

## Quantifying and valuing the critical role women play in Fiji's inshore fisheries sector

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### Background

Coastal fisheries contribute to household nutritional security and local livelihoods, particularly in developing countries. In the Pacific, fisheries contribute substantially to food and income, with women providing a disproportionate contribution to household and village protein requirements – around 80% (Chapman 1987; Kronen and Vunisea 2009). This is explained by two factors: (1) fisheries catches by women normally go to feeding their family, whereas catches by men go mostly to markets; and (2) contributions from women's fishing activities are usually more regular and frequent than the irregular contributions from men. In terms of non-subsistence fishing, women contribute 25–50% of the small-scale fisheries catch globally (Harper et al. 2013; Kleiber et al. 2014). However, their contributions, to household food and income, are often overlooked, underestimated, and/or undervalued (Chapman 1987; FAO 2017; Harper et al. 2017). This is largely because the majority of the seafood women catch is for food for their families, and therefore harder to track and quantify, especially where communities are widely dispersed and far from the market.

It is important to note that women's contribution to the fisheries sector is not just through gleaning and fishing. In many communities, women are also involved in post-harvest processing (such as gutting, cleaning, salting or drying) of seafood caught by themselves or other family members, such as their husbands and children (e.g. Mangubhai et al. 2016). And in Fiji for example, women also play an important role in the sale of seafood, especially invertebrates, along the roadside or at municipal markets on the islands of Viti Levu and Vanua Levu (Mangubhai et al. 2016, 2017). However, there is little current information on the role of women in small-scale fisheries in Fiji. Most of the publications on women in the fisheries sector from Fiji are from the 1980s and 1990s, and most fisheries profiles fail to gender disaggregate data (Lee et al. 2018). This lack of information has meant that technical and funding support tends to be focused on or biased towards male fishers who are considered a higher priority. Although women are heavily involved in both subsistence and commercial fisheries, they are either absent or very poorly represented in fisheries planning and management decision-making (Mangubhai et al. 2018).

Gender inclusion in fisheries management is increasingly becoming a priority for Fiji and other countries globally. It is also being made a requirement by development agencies. To date, Fiji has not conducted any national studies to quantify the role women play in food security, household nutrition, local livelihoods and the national economy, which can then guide decision-makers. In late 2017, a number of organisations came together to advance the recognition of the role women play in the coastal fisheries sector in Fiji and address this knowledge gap.

### National study

The Wildlife Conservation Society (WCS) developed a socio-economic questionnaire in consultation with gender experts from the Pacific Community (SPC) and United Nations Women (UN Women). Both household and focal group surveys were developed and approved by WCS's Institutional Review Board. Questions were asked on a wide range of fishing-related topics to adequately document the diversity of fisheries women are involved in, and to establish a detailed baseline for future applied research and management action. The survey aimed to cover a wide range of habitats including rivers, mangroves, seagrass, coral reefs and deeper pelagic waters. Due to financial and time constraints, only women were interviewed.

Examples of questions the surveys aimed to answer include:

- a) Which habitats do the women fish and how often?
- b) Are they using their catch for food or selling it?
- c) What types of seafood (e.g. finfish, crabs, shellfish) are they catching?
- d) How long do they spend fishing at different sites?
- e) What barriers do they face in their fishing, in terms of both catching and selling the seafood?
- f) How much do the households depend on seafood for consumption, income and livelihoods?

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- g) What are the fishing strategies (e.g. what gear, boat use, time of day fished, what habitats targeted, duration and frequency of fishing trips) employed by the women?
- h) What methods of preservation, if any, do the women use for their seafood?
- i) Where do they sell the seafood and at what price?

To enable a wide coverage of Fiji, WCS collaborated with the Fiji Locally-Managed Marine Area (FLMMA) network, Conservation International, the Ministry of Fisheries, Women in Fisheries Network-Fiji, World Wide Fund for Nature, the University of the South Pacific, and the Vatuvara Foundation to implement the surveys. Surveys were targeted at rural indigenous Fijian (*iTaukei*) women fishers and were conducted in the *iTaukei* language by trained interviewers. Surveys were conducted over 7 months between October 2017 and April 2018.

To date, a total of 1238 women have been interviewed across 11 of the 14 provinces in Fiji, including 47 districts and 110 villages. Preliminary findings show that women fish in all habitats in their areas, ranging from freshwater streams to the intertidal area and the open ocean. Some of the women fish just for subsistence, but many of them sell at least a portion of their catch to support their household income. All women were willing to participate in the study and share their fishing practices and stories. The data are currently being analysed and a full report will be published later this year.

The information gathered from the surveys will assist stakeholders (government and non-government) to better recognise the valuable contribution women fishers make to food security and to the national economy. What is clear from this work is that fisherwomen are a critical backbone for their families, and to our society. However, it is not enough just to recognise the substantial role these women play. Ultimately, fisherwomen need to be provided the same opportunities as fishermen. This includes participation in fisheries planning and management, receiving training and support, and accessing projects and funding to improve their fisheries.

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## References

- Chapman M.D. 1987. Women's fishing in Oceania. *Human Ecology* 15(3):267–288.
- FAO (Food and Agriculture Organization of the UN) 2017. Towards gender-equitable small-scale fisheries governance and development – a handbook. Italy: FAO. 174 p.
- Harper S., Grubb C., Stiles M. and Sumaila U.R. 2017. Contributions by women to fisheries economies: Insights from five maritime countries. *Coastal Management* 45(2):91–106.
- Harper S., Zeller D., Hauzer M., Pauly D. and Rashid U. 2013. Women and fisheries: Contribution to food security and local economies. *Marine Policy* 39:56–63.
- Kleiber D., Harris L.M., Vincent A.C.J. and Rochet M.-J. 2014. Improving fisheries estimates by including women's catch in the Central Philippines. *Canadian Journal of Fisheries and Aquatic Sciences* 71(5): 656–664.
- Kronen M. and Vunisea A. 2009. Fishing impact and food security – Gender differences in finfisheries across Pacific Island countries and cultural groups. *SPC Women in Fisheries Information Bulletin* 19:3–10.
- Lee S., Lewis A., Gillett R., Fox M., Tuqiri N., Sadovy Y., Batibasaga A., Lalavanua W. and Lovell E. 2018. Fiji fishery resource profiles. Information for management on 44 of the most important species groups. Fiji: Gillett Preston and Associates and the Wildlife Conservation Society. 253 p.
- Mangubhai S., Nand Y., Ravinesh R. and Fox M. 2016. Value chain analysis of the wild caught sea cucumber fishery in Fiji. Report No. 02/16. Fiji: Wildlife Conservation Society and Department of Fisheries. 58 p.
- Mangubhai S., Fox M. and Nand Y. 2017. Value chain analysis of the wild caught mud crab fishery in Fiji. Report No. 03/17. Fiji: Wildlife Conservation Society. 100 p.
- Mangubhai S., Tabunakawai-Vakalalabure M., Fox M., Leweniqila L., Meo I., Naleba M. and Thomas A. 2018. Fiji's Northern Division hosts its first "Women in Fisheries Forum". *SPC Women in Fisheries Information Bulletin* 28 (this issue).