



Salanieta Bukarau-Kitolelei. © J. Kitolelei

Looking through the gender lens to document the “endangered” indigenous fishing knowledge and skills of fishers in Fiji

Salanieta Kitolelei¹

Indigenous fishing knowledge (IFK) of Fijian fishers is becoming “endangered”, which has sparked a call at the beginning of 21st century to document the

knowledge before it is completely lost or forgotten (Kitolelei et al. 2021). This knowledge developed over millennia through fishers’ daily contact with the fishing environment, and is combined with knowledge passed on to fishers by their elders (Kitolelei et al. 2021; Veitayaki 2002). This knowledge is an important component of subsistence fisheries, and an intimate understanding of the fishing environment and resources is required. IFK is adaptable in that it adjusts to changing circumstances faced by the community due to fishing pressure, increased population, resource exploitation, climate change and developmental changes, all of which affect the *iqoligoli* (fishing grounds) of a community. IFK is dynamic and undergoes temporal changes as fishers and outsiders who are married into the community share their local knowledge with the community and add to the community’s knowledge base (Kitolelei 2021). Like all knowledge systems, IFK is gender based and this is an important consideration for an outsider who is conducting research or activities in a local community. In Fiji, women who fish or glean contribute to the subsistence diet of their families and, in some instances contribute to their family’s income either directly by selling their own catch, or indirectly by selling their husband’s catch or converting the catch into food packs and selling them.

Men and women both play important roles in fishing although the actual documentation of fishing activities in the past was biased and fishing was considered men’s domain (Rohe et al. 2018). A surge in the reporting of women’s fishing activities has highlighted the importance of women’s input to small-scale fisheries and the substantial contribution of women to the economy, which is often invisible, unrecognised and ignored (Thomas et al. 2021). Work towards correcting gender biases that exist in the documentation of fishing activities, fishing contribution and knowledge is being done by researchers in Fiji and the wider Pacific. While women’s contributions are invisible on paper and in community decision-making discussions, women are very much acknowledged as expert fishers in their own right by their communities, and are sometimes the most sought-after fishers when it comes to sharing fishing responsibilities in the community.

My thesis research at the University of the South Pacific

As a researcher in the field of indigenous knowledge, particularly in fishing, accompanying fishers into their fishing grounds provides an insight into a fisher’s intimate understanding of the fishing areas and resources. My PhD dissertation, entitled “Re-establishing the ‘real’ imaginary baseline – using traditional knowledge as a basis for recovering keystone species”, uses a gender lens to document the indigenous fishing knowledge of fishers in Fiji. Looking through the gender lens when documenting IFK allows my research to collect information on both gender and age (male and female, elders and youth). The challenge I face in my research is the timeframe and fragmentation of the islands; therefore, documenting the traditional knowledge of fishers across Fiji in a short timeframe is impossible. Instead of covering the entire country, my research focuses on three communities per division (Central, Western, Northern and Eastern), which will give a snapshot of the kind of information researchers are able to learn by listening to fishers as they share their knowledge. Communities chosen for this research include coastal communities and those that have access to freshwater resources so that IFK of both marine and freshwater habitats and resources are documented. Moreover, working with IFK is sensitive, particularly when dealing with secret fishing skills or knowledge that only certain individuals are privy to. In such cases, elders and younger people should be encouraged to share or document their own knowledge before it is forgotten or lost. All of the information gathered during my research, particularly information relating to species, will be linked to their scientific names, which can be used to correct some previously incorrectly documented local names in publications and research conducted by non-native speakers.

Fishers in Fiji identify many species as being important and this research will break down the “importance” of resources into three categories: economic, cultural and ecological. This information will then be used to identify keystone species for each community. Keystone species included in the research will include both ecological and cultural species. Ecological keystone species are those whose contribution to the environment is disproportionately larger than their population (Paine 1969), such as sea cucumbers. Cultural keystone species are those that hold special significance to a culture or people (Garibaldi and Turner 2004) such as sea turtles. The information collated in this research can be used as baseline information for some community rapid environmental assessments, and can be used to inform place-based resource management in communities throughout

¹ PhD student at the University of the South Pacific, Suva, Fiji. Email: s11032210@student.usp.ac.fj



Setaita preparing her fishing line for another day at sea.
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Fiji. Due to the sensitivity of the information, I will obtain prior approval of the knowledge-owners for all of the data that I collect, analyse and publish as part of my research. Any information that communities wish to hold for themselves, or information that can lead to the exploitation of resources from outside fishers, will be returned to the communities for safekeeping and reference for future generations of fishers. As part of the research, four chapters will need to be published in order to fulfill the University of the South Pacific's criteria for graduation. The first chapter is a literature review, which was recently published in the journal *Frontiers in Marine Science* and titled "*Na vuku makawa ni qoli – indigenous fishing knowledge of Fiji and the Pacific*".

I wish to acknowledge my supervisory team (Joeli Veitayaki, Randy Thaman, Susanna Piovano and Annette Breckwoldt), my sponsors (Pacific-European Union Maritime Partnership Scholarship) and the University of the South Pacific in their supervisory and financial roles.

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