# Engagement of women in fisheries in Pakistan: Two case studies

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This article explores how women in Pakistan working in the fisheries sector are overexploited and underpaid by middlemen.

#### Introduction

According to the recent Illuminating Hidden Harvests report, 72.5% of the estimated number of people employed part- or full-time in small-scale fisheries employment or engagement in subsistence activities are found in ten countries including Pakistan (FAO et al. 2023). An estimated 4.5 million people are engaged in small-scale fisheries in Pakistan (FAO et al. 2023). The fisheries sector is dominated by males, and females are marginal or not involved in this sector of Pakistan. Although there is a lot of dialogue about gender equality in various economic sectors in Pakistan, including fisheries, progress is lagging due to social pressure, traditions, and religious restriction. Traditionally women who are involved in remote coastal villages in the meandering creeks of the Indus Delta help their husband, father or brothers in pre- (e.g. mending nets) or post-harvesting (e.g. drying fish). There have been isolated cases where women have accompanied their family members who are sick or old because there is no other means of earning an income, except through fishing.

This article sheds light on the role of women in small-scale fisheries in Pakistan by presenting two case studies: the traditional involvement of women in shrimp peeling and processing, and net weaving, including their contribution to the national economy and how they are being over-exploited and underpaid by middlemen.

#### **Shrimp industry**

The shrimp freezing industry was established in Karachi in the late 1960s, and provided an opportunity for women to engage in post-harvest processing. Women were employed to behead and peel shrimp before packing. Twenty seafood processing plants located in Karachi provided employment for 15 to 20 women in each plant. Initially only large sized shrimps (locally called *jaira* and *kalri*) were processed but by the late 1970s export of small size shrimp (locally known as *kiddi*) commenced, which required peeling before packing. As a result, an ancillary shrimp peeling industry was established, providing further work opportunities for women.

Currently, the shrimp peeling industry is based mainly in slums and squatter settlements along Karachi Fish Harbour such as Machar and Madina colonies. Working in extremely unhygienic conditions, these peeling sheds are made of thatched structures. There are estimated to be 50 peeling sheds in Karachi, each employing 50 to 200 women. This is a highly seasonal industry which has large labour requirements in August to October and January to March each year. In these peeling sheds, kiddi and squid are processed. Usually a thekedar (i.e. a middleman) owns and operates peeling sheds, and women are paid on the peeled product - usually PKR 55-75 (USD 0.19-0.26) per kg. For squid, the women are required to remove the skin and inner tube, and they are paid PKR 20-25 (USD 0.07-0.09) per kg. An individual woman usually peels about 20 to 50 kg per day, and is thus able to make a reasonable living. Unfortunately, there are issues with the industry. Firstly, only illegal Bangladeshi immigrant women are currently employed in the shrimp peeling industry. During the peak period of peeling activity (August to October), Bangladeshi women fly into Pakistan and engage in peeling activity. Additional middlemen exploit these women by making them work long hours, forcing them to work in extremely unhygienic conditions and underpaying them. Peeling of shrimp and squid is an integral part of the fish processing industry; however, operation of these squalid peeling sheds is undermining the integrity of the industry in Pakistan.

### Net weaving

The Pakistan fishing industry relies on imported fishing nets, twine, ropes, and other gear mainly from Korea, China, and other South and Southeast Asian countries. Substantial quantities of nets and other gear are also smuggled in from Iran. Men are often hired to weave and make nets in coastal villages, towns and cities. Nets, twine and ropes for fishing are made of nylon and other plastic products, and their prices are dependent on global petroleum prices; the prices for fishing nets, especially pre-woven nets, have increased in the past few



Women helping in fish drying in coastal village in the Indus Delta. ©Muhammad Moazzam

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years. The tuna gillnet fishery is an important industry, and it is estimated that about 700 fishing boats are engaged in fishing operations in coastal and offshore waters of Pakistan, as well as in the Exclusive Economic Zone of Pakistan and in the Area Beyond National Jurisdiction.

Tuna gillnets being used by Pakistani vessels are extremely long, exceeding 7 km in length, costing around PKR 20 million to 30 million (USD 69,000–104,000), and usually such nets must be replaced every three to four years. Each boat carries 2.5 to 3.0 tonnes of plastic gillnets. Previously such multifilament nets made of soft nylon used to be smuggled in from Iran, which has its own net-weaving industry. With the global increase in prices of plastic products due to hikes in petroleum prices and economic restrictions, it became difficult to rely on smuggled nets. Although nets and fishing implements continue to be smuggled in from Iran, the prices are high.

Pakistan does not have a net-weaving industry and there are no nylon twinemaking facilities, and so the country continues to be reliant on imported nets and twine. To source cheaper fishing nets, one of the suppliers decided to start up net weaving in Pakistan. Initial attempts were made to contact fishermen groups but none was willing to be involved. While discussing in Gaddani, one of the fishermen suggested women may like to be involved in net weaving. Using twine available with one of the family, the wife of a fisherman weaved a small piece of net to the gillnet specifications of the tuna industry.

Gaddani is a coastal settlement located along Sonmiani Bay about one hour's drive from Karachi. It is located north of the Gaddani Ship-breaking Yards and has a population of about 10,000. A large percentage of the population in Gaddani is engaged in fishing or fisheries-related industries. The boats based in Gaddani are mainly engaged in gillnetting and the use of line gears (handlines and longlines). There is no processing plant established in Gaddani, and therefore the entire catch from Gaddani is transported to Karachi for processing, export, and local consumption.

Gaddani is the only coastal town where women are engaged in net weaving. These women get the material from middlemen who get orders from individual fishermen or from the shops in the coastal towns including Karachi. Middlemen provide weaving thread to individual families and later collect the finished product (net).

Only adult females are involved. No children are involved because it requires strength to make strong knots in the nets. Net weaving involves specialised needles which are locally manufactured from wood or bamboo. In addition, a piece of square wood is used to maintain a fixed mesh size. Net weaving in most cases is a family affair and all adult women including mothers, daughters, daughters-in-law, sisters-in-law, and other female relatives living in the same household participate in this weaving activity. This adds additional income to families, making them better off than other fishing communities living along the coastline which are entirely dependent on the income generated by fishermen.

The net-weaving profession has challenges in terms of the women being entirely dependent on middlemen who pay these women only a meagre amount of PKR 30/kg (USD 0.1/kg). Some women have taken loans from these middlemen for the purpose of repair of their houses and for other purposes, thus becoming entrapped in a vicious circle of indebtedness and poverty, as these women are paid much less (PKR 20/kg, USD 0.066/kg) than other women.

The nets woven by women in Gaddani are being used in the subsurface gear called *paro* which means stiff net and is considered more efficient than machine-made soft nets of Iranian origin, which get entangled more frequently, including during subsurface gillnet fishing.



Shrimp and fish processing engages scores of women in seafood processing plants mainly located in Karachi. ©Muhammad Moazzam



Bangladeshi women engaged in shrimp peeling in Pakistan in extremely unhygienic conditions. ©Muhammad Moazzam



Tuna gillnets are extremely large, and each vessel carries 2.5 to 3.0 tonnes of nylon nets. ©Muhammad Moazzam



Gillnet weaving from nylon twine by women at Gaddani. ©Muhammad Moazzam



WWF-Pakistan talked to the women who weave nets in Gaddani and organised regular meetings to raise their awareness of the importance of subsurface gillnet fishing.©Muhammad Moazzam

Subsurface gillnetting was introduced by the author in his capacity as Technical Director for WWF-Pakistan with the aim of reducing entanglement and the mortality of endangered, threatened, and protected species caused by gillnets that were traditionally placed on the surface of the sea. Subsurface gillnetting also has better catches of tuna species such as yellowfin, longtail, and skipjack, and within a period of about a year, the entire tuna gillnet fleet has shifted to subsurface operations. The introduction of subsurface gillnetting provided an additional and sustainable income source to the net-weaving women of Gaddani. The weaving of stiff net (*paro*) requires more time than other nets made from soft threads but because of the large size of the fleet, weaving of this type of net is providing a regular source of income to the net-weaving women community of Gaddani.

## Conclusions

Unlike most Pacific Island countries, there are more restrictions and fewer opportunities for women in Pakistan to engage in fisheries. Women can play an important role in providing supplementary income for fisher households, where poverty can be high. Where opportunities arise, these can quickly be highly exploitative, like the case study of women from Bangladesh. However, there are positive examples of Pakistani women engaging in net weaving from the safety of their own homes. This can be more culturally acceptable given the gender norms and customs that prevent women from working in the fisheries sector in Pakistan. This will enable the increase of women's participation not only in family income generation but also by contributing to the national economies of these countries.

### Reference

FAO, Duke University and WorldFish. 2023. Illuminating Hidden Harvests – The contributions of small-scale fisheries to sustainable development. Rome. https://doi. org/10.4060/cc4576en



Old women engaged in weaving of net in Gaddani. ©Muhammad Moazzam



Shacks that are being used for living and weaving nets in Gaddani. ©Muhammad Moazzam