

Strong Women, Strong Nation

Innovative research in the Southeast Asian island nation of Timor-Leste has obtained data to help close the gender gap and provide food security for the local community

In October 2018, Leocaldia de Araujo, a fisherwoman from a village of 300 people at the northern tip of Timor-Leste's Atauro Island, stepped quietly but confidently on to a stage in the capital, Dili. She was representing women fishers and fishworkers at the National Fisher Forum, the largest fisheries-focused gathering in Timor-Leste since independence. Her presence in front of a predominantly male crowd represented the start of a change taking place in Timor-Leste and its fisheries. She referred to herself and her community as an example of *ami povu ki'ik* (the poor and marginalized) that need to be heard.

"We understand the need to manage marine resources," de Araujo said. "They provide us with food and income, and we are an important part of this chain. We can help to manage them for our families and for the next generation to come."

Timor-Leste is a half-island nation at the eastern end of the Indonesian archipelago. It gained independence from Indonesia in 1999. More than 80 per cent of the population lives in rural areas, relying on agriculture; about 60 per cent of the population is deprived of food security; and 50 per cent of the children here are malnourished due to poor dietary diversity. The country's fishing fleet is small and almost entirely artisanal, comprising paddle canoes and small motor boats that target reef and nearshore pelagic fish stocks with gillnets and hand lines.

A local saying was coined to capture the contribution of women in the long and costly journey to independence from Portuguese colonization and Indonesian invasion: *Feto forte, nasaun forte*, meaning 'strong women, strong nation'. Yet, the norms that shape Timorese societal interactions contradict this sentiment, representing barriers to gender equality. Fisheries

are no different. Globally, the small-scale fisheries sector conjures images of men in boats. This is being gradually dismantled as more inclusive systems of fisheries governance come into force. The FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (the SSF Guidelines) highlights that gender equality is an essential dimension of effective fisheries governance. In doing so, the SSF Guidelines reinforce that fisheries actors and programmes at all scales need to recognize women as equal contributors to small-scale fisheries and drivers of local economies through their engagement in all nodes of the sector's value chains. This relies on overcoming gender data gaps in fisheries as well as addressing gender barriers at all scales.

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Trust and acceptance

Inclusive governance implies that decision-making does not merely give all stakeholders the opportunity to participate, but rather recognizes that resource users—of all genders—are the end-point at which success or failure is measured. The legitimacy of rules and regulations in fisheries management is directly related to the trust and acceptance in the process of all resource users, from all gender and socioeconomic groups.

Fisheries in Timor-Leste have, until recently, focused exclusively on 'men on boats'. However, new research is

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Women processing sardines for local fish-based products. Fishing provides both a direct source of nutritious food and an income for various members of the household through diverse means of processing.

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helping to close the gap on gender data. The research is highlighting the extensive engagement of women and their contributions to the country's fisheries, and the distributive flows of aquatic foods to households and within social networks. In contrast to the national census data showing five per cent of coastal households were engaged in fishing, new research that includes the activities of women and subsistence fisheries suggests this could be as high as 80 per cent of households in many poor coastal areas.

This evidence underscores the need for greater gender equality in data, as well as delivering better on gender in policy and programmes. Moreover, the improved gender data is driving a new appreciation of the critical connection between coastal fisheries and rural food security, especially in times of shock. This has brought a new political will and momentum to the Timor-Leste fisheries sector. It is being used to push for broader development goals.

Five examples illustrate the important types of fishing that the women of Timor-Leste practise. These can be compared to the sector stereotype of offshore fishing by men on

boats. As critical as these are, they are often overlooked in sector reporting, policy and programme development.

In Atauro Island, traditional spearfishing with handmade wooden goggles and a Hawaiian sling has been used for over a century by small groups of women targeting reef fish and collecting clams and shells in the fringing reef habitats. These are the 'mermaids' of Timor-Leste, the female divers or *Wawata Topu* who, for four generations, have been striving to catch their living from the sea. The knowledge and skill of spearfishing has been passed down from generation to generation. Aquatic foods are integral to the diet here, just as fishing is to the culture. Fishing provides both a direct source of nutritious food and an income for various members of the household through different means of processing.

The second example is that of women heavily engaged in cultivating seaweed throughout the year in coastal villages, where the conditions are suitable. They spend hours exposed to the sun while wading along the lines of seaweed, tied to ropes lying parallel to the shore. Their task is to clean up debris and algae that catch on the lines

and to tie up the ropes to protect them from strong currents. The seaweed (*Kappaphycus* and *Eucheuma* spp.) is harvested regularly, almost weekly, then preserved in bags or baskets made of dried palm leaves or laid out in the sun to dry. Every Saturday it is transported by boat or local motorbike rickshaw (*tiga roda*) along the rough road to the local market (*basar*). The women traders who cannot afford to pay for transport have to walk for hours along the coastal cliffs with their products on their heads or shoulders. The seaweeds sold locally are mostly fresh and uncooked (unprocessed), for use in a local recipe called *budutasi*; it comprises seaweed mixed with local ingredients such as lemon juice, chilli pepper, garlic and tamarind. The export market value for dried seaweed is very low, but represents an important source of income for these isolated communities where cash crops are scarce.

Gleaning is the third example, one of the most popular fishing activities in Timor-Leste. Women and children catch and collect molluscs, crabs, seaweed, fish and octopi found in the intertidal zones, mangroves and other shallow habitats at low tide. A recently published article, titled “Contribution of women’s fisheries substantial, but overlooked, in Timor-Leste,” highlighted that while gleaners are not landing large catches, they usually come home with something. Traditionally, male fishers, on the other hand, spend much longer at sea and have lower catch rates. The impact of continual gleaning activities on reefs near communities are likely to be substantial, but crucially, the gleaners actively surveying these resources on a daily basis have detailed and unmatched knowledge of their dynamic ecology across space and time.

Women and children

As such, it makes sense that their potential contribution to management of these resources be recognized in the formal structures of governance. One way this can occur is through co-management, where stewardship of resources is a collaboration between communities and government or other institutions. Recent research evaluated the fit of co-management for Timorese fisheries. There are some very positive indications that it can provide a

mechanism for inclusive governance by building on the local practice of setting local laws around the ritual practice of *tara bandu*, which prohibits nominated activities under threat of spiritual and material sanctions.

The fisheries sector and its value chains in Timor-Leste are predominantly informal. As such, there is little recognition that many of the traders at the village level are women. Women are active as traders, buying and selling fresh and dried aquatic foods, making and selling local traditional dishes, and making crafts and ornaments from shells (like necklaces and rings from molluscs, bivalves and gastropods). Barbecued fish is the most common accompaniment for *Katupa*, an iconic local preparation of rice wrapped into woven coconut leaves and cooked with fresh coconut oil. Fish and *katupa* stands line the main roads through small villages in Timor-Leste. They represent an important node in the value chain between fishers and consumers.

Women fish, grow seaweed, trade, manage households and raise children in Timor-Leste.

In Beacou, a small village near the western border of Timor-Leste’s north coast, a women’s group has developed fish-based products as a social enterprise aimed at improving nutrition through improved access to fish. This is especially important for lactating women and children under two years of age; it ensures a child’s diet is diverse enough to provide sufficient micronutrients for development. The fish powder is a combination of fish, *marungi* leaves (*Moringa oleifera*), dried shrimp, roasted sesame seeds and spices. Another product from the group is preserved sardines in jars. These products have begun to be bought and distributed by local supermarkets in the capital, Dili, since 2019.

To track the progress of countries in achieving the UN Sustainable Development Goals and the objectives of the SSF Guidelines, a first step is an evidence-based understanding of

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Timorese girls gleaning along the shore. Women and children catch and collect molluscs, crabs, seaweed, fish and octopi found in the intertidal zones, mangroves and other shallow habitats at low tide.

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how all genders, not only men, engage in, and contribute to, the fisheries sector and its outcomes, activities and contributions. The extensive and critical contributions of fisheries activities where women predominate have been overlooked in national data and evidence for policy and programme development to date.

This highlights the need for gender-integrated instruments in national fisheries monitoring and management. Women fish, grow seaweed, trade, manage households and raise children in Timor-Leste. But gender dynamics and barriers, including constraining norms, continue to drive gender data gaps. Moreover, these power asymmetries and imbalances produce inequalities in governance in the sector from local to national scales.

The work of WorldFish and partners, with fishers like Leocaldia, shows that there is an opportunity to use data and participatory research to highlight these gender barriers and gaps, using evidence and innovative approaches to transform the sector towards one that is inclusive and promotes the improved well-being of all fishers and fishworkers. *Feto forte, nasaun forte*

are words to stand behind as we set our sights on achieving the Sustainable Development Goals. It should be a call to action across all sectors in Timor-Leste, including fisheries. 📌

For more

<https://link.springer.com/article/10.1007/s13280-020-01335-7>

Contribution of women's fisheries substantial, but overlooked, in Timor-Leste

<http://www.fao.org/3/a-i7419e.pdf>

Towards gender-equitable small-scale fisheries governance and development: A handbook - In support of the implementation of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication

<https://extranet.who.int/nutrition/gina/sites/default/files/TLS%202014%20National%20Nutrition%20Strategy.pdf>

Timor-Leste National Nutrition Strategy 2014- 2019