

# A summary of key issues from the Cook Islands gender and fisheries assessment

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## Background

In October 2019, the Pacific Community (SPC) – through a collaboration between its Division of Fisheries, Aquaculture and Marine Ecosystems, and Social Development Programme – conducted a gender assessment of the fisheries sector in the Cook Islands. This assessment was funded by the European Union and the Government of Sweden through the Pacific-European Union Marine Partnership (PEUMP) programme and by New Zealand through the “Improving fisheries food security and sustainable livelihoods for Pacific Island communities” programme.

The assessment was conducted in order to support the Cook Islands Ministry of Marine Resources (MMR) and other government line ministries to strengthen their institutional capacity to:

- integrate a gender and social inclusion perspective into internal and external operations;
- respond to and identify gendered needs of various marine resource stakeholders;
- provide a strong evidence base of key issues that concern women and men differently; and
- adopt a gender-sensitive approach into MMR’s key areas of work.

The gender and fisheries assessment is the first comprehensive gender-focused analysis of the coastal fisheries sector in the Cook Islands. It analyses the fisheries sector with regards to gender roles, aiming at an increased understanding of who is doing what, who is accessing and using which resources or equipment, and who is occupying which fisheries spaces, and targeting which species. In-depth case studies of three selected islands – Rarotonga, Aitutaki and Mangaia – were conducted. The case studies identified cultural influences on gendered roles in the fisheries sector, as well as changes and reasons for these changes, while also pointing out island-specific particularities. Key areas of investigations also included gendered roles with regards to fishing for a living, and challenges and opportunities for improved economic benefits for women and men from fishing and pearl farming, including value-added operations. In addition, the assessment provided an institutional analysis of MMR and its overarching policy framework with regards to integrating gender perspectives.

## Methodology

The assessment was informed by an extensive literature review and field visits to Rarotonga, Aitutaki and Mangaia. Additional information on gender-related issues was gathered by a separate SPC team during field visits to Rakahanga and Manihiki islands, and this information was used to inform the overall gender analysis. Interviews and focus group discussions were conducted with identified stakeholders with support from the Cook Islands government and fisheries extension officers. The survey methodology was developed by SPC’s Social Development Programme, and includes a gender mainstreaming capacity assessment as well as a field visit questionnaire. This follows a consistent structure that allows comparative studies of gender and fisheries assessments in Pacific Island countries, with a view to identifying regional gender and fisheries development needs, gaps and trends.

## The importance of the fisheries sector

The Cook Islands fisheries sector is a significant source of economic and dietary needs for the country. In the outer islands, fish and seafood consumption is 62.2% while in urban Rarotonga it accounts for 37.8% (Cook Islands Government 2016). The demand for fish and other marine resources continues to exceed local availability demands because of the growing tourism sector and decreasing household participation in fishing activities (only 18% as per HIES, 2016). The growth of the fisheries sector and its contributions to people’s livelihoods faces obstacles from the following:

1. Small population that is scattered over large distances does not allow for an economy of scale.
2. High out-migration resulting in the de-population of outer islands, specifically those age groups that are typically engaged in fishing activities.
3. Lack of connecting infrastructure, which has resulted in constrained market access for marine resources and value-added products from these resources.

## Gender roles across the fisheries sector

In the Cook Islands, gleaning is mainly carried out by women, while men target pelagic species in deeper waters. Gleaning is done during low tide and within prescribed confines but generally in shallow water along the inner reef, beaches and lagoon. Women often go in pairs or in small groups to forage

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Woman gleaning from shallow reef flats around Mangaia Island. ©Tuaronga Matepi - MMR Cook Islands



for crustaceans, clams, sea cucumbers, urchins, octopus and small fish species. Collective gleaning is also considered an enjoyable activity for some women who use the time for socialising, networking or simply as leisure time. In the outer islands, where a subsistence lifestyle remains strong, more women own or have access to simple paddle canoes that they use to fish in the calm lagoon, reef flats and inside the fringing reef. Compared to men, women use very basic “fishing” equipment, which includes buckets, metal spoons, knives, screw drivers, bamboo sticks or occasionally homemade scoop nets. The lack of female ownership of motorised boats and limited access to such vessels contributes to having a small number of women engaged in pelagic fishing. Women’s traditional roles and responsibilities in the home (e.g. child care), or in supplementary income-generating or subsistence activities (e.g. sewing, producing natural oils, handicrafts), and gardening impede their involvement in what is both time- and labour-intensive work. Local customs and traditions continue to play a role in the acceptance of women’s engagement in deep-sea fishing, and this can vary from island to island.

### Traditional practices in the past that influenced the gendered use of marine spaces

*The gendered use of different marine environments is well illustrated in historical practices where the cord of a male child was cast into the sea. This was done to ensure that the child would develop into an expert fisher and sailor by identifying ocean waters outside the fringing reef as men’s sphere. In contrast, the cord of a female child was cast into the lagoon, thus allocating this space to women (Buck 1932).*

Fishing is regarded as a community affair and accompanied by traditional practices that are gender specific. For example, men dominate in fish harvesting and fish filleting, while women are involved in food preparation, cleaning, cooking, value adding, marketing and selling, and act as the primary decision-makers regarding the distribution of excess catch among community members.

It is common for young children to accompany their mothers, aunts or grandmothers during fishing activities. This is often the first source of traditional fishing and broader environmental knowledge that gets passed on to the next generation.

Economic activities from fishing are often undertaken through a husband and wife partnership. For example, the husband catches and supplies the fish, while the wife manages their small- to medium-sized business, such as a market stall or serves as a wholesaler to hotels or restaurants.

Women are responsible for preparing traditional (as well as non-traditional) seafood dishes for home consumption, cultural and social functions, or fundraising activities. A growing number of women operate catering businesses that serve local fish and other seafood-based dishes. Others sell raw products and/or add value to their seafood through processing methods such as cooking, fermentation and marination. Added flavours such as lemon and grated

services. Boat ownership by gender has not been documented, although men appear to be the main boat owners. However, it was not unlikely between spouses to have a shared or joint boat ownership.

Fish and seafood consumption has decreased over time in the Cook Islands. The main reasons include high prices for fish, the deterioration of lagoon quality associated with a high risk of ciguatera poisoning, water quality concerns from human and pig effluent, and changes towards more modern lifestyles that influence food consumption trends (Pinca et al. 2007). In addition, the progressively growing tourism-based industry in Rarotonga has created more pressure and competition between community members fishing for subsistence purposes while the demand for fish and seafood

## CASE STUDY

### *A family-based fish business in Rarotonga run by an outer islands couple*

*A married couple in their 40+ from the outer islands has been living in Rarotonga for more than 10 years. The wife reports on their small-scale fish business:*

*My husband goes out fishing almost every night targeting red snapper, flying fish and tuna. Sometimes we get fresh fish from the outer islands to sell it in Rarotonga, mainly parrotfish or mullets. In return our family in Palmerston sends their shopping order for mainly food items from Rarotonga. It is a give and take. Fishing is our main source of income, but I also do some planting with my daughter. My husband supports our planting activities. We sell some of the vegetables and fruits but it is more for us to eat – we are a big family and more relatives have moved to Rarotonga to make a better living and they often stay with us. I sometimes go and fish myself to support my husband. I would collect shellfish to sell. I usually sell the whole fish but sometimes I also sell filleted fish along the roadside. We would only sell tuna filleted because there is demand for it and I can get a better price. The flying fish we don’t clean it – just sell it as it is. My husband usually fillets the tuna – only the big and long tuna - and I am responsible for warping, packing and selling. We advertise our fish on Facebook, especially if we have filleted tuna. I don’t sell at the main market, just along the roadside. I prefer that because I can be more flexible, and I don’t have to compete with others. The main market is only on Sunday, but we sell almost daily. There are also too many people selling at the market and people know each other and support their own family/relatives. We had to get a new outboard motor when it was broken. We saved money and bought a new outboard motor from New Zealand. We were able to pay it off from our fishing business, we can pay all our bills, our petrol and our daily expenses. If the fish supply is constant, we can make a good income from our fish. We can make NZD 700 from fish in a week and if we have a good week, we can even make NZD 1000 in a week.*

*We eat fish almost every day. We live off the fish off-cuts from our business and we often give some of the off-cuts away to family and friends when it is plentiful.*



A woman gleaning on a reef flat in the Cook Islands. ©Tuaronga Matepi - MMR Cook Islands

for restaurants and hotels is continuously growing. The increase in the number of restaurants, snack bars, hotels and food stalls has opened additional markets for women fish vendors who sell directly to the eateries. Women are the main fish vendors at Rarotonga's central market, selling their husbands', partners' or sons' catches. Fish is mainly sold on Sundays, either fresh, cooked or packaged for take away, or as direct serves. Women also sell their own harvest, mainly invertebrates, which they turn into local dishes that are considered a delicacy. Some women also sell fresh fish or filleted fish along roadsides in township areas so as to sell the fish straight on the spot at any time of the day when the catch is fresh, in order to avoid competition at the main Sunday market. More women have been observed selling fish as a supplementary livelihood activity. Although Rarotonga's population is less dependent on marine resources than people from the outer islands, family fishing businesses still provide a vital supplementary livelihood option in light of the high cost of living in Rarotonga. In some rather rare cases, it can be the only income source for families who have less options in accessing formal labour markets.

The above case study illustrates how fishing for a living is still a lucrative livelihood option. The case study demonstrates how the success of a fishing business relies on joint labour between couples and, more broadly, family support. Tasks are clearly gender specific: deep-sea fishing is undertaken by the husband, while selling is the wife's responsibility. However, fish filleting is done by the husband despite this usually being a woman's post-harvest activity. Women concentrate on packaging and selling, and managing finances. Being resourceful, such as using fish off-cuts, and gardening, is a contributing factor to the success of a family business. The wife's additional harvest from gleaning and the sale of fish from the outer islands, are additional means to overcome irregularities in fish supply chains.

coconut are main ingredients for the preparation of traditional delicacy foods. Some of the traditional seafood dishes are considered rare delicacies because of limited resources, seasonal availability, and fewer women gleaning for these delicacies (e.g. invertebrates). These delicacies are much sought after and more women are selling them at local markets or directly to relatives or friends. These foods are prepared by women using women's invertebrate catches, in particular turban snails, great worm-shells, mature gonads of the sea cucumbers, or giant clam meat.

Food preservation – using local methods such as salting, bottling, drying, smoking or multi-stage heating in a traditional earth oven – is also part of women's responsibilities, although this tradition is now rarely practised because it is time-consuming and physically taxing process and has been replaced by refrigeration. Only in some of the northern islands do women still preserve food such as smoking fish or making jerky, sometimes with added flavours. Not surprisingly, smoked or dried fish are both popular, yet rarely available, particularly amongst the local population in Rarotonga. When it is available, it is shared freely among family, or is quickly sold within family networks or through pre-orders, mostly before reaching markets.

## Island-specific gender analysis of the coastal fisheries sector

### Rarotonga

Women in Rarotonga mainly glean for sea cucumbers, giant clams and other shellfish, tube-like worm-shells, sea urchins, octopus and crustaceans. Deep-sea fishing is almost exclusively done by men. Reef fish are avoided by both women and men because of the high incidences of ciguatera in these species. More people in Rarotonga own or have access to boats due to better infrastructure there (e.g. jetties, roads, maintenance services), more capital and better maintenance



In Rarotonga, changes towards more urban or sophisticated lifestyles and time constraints are the main reasons why fewer women undertake gleaning activities and post-harvest-related activities, including the preparation of local delicacies. Despite the reported decrease in the number of women fishing, there has been contradictory observations suggesting that there is still a significant number of women who undertake fishing activities, albeit more on an *ad hoc* basis, and spending less time fishing.

### Aitutaki

Many women on Aitutaki fish, and most women see fishing as a key subsistence activity to supplement other income sources that, on their own, would not afford them a decent standard of living. On average, women reported that they went out fishing twice a week, while some said more often; a few said they fish only occasionally. Those women went fishing more than twice a week highlighted that they are not involved in communal or church groups because their priority was to fish and garden in order to support their family. Contrary to this, women who are active and engaged in community affairs mentioned time constraints as barriers to undertake more fishing activities. Another time constraint is child care, mainly reported by women over 40 years of age who highlighted the high expectations of their grandparents' generation – mainly grandmothers – to look after their grandchildren. Additional income sources most common to women on Aitutaki are planting, formal employment within the hospitality or tourism sector, catering businesses, handicraft making, and traditional oil production. Formal employment jobs in the public sector are limited and fewer women appeared to have accessed these jobs than men. Women reported to be involved in most types of fishing such as reef gleaning during low tide, rod or line fishing, or netting in the lagoon using canoes. The least popular fishing methods for women were spear fishing and deep-sea fishing, which are typically done by men. Most of the catch by women is for home consumption, and only occasionally do women sell their catch to restaurants or at the main market, despite the growing demand for fish by the tourism industry and local market. Women also cast for reef fish, mentioning that parrotfish were the most sought-after reef fish – both for home consumption and for commercial purposes.

Most of the women who are well known fishers on the island are older women, many of whom are single, widowed, divorced, separated or their partners or husbands live overseas for work. This results in many female-headed households. About 60% of the female fishers interviewed were heads of households or lived within a female-headed household; almost 50% of these female fishers were over 60 years of age, with some showing signs of age-related disabilities. Due to high out-migration of the working-age segment of the population, women have had to take on more responsibilities. Nowadays, a significant number of women access and own their own boats, although none had a motorised boat (at the time of the study) and only a few women fished beyond the reef. Some mentioned the poor condition of their canoes and described them as “run down, old, leaking – but still doing the job”.

The example below illustrates the importance of fishing for a living for elderly, female-headed households in terms of their livelihoods, financial independence and for food security. Out-migration has placed greater pressure on women to provide for their families, and it is quite acceptable for women to continue fishing as they get older. Most women have their own boats and fishing gear and have learned to be independent, with little reliance on traditional support networks, remittances or seeking men's support. Undertaking multiple and diverse livelihood activities (e.g. gardening, handicrafts, natural oil production and sewing) is another common factor that enables women to have an adequate and sustainable income, and sometimes opportunities for additional cash on an “as need” basis. Again, livelihood diversification is a resilience-strengthening factor if time burdens for women and men are not stretched. The younger generation is understandably more active and eager to explore economically (more) lucrative income-generating activities in the fisheries sector. Younger fisherwomen are more likely to sell fish, explore additional markets, and invest in small businesses.

### Mangaia

Limited formal employment opportunities, a high out-migration rate, and extraordinarily high prices for imported foods and goods make the Mangaia community highly dependent on its marine resources for subsistence (Pinca et al. 2007). These socioeconomic challenges demand a high degree of self-sufficiency in obtaining food across all population groups. As a result of demographic changes, Mangaia has a high proportion of elderly people (21.4% of the population was over 60 years of age, compared with 7.8% on Rarotonga in the 2011 census) and other community groups more exposed to hardship such as persons living with a disability and other health concerns. Women on Mangaia are well known for their gleaning activities. Women of all age groups undertake gleaning for a wide variety of invertebrates. Invertebrates are primarily caught for subsistence but there is a growing number of women who sell their harvest at the main market. They also prepare local delicacies and sell these in small containers that cost between NZD 10 and NZD 25,<sup>1</sup> depending on the size. Women's harvests from gleaning are very popular and are usually the first produce to be sold out at the market. Some of the women sell their raw harvest, or containers with local delicacies, in Rarotonga through family contacts. Men are mainly deep-sea fishers but also undertake reef fishing. A popular reef fish that can be found in the lagoon and is caught by men is the lowfin drummer. Flying fish is another sought-after species by men and young boys. Spearfishing is a common method used by many men, especially younger men. Only women undertake deep-sea fishing, and they typically have access to motorised boats because their husbands or partners own them, or they have access to community boats.

As with Aitutaki, many women over 60 still reef glean in order to supplement their pension. However, more women of all ages and across social groups were found to reef glean on Mangaia than on Aitutaki where women fisher groups appeared to be less diverse. This underlines the higher reliance

<sup>1</sup> Equivalent to USD 7 and 10 and AUD 9 and 14



Young boys showing their catch after a *rau'i* opening. ©Tuaronga Matepi - MMR Cook Islands

on marine resources across community groups on Mangaia. Interestingly, women fishers on Mangaia do not (or rarely) fish in the lagoon, mainly because of the island's geology and bathymetry. Mangaia is a raised coral atoll that has a rough and shallow outer fringing reef that makes sea access to the already small lagoon very difficult. For this reason, women primarily glean, net fish or walk along the reef with spears to catch fish.

## Recommendations

The gender and fisheries assessment provides recommendations to assist MMR and its stakeholders with progressing a gender-integrative approach to their work. The recommendations also provide guidance for the PEUMP programme and its partners to identify activities, areas or types of support that are most likely to address inequalities, and allow more equal benefits and participation of women, men and marginalised groups. The recommendations cover seven key areas:

1. Financial literacy, business skills and boat master training for women fishers operating businesses.
2. Exploring value-adding processes of marine resources (e.g. trochus, pearl shells, other shells), including investment in various processing steps.
3. Maintaining and formalising career pathways and youth empowerment initiatives.
4. Promoting tourism-related sustainable marine businesses in Rarotonga and Aitutaki.
5. Mangaia-specific recommendation: enabling more inclusive platforms for decision-making on coastal

fisheries management, and providing active support to women to access MMR's small grant scheme for a collective application.

6. Ensuring MMR's small grants scheme includes gender-sensitive and other socioeconomic considerations for hardship, and improved reporting on gender, including sex-disaggregated data.
7. Exploring and developing export markets for the pearl industry while investing in strategic marketing and branding strategy for women with retail training needs.

This is only a brief list of recommendations because the gender and fisheries assessment has yet to be finalised in close liaison with MMR.

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