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Sustainable Fish Asia (SUFIA) Local Capacity Development (LCD) and Technical Support (TS) Activities

COVID-19 impacts on women in fisheries in the Coral Triangle: A cooperative action plan on working together towards gender equality and building back better

Draft output of the CTI-CFF WLF Learning Exchange on Addressing and Coping with the Impacts of COVID-19 in the Coral Triangle Region



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COVID-19 impacts on women in fisheries in the Coral Triangle:

A cooperative action plan on working together towards gender equality and building back better

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This document was initially developed by Ms. Jasmin Mohd Saad (GESI Consultant, Regional Expert Technical Team, USAID SUFIA Technical Support Activity (implemented by Tetra Tech). USAID Sustainable Fish Asia Local Capacity Development (LCD) and Technical Support (TS) GESI Teams further provided additional inputs and reviewed the draft. This document also contains inputs from the participants of the "CTI-CFF WLF Learning Exchange on Addressing and Coping with COVID-19 in the Coral Triangle Region." It was made possible by the support of the American people through the United States Agency for International Development (USAID). The views expressed in this Cooperative Action Plan are based on expert opinion and do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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Executive Summary

This document, "COVID-19 impacts on women in fisheries in the Coral Triangle: A cooperative action plan on working together towards gender equality and building back better" is an output of the CTI-CFF Women Leaders' Forum "Learning Exchange on Addressing and Coping with COVID-19 in the Coral Triangle Region" conducted on May 25, 2022. The sharing and discussion that ensued during the online event highlighted issues faced by women in the Coral Triangle region during the ongoing pandemic, and identified areas that need action by various stakeholders in the marine and fisheries resources sector. The event was organized by USAID Sustainable Fish Asia Local Capacity Development Activity (SUFIA LCD, implemented by RTI International) in collaboration with USAID Sustainable Fish Asia Technical Support Activity (SUFIA TS, implemented by Tetra Tech).

With reports that the COVID-19 pandemic has affected women and men differently, and that women bear not only the economic impacts of the pandemic but also the physical and emotional impacts, it is imperative for governments, non-government organizations, private sector, and civil society to recognize and act on this issue. A large number of women have taken up a disproportionate amount of domestic work and unpaid care, in addition to the productive roles to ensure the basic needs of their households are met during the difficult pandemic times.

In coming up with the recommendations, participants in the Learning Exchange event in May 2022 discussed the experiences and challenges faced by women working in the fisheries sector in the Coral Triangle region, along with those from other countries, brought about by the COVID-19 pandemic. The recommendations align with the CTI-CFF GESI Policy and the CTI-CFF Regional Plan of Action (RPOA 2.0) aspirations for a full GESI integration by 2030. The framework for recommendations is based on WorldFish's recommended framework to improve gender equity in fisheries, transform food systems for greater resiliency and equality, and to build back better.

This cooperative action plan will enable CTI-CFF WLF and its partners to work together toward gender equality and building back better, to counteract the detrimental impacts of the pandemic, and to provide practitioners with a roadmap on how to do it. This can also serve as a guide for other disaster related events that are impacting the region.

This is the first draft version, and it is still subject to further review and reiteration with country-specific inputs from WLF members and partners, including the CTI-CFF Regional Secretariat and member countries, to ensure a participatory approach in developing this action plan. Since they are eventually the implementers of this plan, it is recommended that they actively participate in its review until its final stage.

1. Introduction to the Cooperative Action Plan

The USAID Sustainable Fish Asia (SuFiA) Local Capacity Development (LCD) Project's main objectives are to facilitate the organizational capacity development of regional fisheries organizations and conduct private sector engagement to increase investments in sustainable fisheries. Achievement of these objectives will contribute to SUFIA Project's overall goal of improving the management of marine biodiversity and fisheries resources in the Indo-Pacific region by reducing illegal, unreported, and unregulated (IUU) fishing. SUFIA LCD's Gender and Inclusive Development Action Plan (GIDAP) identified supporting the CTI-CFF Women Leaders' Forum (WLF) in building their capacity in GESI integration as well as in providing avenues for learning exchanges and sharing. It has been recognized that the COVID-19 pandemic has affected women and men differently. In the marine and fisheries sector, women must bear not only the economic impacts of the pandemic but also physical and emotional impacts, as many women have taken up a disproportionate amount of domestic work and unpaid care, in addition to the productive roles to ensure the basic needs of their households are met.

CTI-CFF WLF members highlighted the need to address these issues and to learn how their counterparts are coping with the pandemic. The online event, "Learning Exchange on Addressing and Coping with COVID-19 in the Coral Triangle Region", which was conducted on May 25, 2022 in collaboration with SuFiA Technical Support (TS), has highlighted issues faced by women in the CT region during the ongoing pandemic and identified areas that need action by the stakeholders in the marine and fisheries sector.

One of the deliverables of the Learning Exchange Event is to produce a draft cooperative action plan on working together toward gender equality and building back better incorporating feedback from the participants, initially, and eventually from all WLF members and partners, especially those who were not able to participate in the learning event.

This document, "COVID-19 impacts on women in fisheries in the Coral Triangle: A cooperative action plan on working together towards gender equality and building back better", is the first draft developed upon the completion of the Learning Exchange Event. It was initially developed by Ms. Jasmin Mohd Saad, after which substantial inputs were added by the SUFIA LCD and TS GESI teams. It acknowledges the experiences and challenges facing women working in the fisheries sector in the Coral Triangle region brought about by the COVID-19 pandemic. It includes the experiences of women from the other parts of the world in coming up with recommendations, and it is envisaged that this draft shall be further reviewed and finalized through several series of workshops, discussions, and meetings to garner adequate input and feedback. The recommendations also align with the CTI GESI Policy and the draft Regional Plan of Action (RPOA2.0) aspiration for a full GESI integration by 2030.

Objective: The objective of this Cooperative Action Plan is to provide strategic direction, guidance and recommendations to CTI-CFF Women Leaders' Forum country members and partners in order to achieve the following in four to five years' time:

- CTI-CFF member countries and strategic partners support the adoption of the Plan, in part or whole, and to take action in accordance to their mandates;
- Women and other marginalized groups working in fisheries and marine conservation in the Coral Triangle region are given attention, voices and a strong representation in decisionmaking roles in COVID-19 policies and recovery programs and interventions;
- Gendered impacts of current issues related COVID-19 pandemic and other disasters are taken into consideration and integrated in recovery programs, policies, and interventions.

 Partnerships are formed among countries, development partners, private sector and civil society to address gender equality issues brought about by the pandemic, including establishing better databases for gender-disaggregated and intersectional data, and to work together in building back a better environment where no one is left behind.

2. Background

In 2018, globally 39 million people were engaged in the primary sector of large-scale marine capture fisheries. Nearly five million, or 12 percent, are women (FAO, 2020). However, when secondary fisheries are factored in, it is estimated that one of every two workers is a woman (FAO, 2020). This means that despite their contributions to the fishery value chain, women are systematically undervalued and often treated as invisible. Systematic discrimination makes it challenging for women to participate in decision-making and access resources and information about their rights as equal contributors to the fishing and seafood industry.

These difficulties are reflected in the findings from the USAID-funded (2015-2020) Oceans and Fisheries Partnership Project (USAID Oceans). USAID Oceans found at two learning sites in Bitung, Indonesia, and General Santos City in the Philippines that women experience similar challenges and limitations. Women are rarely found working in the capture fisheries segment due to cultural norms, societal beliefs, and the perception of being limited in physical capacity to harvest catches (USAID Oceans, 2020). Most of the women are involved in the processing part of the value chain, working in processing facilities, or are involved in marketing activities (USAID Oceans, 2018a). At these sites, women have limited access to information, networks, and associations to channel grievances, and they are constantly weighing the demands to fulfill their roles in occupational and household work. The competition for time and effort impacts the women's ability to enjoy leisure activities, rest, and participate in community life (USAID Oceans, 2018b). The situation also hampers their ability to access and earn profits from profitable markets that are often located further away (USAID Oceans, 2018a). Case in point, male traders in General Santos tend to earn 20 percent more than women traders (USAID Oceans, 2018b).

Women fishers who wish to defy cultural biases and gender norms and work within the capture portion of the value chain face resistance and backlash, including social alienation and gender-based violence. Recently investigated and documented 'fish-for-sex' schemes² occurring in East African coastal and freshwater fisheries (UNEP 2016; Seager 2021; Atkins et al. 2021) present the risk for similar exploitation schemes in the Indo-Pacific region. Though these specific schemes have not been reported in ASEAN countries, the prospect of decreased stocks and increased competition over remaining fish populations will inevitably create an enabling environment for exploitation as food security, livelihoods, and economic security in fishing communities are threatened.

Women in small-scale and artisanal fisheries

The 2012 World Bank *Hidden Harvest* study reported that while large-scale fisheries contribute to the majority of fish landings, over half of the catch in developing countries³ is produced by small-scale fisheries (SSF). Approximately 90-95 percent of the catches are for local human consumption and thus play a critical role in food security and poverty alleviation (World Bank, 2012).

¹ Secondary fisheries include fishers exclusively involved in fishery-related activities in the pre- or post-harvest sector.

² "Global Gender and Environment Outlook." UN Environment Programme (UNEP) 2016.

³ Bangladesh, Brazil, Cambodia, China, Ghana, India, Indonesia, Lake Victoria (Kenya, Uganda, Tanzania), Mozambique, Myanmar, Nigeria, Philippines, Senegal, Thailand, and Vietnam.

Still, small-scale fishing communities are among the poorest, predisposed to poverty-induced social ills, and further marginalized by the failure to recognize the importance of the fishery (World Bank, 2012). The same study found that as much as 70 percent of small-scale fisheries catch numbers are underestimated in nationally reported documents; and that employment in small-scale fisheries is several times higher per ton of harvest than in large-scale fisheries.

Noting that women account for 46 percent of the total small-scale fisheries workforce in the harvest and post-harvest segment, international organizations such as the World Bank, FAO, and the International Fund for Agricultural Development (IFAD) recognize that a considerable effort is still required to address the need for women's empowerment, access to healthcare, education, and financial support (World Bank, 2012).

The role of women in SSF is not limited to processing and marketing. The same World Bank study found that women are also investors, a source of credit, managers of household income, and an important segment of seafood consumers who ensure households are getting adequate nutrition.

One area that is often overlooked is the *fishing for subsistence* node such as gleaning⁴ where women play a considerable role. They are often engaged in the collection of aquatic animals and plants in inland waters such as mangroves, rivers, and lakes. Often, this activity would also involve children, not as child laborers, but as family helpers. Unfortunately, as with small-scale fisheries, subsistence fishery contributions and the accompanying processes and activities are not recorded and reported. Thus, the contribution of subsistence fishing has largely remained invisible in policies and research, is underrepresented in fisheries assessments and reporting, and is rarely factored into decision-making processes and coastal resource management (Grantham et al., 2020).

The above background summarizes the existing issues and challenges facing women working in the fisheries sector, either in the commercial fishing sector or in small-scale artisanal fisheries that are happening at least in most developing countries.

Lack of gender-disaggregated data

The COVID-19 pandemic exacerbated the existing issues and challenges facing women working in the fisheries sector, either in the commercial fishing sector or in small-scale artisanal fisheries. Many works of literature cited the lack of gender-disaggregated data contributed to the ineffective management of resources, especially during emergencies such as the COVID-19 pandemic.

The lack of disaggregated data on commercial versus small-scale fisheries is an area that must be addressed to determine true social and economic value. Future research should address the following data gaps and issues: the lack of/insufficient data in official records on the numbers and production of small-scale fishers; records or estimates of post-harvest labor; and information to access the scale and importance of subsistence fisheries (World Bank, 2012).

Currently, the FAO and the Organization for Economic Co-operation and Development (OECD) are working together to assess the availability of employment data in the fisheries secondary sector to better reflect the relevance of post-harvest employment data and obtain a comprehensive assessment of the capture fisheries and aquaculture sectors (FAO, 2020). This assessment will also investigate the importance of women's contribution to production, trade, food security, and livelihoods and inform the development and design of gender-sensitive fishery policies to move the sector closer toward gender equality. It is expected that a robust data collection process conducted through the adoption and application of a gender lens will enable a greater appreciation for the complex power dynamics in the relationships between women and men and improve the

⁴ Gleaning is the collection of marine organisms predominantly from the littoral zone. It is an important livelihood activity for the rural poor in coastal regions of developing countries.

understanding of their roles and responsibilities, access to and control over resources, assets, financial services, information, training and technology, and leadership (FAO, 2020), especially when managing resources in a crisis.

The COVID-19 pandemic is an example where data is crucial and efforts must be hastened to start gathering and analyzing periodic gender-disaggregated data to design effective resource management plans, not only for emergencies, but also accelerate closing the inequality gap.

Importance of Data

In the Maldives, nearly 7,500 previously excluded women informal workers have been included in the Income Support Allowance program based on a Rapid Gender Assessment (RGA) organized by the Ministry of Gender, Family and Social Services, a week after the COVID-19 lockdown. Initially, it was found that the number of women receiving the support was lower than men due to the strict documentation requirement, i.e. the beneficiaries must be registered as an employee. However, when the requirement is made easier for women informal workers to apply, the number of recipients increased with women now representing 36% of successful applicants. It was the first of its kind and many stakeholders made use of the findings as an important tool to mobilize assistance. - Source: UN Women (2021)

3. Methodology

Much of the information presented in this draft Action Plan is derived from the inputs received during the "Learning Exchange on Addressing and Coping with COVID-19 in the Coral Triangle Region" especially on the experiences of member countries⁵ in light of the pandemic, and from a quick review of lessons learned from other regions. A further extensive review can be conducted at the request of the CTI WLF.

The structure of the recommendations is adapted from the "COVID-19 impacts on women fish processors and traders in sub-Saharan Africa: Insights and recommendations for building forward better" (Atkins et al. 2021) report (herein referred to as the COVID-19 impacts and recommendations) due to the similarities in the profiles of women fish traders and processors in the sub-Saharan African region and women working in fisheries in this region. Nevertheless, the recommended actions would be better targeted given sufficient gender-disaggregated data, including intersectional data, which is very lacking, especially in this region.

Taking stock of intersectional experiences will help narrow the targeted recipients to those who need help the most. Intersecting aspects of identity such as socioeconomic status, age, ethnicity, marital status, migration status, and education all play a key role in determining access, benefits, risks, vulnerabilities, and resilience in food systems (Kleiber et al. 2021. In press). This is key to all COVID-19 and other emergency responses, as women's experiences and needs are different to ensure the needs of women most at risk – the poorer, widowed, divorced, and single women are addressed effectively.

Therefore, before implementing the recommendations in this Action Plan, it is <u>highly recommended</u> that a comprehensive gender-disaggregated data collection and analysis be undertaken efficiently to better target beneficiaries and manage limited resources.

⁵ As of the time of drafting this document, the Learning Event witnessed presentations from Solomon Islands representing one of the CT member countries and from the Coral Triangle Centre (CTC) as the co-chair of the CTI Women Leaders' Forum. For a comprehensive review of the experiences of women in the other remaining CT countries, further effort is required to gather the required information (as part of the revision process of this draft Action Plan).

4. COVID-19 disruptions to women's lives in the Coral Triangle

This section presents a brief overview of how COVID-19 has affected the lives of women and their households and communities in the Coral Triangle region, with some resulting from the prevent and control measures put in place by local and national governments. These issues and challenges are not unique to countries in this region. The same can be observed happening in other developing countries such as in the South America and the sub-Saharan African region (see Table 1).

The impact affected all nodes of the food chain, from fish food system functions, to individual well-being of women, men, youth and elderly, and the basic needs of communities, families and including children. All of the pressing challenges already experienced by women working in the fisheries sector are magnified and made worse by the pandemic, for the simple reason that women generally were not provided the same level of economic and social security made available to men. The lack of data on women working informally in the fisheries sector made it challenging to identify women and other disadvantaged groups to channel aid.

Indonesia

The COVID-19 pandemic has severely impacted the tourism industry on the three main islands within the Nusa Penida Marine Protected Area in Bali, Indonesia. The communities went back to seaweed farming, a traditional activity, where women are heavily involved in harvesting and processing. Before the pandemic, the women would just dry the seaweed and sell them to a third party. However, during the pandemic, the women started to process the seaweed themselves as there was an oversupply. In addition to post-harvest activities, the women are now building their business and becoming ore directly involved in processing activities. The Coral Triangle Center provided support to enhance the processing and marketing aspects, capacity building, and product registration and other permits.

For the women in blue swimming crab fisheries in Lampung, Indonesia, their roles are limited to removing crabs from the nets (as pickers) and working in the processing sector. These roles limit their potential and do not provide them a voice in decision-making processes at work. With the training given by CTC on product development, they are able to access financing.

(Source: Leilani Gallardo, Coral Triangle Center at the 2022 WLF Learning Exchange Event)

Malaysia

The impact of COVID-19 pandemic in the marine and fisheries sector has affected the marine capture fisheries and aquaculture. The lockdowns and movement restrictions has limited fisheries activities and movement of people to control the spread of the virus. It affected fisheries supply chains including food processing and trading. The fishers were not allowed to go out to the sea to catch fish, fish farmers were not allowed to work outside, and fish traders and sellers had difficulty selling fish in the markets. Processing plants had to reduce their activities due to decrease in catch, thus women workers in fish processing plants had less work or lost their jobs. As a result, fishers, traders, fish processing workers and all involved in fisheries activities experienced a reduction in their incomes, affecting their and their families' welfare and well-being.

(Source: Ferrer, et al., 2021)

Table 1: Summary of COVID-19 impacts on women fish processors and traders in the sub-Saharan Africa (Atkins et al. 2021)

Don	nains affected	Impacts
Fish food system functions	Production disruptions Storage and distribution disruptions	 COVID-19 restrictions meant fewer fishers were able to access vessels and landing sites, thus there was less catch and fewer fish landed. Some countries closed their borders, which limited imports of fish feeds (such as into Malawi). Surges in the cost of imported fish feed have increased the cost of farmed fish production. These factors have resulted in declines in the availability and accessibility of fish. The scarcity of fish has increased competition and bargaining among post-harvest fish workers. COVID-19 restrictions disrupted transportation to landing sites, urban markets and trading routes across borders. This negatively affected traders' access to customers and, vice versa, customers and consumers' access to fish. Transportation costs increased. Changes to market dynamics increased storage requirements to avoid losses on unsold fish. Where access to processing and storage infrastructure (e.g., cold-storage facilities, warehouses and ice) is poor, this resulted in
Œ	Retail and market disruptions	 School closures, market closures, and disruptions to the restaurant, hotel and tourism sector significantly reduced market demand, retailing hours and marketing avenues. Changing market dynamics, delays in selling and poor purchasing power of buyers and consumers contributed to increased fish quality losses.
	Economic well-being	 Women fish processers and traders have experienced significant reductions in income as a result of the above disruptions. This includes the combination of quality losses and rises in costs of storage and of marketing, leading to reduced profit margins. Loss of revenue and a lack of capital has caused business failures. Consequential loss of capital has affected women's bargaining power. Economic instability has led to increased debt levels. Reduced profit margins have resulted in women not being able to pay back loans. They have not been able to negotiate any restructuring of their loan-repayments and/or have had to take out new loans to repay existing ones.
Individual well-being	Unpaid care work	 COVID-19 containment measures (e.g. school closures) have intensified women's unpaid domestic work burden, and in turn constraints on women's time. Women have shouldered the brunt of increased childcare responsibilities, including physical care, cleaning, feeding and at-home learning responsibilities.
Individua	Health	 Women are routinely exposed to the virus and its physical health impacts through their reliance on work in crowded markets and landing sites. Food intake has been reduced (see food and nutrition below). Declines in economic well-being and increases in unpaid care work have negatively affected women's mental health and have manifested symptoms of psychological distress, particularly stress and anxiety.
	Safety and relations	 Scarcity of fisheries resources has intensified already unequal bargaining and power relations in the food system, and it has increased incidences of sex-for-fish transactions (which in turn create additional risks and potential harm, including HIV). COVID-19 restrictions have increased police presence around fish landing sites and along transportation routes, with women experiencing harassment and exploitation by police. Household economic insecurity and distress have increased gender-based violence.
	Food and nutrition security	 Economic insecurity and declines in the availability and accessibility of fish and other food products have altered and reduced household food consumption. Some women resorted to eating only one meal per day.
Basic needs	Education	 Economic insecurity has adversely affected children's attendance at school. School closures and economic insecurity risk knock-on effects of potential dropout especially by girls, reduction in children's nutrition due to loss of access to school feeding programs, and additional time and economic costs of having children at home. There may also be educational setbacks during children's time out of school, especially for families with illiterate parents, who may not be able to play the role of teacher at home during school closures.

Source: FGDs, Klls and community reporting data.

Papua New Guinea

In Papua New Guinea, COVID-19 has impacted the small-scale fishing communities and isolated islands. Support for basic foods and services was needed as the coastal communities was struggling with shortages of food. In Ahus Island, where the majority of the people work in the fisheries sector, fishers and fish traders had difficulty getting to markets due to the lockdowns and restrictions. Usually, the fishers and traders would take a boat ride to go to the town market to sell fish. During the pandemic, there was almost no demand for fish as the market was closed briefly and travel was restricted.

Once the travel restrictions were eased down and the market reopened, the communities did not have enough cash and many have returned to traditional bartering system, exchanging fish for vegetables. The lack of income and the increasing food shortage resulted in health risks as most households started rationing the food they ate in order to feed the whole family. As families faced challenges, the unpaid care and domestic work by women increased. The government gave support in the form of food and basic services to these coastal communities and with the current situation starting to get better, the situation has improved.

(Source: Lau and Sutcliffe, 2020; Lau et al., 2020)

Philippines

As the national government imposed the enhanced community quarantine, the economy was disrupted. Particularly in the fisheries sector, the limited fishing and marketing activities with limited social assistance package created hardships to fishery communities. Moreover, women traders were greatly affected by the mobility restrictions as they had to stop their business, or had to walk long distances to reach their buyers. With ice plants closing and long hours queueing at checkpoints, fish was spoiled easily.

The government stated that fishing was exempted from restrictions as the fishers were acknowledged as food security frontliners. Due to the strict restrictions in the early months of quarantine, women had to limit their selling to nearby buyers or walk long distance. Other women switched to sewing and selling cloth masks. The local government units (LGUs) supported the small-scale fishers through providing food packs and buying fish.

(Source: Ferrer et al., 2021)

Solomon Islands

The Solomon Islands is a country highly vulnerable to natural disasters such as cyclones, and tsunamis. It is also prone to political unrest and more recently the COVID-19 pandemic with 146 deaths recorded with 18,174 confirmed cases. In this case, both rural and urban communities were affected.

The issues and challenges faced include the restriction in people's movements resulting in reduced production. Domestic shipping services were also disrupted affecting the delivery of food and services due to lockdowns, including disruptions to local markets supplying fish to urban markets. It was observed that in coastal areas, gleaning activities increased. Rural communities continued with their fishing activities in nearshore areas. With shops and markets closed and fresh produce and fish were lacking in urban markets, food and nutrition security were affected. In rural areas, food intake was limited to one meal per day for some families as food supply decreased, with most families prioritizing their children to be fed.

Women traders faced difficulty accessing local markets due to the directive on vaccination. Some women are apprehensive about the effect of the vaccine on them and decided not to be vaccinated. This in turn hampered their ability to trade at local markets.

The pandemic management protocols increased the demand for unpaid care work with the closure of schools in terms of increased hours for childcare. This burden fell on the women who by default are the family's caregivers. Medical facilities such as hospitals were limited to emergency cases although smaller clinics were available to serve the public. As most of the frontline health workers are women, the face a higher risk of being infected.

Business closures led to the laying off of workers and salaries unpaid, thus affecting families who rely on these salaries for their daily subsistence. The rate of sexual violence increased due to the stress the pandemic has caused on families, but only a few cases were reported due to restriction in movements and isolation measures.

(Source: Chelcia Gomese, WorldFish, and Salome Topo, WWF-Pacific at the 2022 WLF Learning Exchange Event)

Timor Leste

Timor-Leste faced several challenges due to the impact of COVID-19 pandemic. Travel restrictions has hit the economic activities and especially bring substantial struggle for informal sector such as those working in the fisheries sector, with limited access to technological supports and relative geographic isolation.

Similar to other countries in the region, the movement restrictions has impacted households income and livelihoods. In some places, the travel restrictions were unequally enforced where the authorities did not apply the same rules for everyone. For example, politicians were able to travel between municipalities as they have private vehicles, whereas the ones dependent on public transport could not travel freely even they are already fully vaccinated. These restrictions have limit the access of fisherfolks to sell their fish. Moreover, the demand for local products including fish has dropped significantly. It is found that the prices reduced up to 50%, hence making it difficult for people to maintain a stable income.

Not only disturbing access to market, the travel restrictions also disrupt the access to fishing equipment. Usually, fishers obtain their fishing tools and equipment from Dili or West Timor, however because of the restrictions they had to use lower quality or less effective products.

(Source: UN Timor-Leste, 2021)

5. Framework for Recommended Actions

The impact of the COVID-19 pandemic is felt worldwide and especially so to those who are already vulnerable and marginalized under normal circumstances. During the pandemic, it also gave the fisheries sector and related sectors an opportunity to step back and build a more inclusive, sustainable, and resilient food system while at the same time addressing societal inequities. Investments, strategies, and policy prescriptions must be gender-sensitive and gender-inclusive to progress and meet the commitment made through the Sustainable Development Goal 5 (SDG 5) on Gender Equality, including the provisions set out in the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (VGSSF Guidelines).

All of these commitments were taken into consideration when drafting the CTI Gender Equality and Social Inclusion (GESI) Policy and the draft Regional Plan of Action 2.0.

The WorldFish report, 'COVID-19 impacts and recommendations' (Atkins et al. 2021) outlined 10 policy recommendations intended for national government agencies, funders of national response strategies, and NGOs seeking to improve gender equity in fisheries, transform food systems for greater resiliency and equality, and to build back better. Whereas the original intent is for sub-Saharan Africa, the issues faced are similar to those in the Coral Triangle. Thus for this action plan, we use the same framework so as not to reinvent the wheel, aligning with regional and global initiatives, and taking into consideration the two relevant CTI-CFF documents: the GESI Policy, and the draft RPOA2.0. **Figure 1** shows the recommendations framework that this action plan followed, adopted from Atkins, et al. (2021). **Table 2** shows the summary of GESI-responsive recommendations to address issues brought about by COVID-19 in the Coral Triangle region, according to the recommendations framework. These recommendations are explained in more detail in Section 6.

An important note to be re-iterated here is that **before implementation of any of the** recommendations, it is highly recommended that a comprehensive gender-disaggregated data collection and analysis be undertaken to better target beneficiaries and manage limited resources.

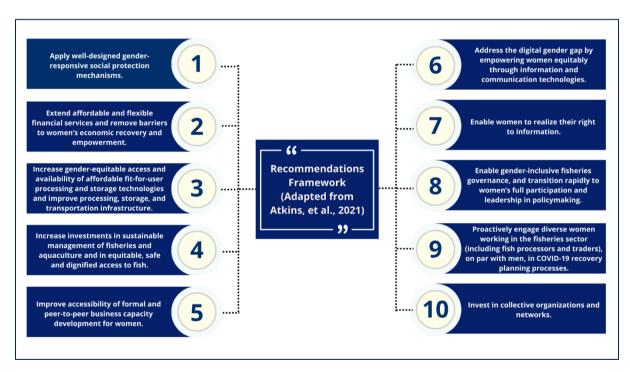


Figure 1. Framework of recommendations that guided this action plan, adapted from Atkins, et al. (2021). Infographic by Smita Yamsangsung.

Table 2. A summary of GESI-responsive recommendations to address COVID-19 impacts and recovery initiatives for the Coral Triangle region

Recommendations (Atkins et al., 2021)	Recommendations for the Coral Triangle Region
Recommendation I: Apply well-designed gender-responsive social protection mechanisms.	Mechanisms must be able to reach, benefit and empower low-income women, especially those working in the informal sector of fisheries to prevent further asset loss and nutritional declines while encouraging economic recoveries. For example, cash and in-kind transfers as well as employment schemes that are sensitive and flexible to unforeseen circumstances.
Recommendation 2: Extend affordable and flexible financial services and remove barriers to women's economic recovery and empowerment.	These measures include savings mechanisms as a medium to long-term strategy; loans, and debt forgiveness /restructuring to enable recovery from the impacts of COVID-19, as well as looking into providing easier access to digital financial services with flexible requirements and attractive interest rates. This way, it allows wider access by women who are mainly working in small to medium-scale enterprises which otherwise not qualified for financial services. This will promote financial inclusion and greater economic resilience and the supply chain that they support.
Recommendation 3: Increase gender-equitable access and availability of affordable fit-for-user processing and storage technologies and improve processing, storage, and transportation infrastructure.	The lockdowns imposed in countries have caused disruptions in the supply chain where women traders and processors are unable to move their stock to the market and processing plants, thus leaving them with large quantities of fish that would eventually turn bad or sold at very low prices. Access to sustainable technologies, better affordability, and capacity of infrastructure taking into account the provision of safer and hygienic facilities indicates sensitivity to women's needs. This will allow businesses to grow and address issues of losses in food quality and quantity.
Recommendation 4: Increase investments in sustainable management of fisheries and aquaculture and equitable, safe, and dignified access to fish.	The investments must ensure a sustained supply of fish and seafood in the supply chains through long-term strategies such as the application of the ecosystem approach to fisheries management (EAFM) respecting the ecosystem of the fishing area. Fair access to and control over physical fisheries resources such as boats, gears, and fishing areas should be provided as well as fit-for-context strategies addressing transactional sex-for-fish (if found that these unscrupulous acts are real) and other forms of security risks unique to women.
Recommendation 5: Improve accessibility of formal and peer-to-peer business capacity development for women.	Building up the confidence and capacities of women from lower incomes groups provides a short-to-medium-term focus aimed at recovering businesses and building up resilience, not only to the individual but to the communities as a whole.

	I
Recommendation 6: Address the digital gender gap by empowering women equitably through information and communication technologies.	The various phases of lockdowns in many countries contributed to the rise of digital transactions. Businesses turned to technology to be kept connected to customer bases. Having the same level of access to technology to connect to their market and be provided with digital capabilities will enable women to thrive and not be left behind. Investments are needed to provide the infrastructure such as access to devices, reliable supply of electricity and internet, and digital skills training.
Recommendation 7: Enable women	Providing access to information, and empowering women's
to realize their right to information.	networks have proven to lead to effective translation of policy into practice and lessons from practice into policy.
	Case in point, with knowledge and training provided by several development partners, the capacities, capabilities, and confidence of the members of the CTI Women Leaders' Forum have risen, and they have managed to develop the CTI GESI Policy and get it endorsed. It is a critical milestone for the network and is currently moving
	towards integrating GESI into all CTI programs.
Recommendation 8: Enable gender-inclusive fisheries governance, and transition rapidly to women's full participation and leadership in policy-making. Recommendation 9: Proactively	Recognize and count (as data) women as key actors in the sector, and remove context-specific social and institutional barriers to women's full engagement – including as leaders – at all levels and in all areas of policymaking representing half of the fisheries workforce and businesses. Acknowledging and engaging with the diverse range of
engage diverse women working in the fisheries sector (including fish processors and traders), on par with men, in COVID-19 recovery planning processes.	women including the youth and those from disadvantaged groups is just as important in identifying their agency/control towards effective and just recovery planning. This will entail developing and applying processes and arrangements that allow diverse women to contribute and be heard in the design, development, and implementation of COVID-19 recovery plans.
Recommendation 10: Invest in collective organizations and networks.	Financially resource and strengthen networking and governing capabilities and voice of regional and national networks, and build accountability and responsiveness of governance bodies to the experiences and leadership of women in fisheries. These bodies will help in highlighting issues and seek support for developing solutions. The CTI Women Leaders' Forum (WLF) is a unique platform with a network that cuts across all six CT countries with memberships ranging from scientists, local leaders, those from the civil service, and NGOs. It has grown from an informal body within the structure of the CTI and evolved into a working entity that has been vocal and effective in ensuring that gender equality and social inclusion will be integrated into all aspects of the CTI by 2030. A step further will be to empower national networks in the same way to affect change on the ground.

Recommendations in relation to adaptive capacity as a foundation for recovery

Many of the responses that can be observed in fisheries are adaptive. To survive, one had to evolve quickly and innovate to work around existing resources and changing circumstances to limit the economic and social impact the pandemic infamously had on people around the world. As per recommended in the 'COVID-19 impacts and recommendations' report, the ten (10) recommendations then take this centrality of adaptive capacity and were designed around a 5-domains framework (Cinner et al., 2018) to ensure the resiliency of the overall food (and social) system.

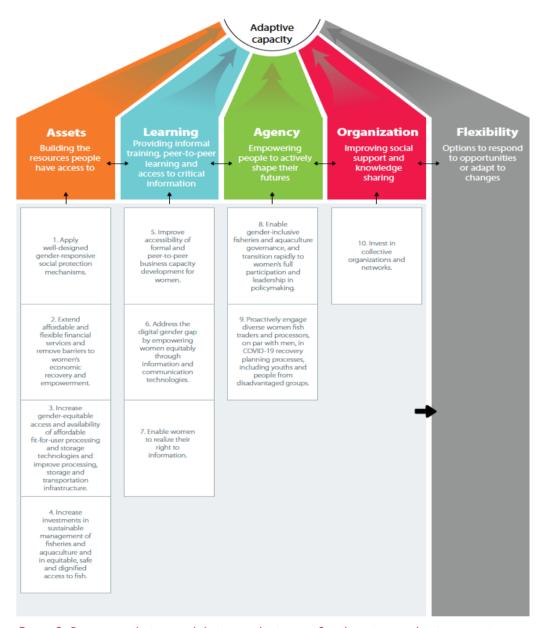


Figure 2: Recommendations and their contributions to five domains to adaptive capacity (adapted from Cinner et al. 2018)

6. COVID-19 impacts on women in fisheries in the Coral Triangle: a cooperative action plan on working together towards gender equality and building back better

This is a draft recommended action plan adapted from the 'COVID-19 impacts and recommendations' report conducted by WorldFish for the sub-Saharan African region (Atkins et al. 2021). Extensive consultation is needed to review and revise via a series of workshops and discussions to finalize this draft Cooperative Action Plan applicable for the Coral Triangle region. Where relevant, actions recommended in the draft Regional Plan of Action 2.0 are applied.

RECOMMENDATION I: Apply well-designed gender-responsive social protection mechanisms.

Mechanisms must be able to reach, benefit and empower low-income women, especially those working in the informal sector of fisheries to prevent further asset loss and nutritional declines while encouraging economic recoveries. For example, cash and in-kind transfers as well as employment schemes that are sensitive and flexible to unforeseen circumstances.

COVID-19 impacts addressed		Recommended actions	Key partners, priority locations, and users	Expected Outcomes	Timeframe (to be determined)
Economic well-being and the fulfillment of basic household needs: Social protection systems address the impacts of the loss of income, including the knock-on implications for women's assets as well as household food and nutrition security, through the provision of cash and/or food.	1.1	Develop rapid gender-responsive cash and inkind transfers that meet the needs of women fishers (immediate/short term).	 International and regional bodies. Specialists (e.g. Socialprotection.org,) 	Prevention and recovery from asset losses and associated losses of businesses	
	1.2	Develop gender-responsive labor market interventions to stimulate employment opportunities for women fishers, workers, and traders who have lost work and income in this period (short and medium-term).	 Collaborate with regional and national networks of women fish workers to ensure reach. Financial institutions. 	en insecurities are addressed. • Women's capacities to manage risks (e.g.	
	1.3	Develop gender-inclusive contributory insurance programs (or other social protection programs e.g. govt. savings scheme that can be withdrawn when needed) that meet the needs of women fishers, workers, and traders and enable them to cope with future shocks, including job losses as well as livelihood disruptions (e.g. maternity leave) (medium and longer-term).	National government agencies.	sickness) are enhanced. • Spin-off effects are addressed in community-wide economic recovery.	
		[additional actions]			

RECOMMENDATION 2: Extend affordable and flexible financial services and remove barriers to women's economic recovery and empowerment.

These measures include savings mechanisms as a medium to long-term strategy, loans, and debt forgiveness (or restructuring) to enable recovery from the impacts of COVID-19, as well as looking into providing easier access to digital financial services with flexible requirements and attractive interest rates. This way, it allows wider access by women who are mainly working in small to medium-scale enterprises which otherwise not qualified for financial services. This will promote financial inclusion and greater economic resilience and the supply chain that they support.

COVID-19 impacts addressed		Recommended actions	Key partners, priority locations, and users	Expected Outcomes	Timeframe (to be determined)
Economic well-being: As a result of COVID-19, women fishers, fish processors and traders have either had their income and working capital decline significantly or have lost it entirely. Access to finance is paramount to individual recovery.	2.1	Rapidly develop well-targeted financial relief to women business owners, such as debt forgiveness or renegotiation on terms that will enable women entrepreneurs to recover fully.	 Financial institutions (e.g. the World Bank) and development agencies. Women who want to 	Women entrepreneurs have greater access to financial services to establish or grow their businesses.	
	2.2	Develop or adapt financial instruments that can build back women's businesses, particularly low-income women. These may include providing loans and other financial services (e.g. access to savings and bank accounts) to increase or improve financial support for women fish processors and traders to develop their business activities.	expand their business operations. Women who require capital to revive their business activities after COVID-19.		
	2.3	Improve women's access to finance by easing loan conditions (i.e. collateral requirements) and reducing interest rates.			
	2.4	Address social barriers to women's expanding economic empowerment. For example, incorporate gender-transformative approaches into programming. These approaches engage men (together with women) as change agents in reducing imbalances in gendered control over finances and women's control over their own income.			
	2.5	Effectively communicate the availability of funds, especially hard-to-reach ("last mile") women.			
		[additional actions]			

RECOMMENDATION 3: Increase gender-equitable access and availability of affordable fit-for-user processing and storage technologies and improve processing, storage, and transportation infrastructure.

3.1	Facilitate the development and use of fit-for-users				(to be determined)
5.1	and fit for- context and affordable technology, such as fuel-efficient biogas, fuelled smoking kilns or solar driers, in particular ensuring responsiveness to the needs of women processors.		Users themselves; developments should be community-led to ensure the technology is contextually	 Impact of fish processing activities on the natural environment is reduced. Post-capture fish 	
3.2	Improve the affordability of infrastructure, with appropriate energy-efficient technology and financing mechanisms.	 appropriate. Processing facilities should be located near beach landing sites. Areas with poor 	quality losses drop through improved access and capacities of processing and storage facilities. poor • More fish is available		
3.3	Expand physical capacities of processing and storage infrastructure to enable post-harvest fish workers to scale up their businesses.				
3.4	Increase the number of facilities around beach landing sites.		infrastructure should	therefore improved	
3.5	Enable collective spaces for processing activities and equipment sharing and encourage peer-to-peer information exchange and mutual learning among women.		oe prioritazea.	Fish products for consumers are of better quality.	
3.6	In conjunction with the above, assess gender-related barriers in context (such as care burdens on women and unequal ownership of assets) and integrate bespoke strategies to address those, such as gender-transformative approaches that engage men as change agents for equality.				
3.7	Improve the physical spaces of processing and trading, in particular taking into account the needs of women processors and traders (e.g. modern wash and changeroom facilities with separate spaces for women fishmongers and processors). These can (i) improve sanitation, (ii) allow women to bring their babies, as they have a space to change nappies, and (iii) increase overall processing efficiency.				
	3.3 3.4 3.5	Improve the affordability of infrastructure, with appropriate energy-efficient technology and financing mechanisms. Expand physical capacities of processing and storage infrastructure to enable post-harvest fish workers to scale up their businesses. Increase the number of facilities around beach landing sites. Enable collective spaces for processing activities and equipment sharing and encourage peer-to-peer information exchange and mutual learning among women. In conjunction with the above, assess gender-related barriers in context (such as care burdens on women and unequal ownership of assets) and integrate bespoke strategies to address those, such as gender-transformative approaches that engage men as change agents for equality. Improve the physical spaces of processing and trading, in particular taking into account the needs of women processors and traders (e.g. modern wash and changeroom facilities with separate spaces for women fishmongers and processors). These can (i) improve sanitation, (ii) allow women to bring their babies, as they have a space to change nappies,	Improve the affordability of infrastructure, with appropriate energy-efficient technology and financing mechanisms. Expand physical capacities of processing and storage infrastructure to enable post-harvest fish workers to scale up their businesses. Increase the number of facilities around beach landing sites. Enable collective spaces for processing activities and equipment sharing and encourage peer-to-peer information exchange and mutual learning among women. In conjunction with the above, assess gender-related barriers in context (such as care burdens on women and unequal ownership of assets) and integrate bespoke strategies to address those, such as gender-transformative approaches that engage men as change agents for equality. Improve the physical spaces of processing and trading, in particular taking into account the needs of women processors and traders (e.g. modern wash and changeroom facilities with separate spaces for women fishmongers and processors). These can (i) improve sanitation, (ii) allow women to bring their babies, as they have a space to change nappies, and (iii) increase overall processing efficiency.	a.2 Improve the affordability of infrastructure, with appropriate energy-efficient technology and financing mechanisms. Expand physical capacities of processing and storage infrastructure to enable post-harvest fish workers to scale up their businesses. Increase the number of facilities around beach landing sites. Enable collective spaces for processing activities and equipment sharing and encourage peer-to-peer information exchange and mutual learning among women. In conjunction with the above, assess gender-related barriers in context (such as care burdens on women and unequal ownership of assets) and integrate bespoke strategies to address those, such as gender-transformative approaches that engage men as change agents for equality. Improve the physical spaces of processing and trading, in particular taking into account the needs of women processors and traders (e.g. modern wash and changeroom facilities with separate spaces for women fishmongers and processors). These can (i) improve sanitation, (ii) allow women to bring their babies, as they have a space to change nappies, and (iii) increase overall processing efficiency.	needs of women processors. Improve the affordability of infrastructure, with appropriate energy-efficient technology and financing mechanisms. Expand physical capacities of processing and storage infrastructure to enable post-harvest fish workers to scale up their businesses. Increase the number of facilities around beach landing sites. Enable collective spaces for processing activities and equipment sharing and encourage peer-to-peer information exchange and mutual learning among women. In conjunction with the above, assess gender-related barriers in context (such as care burdens on women and unequal ownership of assets) and integrate bespoke strategies to address those, such as gendertransformative approaches that engage men as change agents for equality. Improve the physical spaces of processing and trading, in particular taking into account the needs of women processors and processors). These can (i) improve sanitation, (ii) allow women to bring their babies, as they have a space to change nappies, and (iii) increase overall processing efficiency.

RECOMMENDATION 4: Increase investments in sustainable management of fisheries and aquaculture and in equitable, safe, and dignified access to fish.

The investments must ensure a sustained supply of fish and seafood in supply chains through long-term strategies such as the application of the ecosystem approach to fisheries management (EAFM) respecting the ecosystem of the fishing area. Fair access to and control over physical fisheries resources such as boats, gears, and fishing areas should be provided as well as fit-for-context strategies addressing transactional sex-for-fish (if found that these unscrupulous acts are real) and other forms of security risks unique to women.

COVID-19 impacts addressed	Recommended actions	Key partners, priority locations, and users	Expected Outcomes	Timeframe (to be determined)
Production disruptions, bargaining and power relations: COVID-19 has exacerbated many of these challenges facing capture fisheries. COVID-19 has exposed some of the vulnerabilities in the aquaculture sector (e.g. dependence on	Invest in the conservation and enhancement of wild fish populations through the following: • Pursue sustainable and contextually appropriate management approaches (e.g. managed areas or other management tools, such as fish aggregation devices). • Strengthen and scale community-based approaches to fisheries management. • Commit to and implement the FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries.	Fisheries, aquaculture, and development specialists, including FAO and other organizations operating nationally (e.g. WorldFish)	 Fisheries are stronger and sustainable for future generations. Access to fish is improved for women fish processors and traders' business activities. Unequal power relations Between women postharvest fish workers and 	2030
imported fish feed and the knock-on implications for actors along the fish food system). • Women report that COVID- 19-related declines in the availability of fish have exacerbated sex-for-fish transactions and exposed women to exploitation.	Conduct a thorough assessment of fit-for- context fish supply options and invest in aquaculture only in contexts that are appropriate and in ways that do not undermine capture fisheries as an essential source of fish supply and livelihoods. Where appropriate, do the following: • Support developments in fish farming by investing in breeding programs and exploring national opportunities for more environmentally sustainable fish feed production. • Explore opportunities for nutrient-rich small fish species in aquaculture. • Collaborate with regional and national networks as well as development partners to avoid emerging risks of non-inclusive sector development. Instead, ensure		fishermen as well as interrelated exploitative relationships (e.g. sexfor-fish) are both addressed. CTI draft RPOA2.01 Target Outcome A3.1 Fish stocks and health are improved in the Coral Triangle region based on Ecosystems Approach to Fisheries Management (EAFM) approaches including Community Based Resource Management (CBRM), Ecosystem	

COVID-19 impacts addressed		Recommended actions	Key partners, priority locations, and users	Expected Outcomes	Timeframe (to be determined)
		women and smallholders are effectively involved in fish farming developments and engaged in future research.		based Adaptation (EBA), Integrated Coastal Management (ICM) and other	
	4.3	Facilitate women's equal and direct access and control over fish as a resource in any mode of production. For example, enable legal ownership of land and ponds, provide finance to allow women to buy assets, enhance women's safe mobility, and assess collective enterprises.		fisheries management approaches. [CTI draft RPOA2.0] Target Outcome B1.1 by 2030, food security and sustainable livelihoods of coastal communities living in the CT region is ensured and improved to cope with the risks and impacts of climate change, natural and anthropogenic threats.	
	4.4	Address underlying gender dynamics through a combination of the following: i) specific gender-based data and policy interventions to ensure that harmful gender-transactions are identified and prevented, and ii) multi-actor programming with women and men in communities as well as enforcement officers to surface and identify context-appropriate means of addressing sex-for-fish or other harmful dynamics.			
	4.5	Expand (re-establish) the viability of women's fish businesses through policy measures, such as governments (i) expanding agriculture commodity trade opportunities relating to fish and fish products and engaging women traders in these opportunities, and (ii) assessing and easing policy barriers that limit women's crossborder fish trade.			
		[additional actions]			
		[additional actions]			

RECOMMENDATION 5: Improve accessibility of formal and peer-to-peer business capacity development for women.

Building up the confidence and capacities of women from lower incomes groups provides a short-to-medium-term focus aimed at recovering businesses and building up resilience, not only to the individual but to the communities as a whole.

COVID-19 impacts addressed		Recommended actions	Key partners, priority locations, and users	Expected Outcomes	Timeframe (to be determined)
Retail and market disruptions and economic well-being: • COVID-19 has gravely impacted the economic viability of many women's businesses. • It became evident that an ability to use digital	5.1	Expand well-tailored business management and develop capacity development opportunities for women fish entrepreneurs, including training and formal coaching programs such as those with private sector actors.	FAO, WorldFish, CTC, WWF, and others. Women who want to expand their business operations.	thers. from low-income groups, have a greater capacity to	
	5.2 in capacity development programming, in	Women small business owners or prospective business owners.	their activities if desired. Self-efficacy and agency of women entrepreneurs are enhanced, and greater		
technology as a means to access market information, buyers, and			connectivity (social capital) is made amo		
retailers was critical to sustain businesses during COVID-19 when physical	5.4	Ensure capacity development is relevant and accessible for women with low literacy levels.		sector.	
connectivity was diminished.	5.5	Engage men in processes to reduce male resistance to or takeover of women's entrepreneurship and businesses. (For how to engage men, see, for example, Promundo-US and AAS 2016 and CARE International 2016.)			
	5.6	Effectively communicate the availability of training and capacity development opportunities.			
	5.7	Support and enable peer-to-peer knowledge sharing (e.g., "mentoring" by successful women entrepreneurs).			
	5.8	Collaborate with national and regional networks of women fish processors and traders to organize and implement training and mentoring programs, including those that use experiential learning models.			

RECOMMENDATION 6: Address the digital gender gap by empowering women equitably through information and communication technologies.

The various phases of lockdowns in many countries contributed to the rise of digital transactions. Businesses turned to technology to be kept connected to customer bases. Having the same level of access to technology to connect to their market and be provided with digital capabilities will enable women to thrive and not be left behind. Investments are needed to provide the infrastructure such as access to devices, reliable supply of electricity and internet, and digital skills training.

COVID-19 impacts addressed		Recommended actions	Key partners, priority locations, and users	Expected Outcomes	Timeframe (to be determined)			
Retail, market and distribution disruptions:	6.1	Develop rapid and effective partnerships to provide reliable access to devices, power, and the internet.	and Public sector electricity and telecommunications agencies. Private sector actors, such as mobile phone and telecommunications companies and solar power companies, including women-led and women-targeted companies. National and regional networks of women fish workers and other women's NGOs and civil society networks.	associations. Public sector electricity and telecommunications agencies. Private sector actors, Private sector actors,	associations. Public sector electricity	associations. fish pro retailing public sector electricity	retailing activities is	
Virtual marketing enabled some women fish processors and traders to continue their income-earning activities during periods of COVID-19-related mobility restrictions.	6.2	These should be fit-for-client technologies and models, including small, flexible, solar options for power as well as flexible payment schemes.			Marketing opportunities are expanded, and profit			
	6.3	Provide ICT skills training to women, whilst also working with men to reduce male resistance.		better market links and information).				
	6.4	Collaborate with national and regional networks of women fish workers to design and deliver ICT training materials.		Several spinoff effects occur increased access to critical information (including health and gender-based violence resources and to climate information); access to digital financial resources; ability for children to				
	6.5	Encourage youth involvement and innovation by, for example, offering financial incentives and competitive small innovation grants, innovative ICT-related products, and solutions.						
	6.6	Promote knowledge sharing among women, with leadership from young people, on ICT skills for business.						
	6.7	In conjunction with the above, assess gender- related barriers in context (such as unequal access to phones or the internet, online safety, and harassment) and integrate bespoke strategies to address those, including gender transformative approaches that engage men as change agents for equality.						

RECOMMENDATION 7: Enable women to realize their right to information.

Providing access to information, and empowering women's networks have proven to lead to effective translation of policy into practice and lessons from practice into policy. Case in point, with knowledge and training provided by several development partners, the capacities, capabilities, and confidence of the members of the CTI Women Leaders' Forum have risen, and they have managed to develop the CTI GESI Policy and get it endorsed. It is a critical milestone for the network and is currently moving towards integrating GESI into all CTI programs.

COVID-19 impacts addressed	Recommended actions		Key partners, priority locations, and users	Expected Outcomes	Timeframe (to be determined)
All impacts were addressed, as women who were networked were reported to fare better.	7.1	Improve the transfer of information from policy to practice to ensure all women fish workers are comprehensively informed of existing and changing policies and strategies that impact or provide them opportunities.	Partner with and financially resource national and regional networks of women fishers, fish processors, and traders to disseminate information and coordinate	educational resources, financial services, new technologies, accurate and timely market and trade information for	
	7.2	Improve accessibility of information for women, including those with low literacy, to ensure the information is accurately understood (for example, in written and visual form and nondominant languages).	awareness-raising campaigns. Women can exercise the voices and enter informed dialogue about decisions and policies that affect their lives. Spinoff effects are addressed, including greater policy compliance.	Women can exercise their voices and enter informed dialogue about decisions and policies that affect their lives. Spinoff effects are	
	7.3	Improve accessibility to financial assistance information so women are aware of available financial assistance.			
		[additional actions]			
		[additional actions]			

RECOMMENDATION 8: Enable gender-inclusive fisheries governance, and transition rapidly to women's full participation and leadership in policy-making.

Recognize and count (as data) women as key actors in the sector, and remove context-specific social and institutional barriers to women's full engagement – including as leaders – at all levels and in all areas of policymaking representing half of the fisheries workforce and businesses.

COVID-19 impacts addressed	Recommended actions	Key partners, priority locations, and users	Expected Outcomes	Timeframe (to be determined)
Fish food system functions: • Many nations are investing in improved (including more gender-equitable) governance through alignment with the SSF Guidelines (FAO 2018), but such commitments are at risk with attention turned to COVID-19 responses. • To be effective, COVID-19 recovery efforts and broader sector policy development and implementation and	Fisheries and other relevant government agencies engage national and regional networks of women fish processors and traders in monitoring fish food systems and developing local to national responses to COVID-19 and in meeting the pre-existing commitment to the SSF Guidelines. National guidelines need local input to design, implement and monitor well. National fisheries departments, in collaboration with/including extension and statistics units, and nongovernmental partners (extension NGOs) should challenge existing views of fish food systems as men's domains, by gathering, analyzing and reporting gender-balanced data (on women and men in both pre-production and along all post-production supply chain nodes) and extension services that employ, reach and benefit women and men equally (Kleiber et al. In press).	Men also need to be engaged when addressing sociocultural barriers to women's participation in local governance. National departments, including those concerned with extension (e.g. equivalent to Department of Agriculture, Forestry & Fisheries, Ministry of Fisheries Development) and statistics (e.g. National Bureau of Statistics). Public and private monitoring, control, and	Quality fisheries governance from local to national scales is improved, in line with the SSF Guidelines. Rule of law and accountability are improved in fisheries spaces and markets. Fisheries policies, from local to national levels, better reflect women's and men's needs, and safer and more dignified work becomes available for both women and men in fisheries.	2030

COVID-19 impacts addressed		Recommended actions	Key partners, priority locations, and users	Expected Outcomes	Timeframe (to be determined)
monitoring must be explicitly gender- inclusive from design, through implementation to data collection.	8.3	During COVID-19 recovery, increase attention to the rule of law and accountability, especially anti-corruption, bribery, and antiharassment monitoring and strategies at the local scale in relation to the fish trade.	surveillance agencies. National departments (e.g. Department of Women, Youth and Persons with Disabilities) and civil society groups to identify what has worked and potential strategies to reduce harassment, local corruption, and transactional fish-for-sex.	Target Outcome B2.1 By 2030, gender equality and social inclusion are mainstreamed into coastal livelihoods, sustainable fisheries and food security including COASTFISH regional framework and other activities.	
	8.4	Consider piloting cameras and (safe, inclusive) reporting mechanisms in fish transaction spaces or locally developed strategies to ensure safety and stop harassment. Assess and apply lessons from contexts that have made progress in this area, including strategies to engage men in cocreating safe and dignified environments.			
	8.5	Convenors and facilitators of local fisheries governance can enhance gender equity by applying best practices in the setup and/or facilitation of and support to local governance organizations as outlined in the SSF Guidelines (point 8 on gender equality in particular [FAO 2018] and current resources (e.g. see Kleiber et al. 2019).			
	8.6	Fisheries extension processes can incorporate gender-transformative strategies to address sociocultural barriers (e.g. women's domestic care burden's, behavioral stereotypes and mobility constraints) (Cole et al. 2018).			

RECOMMENDATION 9: Proactively engage diverse women working in the fisheries sector (including fish processors and traders), on par with men, in COVID-19 recovery planning processes.

Acknowledging and engaging with the diverse range of women including the youth and those from disadvantaged groups is just as important in identifying their agency/control towards effective and just recovery planning. This will entail developing and applying processes and arrangements that allow diverse women to contribute and be heard in the design, development, and implementation of COVID-19 recovery plans.

COVID-19 impacts addressed	Recommended actions		Key partners, priority locations, and users	Expected Outcomes	Timeframe (to be determined)
All impacts were noted.	Invest in multiple and gender-balanced perspectives on response plans and effective solutions. Ensure women's voices are equally included and heard in the decision-making spaces and processes where responses are formed. National and regional networks of women fish workers. Engagement should extend to men and women, both adults and youths, from disadvantaged groups.	and traders' agency is enhanced and recognized as vital to just, relevant and efficient COVID-19 recovery plans. Responses address the	2030		
	9.3	Increase women's leadership at all levels of COVID-19 response structures.		based violence and providing sexual and reproductive health services or womenspecific economic	
	9.4	Support women's participation by addressing gender-specific barriers to decision-making spaces.		assistance. [CTI draft RPOA2.0] Target Outcome B2.2 By 2030, the CTI-CFF reports a positive change in productivity, skills, income, gender and social inclusion, youth involvement and sustainability of coastal livelihoods in priority seascapes and MPA networks.	

RECOMMENDATION 10: Invest in collective organizations and networks. Financially resource and strengthen networking and governing capabilities and voice of regional and national networks, and build accountability and responsiveness of governance bodies to the experiences and leadership of women in fisheries.

These bodies will help in highlighting issues and seek support for developing solutions. The CTI Women Leaders' Forum (WLF) is a unique platform with a network that cuts across all six CT countries with memberships ranging from scientists, local leaders, those from the civil service, and NGOs. It has grown from an informal body within the structure of the CTI and evolved into a working entity that has been vocal and effective in ensuring that gender equality and social inclusion will be integrated into all aspects of the CTI. A step further will be to empower national networks in the same way to affect change on the ground.

COVID-19 impacts addressed	Recommended actions		Key partners, priority locations, and users	Expected Outcomes	Timeframe (to be determined)
Collectives can enhance resilience and recovery: during the pandemic, women organized within cooperatives or associations and have been able to access affordable loans from group savings to rebuild their capital, resume their business activities and provide for family expenses.	10.1	Financially resource national and regional networks, collectives, organizations.	National and regional networks of women fish workers, specifically CTI WLF. International funders.	Reach and representative voice of women entrepreneurs' national level networks are expanded.	
	10.2	Strengthen the organizational capacities of women fish workers organizations (national associations).		Social learning opportunities are increased.	
	10.3	Help create or maintain shared/collective spaces (e.g. processing facilities, storage facilities, and retailing spaces).		The resilience and capacity of national-level networks of women entrepreneurs are increased to respond to the needs and ideas of diverse members effectively and rapidly. Resilience and adaptive capacity of women entrepreneurs in fish food systems are enhanced.	
	10.4	Identify "champions" who raise the debate about gender equality in the sector and underscore women's contributions to fisheries and aquaculture, as well as cross-border fish trade. These champions could work within the framework of CTI priorities, linking to the UN SDGs.			
		[additional actions]			
		[additional actions]			

References and Suggested Readings

- Atkins, M., McDougall, C. and Cohen, P.J. 2021. COVID-19 impacts on women fish processors and traders in sub-Saharan Africa: Insights and recommendations for building forward better. Penang, Malaysia: CGIAR Research Program on Fish Agri-Food Systems. Program Report: FISH-2021-12. Available at https://www.worldfishcenter.org/publication/COVID-19-impacts-women-fish-processors-and-traders-sub-saharan-africa-insights-and
- Cinner, J.E., Adger, W.N., Allison, E.H., Barnes, M.L., Brown, K., Cohen, P.J., Gelcich, S., Hicks, C.C., Hughes, T.P., Lau, J. and Marshall, N.A. 2018. Building adaptive capacity to climate change in tropical coastal communities. Nature Climate Change 8(2):117–23. doi:10.1038/s41558-017-0065-x
- FAO. 2020. The State of World Fisheries and Aquaculture 2020. Sustainability in action. Food and Agriculture Organization of the United Nations. Rome. https://doi.org/10.4060/ca9229en
- Ferrer, A.J.G., Pomeroy, R., Akester, M.J., Muawanah, U., Chumchuen, W., Lee, W.C., Hai, P.G., and Viswanathan, K.K. 2021. COVID-19 and Small-Scale Fisheries in Southeast Asia: Impacts and Responses. Asian Fisheries Science 34:99-113.
- Grantham, R., Lau, J., and Kleiber, D. 2020. Gleaning: beyond the subsistence narrative. Maritime Studies, 19, 509-524. https://doi.org/10.1007/s40152-020-00200-3
- Kleiber D, Harper S, Appiah, Atkins M, Bradford, Choudhury A, Cohen P, de la Puente, De la Torre Castro, Duffy-Tumasz et al. 2021 (in press). Gender and small-scale fisheries: Moving beyond sexist data structures. In FAO, Duke University and WorldFish. In press. Illuminating hidden harvests: The contribution of small-scale fisheries to sustainable development. Rome: FAO.
- Lau, J. and Sutcliffe, S.R. 2020. "We didn't have money or enough food': how COVID-19 affected Papua New Guinean fishing families. The Conversation, December 16, 2020. Available at https://theconversation.com/we-didnt-have-money-or-enough-food-how-COVID-19-affected-papua-new-guinean-fishing-families-152009
- Lau, J., Sutcliffe, S & Hungito, W. 2020. Lived experiences of COVID-19: impacts on an atoll island community, Papua New Guinea. Townsville, Australia. ARC CoE in Coral Reef Studies, James Cook University. Report. Available at https://www.coralcoe.org.au/wp-content/uploads/2020/10/COVID-19-report.pdf
- Seager, J. 2021. Gender and illegal wildlife trade: Overlooked and underestimated. WWF. Gland, Switzerland. https://wwfint.awsassets.panda.org/downloads/gender_iwt_wwf_report_v9.pdf
- UNEP. 2016. Global Gender and Environment Outlook. UN Environment. Nairobi, Kenya. Available at https://www.unep.org/resources/report/global-gender-and-environment-outlook-ggeo
- UN Women. 2021. Women and Girls Left Behind Glaring gaps in pandemic responses. Available at https://data.unwomen.org/sites/default/files/documents/Publications/glaring-gaps-response-RGA.pdf
- UN Timor-Leste. 2021. Socio-Economic Impact Assessment of COVID-19 in Timor-Leste, Round 2. Conducted by UNDP and UNFPA in collaboration with UN Women, UNICEF, UN Timor-Leste Resident Coordinator's Office, and the General Directorate of Statistics of the Ministry of Finance in Timor-Leste. Available at https://timorleste.un.org/sites/default/files/remote-resources/0318222c8daacb679a0d5981d0bba788.pdf

- USAID Oceans. 2018(a). Gender Analysis of the Fisheries Sector: Bitung, Indonesia. The Oceans and Fisheries Partnership (USAID Oceans). Bangkok, Thailand. https://www.seafdec-oceanspartnership.org/wp-content/uploads/USAID-Oceans_Indonesia-Gender-Analysis_2018-Final.pdf
- USAID Oceans. 2018(b). Gender Analysis of the Fisheries Sector: General Santos, Philippines. The Oceans and Fisheries Partnership (USAID Oceans). Bangkok, Thailand. https://www.seafdec-oceanspartnership.org/wp-content/uploads/USAID-Oceans_Philippines-Gender-Analysis_2018-Final.pdf
- USAID Oceans. 2020. Regional Document on Gender Integration in the Fisheries Workplace. The Oceans and Fisheries Partnership (USAID Oceans). Bangkok, Thailand. https://www.seafdec-oceanspartnership.org/wp-content/uploads/USAID-Oceans_SEAFDEC_WLF_Regional-Gender-Integration_Fisheries_APPROVED.pdf
- World Bank. 2012. Hidden Harvest: The Global Contribution of Capture Fisheries. Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/11873

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