify potential gender-responsive climate resilience strategies for select coastal fisheries, including Indigenous approaches, and evaluate their potential effectiveness, feasibility, and implementation timelines.
- 3 Communicate information about the climate resilience assessment process, key findings, and implementation needs to local, national, regional, and international audiences.

Focus communities

Our research is being conducted in three coastal villages in Ra Province—Namarai, Nabukadra and Nadogoloa. Data on the health of coral reefs and the socioeconomic characteristics of these communities will be used to cross-validate community responses. All three villages are highly dependent on fisheries for food security and local livelihoods, are relatively remote, and have been impacted by multiple cyclones within the last decade, including Cyclone Winston. All three communities engage in low-cost, low-technology fishing with different species and habitats targeted by different fishers (i.e., women vs. men). Women generally target mangrove areas and shallow coral reef habitats, and collect fish, invertebrates and marine algae by hand or hook and line, primarily to feed their families; however, an increasing number of women sell some of their catch to support household income (Thomas et al. 2020, 2021). In contrast, men target deeper coral reef habitats and open waters, with their catch primarily for sale

Men, women and youth of Nadogoloa village participating in workshop. © Jake Taoi



in local markets (Ibid.). The degree to which value-adding is done to seafood within these communities is poorly documented. Information for this project is being collected through key informant interviews, focus group discussions and workshops tailored for each village.

Expected contributions and outcomes

- Foster adaptation and resilience in Fiji's small-scale coastal iTaukei fisheries through collaboration between the local communities and an international collaboration to advance understanding of climate change impacts, drivers, adaptation approaches and pathways and needs for climate resilience in fisheries as they overcome recent disasters which disrupted their fisheries systems.
- Use an intersectional lens that recognises that climate impacts, adaptation options, and resilience are all influenced by societal distinctions (e.g., gender, fishery roles), culture and traditions, as well as the broader ecological, socioeconomic, and governance contexts within which these fishery systems are situated.
- Co-develop tangible information and products to support climate resilience in Fijian coastal fisheries.
- Work directly with three communities to develop contextually-relevant information about climate risks to fisheries, resilience attributes and adaptive capacity (or constraints), and strategies for climate-resilient fisheries.
- Share actionable fisheries resilience strategies back to each fishing community as well as recommendations for actions needed at national, regional, and international scales to support the resilience of small-scale coastal fisheries.

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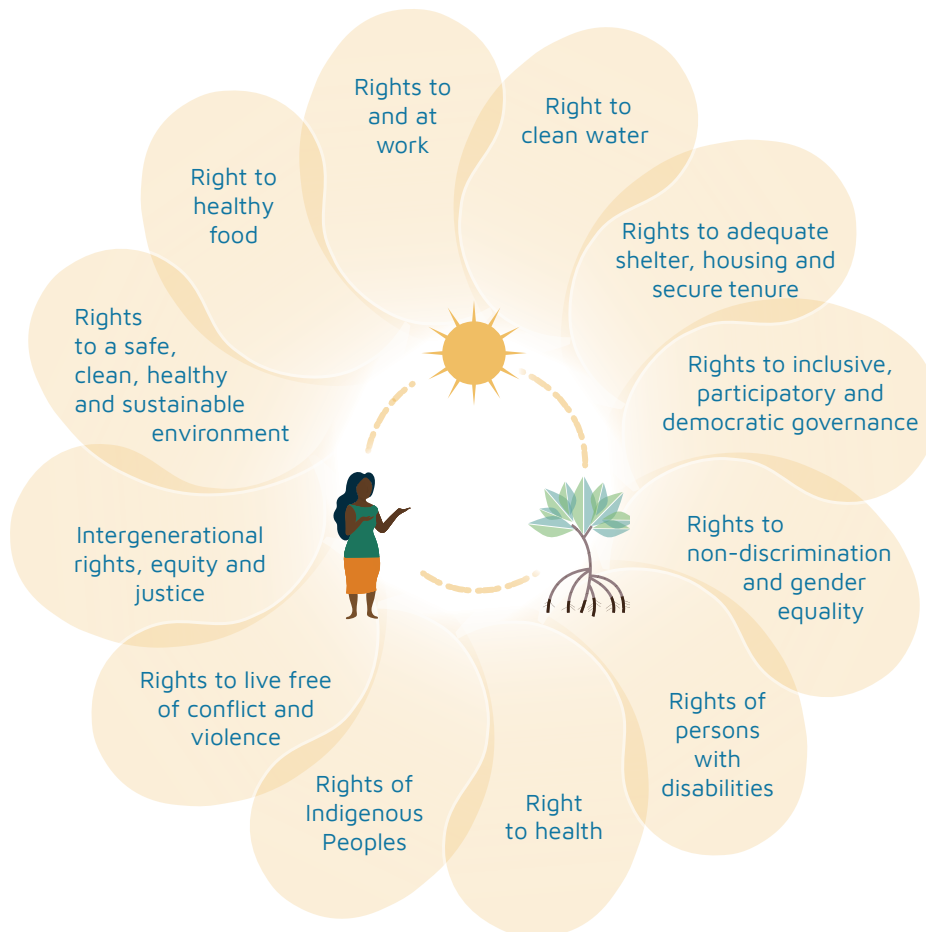
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Kiwa Initiative launches simple, easy to use tools to help Pacific practitioners integrate gender and human rights into nature-based solutions

Environmental and social issues cannot be separated – a thriving planet cannot be one that contains widespread human suffering or restricts human potential, and humanity cannot exist on a dying planet.¹



Nature-based solutions (Nbs) address societal challenges through actions to protect, sustainably manage, and restore natural and modified ecosystems, benefiting people and nature at the same time. Fisheries can serve as a vital nature-based solution, playing a significant role in maintaining ecological balance and providing sustainable livelihoods for many Pacific Islanders. Through responsible management practices, fisheries can contribute to the preservation of aquatic biodiversity while ensuring the well-being of coastal communities. Sustainable fishing methods, such as selective harvesting and habitat protection, promote the resilience of marine ecosystems, mitigating the impacts of overfishing and habitat degradation. Embracing fisheries as a nature-based solution means recognising their inherent link to the health of marine environments, fisheries management, and fostering a harmonious coexistence between humanity and the natural world.

Three tools have been developed to support advocates, policymakers and practitioners better consider and integrate gender equality, disability and social inclusion (GEDSI) and broader human rights and human rights-based approaches (HRBA) into Nbs for climate adaptation. These resources are the result of a collaboration between the Secretariat of the Pacific Regional Environment Programme (SPREP) and Talanoa Consulting under the Kiwa Initiative.

Human rights for nature-based solutions in Pacific Islands:

The purpose of this booklet is to provide an introduction to what human rights are and why they are relevant and should be considered when designing and implementing Nbs for climate change adaptation in the Pacific Islands. Each of the 12 human rights identified are described in detail, with Pacific Islands examples (where available) to illustrate their

¹ Smallhorn-West, P., Allison, E., Gurney, G., Karnad, D., Kretser, H., Lobo, A.S., Mangubhai, S., Newing, H., Pennell, K., Raj, S., Tilley, A., Williams, H. and Peckham, S.H., 2023. Why human rights matter for marine conservation. *Front. Mar. Sci.* 10:1089154. doi: 10.3389/fmars.2023.1089154



relevance to NbS practitioners (Fig. 1). This is not to say other rights are not important, rather than these 12 human rights have been highlighted as good entry or starting points for learning and considering how human rights intersect with NbS. Understanding the relationship between human rights and NbS is an important first step to integrating human rights in NbS. A three-module training kit has also been developed which includes a trainer's guide and slides. Posters as visual aids to support advocacy and education efforts are also available.

Gender equity, disability and social inclusion analysis for nature-based solutions in the Pacific Islands: This guide provides information and guidance on how to conduct a GEDSI analysis and to use the findings to ensure NbS stakeholders promote fairness, address barriers related to gender and disability, and ensure social inclusion in NbS initiatives. A GEDSI analysis provides information that

can be used to design interventions to ensure NbS provide equitable benefits for every member of the community.

Assessing human rights risks to inform nature-based solutions in Pacific Islands: This assessment tool has been designed for organisations and practitioners working on NbS in the Pacific Islands, who wish to ensure their projects do not cause harm to people. A human rights risk assessment helps to identify and address risks to individuals and groups of stakeholders, including communities, from planned NbS. With the right social safeguards in place, NbS can positively reinforce human rights, and are likely to be more fair and effective. The risk assessment should not be seen as an additional burden on already busy practitioners. Rather the process of identifying risks is an important opportunity for stakeholder engagement, enhancing the quality of NbS design and implementation, while enhancing accountability for impacts on human rights.

The Kiwa Initiative – Nature-based Solutions for Climate Resilience aims at strengthening the climate change resilience of Pacific Islands ecosystems, communities and economies through nature-based solutions (NbS), by protecting, sustainably managing and restoring biodiversity. It is based on an easier access to funding for climate change adaptation and NbS for local, national authorities, civil society and regional organisations of Pacific Island Countries and Territories including the three French overseas territories. The Initiative is funded by the European Union (EU), Agence Française de Développement (AFD), Global Affairs Canada (GAC), Australian Government Department of Foreign Affairs and Trade (DFAT) and New Zealand Ministry of Foreign Affairs and Trade (MFAT). The Kiwa Initiative has established partnerships with the Pacific Community (SPC), the Secretariat of the Pacific Regional Environment Programme (SPREP) and the Oceania Regional Office of the International Union for Conservation of Nature (IUCN-ORO). More information on www.kiwainitiative.org

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All tools and resources can be freely downloaded from the Kiwa Secretariat website:
<https://kiwainitiative.org/en/news/download-now-our-freely-available-resources-on-gedsi-and-humanrights>

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