

Why mangroves and people benefit from feminist food research: Insights from Marovo Lagoon, Solomon Islands

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We discuss how a feminist food system approach can help us learn about the gendered values, practices and knowledges of mangrove gleaning in Marovo Lagoon, Solomon Islands. Importantly, we highlight the contributions of feminist analysis to understand not just what women do, but how gendered ideas shape what is even considered important within the food system. Ultimately, we point out the values of intersectional feminist research on mangroves and offer ideas as to how researchers, development practitioners and policy-makers can put feminist approaches into practice.

Introduction

Mangrove forests are biodiverse ecosystems that serve many roles, from habitats for fish and other aquatic species, to forests that sequester carbon and mitigate climate change impacts (Friess et al. 2021). Mangrove health and sustainable use are particularly relevant for local food livelihoods in the Pacific Islands, even as mangrove forests are rapidly being degraded. Furthermore, mangrove health intersects directly with gender, as women in Solomon Islands are often the primary community members collecting a variety of mangrove shells (*Polymesoda* spp.), crab (*Scylla serrata*), oyster (*Saccostrea cucullata*) or mangrove bean (propagule of *Bruguiera gymnorhiza*) for consumption or local sale. Therefore, providing researchers, practitioners and policy-makers with a better understanding of how gender, environmental conservation and food livelihoods overlap in mangroves, is timely and urgent. Drawing from our qualitative research in Marovo Lagoon, Solomon Islands, we discuss the benefits of a feminist food system approach to help us understand how communities value, use and experience mangrove forests for food livelihoods. We focus on a food system lens as opposed to a fisheries lens because some of the foods that are collected are both marine animals and vegetation (e.g. mangrove bean). Furthermore, a food system lens can move beyond technical approaches used in fisheries management to better assess the cultural and social dimensions of how livelihood pressure on mangroves relates to broader changes in Pacific food environments.

We find that a specific “feminist” food system approach (Hovorka 2013) pushes past a narrow focus on women’s empowerment, or women and resource management, to more holistically address the prevalence of uneven gender relations in food systems. This more holistic feminist approach to mangroves leads to a better understanding of the roles that women have in mangrove gleaning, inshore fisheries and mangrove-adjacent food livelihoods as these women’s roles are often neglected in current fisheries and food policy research (Grantham et al. 2020; Kleiber et al. 2015). As opposed to adding to women’s responsibilities, or assuming that women should take on further mangrove management tasks, a feminist approach understands that changing

inequitable gender–environment relations is the work of men and women (Hovorka 2013). Furthermore, a feminist approach to research can also help us understand how bias and ingrained stereotypes about “women’s work” shape what is taken seriously as relevant mangrove knowledge, on the level of community, development practitioners, and for national policy. That is, feminist research can address not only understanding and documenting gender disparities, but help us to learn how and why they persist, and what might be done to address these disparities in the future. Instead of token gains, such as increasing the number of women attending community management meetings, we push researchers and practitioners to consider the intrinsic value of gender equality, and direct their efforts to transforming uneven gendered relations towards food systems that benefit all (Lawless et al. 2022). We briefly present an overview of mangrove forests and gendered food dimensions in Solomon Islands, before drawing from our data in Marovo Lagoon to show the added value of a Pacific feminist research lens.

Solomon Islands has the second largest area of mangrove forest in the Pacific Islands, covering 2% of the region’s total land area (Bhattari and Chandra 2011). Yet mangroves are becoming rapidly deforested, both from local causes such as village expansion, land clearance and firewood, as well as linked to export-oriented logging and sea level rise (Warren-Rhodes et al. 2011). At the same time, changes in food systems in Solomon Islands – resulting from globalisation, environmental degradation and climate change – have increased food insecurity for rural communities, placing additional pressure on mangroves, with gendered implications (Bruckner and Paia 2024). Food practices related to farming and fishing in Solomon Islands follow strong gender norms, with rural women conducting most of the household food provisioning, harvesting and cooking, while men are predominately involved in offshore fishing (Rabbitt et al. 2023). Like other areas in the Pacific, mangrove gleaning is often seen as women’s work for its role in feeding the family, and because it can be combined with other gendered female domestic tasks (Teioli et al. 2018). Nonetheless, women’s access to mangrove fishing areas is not taken

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Mangrove forest in Marovo Lagoon, Solomon Islands. © M.T. Paia

seriously in resource decision-making (Aswani 2004) or rarely considered when community leaders concede to logging activities that degrade mangrove forests (Minter and van der Ploeg 2021). In times of food insecurity and mangrove degradation, family stress can lead to higher rates of domestic violence against rural women in Solomon Islands (McCarter et al. 2023). Thus, while women are often seen as the one responsible for mangrove harvesting and conservation, they are excluded from decisions that affect them, and suffer gender-based violence in times of food insecurity.

From “women and fisheries” to “mangroves from a feminist approach”: what’s the benefit?

Gender-equity is increasingly addressed in policy, research and development work on women in fisheries in the Pacific, yet the narrow emphasis on “women” has limitations.³ A focus on women and empowerment places women at the centre of change, whereas a feminist approach to fisheries and food systems is broader. Beyond understanding gender as just a “women’s issue”, feminist food systems research tries

³ The focus on “women” is limiting because it assumes a binary of gender identities as men and women. While we join the Pacific Feminist Forum to advocate for rights and recognition of LGBT people and nonbinary gender identities. In this brief, we focus on gender as “men” and “women” as relevant for the target audience of practitioners and policy-makers.





Mangrove crab, *Scylla serrata*. © M.T. Paia

to identify how roles, responsibilities, and gendered expectations around food impact everyday conditions, and shape ideologies about what is important or worth paying attention to. While there is a diversity of feminisms in the Pacific, the Pacific Feminist Forum emphasises that feminism should address intersecting and unequal power relations, and the multiple political, economic and ecological challenges that relate to gender (Pacific Feminist Forum 2016). Furthermore, Pacific feminisms are specific and dynamic, and any feminist approach requires an understanding of what gender means in a particular place, as well as how gender roles are changing (Underhill-Sem 2019). How does a feminist lens on mangroves in Marovo Lagoon help us learn about the relationship between gendered food practices and gendered ideologies about the value of mangroves?

Mangroves in Solomon Islands are often associated with women and sometimes called “womangroves” (Teioli et al. 2018). In our interviews with 51 women and men in Marovo Lagoon, the vast majority said that mangroves were “women’s spaces”. At the same time, the idea of mangroves as just for women is deceptive, as we discovered through our ethnographic research. In addition to interviews, we conducted participant observation to accompany women and men in mangrove harvesting activities, during cooking and sharing mangrove foods with their families, and while selling mangrove foods at local markets. Through these combined research methods, we learned that both men and women in Marovo Lagoon actively harvest and sell mangrove foods, and that these food roles are gendered and changing due to economic, social and environmental factors.

Women tended to harvest mangrove whelks and mangrove beans for household consumption, and mangrove shells and oysters for home and sale. Women discussed the values of

mangroves for food security, but also how harvesting is key for social connection and storytelling. This reflects other research on the social values of gleaning for well-being and sense of ecological connection (Grantham et al. 2020). Male participants said that the availability of fish from the reef was declining, both due to overfishing and climate change. For this reason, men in Marovo had begun to frequent mangroves to harvest and sell mud crabs and mangrove shells in recent years. Adult men discussed how they utilise mangroves to teach younger generations about fishing and fish life cycles of bonito, groupers and mackerel. A few elder men reported that mangroves are important sites for passing along indigenous ecological knowledge, not only about fish species, but also with regard to medicinal plants and *kastom* stories about sacred mangrove species such as eel.

Feminist research emphasises that a lens not only on gender, but on other intersectional identity factors such as religion, age, marital status, educational or economic status can help to understand how social positions shape environmental interactions. We focused on age as well as gender in our research, and found that male and female youth between 18 and 30 had similar responses in terms of the type of species harvested from mangroves, and these youth went harvesting in mangroves quite often. Youth saw mangrove foods as an important source of food for the household, and as a source of income to pay for their education. Interestingly, though, the youth interviewed said that they were worried about the loss of indigenous ecological knowledge and stories about mangroves, and wanted to learn more from the elders.

By moving the focus of research beyond women, we learned that men were also active in mangrove food systems, and were increasingly harvesting in mangroves because of economic and ecological challenges. This demonstrates how and

why gendered food roles may change in response to financial strain, environmental degradation, and climate change. By expanding the focus from just gender to age, we gained a glimpse as to the concerns of future generations, as well as the desire for young people to (re)connect with *kastom* stories and their elders' ecological knowledge of mangroves.

At the same time, we were left with more questions about how and why men that we interviewed at first pointed to mangroves as “spaces for women”, and why it matters that mangroves are seen as women's realm within the community and beyond. In Marovo Lagoon, while matrilineal landholding means land is passed through women, much environmental decision-making about community land and sea areas, such as mangroves, is made by male leaders. Mangroves are often seen as marginal places where mostly women gather, and are thus not prioritised for community closures or environmental protections. Furthermore, even women we interviewed were reluctant to admit they had environmental knowledge of mangrove species and mangrove harvesting practices. Because they did not know official scientific names, because they did not use fishing tools, and because they continue to be absent from decision-making processes, women undervalued their own knowledge. We heard comments from women such as the shells were just lying there, waiting to be collected. During our observation, however, we saw how women skilfully navigated shifting environmental conditions, read the sand and sea for clues about where mangrove shells were hiding, and used their hands and feet to harvest with speed and dexterity. Nonetheless, women seemed to discount their own knowledge in the same way that much fisheries research fails to recognise women's inshore gleaning as skilled work. Mangroves are also absent from most food policy research and currently falls through the cracks in environmental policy, with no mangrove-specific environmental protection in Solomon Islands. These insights helped us to better understand how bias and stereotypes about mangroves as spaces just for women seep into people's own narratives. The findings demonstrate that what is perceived as skilful practice or valuable mangrove knowledge relates to gendered ideas about skill, knowledge and value on community, development and policy levels.

Conclusions

Practically, researchers and practitioners can use tools from feminist research to identify gendered roles, practices and community values for their inshore fisheries and mangrove forests. This means not only better understanding what women and men do, but why, and the place-specific gendered meanings related to these practices. It is a constant learning and re-learning about how gendered roles related to fisheries and mangrove food systems in a particular Pacific context may be changing, and with consequences for goals of gender equity, food security and environmental health.

Feminist food research aims not only to document how gender operates in practical and symbolic ways, but to work towards a more gender-equitable future. In this research, we learned that mangroves in Marovo Lagoon provide men, women and youth with dietary diversity, social connection, and opportunities for intergenerational ecological knowledge sharing. Yet, not all of these positive benefits of mangroves are widely discussed, promoted or safeguarded through mangrove conservation on either a community or national level. Thus, in a next phase of the project, we will work with community members to re-valorise and socialise these different positive contributions of mangroves for people through *tok stori* sessions, *kastom* storytelling, and community management planning workshops. Through this process, we want to emphasise the collective benefits for the community and for mangroves that come from seeing mangrove health as everyone's responsibility. Simultaneously, we are working with government ministries to create a mangrove management framework on a national level.

In summary, the benefit of a feminist approach to mangrove food systems is that it is not just about counting or including women, but understanding how and which insights are seen as valuable or not related to gender bias. Working towards gender-equitable food systems is more than a technical intervention – it requires individual and institutional shifts in perspectives and values over the long term. Feminist research is about gendered relations between men and women, as well as other aspects of uneven power dynamics that shape



Mangrove shells for sale at the local market in Seghe. © H.K. Bruckner

intersectional experiences of environment and environmental change in fisheries and mangroves. Future research could address the role that education level, household income, marital status and religion play, alongside gender, in different mangrove food practices and values. Understanding the different roles that mangroves play in the community, not just for women but also for men and youth, can help communities, governments and conservationists come together to jointly envision what an environmentally and gender-just future can look like, and what steps can be taken to get there. Such a coordinated and holistic approach would aim to shift gendered attitudes and practices in which women and women's work in mangroves is seen as less important or less relevant than men's work. Feminist research from a holistic food system approach can be a helpful tool to examine with communities what their place-specific, culturally-relevant visions for a sustainable and gender-equitable future are, in mangroves and beyond.

These research findings have been recently published in an article titled "From mangroves to womangroves to feminist foodscapes: (en)gendering research on indigenous food livelihoods in the Solomon Islands" (Bruckner and Tahu 2024). Greater detail of the research context, methods, and analysis are discussed in the full-length article, available open access at: <https://link.springer.com/article/10.1007/s10460-024-10634-8>

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