

Food and Agriculture Organization of the United Nations

Empowering women in fisheries value chains

Good practices and lessons learned from the Coastal Fisheries Initiative



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Empowering women in fisheries value chains

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Preface

The **Coastal Fisheries Initiative (CFI)** is a global partnership between the Food and Agriculture Organization of the United Nations (FAO), the United Nations Development Programme (UNDP), the United Nations Environment Programme through the Abidjan Convention (UNEP/Abidjan Convention), Conservation International, the World Bank, the World Wide Fund for Nature (WWF), and the governments of Cabo Verde, Côte d'Ivoire, Ecuador, Indonesia, Peru, and Senegal.

In these six countries, the CFI partnered with relevant ministries and other policymakers, fishing communities, fisher and fish worker organizations, fisheries managers and entrepreneurs, scientific researchers, and local NGOs.

Its overall objective is to demonstrate that holistic, ecosystem-based management and improved governance, including enhanced value chains, can help achieve sustainable and profitable small-scale fisheries in healthy ecosystems.

CFI's work contributes to the FAO Blue Transformation Roadmap 2022-2030 for aquatic food systems to enable better production, better nutrition, a better environment, and a better life, leaving no one behind. It also contributes to the Sustainable Development Goals (SDGs) – especially SDG 14 on sustainable use of marine resources, SDG 1 on no poverty, SDG 2 on zero hunger, and SDG 5 on gender equality.



Mariama Dieng, seafood processor and co-leader of the Dionewar Federation of Economic Interest Groups (FELOGIE), Senegal

The CFI has developed a set of three legacy publications to consolidate good practices and experience from the field and to make its successful approaches and tangible impacts sustainable beyond the end of its five-year cycle. The publications are aimed at academia, authorities, civil society, development partners, institutions, NGOs, practitioners, and scientists.

This publication is a companion to the other two CFI publications in the series: *Comanagement of fisheries and mangroves as a pathway to the EAF* and *Engaging the private sector in sustainable fisheries.*

It describes **successful CFI approaches and results** to empower women at its 15 pilot sites, based on the premise that we cannot attain the SDGs without women and that wherever women are empowered, children and households thrive, livelihoods improve, and ecosystems are protected better.

The CFI champions gender equity and equality in small-scale fisheries, whose value chains employ 45 million women whose arduous work is often informal, underpaid and overlooked in policymaking. To do so, it built the capacities of women harvesters, fishmongers, and seafood processors to become leaders and entrepreneurs, take control of their businesses and their lives, and have a seat at the decision-making table. It also fostered participatory gender-based legal reform to uphold and protect women's rights at the institutional and policymaking level.

To reach its objectives, the CFI worked across five axes:

- 1. Ensuring that women in fisheries value chains are recognized and empowered.
- 2. Ensuring that policies and strategies for fisheries are responsive to the needs of women.
- 3. Supporting women in fisheries value chains to organize and take collective action.
- 4. Supporting women to develop and run their businesses effectively.
- 5. Empowering women through access to technology, innovation, and infrastructure.

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It was developed by Philip Townsley (FAO) under the coordination of Fatou Sock, CFI Chief Technical Advisor (CTA) at FAO headquarters and in collaboration with the CFI teams from the six beneficiary countries, including Maria Da Costa Moniz Carvalho and Eliane Spencer (Cabo Verde), Aboubakar Koné and Dr Labla Jeremie (Côte d'Ivoire), Adipati Rahmat Gumelar (Indonesia), Miguel Maldonado (Ecuador and Peru), and Amadou Touré, Aliou Diouf and Mamadou Thiam (Senegal).

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Abbreviations

ANADER National Agency for Rural Development - Côte d'Ivoire

CAOPA African Confederation of Artisanal Fishing Organizations

CEGEP College for General and Professional Education

CETMAR Centre for Marine Technology - Peru

CFI Coastal Fisheries Initiative

CI Conservation International

COFIDE Peruvian Development Bank

CRODT Dakar-Thiaroye Centre for Oceanographic Research -Senegal

EAF Ecosystem Approach to Fisheries

EEZ Exclusive Economic Zone

EMAR School of the Sea - Cabo Verde FAO

Food and Agriculture Organization of the United Nations

FELOGIE Federation of Economic Interest Groups - Senegal

FIRCA Interdisciplinary Fund for Research and Agricultural Advice - Côte d'Ivoire

FPAT Fisheries Performance Assessment Toolkit

FVC Flexible Voluntary Contribution

GIE Economic Interest Group -Senegal

ICIEG Cabo Verde Institute for Gender Equality and Equity

IIED International Institute for Environment and Development

IMAR Institute of the Sea - Cabo Verde

INADES-Formation African Institute for Economic and Social Development IUPA

University Institute of Fisheries and Aquaculture -Senegal

MATRAPHAS Cooperative of Women Fishmongersand Seafood Processors of Sassandra - Côte d'Ivoire

MMAF Ministry of Marine Affairs and Fisheries - Indonesia

SAAEN Autonomous Service for Literacy and Non-Formal Education - Côte d'Ivoire

SIDS Small Island Developing States

UNDP United Nations Development Programme

UNEP United Nations Environment Programme

UNICA Credit and Savings Union -Peru

WWF World Wide Fund for Nature

Introduction: women and sustainable coastal fisheries

Coastal fisheries – defined as all fisheries within Economic Exclusive Zones (EEZ) – are of global importance as critical providers of livelihoods, food security and nutrition, particularly in developing countries. They provide highly nutritious aquatic food and jobs and contribute to local and national economies. In addition, they constitute a way of life that is inextricably linked to the ecosystems in which they exist: the communities who depend on them have distinctive skills, social and economic relations, cultures, and beliefs.

Small-scale or artisanal fisheries account for at least 40 percent of global fish catches and employ an estimated 60.2 million people, or about 90 percent of total fish workers worldwide.¹ These range from fishers and shellfish harvesters to those employed in fish landings, transportation, handling, processing, and wholesale and retail marketing. It is thought that an additional 53 million people engage in subsistence fishing on an occasional or part-time basis to feed their families. Overall, close to 500 million people around the world depend at least in part on small-scale fisheries for their food and livelihoods.

Artisanal fisheries are often practiced by owner or family-run enterprises that operate in the informal sector. Fish landings and value chain activities are often spread across many locations involving limited numbers of participants, which are difficult to monitor. This means their social and economic contributions and environmental impacts remain hidden.

Because they are often open-access and unmanaged, these small-scale fisheries are threatened by overexploitation and ecosystem degradation. Where management arrangements are in place, they are often poorly enforced, particularly in developing countries. This means that the sustainability of coastal fisheries, and therefore the livelihoods of those who depend on them is under threat (see Box 2). Some data on small-scale fisheries

The contributions of small-scale fisheries to sustainable development

A snapshot of findings from the Illuminating Hidden Harvests (IHH) report



Threats to coastal fisheries worldwide

Coastal fisheries are relatively easy to access compared to those in offshore waters, therefore they are often threatened by high fishing pressure, unsustainable practices, and post-harvest losses. This harms coastal ecosystems and produces sub-optimal benefits, poor working conditions, and insecure livelihoods.

In the absence of effective management, they are easily degraded by overfishing, climate change and the impacts of other human activities, which include pollution from agriculture and urban settlements and the unrestricted development of ports, shipping routes, tourism, and offshore oil industries.

In addition, soil run-off from inland deforestation can affect coastal ecosystems such as coral reefs and seagrass beds, while logging in mangrove forests destroys fish and shellfish nursery zones and habitats and makes coasts more vulnerable to erosion, rising sea levels, and storms.



Tumbes National Mangrove Sanctuary, Peru 2022

About 40 percent of the people in small-scale fisheries worldwide are women, of whom an estimated 50 percent works in the post-harvest sector as fishmongers and seafood processors and 45 percent as subsistence fishers and shellfish harvesters.

While the economic and social contributions of small-scale fisheries in general are often underestimated, the role of women is even more unrecognized and under-documented. Because it is often informal, underpaid, and combined with household and childcare chores, women's work in this sector is regarded as part-time and undervalued by institutions and society.



Women fishmongers, Senegal

Women are largely excluded from discussions about fisheries management, are generally overlooked in policy documents, and under-represented, or not represented at all, in governance mechanisms and decision-making bodies.

Addressing these imbalances and inequalities in women's influence over policies and institutions is essential, because decisions about fisheries management – including sustainable practices and environmental conservation – will directly influence their livelihoods and those of their households and communities. Therefore, they have a fundamental right to take part in decisions that affect their lives.

In addition, excluding women from policymaking about fisheries and their associated value chains limits the effectiveness of those policies, because women can be powerful drivers of sustainable economies and societies. Their daily decisions – for example whether to use mangrove wood as fuel to smoke fish, whether or not to take part in mangrove restoration efforts, to respect closed seasons, or to invest in alternative livelihoods – are essential to successful fisheries management and will affect how their associated value chains function (see Box 3). This in turn affects the overall sustainability of small-scale fisheries.

According to FAO, a sustainable value chain is one that is profitable at all its stages, generates broad-based benefits for society, and has a positive or neutral environmental impact. For women in small-scale fisheries, this means ensuring they can make a decent living, that their income can be invested in education and family welfare, and that their activities do not harm the ecosystems on which their livelihoods depend.

Value chains in small-scale fisheries

A value chain is made up of the people who carry out the activities that are required to bring a product or service from its point of origin to the final consumer. In the case of fisheries, it refers all those involved from catching a fish to those who process it to those who end up eating it.

As fish move along the chain, value is added to them either by being sold fresh or through processing (such as drying, smoking, or canning). At every link of the chain, people carry out actions and services that enable this value to be realized.

Value chains can be short and simple, for example: a coastal fisher lands his catch in the morning and gives it to his wife. She keeps some fish to cook for her family and takes the rest in a basket to sell to other households or at a local market. The woman fishmonger is adding value to the catch by physically taking it to be sold.

A longer and more complex value chain entails demand from local restaurants and hotels, or far-off locations such as urban or international markets, including supermarkets. Because fish is highly perishable, it needs special handling and processing if it is going to reach these markets as a quality product. This means more people doing jobs and offering services at various links in the chain – such as cold storage, packaging, and transportation.



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Value chains in coastal fisheries can be made more sustainable in many ways: for example, by reducing waste in fish handling and processing; by improving processing methods to achieve safe, quality products that fetch good prices; and by earning international designations such as Fair Trade or Marine Stewardship Council (MSC) certifications, which in turn brings economic incentives to fishers and fish workers who engage in environmentally responsible practices.

The need for gender equity and equality in fisheries is enshrined in a number of international instruments: the FAO Code of Conduct for Responsible Fisheries, the Ecosystem Approach to Fisheries (EAF), the Voluntary Guidelines on Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication, and the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security.

The FAO Fisheries and Aquaculture Division (NFI) has developed specific guidance on how to address gender issues for more equitable and resilient small-scale fisheries.

Women in fisheries value chains in CFI countries

Indonesia

CFI Indonesia is led by the WWF and executed by the Ministry of Marine Affairs and Fisheries (MMAF) among fishing communities in the districts of East Seram, Southeast Maluku and Wondama Bay (see map on p. 8). In these CFI pilot sites, cultural and religious restrictions mean that women are mostly confined to household activities, and their independent initiative has been largely unknown.

CFI Indonesia therefore started its work from the ground up, forging close ties with community leaders and local institutions to gradually create space for women to form associations, take part in economic activities, and have a greater say in household and community decision-making. This has been supported by training in seafood processing and packaging, business and marketing skills, and on the importance of the EAF and sustainable fishing practices.

Latin America

CFI Latin America was led by UNDP in partnership with Conservation International and WWF in collaboration with the Ministry of Environment of Peru and the Ministry of Production, Foreign Trade, Investment and Fisheries of Ecuador. In these two countries, women are involved extensively in fish processing and marketing, either in family-run businesses or as labour in seafood industries. Their role is largely overlooked in policy for the sector and is often informal, underpaid, and unrecognized.

To remedy this situation, CFI Latin America implemented a concerted programme to build gender awareness among government institutions and fishing communities at its pilot sites (see map on p. 8). This included capacity building to help both women and men recognize and address the cultural norms and stereotypes that contribute to unequal power relations.



In addition, the project worked with the Development Bank of Peru (COFIDE) to introduce community-based Credit and Savings Unions (UNICAs, in their Spanish acronym) among small-scale fisherfolk. Women proved particularly responsive to the UNICA model, thanks to which they gained greater economic independence, set up their own businesses, and improved their livelihoods and those of their households. These new female entrepreneurs received additional support through a training course called Creciendo con su Negocio (Growing with Your Business), which was designed by CFI Latin America and COFIDE to provide technical support to female-led start-ups.

West Africa

The CFI West Africa project was led by FAO in partnership with UNEP/Abidjan Convention in collaboration with the Ministry of the Sea of Cabo Verde, the Ministry of Animal and Aquatic Resources of Côte d'Ivoire, the Ministry of Fisheries and Maritime Economy of Senegal, fishing community organizations, NGOs, and research institutions.

In these countries, women have historically dominated the post-harvest sector, where they carry out much of onshore fish handling, processing, and marketing. In Cabo Verde, women make up 62 percent of the post-harvest workforce² while for Côte d'Ivoire³ and Senegal⁴ the figures are 60 and 30 percent, respectively.

In Cabo Verde, women work predominantly as fishmongers. Except for the fish salting and drying technique, which is carried out at home or in municipal markets, there are not many forms of artisanal processing. Most professional associations include both males and females, and some have women in decision-making positions such as vice president or secretary. At the CFI pilot sites on Maio and São Vicente islands, women make up 48 percent of existing associations. Cabo Verde also has an association of fishing vessel owners, which is 100 percent male, and the Mindelo Fishmongers Association, which is 100 percent female.

Women in Cabo Verde tend to work alone in individual businesses, compared to their colleagues in Côte d'Ivoire, where they form cooperatives, and Senegal, where they come together in Economic Interest Groups (GIEs, in their French acronym). Despite these organizations, women's institutional influence remains limited, and men continue to dominate most formal decision-making venues.

CFI West Africa worked closely with women and their associations at its pilot sites (see map on p. 8) to improve their entrepreneurial and organizational skills, to take on leadership roles so they can represent their interests, and to improve the performance of their businesses by introducing labour-saving and environmentally friendly methods and technologies resulting in quality products that can reach more rewarding markets.

In addition, under the technical guidance of the UNEP/Abidjan Convention, the CFI supported communities to reforest, rehabilitate and protect 700 hectares of endangered mangrove forests at its pilot sites in Côte d'Ivoire and Senegal. Among their manifold



Oyster harvesters among mangroves, Diamniadio, Saloum Islands, Senegal

ecosystem services, mangroves play a critical role in sustaining the rich biodiversity that coastal fisherfolk depend on for their livelihoods.

Women harvesters and seafood processors took the lead in these reforestation efforts

because they spend their working days among the mangroves, where they collect oysters and other shellfish that grow on their semi-submerged branches.

Ensuring that women in fisheries value chains are recognized and empowered

Making sure that women's contributions to coastal fisheries are visible, accounted for, and fully valued is an essential starting point if those contributions are to be supported, enhanced, and made more sustainable. Failure to understand the full value of women's work and the extent to which it supports the economies of coastal fisheries communities has been one of the major reasons why it is often undervalued and why policies and decision-making processes about fisheries often ignore the priorities and concerns of women.

This section reviews some of the key lessons from CFI experience about how to increase and build upon women's visibility and empower them to take a greater role in deciding the future of coastal fisheries.

Data and dedicated studies to analyse gender dynamics and gaps and their underlying causes

Work on small-scale fisheries over the last decade has highlighted the hidden nature of much of the work carried out by women in fisheries value chains.⁵ Making women's work visible and accounting for it properly are paramount to fostering gender equality and sustainable fisheries. This means collecting and analysing age- and sex-disaggregated data as well as understanding the social rules and interactions between different economic groups.

However, statistics may not tell the whole story. Experience from the CFI has shown that there is also a need for dedicated studies to analyse the gender dynamics and gaps in small-scale fisheries in general and in the post-harvest sector in particular if we are to fully

BOX 4

Gender-sensitive diagnostic studies in CFI countries

CFI Indonesia started its work to empower women by collecting detailed information about village organizational structures, the number of female and male inhabitants, women's jobs, women's groups, and the number of widows (given the social norms associated with this status). The data was used as a basis to design programmes to suit the characteristics of each village. This allowed the CFI to work with the communities to build awareness of gender issues, the importance of women having their own income and organizing into groups, and how women can contribute to the sustainable development of their villages.

In **Peru** a diagnosis of women's self-perception in fishing, mariculture and aquaculture value chains in coastal communities around the Bay of Sechura was carried out with over 600 women interviewed. Of these, just 25.6 percent had completed their primary education and 19.4 percent their secondary education. Over 78 percent said they had never taken part in any form of training or capacity building outside a school setting. Carried out during the COVID-19 crisis, the study provides insight into the challenges women faced during the pandemic, which often narrowed their employment opportunities while adding extra burdens in their roles as caregivers in their families and communities.

CFI West Africa also carried out dedicated studies on gender at all its pilot sites. In Cabo Verde, an analysis of gender constraints in the value chains for grouper (Cephalopholis taeniops) and coastal lobster (Panulirus sp) was carried out in Maio and São Vicente islands. It showed that women make up 52.9 percent of the poorest strata in rural areas and are constrained by low educational levels, widespread illiteracy especially among older women, poor working conditions, lack of social protection due to informality on the job, and lack of access to bank credit because they often don't have the guarantees to qualify for a loan. The study also found that while some women are members of fisher associations, they are in the minority and have low participation in decisionmaking. As well fishmongers, most of whom are women, are not represented on the country's National Fisheries Council. This translates into a lack of voice within local and central authorities. The results of the study stimulated the CFI to help develop a national gender strategy for fisheries in Cabo Verde, in partnership with a FAO Flexible Voluntary Contribution subprogramme called Empowering women in food systems and strengthening the local capacities and resilience of Small Island Developing States in the agrifoood sector (FVC-SIDS) (see Box 13).

In **Côte d'Ivoire**, the CFI carried out a participatory gender-sensitive analysis at its pilot sites in Locodjro and Sassandra, focussing on the value chains for sardinella (*Sardinella aurita* and *Sardinella maderensis*) and tuna (*Auxis thazard* and *Euthynnus alletteratus*). This study showed that women make up 95 percent of the post-capture workforce, with 20 percent of them aged 50-60 years and with several decades of experience in seafood processing. It also showed that these women are experienced in setting up their own community-based savings and loan schemes and in the financing of fishing operations,

with loans provided for motors, nets, canoes and with operating expenses often repaid in fish. Thanks to the study, the CFI identified several areas for intervention. These included strengthening women's organizational, managerial, and business capacities, improving their working conditions and processing methods to cut post-capture losses and increase seafood quality and safety, reducing their use of mangrove wood to smoke fish, and linking them to more lucrative markets for their products.

In **Senegal**, the CFI carried out a gender-sensitive analysis of three value chains at its pilot sites in the Saloum Islands, where it focussed on coastal shrimp (*Penaeus notialis*), oysters (*Crassostrea gasar*), and ark clams (*Anadara senilis*). It found that women are concentrated in artisanal processing and retail while men dominate key services such as provision of salt, fuel, and packaging. This was complemented by a gender study on financial needs among artisanal seafood processors. It found that the average age of female processors is significantly higher than that of their male counterparts. They also retire later, with 22 percent of them over 60, against no men working beyond that age. Knowledge about and access to sources of credit for their activities is limited for both women and men, although in some communities locally developed informal credit mechanisms, such as solidarity funds and rotating credit funds, were found to be widespread.

understand the critical roles of women, existing cultural and social norms, the dynamics of the conditions in which they work, and the challenges they face.

These dedicated studies must be context-specific and may indicate different pathways to gender equity and equality – bottom up, top down, or combinations of both – depending on the local dynamics in each country, region or community (see Box 4).

Dedicated studies will also reveal how measures to improve fisheries governance will affect women and men, and enable mechanisms to be put in place to support genderresponsive, transformative and inclusive approaches. Numerous methodologies and sets of materials are available to encourage the use of a gender lens to better understand the dynamics of fishing communities.

Creating channels for women's voices to be heard

The invisibility of women in fisheries value chains is due not only to a lack of data and statistics but also to lack of channels of communication that allow their voices to be heard by policymakers.

Creating such channels requires an approach that is both bottom up and top down: women in local communities must acquire the skills and organization to engage with institutions and have their needs met, and vice versa institutions must learn how to reach out to women and address their needs in productive and beneficial ways. At the field level, CFI experience has shown that a participatory approach is vital to making women's voices heard. This includes not only conducting surveys and offering capacity building workshops and trainings, but also organizing country, regional and international exchange visits where women can share and interact with peers from other communities and geographical areas, including them in participatory research with scientific institutions, and inviting them to make presentations at conferences and webinars (see Boxes 4 and 6).

This participatory approach was accompanied by a communication strategy that included interviews to give the women a chance to voice their concerns and deliver their own messages in stories and videos, for example on International Women's Day (see Box 5).

A woman's voice

BOX 5

Ce We want to be independent women. We want to set up our businesses, to be free, and for our children to be able to study in top schools.

> **Gisèle Kra** General Secretary CMATPHA Locodjro, Côte d'Ivoire



Watch Gisèle's International Women's Day message here.

Gisèle Kra at the seafood processing facility where she works, Locodjro, Côte d'Ivoire

These first-hand accounts have proven very effective, not only in raising awareness among a wider public, but also in reinforcing the confidence of the women themselves (see Boxes 6, 7 and 8).

Participatory approaches in Indonesia

In **Indonesia** the CFI adapted to the local context, which is characterized by the limited involvement of women in village-level deliberations and generally in economic activities, including fisheries-related work. The project reached out to village and religious leaders as entry points, then worked to engage women in small discussion groups where they increasingly were able to convey their hopes and concerns, gain confidence, and branch out into new areas of economic and social activity. In time, village leaders have come to welcome the women's enthusiasm and to recognize their contributions to sustainable community development.



Community leader Kuriani Wartanoi from the fishing village of Menarbu, Indonesia explains the importance of the Indigenous Sasi fisheries management practice for environmental sustainability at the CFI Global Exchange Visit in Tumbes, Peru 2022

In addition, CFI Indonesia brought women representatives from its pilot sites to CFI Global Partnership Consultations and to a global exchange visit in Tumbes, Peru. The women spoke out before international gatherings of peers and institutions and gave interviews for stories and videos during what was in some cases, the first time in their lives that they had travelled so far from their villages.

They reported feeling enormously charged and inspired by these experiences, in which they realized they are part of a wider community that shares their struggles, concerns and aspirations.

Kuriani explains why she travelled so far from home to represent her community at the CFI Global Exchange Visit in this video about female leadership.

My hope for the future is for women who still live in the dark to rise into the light.

Sri Fanny Mony

Fisherwomen's group leader from Watkidat village Southeast Maluku, Indonesia Read the rest of Fany's International Women's Day message here.

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BOX 7

Creating channels for women's voices

The **CFI website** and the **IW:LEARN platform** have provided venues to amplify the voices of women from the field through interviews, human-interest stories, photos and videos, giving them the chance to describe their lives and struggles, and to deliver their own messages about what they see as important to achieve sustainable fisheries, for example on **International Women's Day** and **World Oceans Day**.



Maria Sábado de Horta Fidalgo

We attended a workshop on the SSF Guidelines. We learned why it is important to respect the norms that protect certain species, and why it is important to observe biological rest periods. If we follow these rules, we will have more fish in the future.

Maria Sábado de Horta Fidalgo

Small-scale fisher and President of the Rincão Women's Association Santiago Island, Cabo Verde

BOX 8

Examples of peer-to-peer knowledge sharing

CFI West Africa organized exchange visits between women in Cabo Verde, Côte d'Ivoire and Senegal in which seafood processors learned from each other about improved fish smoking technologies using FAO-Thiaroye Technique (FTT) ovens, fish salting and drying techniques, and creating new products such as canned molluscs. These national exchange visits were followed up by a regional exchange visit where women in Senegal hosted their colleagues from Cabo Verde and Côte d'Ivoire.



Germana Soares, member of the São Pedro New Generation Fishers Association and the Mindelo Women Fishmongers Association in Cabo Verde, gives a media interview during a regional exchange visit in Senegal, 2022

The project also organized two exchange visits in which women seafood processors from Mali and Niger travelled to Côte d'Ivoire, where their peers demonstrated how to smoke fish with FTT ovens, which require far less wood than traditional ovens, protect the women from toxic smoke and burns, reduce post-capture waste, and result in healthy, quality products.

In addition, the CFI facilitated the participation of women from all its beneficiary countries in international meetings where they met peers, talked to government fisheries representatives, and discussed issues with international experts. These included the annual CFI Global Partnership Consultations as well as a Global Exchange Visit in Tumbes, Peru. During all these events, dedicated spaces were allocated to participants from coastal fishing communities, including women, to present their experiences and concerns and to discuss them with their peers, partner agencies, and institutions.

The CFI also invited women and their organizations to take part in CFI Talks, its webinar series which provided a further venue for them to share their knowledge and experience and take a role as protagonists in discussions of sustainable mangrove management, the EAF, and the private sector as catalyst for sustainable small-scale fisheries.



Mariama Dieng, seafood processor and co-leader of the Dionewar Federation of Economic Interest Groups (FELOGIE), speaks out at a field visit to a processing facility during the 2022 CFI Global Partnership Consultation, Senegal 2023

Creating opportunities to exchange experience and build solidarity

While studies and reports have an important role to play in building institutional recognition of women's work in fisheries value chains, the CFI has learned that creating opportunities for women to exchange ideas and experience with their peers from CFI countries and from similar value chains in countries outside the scope of the project is of the essence (see Box 8).

This builds their confidence, helps them realize that their work has value, and fosters their engagement in broader discussions of issues around sustainability with institutions, agencies, and their male counterparts. At the same time, this process enhances institutional recognition of women and their organizations.

Perhaps most importantly, these exchanges help the women to understand that while their countries and cultures may differ many of the challenges they face are in common, and to explore ways to address those issues. The importance of creating these opportunities for women to see and hear each other cannot be overemphasized as a means of bringing them into the limelight and fully appreciating their contributions.

Participatory scientific research to empower women

The CFI has promoted a participatory approach in all its activities as a way for local communities to have a better understanding of and take ownership of the results – including in the domain of scientific research, which is fundamental to identifying critical areas and informing management decisions about fisheries.

When conducted in an inclusive way that brings local communities – women as well as men – on board, decisions about sustainability have a better chance of being upheld and respected over time. Boxes 9, 10 and 11 illustrate CFI experience from the field.

This is where empowering women in small-scale fisheries dovetails with the virtues of co-management for the sustainability of livelihoods and ecosystems, as detailed in the companion CFI publication *Co-management of fisheries and mangroves as a pathway to the EAF*.

Participatory research to repopulate mangrove clams in Peru

Pustulose ark clams (*Anadara tuberculosa*) or *concha negra*, as they are known in Spanish, are a vital economic resource for artisanal fisherfolk living near the Tumbes National Mangrove Sanctuary. These clams live and reproduce among the semi-submerged roots of the mangrove trees, but their numbers have been dwindling due to fishing pressure.



A concha negra harvester in the Tumbes National Mangrove Sanctuary, Peru 2022

In response, CFI Latin America joined forces with Incabiotec, a biotechnology lab for sustainable development, and local shellfish harvester organizations to conduct participatory research with women, men, and youth from local communities.

Together, they developed a technique to grow clam larvae in the lab and then lay them among the mangroves in a bid to repopulate this highly prized species, while also working together to preserve and raise awareness about the mangrove ecosystem on which their livelihoods depend.



Field visit to the Incabiotec lab during 2022 CFI Global Exchange Visit, Tumbes, Peru



What we offer here is biotechnology for sustainable development. The goal is to integrate: to help repopulate depleted species while also offering communities alternatives for sustainable development.

Virna Cedeño

Founding Partner and Director, Incabiotec S.A.C. Tumbes, Peru

BOX 10

Participatory research to rehabilitate mangroves in West Africa

In Senegal's Saloum Delta and in Côte d'Ivoire, mangroves sustain the rich biodiversity that coastal fisherfolk, particularly women, depend on for their livelihoods. However, these ecosystems are threatened by logging, pollution, and climate change. As mangrove cover dwindles, coasts are becoming more vulnerable to erosion, rising sea levels, soil salinization, and storms.



Protected mangroves, Parc des Îles Ehotilés, Aby Lagoon, Côte d'Ivoire 2019

In addition, holistic management approaches are lacking: the focus is either on conservation or on sustainable use, but the two must be addressed together to achieve environmental, social, and economic benefits at the same time.

The CFI therefore developed and implemented an integrated management plan based on participatory scientific studies of the evolution and drivers of degradation of mangrove ecosystems in both countries.

It then supported local communities to reforest, rehabilitate and protect 700 hectares of mangrove forests in the two countries. Women harvesters and seafood processors whose livelihoods depend on healthy mangroves took the lead in these efforts, which were coupled with awareness raising among communities and local authorities of why mangroves are essential to protect small-scale fisheries and biodiversity and mitigate climate change.



Women planting mangroves in Senegal's Saloum Delta

Participatory research to extend closed seasons in Senegal

In **Senegal**, participatory research with local women as well as men with the support of the Dakar-Thiaroye Centre for Oceanographic Research (CRODT) and the University Institute of Fisheries and Aquaculture (IUPA) over a nine-month period led to new comanagement measures for sustainability that were agreed upon by communities and authorities. Following a lengthy process that consisted of many rounds of consultation and negotiation between all stakeholders, they decided together to establish a six-month closed season for ark clams and oysters for the first time, and to extend the closed season for shrimp by a month.

Women's participation in this process was crucial, because they predominate in the shellfish harvesting and processing sector and their livelihoods depend on a continued supply of clams and oysters. Therefore, it was essential that they agree to the new measures.



C These new closed seasons were discussed for several months and adopted by consensus. It's not easy to go that long without working. But as they say, you can't make an omelette without breaking some eggs. We will see their usefulness when the resources become plentiful again.

> Ndèye Isseu Ndiaye Seafood processor and CLPA member Foundiougne, Senegal



Ensuring that fisheries policies and strategies address the needs of women

Even if women's central role in the life and economies of coastal fishing communities is recognized, making policy processes and the institutions involved in those processes responsive to their needs remains challenging. Changing those processes and institutions so that they become gender-sensitive and gender-responsive is a long-term endeavour, but CFI experience has provided important indications of some of the key steps involved. This section discusses some of these lessons and provides examples of how they have been implemented.

Developing gender-responsive legal frameworks for fisheries

Women in coastal fisheries need to be supported by laws and policies that explicitly recognize their rights, address their concerns, uphold their organizations, and promote their participation in decision-making. The first step in developing such policies is to identify any current gaps and obstacles in existing legal frameworks and propose ways to remedy them through legal reform.

In West Africa, the CFI did so by assessing laws and policies in Cabo Verde, Côte d'Ivoire, and Senegal and how they align with international instruments on gender equity and equality, the EAF, the SSF Guidelines, and food safety through Codex Alimentarius standards (see Box 12).

These assessments were followed up with recommendations and proposed new genderresponsive legal texts, which were debated at length with communities and authorities. This inclusive and participatory process created new spaces for dialogue between artisanal fishers, fish workers and decision-makers and led to a successful outcome in Cabo Verde, which recently approved a National Gender Strategy for Fisheries - the second of its kind in Africa (see Box 13). Legal reform must be accompanied by tailored measures to ensure that any new provisions can be put into practice. For example, women's leading role in the postharvest sector means that their activities are subject to food safety norms. Establishing mechanisms to promote the effective application of these norms is critical to making these value chains more profitable and sustainable, including by reducing waste and postcapture losses.

Promoting gender-sensitive legal frameworks in West Africa

In Cabo Verde, despite a strong commitment to gender equality in the Constitution, there are gaps in the explicit recognition of women in fisheries governance and development, labour regulations, social protection measures, health care provisions and access to disaster insurance.

In response, the CFI supported Cabo Verde to develop a national gender strategy for its fisheries sector (see Box 13). As well, suggestions were made to review National Fisheries Council regulations to include more women, and to field more measures to improve their capacity to operate effectively in the sector. The importance of extending food safety controls to all stages of fish handling and processing was also highlighted, with a proposed new standard for salted and dried fish.

The assessment carried out by CFI in Côte d'Ivoire also noted that, while key policy documents in the country address gender concerns in a generic way, specific legal and policy documents are limited. Notably, its National Policy for Equal Opportunity, Equity and Gender drawn up in 2018 has yet to be adopted. Although gender specific policies have been developed for other sectors of the economy, they are lacking in fisheries.

In view of this recommendations were made to develop a national policy to integrate gender into all fisheries projects and programmes, along with mechanisms to monitor and measure their impacts on women and men; to set up a gender unit in the fisheries ministry and develop specific instruments to give women's concerns equal weight in political, technical, organizational, and cultural debates and decision-making; and to implement new health, sanitary and food safety standards for small-scale fish landing sites and artisanal seafood processing facilities.

In **Senegal**, the CFI assessment found that while the Constitution fully recognizes the principles of gender equity and equality and a national strategy is in place, national policies still do not explicitly recognize the importance and complementarity of the roles of women and men in fisheries governance and development.

The CFI recommended that specific gender provisions be included in national fisheries regulations and policies. While the fisheries ministry has a gender unit, the importance of changes in structure and personnel to better accommodate women's concerns was also noted, along with closer attention to legal provisions to recognize women and their organizations.
However, compliance can be challenging for many women who lack technical skills, adequate equipment, and financial resources. Therefore, any new food safety norms should be combined with measures to support and facilitate compliance, such as capacity building and ensuring access to the necessary tools, technology and infrastructure.

Formulating a coherent gender strategy for the fisheries sector

Developing a gender strategy for the fisheries sector can create coherence between policies and programmes and harmonize efforts to improve the sustainability of fisheries at both the institutional and community levels. Importantly, it should also provide a template to engage a wider range of stakeholders and institutions, such as academia, other government agencies, and civil society.

Strong institutional commitment is an important impetus. However, the development of a gender strategy is not a one-off exercise but rather a process that needs to be revisited continually to respond to new developments and challenges. As with any strategic document, participatory mechanisms for review that involve all relevant fisheries stakeholders need to be in place.

C This Strategy is one more step towards making women occupy a place of greater visibility and participation. We believe that empowering one woman in the fisheries sector empowers all families in some way.

> Abraão Vicente Minister of the Sea, Cabo Verde

BOX 13

Developing a gender strategy for fisheries in Cabo Verde

CFI West Africa worked in partnership with the FAO FVC-SIDS subprogramme to develop Cabo Verde's Gender Strategy for the Fisheries Sector 2022-2025 with national authorities and stakeholders through a seven-step methodology based on a participatory and evidence-based process that included: nationwide stocktaking exercises; building gender awareness and gender mainstreaming capacity among staff at the Ministry of the Sea; defining a core set of gender indicators from existing official statistics; and collecting qualitative information from primary sources via one-on-one interviews and focus group discussions with fishing community members. The objective was to answer the question: to what extent are women's and men's voices and needs, and the principles of gender equality and women's empowerment considered in fisheries and aquaculture policies and programmes in Cabo Verde? Once drafted, the Strategy was debated during a series of national consultations until a final version was agreed upon in concertation with all stakeholders; it was officially approved by the Minister of the Sea and the Minister of Family and Social Inclusion in March 2022.

The Strategy is designed to include women's voices at all levels of decision-making. Its accompanying plan of action includes measures to promote women's organizations, strengthen their leadership capacities, and improve their representation in national and professional associations. This is seen as one of the strategic axes for achieving gender equality in the fisheries sector.

The Strategy is being implemented through Letters of Agreement with the Cabo Verde Institute for Gender Equality and Equity (ICIEG), which in October 2023 launched a three-year plan to foster gender equality in seafood processing companies, and with the School of the Sea (EMAR), a university-level educational institute that fielded a training programme with three modules: planning and starting a business, operating cold chain equipment, and small business accounting.



Woman fishmonger in Cabo Verde market

Why do we need a strategy for gender equality in fisheries? Because it gives women a voice. It enables them to take part in decision-making and facilitates their access to resources and benefits.

Katya Neves Assistant FAO Representative, Cabo Verde

Supporting women in fisheries value chains to organize and take collective action

For women to be seen and heard in a context where policymaking, power structures and the economy continue to be largely male dominated, it is essential that they organize into groups that can take collective action and represent their interests effectively. Catalysing this process has been central to the CFI approach, whether by working with and strengthening existing women's organizations or encouraging new ones to develop. This section highlights lessons learned and documents CFI experience in working with women's organizations at the project's pilot sites.

Whether they are cooperatives, associations, or another kind of organization, such entities increase solidarity and mutual support among members, which is essential when working in informal sectors with little or no social protection. They also make individual women stronger as they can pool their skills and resources to improve their working conditions, negotiate access to seafood processing facilities or marketing arrangements on a collective basis, and set up common savings and credit funds.

Identifying women's existing level of organization

An important first step is to understand what organizations are already in place and how effective they are before building on them or introducing new ones. CFI West Africa carried out an inventory of existing socio-professional organizations and their capacity strengthening needs at its pilot sites in the beneficiary countries to focus its work where it was most needed.

In Cabo Verde, the CFI identified seven associations with total membership of 526 people, 205 of them women. In Côte d'Ivoire, the project worked with 13 cooperatives and associations gathering 985 members, of whom 800 are women. In Senegal, the CFI joined forces with nine CLPAs representing 13 511 people, 5 695 of them women. A more detailed description of these organizations can be found in the Annex.

Ensuring formal recognition of women's organizations

Women in fisheries need to organize so that they can engage with decision-makers, access public resources and apply for support. But to do so effectively, their organizations need to be registered or otherwise recognized formally. Women should aim to achieve this from an early stage as they set up their groups.

The exact form that these groups will take depends on the legal framework in each country as well as member decisions about their purpose (see Box 14). By working towards formal registration, members can think through and articulate their objectives and aim for greater levels of inclusion, where women with less experience, confidence and resources can also participate.

Strengthening women's organizations through partnerships

Achieving sustainability in fisheries requires behavioural change on the part of stakeholders from top to bottom. This in turn requires specific technical skills and expertise, which can be acquired through training and capacity building where needed.

These trainings must be context-appropriate and adapted to the needs of individual women and their organizations and/or businesses, as well as community organizations and local authorities. Rarely will single institutions be able to provide all the necessary know-how to deliver such capacity building. CFI experience at the community level at its pilot sites has shown that creating partnerships with diverse organizations is essential: the combination of different perspectives, sets of skills and areas of expertise can ensure a more holistic process and result in better outcomes in the long term (see Box 15).

The same factors that result in women in fisheries value chains being unseen and unheard can also result in them having limited experience with organizing themselves and making their groups function effectively. Strengthening women's professional organizations has therefore been a core element of the CFI approach.

In some cases, the work started with basic awareness raising about the advantages of working together as a group. In other cases, the CFI delivered workshops on many topics including leadership skills, organizational and financial management, simplified accounting, food safety and good hygiene practices as well as gender principles, the EAF and the SSF Guidelines, both of which have strong gender components (see Box 15).

The importance of creating opportunities for women to meet their peers to share experience and build networks of solidarity has been mentioned above. By the same token, peer-to-peer exchanges also encourage organization and collective action, as women get a chance to compare notes and find out about strategies to overcome obstacles (see Box 8).

Examples of formal registration of women's organizations

In **Cabo Verde**, the CFI supported the São Pedro-São Vicente Fishermen's Association, which also includes female members, to register as a public utility, enabling it to access benefits and opportunities available under local law. Work carried out on Maio Island led to recommendations for the establishment of women's seafood processing cooperatives to better represent their interests.

In **Côte d'Ivoire**, the government has put in place a regulatory framework for cooperatives. The CFI has worked with existing women's cooperatives and associations in Locodjro and Sassandra and supported the formation of a new entity, the Cooperative of Women Fishmongers and Seafood Processors of Sassandra (MATRAPHAS).

In **Senegal**, the government set up Local Artisanal Fisheries Councils (CLPAs, in their French acronym) and Economic Interest Groups (GIEs, in their French acronym) as formal forums to engage with fishers and fish workers on matters of governance and management and on economic, marketing and business issues, respectively.

In **Indonesia** the CFI works closely with local authorities at the village, district, and regional level to secure formal recognition of newly formed women's groups so that they have a better chance of sustainability in the future. One women's group from Watkidat village in Southeast Maluku established itself as the Outer Island Fishing Cooperative, based on a notarial deed. Supported by CFI Indonesia they introduced themselves to the local Cooperative Agency. They have since been recognized by regional authorities as a model for other women's groups in the region and have participated in a range of training activities.

In Latin America, the CFI engaged with fisher and fish worker associations, cooperatives, and consortiums as entry points to small-scale fishing communities. For example in **Ecuador, the project supported the** *20 de Septiembre* **Cooperative on a pilot project** in the San Mateo Cove settlement to ensure traceability for its sustainable mahimahi fishery, which supports the livelihoods of fishermen as well as women seafood processors.

The pilot motivated men and women to work together and unite for a common cause: responsible artisanal fishing with fair prices.

> Fernando Rey WWF Ecuador

Capacity building and partnerships to reinforce women's organizations

In **Indonesia** the formation of women's groups required various kinds of capacity building, from awareness raising about the potential benefits and purposes of association to training in basic organizational skills as there was little previous history of female association in most of the communities (see Box 6).



Indigenous fisherwomen from Roon Village in Wondama Bay, Indonesia, who received capacity building from the CFI

CFI Latin America successfully mobilized various organizations to catalyse support for a gender approach, from fisher and fish worker associations and academia to research labs, civil society, and the private sector. In coordination with the fisheries and environment ministries of **Ecuador** and **Peru**, it developed a training module on gender principles with dedicated materials for officials and fisher organizations. By the end of the project in October 2022, a total of 230 people had been trained through virtual and in-person workshops and an online course. In addition, 11 gender focal points were designated, who took responsibility for replicating the lessons learned within their organizations in both countries.

The project also supported women's associations to strengthen their productive capacities and entrepreneurial skills and facilitate their access to collective financial resources. In **Peru**, thanks to strategic alliances with specialized institutions, CFI Latin America strengthened the business capacities and access to financing of over 600 people, more than 76 percent of them women.

CFI West Africa delivered training through partnerships to existing and newly formed women's groups at its pilot sites. These included associations in Cabo Verde, cooperatives in Côte d'Ivoire and Economic Interest Groups in Senegal.

In Cabo Verde, it collaborated with the following institutions and NGOs:

- The Cabo Verde branch of the Association of West African Women (RAMAO), which offered training in leadership, association building, small business management, finance and credit, market access and exports, and gender equity and equality.
- BIOSFERA, an NGO that builds capacity in leadership, strategic management, and small business administration.
- The Institute of the Sea (IMAR), which fostered women's roles in participatory research and the implementation of the Fisheries Performance Assessment Toolkit (FPAT).
- The Cabo Verde Institute for Gender Equality and Equity (ICIEG) and the School of the Sea (EMAR), which worked with the National Directorate of Fisheries and Aquaculture (DNPA) to implement the 2022-2025 National Gender Strategy for Fisheries action plan.

In **Côte d'Ivoire**, CFI work on the inclusion of gender in the National Policy for the Development of Livestock, Fisheries and Aquaculture (PONADEPA 2022-2026) involved collaboration with many institutions:

- The Oceanological Research Centre (CRO) to support participatory research on sardinella and FPAT implementation.
- The Autonomous Service for Literacy and Non-Formal Education (SAAEN) in the Ministry of Education and Literacy, which supports gender equity and equality activities.
- The Directorate of Economic Independence for Women in the Ministry of Women, the Family and Children, which supports gender equity and equality activities.
- The Department of Gender and Development of the National Agency for the Support of Rural Development (ANADER), which supports gender equity and equality activities.
- INADES-Formation, an international NGO that builds capacity in leadership, small business administration, and management of cooperatives.
- The Interprofessional Fund for Agricultural Research and Advice (FIRCA).

In **Senegal**, the CFI partnered with the ministries of fisheries and the environment as well as the following bodies to engage women in participatory scientific research on molluscs and shellfish and to deliver training in areas that included literacy and numeracy, business skills and access to credit, gender, the EAF and the SSF Guidelines, improved seafood processing techniques and good hygiene practices:

- Dakar-Thiaroye Centre for Oceanographic Research (CRODT) to foster women's roles in participatory research on shrimp and FPAT implementation.
- University Institute for Fisheries and Aquaculture (IUPA) to support participatory research on molluscs.
- College of General and Professional Education (CEGEP) de la Gaspésie in Canada to deliver trainings on value chain improvements.
- African Confederation of Artisanal Fisheries Organizations (CAOPA) to deliver trainings on improved fisheries governance.



Supporting women to develop and run their businesses effectively

Whether they are a fishmonger selling door-to-door, at the head of a company with paid employees, or in a cooperative that produces seafood, most women in small-scale fisheries value chains operate a private business of one kind or another. But because they often have limited access to education and because their work is undervalued, they are less likely to have the skills they need to run their businesses successfully.

CFI's work to build the capacity of women to strengthen their businesses has generated several important lessons that are discussed below.

Supporting women to make their businesses more profitable is essential to helping them to contribute to the overall sustainability of the fisheries they depend on. For example, changes in governance to achieve sustainability can mean that women fishmongers and seafood processors might have to adapt their methods to deal with new types of raw materials, products, technologies, or markets – all of which require new skills.

In the past, changes such as the concentration of fish landings in bigger ports or the introduction of more efficient fish handling facilities have led to women being left behind. For example, changing work patterns or locations may exclude women who must stay close to home to care for their children, expose them to gender-based violence, or increase their economic burden to pay for extra transport costs. As well, men may find it easier to adapt to changes in organization and technology because they have more mobility, more resources, and more power.

Equipping women with new skills will go a long way to improving their products, marketing strategies, incomes, and economic independence. This capacity building must go hand in hand with access to capital and resources so that women can invest in and expand their businesses.

Together, these elements will increase women's wellbeing and that of their households. It will also make fisheries value chains more sustainable, because well-run businesses

Strengthening women's business skills in CFI countries

CFI Indonesia, working closely with the MMAF, provides training to women's groups to improve their entrepreneurial skills, with an emphasis on helping them to identify and link with markets for new seafood products that they have learned to produce with the support of the project.



CFI Indonesia beneficiaries display their seafood products

CFI Latin America used a training approach called Growing With Your Business to strengthen the entrepreneurial skills of women in artisanal fishing communities. In alliance with COFIDE and the NGO Ayuda en Acción, CFI supported the creation of 32 community-based Credit and Savings Unions (UNICAs) made up of 553 people, 68 percent of them women (see Box 19). It also worked with the CETMAR Foundation, which specializes in artisanal fisheries, and a Peruvian project called ACUIPESCA to strengthen the business capacities of four groups led by female entrepreneurs.

In **Cabo Verde**, the CFI helped build up women's business skills in collaboration with the School of the Sea (EMAR) and the Cabo Verde branch of the Association of West African Women (RAMAO). These provided technical training in seafood processing, hygiene standards, business management, accounting, planning, and marketing. They also developed a manual on hygiene and food safety in seafood processing.

In **Côte d'Ivoire** similar training was delivered with INADES-Formation, an NGO that works for equitable and sustainable development in Africa. This support was strengthened through gender-sensitive studies to better understand the value chains for key species such as sardinella and tuna.

In **Senegal**, the CFI delivered capacity building for women's organizations to improve their business skills in collaboration with the College of General and Professional Education (CEGEP) de la Gaspésie in Canada and the African Confederation of Artisanal Fisheries Organizations (CAOPA). Topics included literacy, numeracy, and basic business management.

reduce waste, result in better quality products that fetch higher prices, and make women more resilient.

Building women's business skills

In addition to awareness raising on international instruments to make them more prepared to take part in decision-making bodies and fisheries governance, providing women with training to equip them with the skills they need to perform in a competitive environment has been a key part of CFI activities at its pilot sites (see Box 16).

This capacity building was preceded by gender-sensitive value chain analyses and detailed surveys in which women were asked to express their needs, concerns, and aspirations. The trainings were then adapted to each community context to make them relevant and responsive to the issues raised in the preliminary surveys. They were delivered on a range of topics, including:

- Literacy and numeracy
- · Improved seafood processing techniques and technologies
- Workplace hygiene
- Basic accounting
- Business management and start-ups
- Entrepreneurship

Improving women's access to finance to develop their businesses

Banks and investors tend to see small-scale fisheries as high-risk, so artisanal fishers and fish workers in general face many obstacles to credit. These include prohibitive interest rates, complicated administrative procedures, and stringent collateral requirements.

The obstacles to credit access are even higher for women, who often lack the official paperwork and formal ownership of assets to back up their loan requests as many of them operate in the informal sector.

Therefore, the requirements for accessing loans through formal channels often end up excluding women, especially where it is perceived that men are the main household breadwinners and women's contributions are undervalued.

However, access to credit is fundamental to sustainability. For example, if fisherfolk are to respect management measures such as closed seasons, they must have something to fall back on, whether in the form of savings or an alternative livelihood that can tide them over until they can go fishing again.

Developing mechanisms to mobilize financial resources in ways that both genders can use can play a vital role in empowering women, building their economic independence, enhancing their status within the household and community, and building sustainable value chains.

Although women in small-scale fishing communities often have difficulty accessing formal financial channels, in many cases they take action to pool their financial resources to create their own savings and credit funds and become drivers of household wellbeing, for example by paying for medical fees or purchasing raw materials for their seafood processing businesses (see Box 18).

This is the case in Côte d'Ivoire and Senegal, where CFI West Africa supports women's initiatives in this sense by building their financial literacy and business management skills, including their capacity to negotiate loans from microcredit institutions.

Improving women's access to credit and financing is a two-way street: on the one hand, the women need to be informed of available channels and grasp their requirements and procedures; they also need to know how to prepare business plans to attract potential investors. For more information on CFI work in this domain, see the companion publication *Engaging the private sector in sustainable fisheries*.

On the other hand, institutions need to adapt to the needs of women who work as artisanal fishmongers and seafood processors, and to understand the investment potential of properly managed small-scale fisheries. The CFI in West Africa sought to bridge this gap by creating opportunities for the two sides to meet and listen to each other (see Box 17).

We learned that we don't need to rely on anyone else. We can set up our own business fund if we each contribute a small amount. We also learned that before applying for a loan, we need to do our research and to save our money.

> **Gisèle Kra** General Secretary CMATPHA Sassandra, Côte d'Ivoire

Bridging the gap between women and financial institutions

In **Cabo Verde**, a CFI study at its pilot sites found that artisanal fishers and fish workers need credit to buy boats and engines and as working capital to buy raw materials, ice, and seafood processing equipment. Their obstacles include low revenues from their activities, the seasonal nature of capture fisheries, and limited entrepreneurial capacity.

During Ocean Week in November 2023 the CFI invited Eloisa Mota, founder of Lofla's Food seafood processing company, and Luis Andrade, president of the São Pedro-São Vicente New Generation Fishermen's Association, to meet with representatives from three institutions:

- The Autonomous Fisheries Fund (FAP), a part of the Ministry of the Sea, which extends 50 percent non-reimbursable microcredits for boat repair, engine purchases, and more.
- MORABI, a cooperative that extends microcredit to artisanal fishers for boat repair and equipment purchases. Its loans have interest rates of 1 percent, are 50 percent non-reimbursable, and recipients can take up to 36 months to pay them back.
- The Institute for Entrepreneurial Support and Promotion (PROEMPRESA), which provides working capital and coverage in case of accidents at sea for semi-industrial fisheries.

In **Côte d'Ivoire**, the CFI organized a meeting between women seafood processors from its two pilot sites - Locodjro and Sassandra - and representatives from several microcredit institutions during an exchange visit in February 2022.

Watch the video here.

In **Senegal**, a CFI survey of the financing needs of women seafood processors in the Saloum Islands found that 45 percent of respondents need working capital, 37 percent need loans to purchase equipment, and 18 percent need start-up funds.

In July 2023, the CFI organized a meeting between 11 representatives of women's unions from the CLPAs and 14 financial institutes. The women raised the following concerns: the interest rates are too high, the credit amounts are too low, there is too much red tape, and delays in disbursement means loans are out of step with the seasonal requirements of small-scale fisheries.

The financial representatives recognized the need to be more flexible and to develop a better understanding of the women's needs. They also said that funds for artisanal fishers and seafood processors are available, and that applicants need to be better informed about deadlines and procedures before applying. It was generally agreed that small-scale seafood processors need support to prepare and submit their credit applications on time.

Traditional women's credit and savings groups in Senegal

CFI Senegal carried out a detailed study of the credit situation of women seafood processors in selected areas of the country. It found that the women's main need is for working capital to purchase raw materials. Their chief obstacles are lack of information about existing lines of credit, collateral requirements, steep interest rates, lengthy disbursement times and complicated administrative procedures. Significantly, most of the respondents confirmed that they had already set up various self-financing mechanisms within their Economic Interest Groups (GIEs), using the money to buy equipment or start new businesses.

Within the CLPAs in Toubacouta, groups used earnings from seasonal agricultural work to replenish their working capital. In Djirnda, with the support of a local NGO, women set up a common shareholder fund, with members taking out loans in proportion to their shares. In Dionewar, two GIEs organized solidarity funds known as calebasse (French for gourd). Women make weekly contributions according to their means, and members can use the pooled money in times of illness or other emergencies or to purchase raw materials. These mechanisms are vital in these contexts, where social protection is often limited or difficult for communities to access.

The difference between microcredit and community-based mechanisms is that in the first case, a bank extends the loan, and recipients must pay it back with interest. In the second case, the loan comes from a commonly held fund; interest is paid back into that collectively owned pool of money, and in some cases redistributed as profits to members on a periodic basis (see Boxes 18 and 20).

In time and as members' capacities grow, these community-based funds can provide a basis for small-scale fishers and fish workers, including women, to access formal financial channels, for example to modernize their work equipment or to send their kids to school.

Establishing community-based credit and savings groups

In the case of Latin America, the CFI partnered with COFIDE and the NGO Ayuda en Acción (Help in Action) to pilot community-based Credit and Savings Unions (UNICAs, in their Spanish acronym) at its pilot sites in Peru, where many households have few or no financial or social safety nets (see Box 20).

UNICAs have proven to be a powerful tool for the economic empowerment of women, who became less dependent on their male relatives' income and able to contribute to the wellbeing of their households. Another positive aspect of the UNICAs is that they provide a financial cushion during closed seasons, functioning as incentives to sustainable fishing practices.

Developing business plans to attract private investors in women's enterprises

As mentioned above, community-based savings and credit unions can play an important role in supporting women, their households, and their businesses. They provide a financial cushion during closed seasons or in case of external shocks such as accidents or illness, and they can also be invested – for example in boat repair, equipment purchase, children's education, or to start new ventures.

However, expanding a business to target new markets, or adapting it to new technologies and processes and higher standards of food safety and hygiene may call for substantial financial investments, which can only be accessed through more structured or formal credit sources or investors.

To attract such investment capital, business owners need to know how to prepare a detailed plan that lays out their objectives and how they intend to reach them, the

A female-led sustainable business from Indonesia

In **Indonesia**, the CFI Challenge Fund worked across four axes that included developing business cases, identifying investors, and matching them with potential investees. Among them is beneficiary Clarissa Sastra, who founded a seaweed manufacturing business that hires artisanal fishers during closed seasons, providing them with alternative livelihoods. In this video, Clarissa explains how her company contributes to sustainable fisheries.



Clarissa Sastra, founder and CEO of Seaweed Manufacturing, Indonesia, explains her business model during the CFI Global Exchange Visit in Tumbes, Peru 2022

resources they will need, any risks they might encounter and how they will address them, what markets they want to target and how they will reach them. The process of developing a business plan to attract outside investors is an important skill that women in fisheries can apply to their enterprises, whatever their scale of operations.

Engaging the private sector in sustainable fisheries can ensure their economic, social, and environmental viability beyond the end of support from development partners and other donors. Based on this premise, the CFI Challenge Fund examined the potential for channelling private sector investments towards responsible small-scale fisheries, including female-owned enterprises (see Box 21).

See the companion CFI publication *Engaging the private sector in sustainable fisheries* for an in-depth explanation of the CFI Challenge Fund experience, which includes the development of a four-step methodology to develop business cases and investment packages, and which promoted participatory processes by including a wide range of stakeholders in small-scale seafood systems in Cabo Verde, Ecuador, Indonesia, and Peru.

What are UNICAs?

UNICAs are voluntary, self-managing and self-selected groups of 10-30 members – usually relatives, colleagues, or neighbours. Each member buys shares of a common interest-bearing fund, and interest is distributed among members on a periodic basis. As well, members can take out loans to face external shocks (accidents, illness) or to invest in their activities (boat repair, alternative livelihoods).

The virtues of the UNICA model are that it is easily understood and put into practice by people who may have very little formal education, fosters social cohesion and mutual responsibility, and becomes self-sustaining over time.

COFIDE provided a financial monitor who went into the communities, explained the methodology to whoever was interested, helped them set up their UNICA, and stayed for 17 months to provide financial training and mentoring, essentially becoming a part of the community.

The uptake by women was impressive: 32 UNICAs were formed with total membership of over 550 people – 68 percent of them female. Many of them invested their share of the profits in starting their own businesses, setting up small convenience stores or arts and crafts boutiques.

An example is the coastal town of Tumbes, where many men make a living by fishing at sea or harvesting crabs and shellfish in the nearby Tumbes National Mangrove Sanctuary. Here, over 200 people founded 12 UNICAs, 67 percent of them led by women. Over 17 months, these UNICAs mobilized a total of USD 250 000 and extended almost 700 loans, 58 percent of them to women.

Contributions of the Coastal Fisheries Initiative in Latin America to the sustainability of fisheries in Peru

Credit and Savings Union (UNICA)

What is an UNICA?

A group of 10 to 30 people who come together to create a common fund where they can save money and obtain credit to finance their productive activities, such as fishing.



They join out of affinity and trust, voluntarily

They save through shares.

UNICA structure and management



Methodology to foster collective savings and credit



JST

trengthen ust and soft skills



GENDER

Importance of responsible savings and credit

FINANCIAL

EDUCATION



Tools for financial business nanagement



COMMERCIAL CAPACITIES

> Online marketing tools and more



BETTER INCOMES

Capitalisatior Investments Productivity

UNICA RESULTS IN TUMBES



12 UNICAs 207 members 5% women



Boards of directors 48 members 67% led by women

We work for sustainable artisanal fisheries.



Average monthly savings per person USD 200

Q



Money mobilise in savings and loans over 17 months USD 253 000



675 loans extended 58% of them to women













Empowering women through access to technology, innovation, and infrastructure

Fish is a highly perishable food, and fisheries are a competitive sector in which technology, innovative approaches and appropriate infrastructure play a key role in allowing those involved in their related value chains, both women and men, to perform effectively. These include equipment to handle and process fish with minimum losses and environmental impact, landing sites that comply with standards, a cold chain, electricity or other source of power, clean water, storage facilities, and transport to markets.

Ensuring that women have equal access to such technology, that innovations address their needs and concerns, and that infrastructure is adapted to their requirements is therefore an essential part of their empowerment.

The CFI recognized that introducing new technical and infrastructural solutions can help make coastal fisheries more sustainable, and the work carried out has shown that women can play a central role in this process. Some of the key lessons learned are included in this section.

It worth repeating here that 45 million women (see Box 1) are employed in fisheries value chains around the world, many of them in developing countries where most of them work in the informal sector. This means they will often need additional support to adapt to and make full use of new technologies and infrastructure because these may call for additional skills, involve higher costs, more distant workplaces, and/or more complicated household and childcare logistics.

Improving technology, techniques, and infrastructure

Traditional seafood processing methods such as fish salting, drying, and smoking are often carried out with basic equipment in difficult working conditions with serious

health hazards. For example, traditional ways of smoking fish over open fires is relatively inefficient: it takes a long time, exposes the women (and often their infants) to toxic smoke and burns, and requires a lot of expensive firewood, which often comes from endangered mangrove forests. This often results in low quality, low-priced products with limited market potential and high levels of wasted fish.

In response, the CFI took action to introduce labour-saving and environmentally friendly technologies and techniques to facilitate women's work and help increase their income. These were preceded by participatory and inclusive studies and diagnoses to better understand the value chains for selected fisheries at CFI pilot sites and were accompanied by targeted trainings to ensure the women can use them effectively (see Box 21).

Building women's technical capacities in CFI countries

CFI Indonesia provided women with technical skills, materials, and technologies to create new products with locally caught fish. For example, in the village of Menarbu in Papua Province the Women's Group of Fish Floss Processors successfully launched a series of new products such as shredded fish, nuggets, and fish balls made from catches that may otherwise have remained unsold as they command very low prices. These products have proved to be long-lasting as well as popular with children.

CFI Latin America provided training to improve the technical capacity of women seafood processors and their access to new technologies. For example, it worked with the Municipality of Sechura and the Technological Institute of Production to train a women's organization called Las Releras de Constante in fish drying techniques, improving their commercial offer. Overall, the project created communities of practice with and built the capacities of over 8 821 people (43 percent of them women) in Ecuador and Peru. In the two countries over 22 000 fishers, shellfish harvesters, fishmongers and seafood processors benefited from the enabling conditions developed by CFI Latin America to generate social, economic and environmentally sustainable coastal fisheries.

In **West Africa**, the CFI focused on a set of good practices to develop and distribute three illustrated brochures with guidelines on workplace hygiene, fish handling and seafood processing. The brochures are adapted to each country: fish salting and drying in Cabo Verde, fish smoking in Côte d'Ivoire, and dried seafood and semi-conserves in Senegal.

In **Cabo Verde**, the CFI joined forces with the FVC SIDS project to deliver an ice-making machine with capacity of 750 kg-1 tonne/24 hours to communities on Maio Island and a refrigerated vehicle to transport fish with a capacity of 1 tonne to communities on San Pedro Island. This fulfilled a request by women fishmongers and seafood processors, who repeatedly named their lack of means to make and store ice among their chief business difficulties.

CFI also helped develop Lofla's Food, a female-headed seafood processing company by supporting the women to register their business and delivering training in hygiene,



Eloisa Mota (L), founder and CEO of Lofla's Food with her employees

waste handling, loss reduction and social protection. As a result, Lofla's Food was able to place its new products (fish-burgers) in supermarkets and hotels in São Vicente Island. In addition, the CFI developed a manual on fish hygiene and food safety aimed at women fish workers.

In **Côte d'Ivoire** and **Senegal**, the CFI promoted the use of FAO-Thiaroye Technique (FTT) fish smoking ovens, which protect the women from toxic smoke, consume significantly less fuel than traditional ovens, improve product quality and durability by reducing polycyclic aromatic hydrocarbon (PAH) residues, and halve production time. A new seafood processing platform with FTT ovens is being built in Sassandra in Côte d'Ivoire, as requested by women's organizations following an exchange visit.



FTT oven demonstration during regional exchange visit, Senegal 2022



Tasting fish smoked in FTT ovens on field visit to Dionewar during 2023 CFI Global Partnership Consultation

In Dionewar (Senegal), the CFI built an innovative platform with five FTT ovens that is also equipped with areas for preparation, storage, and marketing. The benefits of this technology and its enthusiastic uptake by women has led to a decision by the Japanese embassy in Senegal to make a significant investment (about USD 2 million) to roll it out on a wider scale in the Casamance region.

This work also provided an example of how introducing new technology serves as an entry point to work with women on other key areas of their empowerment – organization into cooperatives to manage the new ovens; literacy and numeracy training to improve their management and business skills; and the introduction of new seafood products to reach more profitable markets.

Conclusion

CFI experience has demonstrated that empowering women in coastal fisheries makes for more sustainable livelihoods, communities, and ecosystems.

Ensuring that women understand, contribute to, and influence policy decisions is critical if sustainable coastal fisheries are to be achieved. This requires concerted, dedicated efforts to explicitly address the specific obstacles that women face as well as the structural causes of gender inequality within the sector, institutions, and society as a whole.

These include developing and putting in place appropriate legal frameworks, strengthening the capacities of institutions as well as women in their communities, establishing incentives for more sustainable behaviour throughout fisheries value chains, fostering women's access to credit and to more profitable markets, and ensuring that they are organized and able to participate in decisions that affect their lives and livelihoods.

To reach its objective of fostering gender equity and equality in small-scale fisheries at its pilot sites, the CFI worked along five axes:

- 1. Ensuring the women in fisheries value chains are recognized and empowered.
- 2. Ensuring that fisheries policies and strategies address the needs of women.
- 3. Supporting women to organize and take collective action.
- 4. Supporting women to develop and run their businesses effectively.
- 5. Empowering women through access to technology, innovation, and infrastructure.

All the aspects described in this publication are interlocking and must go hand in hand for a successful outcome. They are a demonstration that holistic, ecosystem-based management and improved governance, including enhanced value chains, can help achieve sustainable and profitable small-scale fisheries in healthy ecosystems.

For a more complete understanding of this holistic approach, consult the other two CFI publications in the series: *Co-management of fisheries and mangroves as a pathway to the EAF* and *Engaging the private sector in sustainable fisheries.*

Notes

¹ FAO, Duke University & WorldFish. 2023. Illuminating Hidden Harvests – The contributions of small-scale fisheries to sustainable development. Rome. https://doi.org/10.4060/cc4576en

² General Fisheries Census 2021 - IMAR; National Statistics Institute (INE), December 2022

³ Office of aquaculture and fisheries, MIRAH

⁴ Field survey, April 2020: participatory gender-sensitive value chain analysis and identification of critical points for improvement, CFI-WA Senegal

⁵ FAO, Duke University & WorldFish. 2023. Illuminating Hidden Harvests – The contributions of small-scale fisheries to sustainable development. Rome. https://doi.org/10.4060/cc4576en

Annex

Fisher and fish worker organizations at CFI West Africa pilot sites

Cabo Verde				
Associations	Professional area	Membership		
		Men	Women	Total
Maio Island				
Venus du Nord Association	Capture /sale/processing Fresh fish, salted/dried fish	26	40	66
Venus du Sud Association	Capture/sale/processing Fresh fish, salted/dried fish	27	12	39
Maio Fishers' Association	Capture/ sale/processing Fresh fish, salted/dried fish	16	11	27
Total		69	63	132
São Vicente Island				
São Pedro New Generation Fishermen's Association	Capture/sale Fresh fish	100	45	145
Salamansa Fishermen's Association	Capture/sale/processing Fresh fish, fish burgers	85	32	117
Mindelo Women Fishmongers' Association	Sale/processing – fresh, frozen, dried/ salted fish, fish burgers	-	65	65
Fishing Vessel Owners' Association	Capture/sale	67	-	67
Total		252	142	394
Cabo Verde total		321	205	526

Côte d'Ivoire

Sassandra				
Associations	Professional area	Membership		
		Men	Women	Total
Ghanaian Women Seafood Processors' Association (Nyamé Na Akyedzi)	Processing	-	63	63
Association of Fresh Seafood Vendors (AMPHFRES)	Sale	8	36	44
Association of Women Battantes du Bord (AFBB)	Sale	-	35	35
Women Fishmongers and Seafood Processors' Association (AYIMI)	Sale/processing	3	25	28
Sassandra Women's Solidarity Union (KPLI)	Processing	4	42	46
Young Ivoirian Fishers Association (AJPIS)	Capture	45	-	45

Cooperatives	Professional area		Membership		
		Men	Women	Tota	
Cooperative for the Development of Fishing in Sassandra (CODAPÊCHE)	Capture	60	-	60	
Sassandra Fishermen's Cooperative (COPESAS)	Capture	52	1	53	
Sassandra Women Fishmongers and Seafood Processors' Cooperative (Coop MATRAPHAS)	Sale/processing	5	60	65	
Locodjro					
Cooperatives	Professional area	Membership			
		Men	Women	Tota	
Abidjan Women Fishmongers and Seafood Processors' Cooperative (SCOOP-CA CMATPHA)	Sale/processing	1	184	185	
Côte d'Ivoire Women Fishmongers and Seafood Processors' Cooperative – Women United (SCOOP-CA CMATPHA CI)	Sale/processing	1	140	141	
Côte d'Ivoire Women Fishmongers and Seafood Processors' Cooperative (COMATPH-CI)	Sale/processing	3	132	135	
Abidjan Women Fishmongers and Seafood Processors' Cooperative (COMATPPA)	Sale/processing	3	82	85	
Côte d'Ivoire total		185	800	985	
Senegal					
Local Artisanal Fisheries	Professional area		Membership		
Councils (CLPAs)		Men	Women	Tota	
CLPA Niodior	Capture	637	-	637	
	Sale	5	-	5	
	Seafood processing	189	45	189	
	Mollusc harvesting	_	1 200	1 200	
	Total	831	1 245	2 031	
CI PA Diirnda		976	_	976	
CLPA Djirnda	Capture	570			
CLPA Djirnda	Capture Sale	42		42	
CLPA Djirnda	Sale		92		
CLPA Djirnda	Sale Seafood processing	42	92	42 92	
CLPA Djirnda	Sale Seafood processing Mollusc harvesting	42 - -	680	42 92 680	
-	Sale Seafood processing Mollusc harvesting Total	42 - - 1 018		42 92 680 1 790	
CLPA Djirnda CLPA Foundiougne	Sale Seafood processing Mollusc harvesting Total Capture	42 - -	680 772	42 92	
	Sale Seafood processing Mollusc harvesting Total Capture Sale	42 - - 1 018 651	680 772 - -	42 92 680 1 790 651 70	
-	Sale Seafood processing Mollusc harvesting Total Capture	42 - - 1 018 651 70	680 772 -	42 92 680 1 790 651	

CLPA Fimela-Ndangane	Capture	650	-	650
	Sale	150	-	150
	Seafood processing	200	135	335
	Mollusc harvesting	-	400	400
	Total	1 000	535	1 535
CLPA Missirah	Capture	541	-	541
	Sale	78	16	92
	Seafood processing	-	230	230
	Mollusc harvesting	-	1 143	1 143
	Total	619	1 389	2 006
CLPA Toubacouta	Capture	282	-	282
	Sale	-	63	63
	Seafood processing	-	94	94
	Mollusc harvesting	-	199	199
	Total	282	356	638
CLPA Palmarin	Capture	1 591	-	1591
	Sale	165	-	165
	Seafood processing	-	214	214
	Mollusc harvesting	-	-	0
	Total	1 756	214	1 970
CLPA Sokone	Capture	218	-	218
	Sale	54	-	54
	Seafood processing	-	40	40
	Mollusc harvesting	-	184	184
	Total	272	224	496
CLPA Bassoul	Capture	1300	-	1300
	Sale	17	-	17
	Seafood processing	-	212	212
	Mollusc harvesting	-	510	510
	Total	1 317	722	2 039
Senegal total		7 816	5 695	13 511

FAO Fisheries and Aquaculture Division (NFI) Coastal Fisheries Initiative (CFI) Website: https://www.fao.org/in-action/coastal-fisheries-initiative/en/ X: https://twitter.com/FAOfish

Food and Agriculture Organization of the United Nations (FAO) Rome, Italy















