

The Impact of COVID-19 in Social Sustainability: A Fish Value Chain Exploration

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Received: March 15, 2020
Accepted: January 12, 2021
Published: April 26, 2021

Abstract

The idea of UN Sustainable Development Goals that no one is left behind is gaining higher importance, especially during the pandemic. Despite social sustainability is a complex topic due to the absence of a clear definition and its subjectivity. It relates with existing social problems, where the COVID-19 pandemic has also increased these problems in the food value chain: poor decent working conditions, lack of occupational health and safety at the workplace, forced labor, and intensive hours of work, among others. As half of the world's workforce is involved in the food industry, the better understanding of its associated value chains in times of pandemic can contribute to improve social sustainable practices. With this aim the current paper identifies and analyzes current challenges and problems linked to social sustainability in times of COVID-19, identifying key actors and potential solutions and recommendations. The research adopts a qualitative and exploratory method applied through the Grounded Theory analysis combining desk research with inputs from a multi-stakeholder consultation of 35 fishery experts from all over the world. The paper provides new insights and shared experiences about social sustainability in the fish value chain to overcome the crisis times we are living in.

Key words

Social Sustainability, Fish Industry, Value Chain, Sustainable Development Goals, Qualitative Analysis

How to cite this article

Toussaint, M., & Cabanelas, P. (2021). The Impact of COVID-19 in Social Sustainability: A Fish Value Chain Exploration. *Harvard Deusto Business Research*, X(1), 109-126. <https://doi.org/10.48132/hdbr.338>

1. Introduction

Although the United Nations (UN) included the three pillars of sustainability (environment, economy, and society) in its activities and agenda, it was not officially reflected until 2017 through the UN Sustainable Development Goals (SDG). Among other objectives, the 2030 Agenda aims at ending all forms of poverty, fighting inequalities and addressing climate change, but at the same time ensuring that no one is left behind (UN, 2015). Those issues relate to social sustainability, as one of the three pillars of the sustainable development (Brundtland, 1987), and they are suffering a considerable stress in this pandemic times with a direct influence on people.

In the supply chain management, sustainability is an emerging concept usually defined by a focal company that establishes the sustainable practices to be adopted in the whole chain (Seuring & Muller, 2008; Kareiva, McNally, McCormick, Miller, & Ruckelshaus, 2015). But the sustainability commonly focused on environment and economic issues (Zhu & Sarkis, 2007; Vachon & Klassen, 2008; Green, Zelbst, Bhaduria, & Meacham, 2012; Zhu, Sarkis & Lai, 2013), keeping social sustainability in the shadow (Mani & Gunasekaran, 2018; Whitelock, 2019). The underlying reason is the lack of clarity in its definition and its subjectivity, making it the least explicit pillar of sustainability (Toussaint, Cabanelas & Blanco-Gonzalez, 2020). However, the inter-linkage among the three pillars is central (Carter & Easton, 2011), particularly in this period of contingency, a time where persons in the upper steps of the value chain are the most affected.

Particularly, the concept of social sustainability in the food industry is quite novel due to the lack of studies analyzing it (Sancha, Gimenez & Sierra, 2016; Whitelock, 2019; Toussaint, Cabanelas & Gonzalez-Alvarado, 2021). Although there are few analyses on sustainable initiatives across all levels of the food industry, from the agricultural sector to the distribution industry (Soysal, Bloemhof-Ruwaard, Meuwissen, & van der Vorst, 2012; Beske, Land & Seuring, 2014; Fredriksson & Liljestrang, 2015; Soto-Silva, Nadal-Roig, Gonzalez-Araya & Pla-Aragones, 2016), they do not provide a holistic approach of social sustainability in the food value chain.

Specifically, this paper analyses the effects of COVID-19 pandemic in the social sustainability of an important industry of the food value chain, as fisheries are, to better understand current problems and challenges. It is not a minor issue as this activity, jointly with agriculture, employs half of the world's labor force and it is considered by ILO (2020) as one of the three most hazardous industries along with the construction and mining sectors in terms of fatalities, injuries and work-related ill-health. Problems, such as poor decent working conditions, lack of occupational health and safety at the workplace, forced labour, and intensive hours of work, among others, usually occur

throughout the fish value chain (ILO, 2017) and they were aggravated due to current circumstances.

Due to the complexity and novelty of social sustainability in the Fish Value Chain (FIVC), the research adopts a qualitative and exploratory method applied through the Grounded Theory (GT) analysis (Johnson, 2015; Minten, Tamru, Engida & Kuma, 2016). This approach helps at identifying core concepts, descriptions and relationships among different categories to gain a better understanding of social sustainability in order to identifying social problems, involved actors and proposing potential solutions. Specifically, this research combines a desk research with inputs from a multi-stakeholder consultation of 35 fishery experts from different levels in the value chain all over the world.

Therefore, the structure of this paper is as follows. The second section reviews existing literature and includes core concepts to better understand the topic. The third section details the methodology, which provides an explanation of the recaptured approach. Then, the findings are presented and described, where it includes a discussion about the results obtained. Lastly, the paper ends with conclusions integrating the main theoretical and practical implications, and also limitations and further directions of study.

2. Literature Review

Sustainability, as an emerging concept in the food supply chain (Genovese, Acquaye, Figueroa & Koh, 2017), includes different initiatives: prevention of food waste by the consumers' behaviors, proactive strategies to enhance sustainable performance, strengthening national safety control systems and the transformation of the food system to increase the farmers' income (Glover, Champion, Daniels & Dainty, 2014; Zhu et al., 2018). Particularly, researchers have made important efforts to measure performance in the supply chain encompassing financial and non-financial measures in the triple bottom line (Van der Vorst, 2006), and multidimensional approaches incorporating production and distribution costs, profits, inventory and ROI (Aramyan et al., 2007). Those efforts also resulted in scorecards (Bigliardi and Bottani, 2010) and specific frameworks considering quality, safety, sustainability and efficiency (Manzini and Accorsi, 2013). However, those approaches under-represented the social dimension in the supply chain due to its complexity to quantify social factors and embed them in a mathematical framework (Eskandarpour et al. 2015).

This situation is particularly relevant nowadays, as many food products are traded worldwide through value chains because of globalization. It means a strong vertical coordination among different firms with a high synchronization in successive stages (Swinnen & Maertens, 2007). It means information exchange by providing inputs and technical support, through rigorous contracts (Goodhue, 2011). But it also causes a more difficult control over each actor involved, making problems and culprits more difficult to identify.

Previous studies on vertical coordination in the food value chain have been highly influenced by supply chain management (SCM) research (Scholten & Schilder, 2015). On one hand, the SCM approach has the focus on the optimization of the supply chain of the focal company by increasing its competitiveness while reducing its costs. And on the other, the value chain analysis takes a

broader perspective by including all actors involved throughout the value chain, from producers and communities to retailers, wholesalers and consumers, and from an economic and social approaches and are more unusual (Gereffi & Lee, 2016; Toussaint et al., 2020). Thus, the value chain approach provides a holistic and more complete analysis by including all relevant aspects and elements of the food value chains (Toussaint & al., 2021). It is particularly important in times of crisis, particularly on health crisis, as the persons should stay in first place in managerial decision taking (Mora-Cortez & Jonhson, 2020), particularly those vulnerable people in value chains.

In this regard, fish, as one of the most traded food commodities worldwide, with millions of people depending on fisheries as a source of jobs, income and livelihoods (FAO, 2020), plays a central exposition to this crisis; particularly due to its exposition to the lowest stages of the value chain (fish extraction). FAO (2020) estimates that 59.5 million people are directly engaged in the primary sector of capture fisheries and aquaculture in 2018. Social sustainability in FIVCs, including aquaculture, has become a major focus of work in the international community and the key stakeholders direct or indirectly involved in it. Despite there are efforts trying to tackle social problems in FIVC, there is still much to do. All over the world, human and labour rights violations and abuses in the sector have been documented, where unacceptable practices are still taking place, not only in developing countries but also in the developed world (FAO, 2020). Also, human trafficking, forced labour and other labour abuses onboard fishing vessels are strongly associated with illegal, unreported and unregulated (IUU) fishing, mainly involving migrant workers (FAO, 2020). Social protection is a key to address fishers' specific vulnerabilities and risks with an important impact in situation of crisis. However, as other rural poor, fishers are often neglected by national social protection policies and programs (FAO, 2020).

Therefore, it is essential to advance towards a central recognition of social sustainability in FIVC, and how to deal with COVID-19 crisis. It is a required input to achieving SDGs within the national and international legal frameworks, but also by promoting a socially responsible along the FIVC (Teh et al., 2019).

3. Methodology

3.1 Data approach and data collection

This paper intends at better understanding the current challenges of social sustainability in the FIVC and in times of pandemic. Through a qualitative approach with exploratory purposes as the new phenomena, this research intends to identify social problems, key actors and potential solutions to address social sustainability in times of COVID-19. Additionally, it integrates a broader perspective focusing on the entire value chain analysis, including the economic and social impact (Gereffi & Lee, 2016; Toussaint et al., 2020). This approach is particularly useful for several reasons. First, the nature of the topic is difficult to quantify (Mani & Gunasekaran, 2018). Second, the complexity of social issues is complex to measure in comparison to economic and environmental ones (McKenzie, 2004). Third, the lack of terminology and studies on social issues and the necessity to gain new insights in pandemic times (Gopal & Thakkar, 2016). Thus, the analysis of a specific industry of food value chain let shed light on the phenomena.

Accordingly, this study uses the GT as a common method for the empirical analysis in social sciences (Johnson, 2015) as it lets generate new theoretical propositions from data (Strauss, 1987; Charmaz, 2001: 245). Following the three basic elements of GT: concepts, categories and propositions (Corbin & Strauss, 1990: 7). With this aim, the data collection was obtained through a 6-day consultation with multiple stakeholders in September 2020. During the consultation, 35 fishery experts were able to share their knowledge and experiences about social sustainability in the FIVC. The sample was crucial for this analysis, where experts were selected according to their work and activities, their participation in different stages of the FIVC, location and type of entity/organization. This helped to achieve relevant data to cover the different stages of the FIVC, global approach and from different perspectives (i.e., industry, policymakers, NGOs, international organizations, academia, among others). Appendix I provides more information about the sample, and Appendix II about the questions raised to obtain precise reflections on experts.

3.2 Data analysis

As the multi-stakeholder consultation was recorded on Zoom© platform, the analysis of the data was evaluated thanks to the recordings and transcriptions of each session provided by the platform. In order to facilitate the analysis, the qualitative software Atlas.ti© was used for data analysis. For the analysis, the videos were uploaded in the software with the transcription of each session. Once uploaded, each video together with transcriptions was analyzed in-depth with the aim to find common patterns based on data. Memos were used in order to facilitate the analysis by making relevant annotations of each session. The analysis concludes with the exhibition of the results through an extensive narrative (Johnson, 2015).

4. Findings

This section provides the main outcomes and new insight about the case study on social sustainability along the FIVC. It is divided into six sub-headings, which represents each stage.

4.1 Small-Scale Fisheries (SSF)

Vulnerable groups and communities, such as women, primary small producers and individual fishermen, those included in the first steps of the value chain, were the most affected and strongly impacted by the pandemic situation. There has been a widespread reduction in family and community incomes. Women are marginalized and vulnerable on multiple counts, where half of the women working in SSF, and sometimes even less, are organized in trade unions or cooperatives. Women face difficulties when accessing to information and resources. However, before the COVID-19 outbreak the situation of women was improving due to different projects being performed and, in some cases, implemented by NGOs and international organizations.

Many fish workers find themselves in a critical family situation. This is because the family income has been severely affected as other family members of the household have lost their jobs. Therefore, many fishermen went fishing as a necessity to survive due to the blockade of fish products commercialization, causing the reduction of their incomes. The difficulty of fishermen to

access to financial aids or support from the national government. During the COVID-19 pandemic, some countries have not given any sort of support in the fisheries sector nor aquaculture to overcome the challenges of the situation. Nevertheless, other countries, including some developing countries, have given a bonus to fishermen and fish farmers that contributed to deal with the economic shortcomings caused by the pandemic.

Before COVID-19, the situation of working conditions for small fish workers (SFW) and fishermen was complex, and still is. This is mainly due to the fact of the high level of informality in the sector. Thus, formalization of the sector is needed, as this will allow fishermen and fish workers (FFW) accessing to social protection. Social protection is a right that all workers are entitled to have, not an option. Particularly, FFW do not have access to healthcare services or social security. These problems come from the lack of formalization. In some areas, the access to healthcare services is limited or even absent, where FFW may be placed at a great risk and including the scarcity of medical supply availability. Seasonality of the work is still a problem if the sector is not formalized. As a consequence, lower incomes and irregular work, without any sort of protection, lead to risky behavior and unsustainable practices if the professionalism in the industry is not achieved.

Climate change is key. Coastal communities are greatly affected by climate change and its importance is not diminished due to the advent of COVID-19. The early stages of the pandemic coincided with disastrous cyclones, putting great pressure on coastal communities from multiple directions. This generated that the loss of employment dependent on tourism and export jobs increased. In turn, this left many FFW without formal jobs and caused many other into informal ones, having to migrate back to coastal communities.

With the dramatic fall of restaurant and catering activities made that fish purchases at supermarkets increased due to the importance of fish and fishery products in local food. FIVC have become shorter focusing on the regional level with higher domestic demand. This allowed the continuity of artisan and small-scale fishermen's activities.

However, many other small fishers rely on international trade for their livelihoods, where COVID-19 has had a great impact. Associativity plays a key role in communicating the SSF's needs to governments. It has played an important part during the COVID-19 pandemic to survive and overcome the situation, but also to coordinate fishermen's activities. It also allows fishermen to have access to marine resources, especially artisanal and small-scale fisheries. This associativity and connectivity are needed but it must be fair. Moreover, the women's role is gaining importance in this sort of associativity; women are getting involved in the development and management of cooperatives to improve their working conditions and access to markets.

Decision-making should be bottom up to ensure that positive social and environmental outcomes are achieved. Transparent intervention is needed. Policy should seek to strengthen alternative incomes, food security and the wellbeing of family, especially for marginalized groups. When developing policies, policymakers should consider the vulnerability of different groups. Furthermore, the importance of communication should be consolidated among various stakeholders, where social dialogues should involve workers to tackle their concerns and problems, an approach that should be deployed throughout the whole value chain. Furthermore, there is a need of updating the national fishing legislation to support sustainable fisheries and to boost the

sector to implement those updated policies, especially those non-organized. Formal guidelines should be translated into simple tools that may be effectively implemented at the community level.

Subsequently,

P1. Policies should be deployed from the bottom up due to the particularities of vulnerable segments, namely women, small fishermen and fishing communities. Although many people depend on fisheries, the informality of the industry make it difficult to deal with pandemics, and policymakers should facilitate the understanding of international, regional and national tools and laws and provide technical support to actors in SSF.

4.2 Industrial Fisheries

Public health, crew welfare and observer safety must all be priorities, particularly in pandemic circumstances. Generally, high seas fisheries are manned by foreign and migrant workers, who have left their country, originally in a temporary basis. However, the return to their country is often disrupted, which creates family hardship and lower incomes. Moreover, the prevalence of illegal workers means there is a sizeable part of the population who are unable to access healthcare services.

Furthermore, governments should be flexible in allowing travels for specific groups, such as fishermen in exceptional situation. For example, during COVID-19 circumstances it was extremely difficult for fishermen and crew members due to the expiration date of their certificates and visas. Of course, it is important to guarantee mobility in appropriate conditions of health but considering the special need of this people for travelling back home. Indeed, crew movement and changes are essential for fisheries, where disruption creates difficulties for the industry.

Shorter value chains come with positive and negative implications. Producers are often able to maintain a greater proportion of the final sale of product than longer chains, with a lower environmental impact from production sources such as transport. Alternatively, the value of the final product maybe reduced when compared to price on the international market. Complementary value chains are necessary, which includes the improvement of post-harvest practices and directly marketing to consumers to promote responsible consumption.

In terms of fish and fish products and trade, the demand and supply elements were negatively affected and there has been a shift in production passing from fresh products to longer shelf-life fish and fish products. The role of fish and fish product traceability plays a key role, where its promotion must have organizational and educative elements. Traceability should be transparent along the FIVC. This will allow the sector to be more transparent by knowing the origin of the fish and consequently the identification of the actor undertaking unsustainable practices will be easier. In addition, companies throughout the value chain must demand it due to the importance of digital tools in building strong systems of management. This will facilitate to monitor and to better mitigate climate change and future crises. With this aim collaboration is key to improve traceability systems and the promotion of responsible fish and fishery products by all stakeholders, particularly by those focal firms. But also, collaboration with unions, international organizations, governments and other relevant stakeholders is very important to ensure and facilitate crew changes.

Moreover, there has been a reduced demand for maritime internships and apprenticeships. Practical experience is an essential point of entry for workers, therefore without new workers the future of the industry can be blurred. There is a need to encourage maritime internships in close collaboration between maritime and navy schools and national government to promote this job for workers to incorporate in the job with the maximum expertise possible. Summarizing, the proposal is as follows:

P2. Most of the industrial fisheries are involved or managed by foreign workers, where migrant people are more vulnerable including IUU fishing practices. Crew members are exposed to unsafety situations, but also situations of human trafficking, forced labour and other labour abuses on board fishing vessels are usually linked to IUU fishing. Crew protection through the implementation of international standards into national law is advisable. Cooperation among key stakeholders is key for the proper implementation and technical guidance of those actions.

4.3 Aquaculture Production

Aquaculture is also reliant on foreign workers. Social problems in small farmers are normally faced by the family business. Thus, social and environmental responsibilities are at the forefront of business, where the support and strengthen of the relationships with community are essential. It is therefore important to consider the experiences of all participants inside but also outside of the firm to enhance and ensure good practices. Specifically, when aquaculture can have diversified products, a high and continuous control is required, and the commitment of skilled workers is central. This represents an important investment for small fish farmers and producers, and they should manage in parallel the multiple perspectives mentioned.

Again, restricted channels with the outside world have led to a lack of inputs for aquaculture. With the closure of services, mainly food services such as restaurants, sales declined dramatically almost to zero. Companies' incomes have been reduced since the COVID-19 outbreak, which could pose a danger for small companies due to is reductions in their earnings. Since the pandemic, aquaculture, in particular small fish producers, have not received any type of support by the government. However, many fish farmers were forced to take out a loan or a credit bank to overcome the situation, in this way they could continue their activities but with lower earnings and workers could receive their salaries.

Collaboration in the aquaculture sector is a need to access into new markets and improve the decision-making at a community and sectoral levels. The creation of cooperatives among small fish producers may help to overcome problems, such as production costs and other expenses. The need to develop or enhance strategic business alliances between small fish producers and bigger companies that could facilitate activities along the FIVC, such as logistics, consumption, marketing, among other. The suggested commitment with communities surely has helped to better overcome this situation of pandemic.

There should be more attention to this industry, as the pressure on natural environment and fixing of population in rural areas are positive, and also more communication campaigns not only for big companies but explaining the importance of small companies and communities are advisable. This

is because the decision-making should be from the bottom to the top to ensure positive social and environmental outcomes in the sector. Those focal companies that can understand it can gain an advantage that can go beyond the value chain but can also reach distribution and, if properly managed, consumers. Therefore,

P3. Aquaculture farms are normally owned by small producers. With the COVID-19 outbreak, financial issues become a problem due to the fall in global demand. Communication and the search of new alliances were key to enter new markets.

4.4 Processing

Before the pandemic, in some countries labor standards were well supported by the national law, where efforts to promote the role of women in fisheries were being undertaken. However, it is necessary more protection for those exposed and vulnerable workers at the processing stage, particularly women. At this stage, women's work is underrepresented and undervalued. Formalization is key to recognize the role of women. In addition, a significant proportion of women involved in post-harvest activities have been affected by COVID-19 in a higher extent than men. Therefore, cooperation is essential to ensure social outcomes, specifically the importance of women's activities in this industry.

Therefore, a greater focus must be placed on workers at the processing stage of the value chain. Again, transparency is essential for workers to engage in the company vision. Therefore, companies must strive to improve workers' livelihoods as well as community engagement.

However, there are some fish actors within the sector facing more problems and challenges than others, especially small entrepreneurs. Micro and SMEs usually are family business, where social problems are related to lower incomes, longer working hours and invisibility of their efforts on responsible and sustainable practices. Access to information and digitalization is still a problem for SMEs to access new markets and expand their business activities. All fish actors involved in the FIVC must work together to ensure the continuity of their work activities.

The respect for all stakeholders and participants in the FIVC starts by accomplishing the standards and policies established. And, in this way, all actors along the value chain are essential, and decision-making should be made in joint-basis. Better harmonization of data standards both horizontally and vertically facilitate monitoring and controlling the whole industry. Thus, a better integration of technology and the increase of observation levels are mandatory throughout the value chain.

Despite disruption to data collection which have affected fisheries with official oversight, private certifications have continued to certify fisheries with no change. As there is little to no external oversight, it is hard to say that these assurances are entirely reliable. This schema should be reflected and updated to new systems and data availability through internationally defined standards with an adaptation to local life.

The industry should make more "umbrella" campaigns to promote fish and fishery products consumption, because every actor will be profited. Now, with the consequence of COVID-19 this promotion is more necessary as it benefits the entire FIVC, provides direct incomes and benefits the consumer. A key element to increase fish consumption is the awareness of fish and fish

products benefits on health. Thus, this could help to the recovery of the industry in times of an extremely difficult situation of human-beings health.

P4. A greater focus on fish workers at the processing stage of the FIVC should be made. Women work should gain more awareness, visibility, and access to social protection, loans and financial support. Companies should be engaged with the workers' welfare and with the local community. Also, companies and relevant stakeholders should seek to improve their collaboration to enhance traceability and try to work together on the promotion of fish and fish productions.

4.5 Distribution

The pandemic has caused a shift in storage and logistics. For example, courier services are no longer available as before the pandemic. In an international outlook, this has led to market access issues and limitations by requiring specific physical documentation for import. For fish and fish products, the reduction in commercial flights has severely hit the low-volume high value exports that relied on them to reach markets. Additionally, the limitations to frozen products have affected this business (e.g., China authorities on the transmission of COVID-19 through frozen products).

As food is essential worldwide, different ways were found to continue operating that means different routes or logistics that allowed them to enter the market or even new markets. As movements of goods and workers were restricted, the companies had to perform extraordinary coordination for transporting protective gear and logistics. Moreover, distributors who supplied restaurants were greatly affected because of the closure of restaurants and the decline of global tourism. Therefore, this situation has also changed the ways of buying. Online demand has become very popular, and logistics and distribution start playing a key role to satisfy demand. However, logistics have been limited due to the restrictive measure of COVID-19 and the decrease in workforce.

It is important to manage fisheries activities continuity in order to be able to supply fish and fish products. Also, the compliance of safety protocols to ensure workers' health during the transport activities are needed. Consequently,

P5. Due to the difficulties of the COVID-19 pandemic, distribution of fish and fish products were negatively affected making the workforce to shrink. Despite this stage is not directly connected with fisheries, it is indeed part of the whole FIVC and key to distribute fish and fish products, where many people depend direct or indirectly on the Fisheries and Aquaculture Sector (FAS).

4.6 Retailing and Wholesale

There have been disruptions for all actors along the FIVC, where some have felt it more acutely than others. For those supplying the international and foodservice markets, the economic loss has been particularly severe since the pandemic. Also, producers supplying the foodservice sector were severely affected, with the subsequent impact on employment. There is a great concern in the foodservice companies. The economic problem due to the COVID-19 has caused a fall in hospitality

affecting food prices and services, which has directly caused lower employment. The pandemic has changed the consumption habits in families. This has increased fish consumption at home instead of restaurants and other options, where many people involved in the FIVC have lost their jobs.

In addition, micro-SMEs are facing difficulties due to the limitation on access to information, digitalization, visibility and financial resources. There are SMEs doing things properly regarding their employees and making social sustainable practices, however the acknowledge of those good practices is scarce. Promotion and marketing in various forms is beneficial for the industry. Furthermore, the capacity to communicate the traceability of a product to the end consumer is key in these days, but it is still a challenge.

The importance of fish promotion through collaboration and cooperation among actors along the FIVC, looking for the cooperation of distribution with different types of advantages from institutions should be considered. The sector alliances can facilitate the reintroduction and encouragement of fish consumption in households. Thus, these alliances together with technology can reach a wider dissemination of those campaigns and promotions. Institutions need to recognize the role of fish workers and SMEs struggling against the COVID-19 implications. The lack of coordination limits this focus, where public administration should create measures not only sanitary measures but also to overcome the economic crisis that is affecting the sector, but workforce and SMEs. Subsequently, the next proposal is suggested as follows:

P6. With the arrival of the pandemic, many companies in the food industry, particularly foodservices SMES, were punished. Restaurants and other companies depending on fish and fish products, mainly in touristic areas, had to close their activities causing the dismissal of many people. Moreover, consumption patterns changed from eating and dining outside to cooking at home. Therefore, the promotion of fish and fish consumption can rise the demand and, consequently, increase the workforce in the FAS.

5. Findings and conclusions

The analysis of the FIVC shows that social issues are still part of situation where the lack of enforceability is one of the key elements. Throughout this research, new insights and recommendations are included to overcome social problems worthy to improve social sustainability practices into the FVCs.

Firstly, with the COVID-19 outbreak, the overall demand for fish and fish products has declined, creating difficulties for suppliers throughout the entire value chain, from production and processing to distribution and marketing. Demand has contracted in key markets and transportation and distribution have become more complex. The challenge now is to develop new markets, where the value proposition (through product development and new income streams) will be key in the industry recovery. Smaller enterprises have been most acutely affected, leading to critical losses of livelihoods for fish workers and their dependents. It creates challenging situations for those people related to the industry and the higher commitment with the community could help overcoming this situation.

Secondly, a key recommendation is to seek collaboration and cooperation from all actors involved in the FIVC. The establishment of associations or formalized networks of fish workers is key to improving working conditions and strengthening related benefits, especially for women. The role of women in fisheries in general must also be better recognized along the fish value chain due to their influence in all steps of the value chain. This organization can improve the empowerment of people to deal with any kind of crisis, including those related with health.

Thirdly, the formalization of the industry is needed. Illegal fishing is still a big social concern in fisheries. The informality of the sector undertakes men and women to go fishing without a proper equipment or gear, where in many cases these situations end up in tragedies. In the industrial fishing, particularly onboard, illegal fishing is usually related to forced labor and indecent work, this causes unfair competition which difficulties the development of the sector. Unfortunately, in some cases enforcing national and international regulations implies a significant economic cost, fact that does not relief illegal fishing. Thus, the discouragement of buying illegal fish will influence fishermen who fish illegal fish to stop making unsustainable practices along with the formalization of their work. Moreover, formalizing will also allow the access rights to resources, tenure or to means of production in the sector is also important for recognizing and implementing better working conditions, especially for vulnerable categories, i.e., migrant workers, women, indigenous groups and fishing communities. It will also favor the adoption of measures to mitigate the expansion of COVID-19 among workers, as the lack of any control cannot warrant it.

Lastly, all this has resulted in increased social problems and growth in unemployment numbers, with many having lost their only source of income - even before the pandemic, social issues were already a big concern in the fisheries and aquaculture sector. Therefore, the creation and adoption of guidance, best practice and standards to address social issues is key, and the process should be undertaken with the participation of the industry and any other actor involved in the fish value chain. This includes application and implementation in the FAS of relevant standards and ILO Conventions that deal with production and processing in agriculture or food production. Companies should seek to go beyond national requirements to implement within the company, better sustainable practices, including on social aspects. Focal firms should lead it and should be object of a high monitoring to accomplish their commitment with sustainability in all its three pillars.

6. Appendix

6.1 Appendix I – List of participants

MODERATORS

Job Position	Organization
Buyer Engagement Director	SFP
Chair of the Scientific Advisory Group	WECAFC
Legal Officer	UNCTAD
President	LDAC
Secretary General	AIPCE-CEP
Sector Lead, Responsible Agricultural Supply Chains	OECD Centre for Responsible Business conduct

Source: Own elaboration.

SESSION 1

Job Position	Organization
CEO	Nemi Natura
Secretary of Labour Rights	PFA
Director	Fundación Cocinamar
Managing Director	OPAGAC
CEO	Aquagrow International
Director	Fisheries, Aquaculture and Marine Ecosystems (FAME)
President	Association of Continuity of Generations
Founder and President	Intermareal
Responsible Markets Manager	Fundación MarViva

Source: Own elaboration.

SESSION 2

Job Position	Organization
General Manager	Austral Group
Senior Fishery Consultant	Independent
VP Product Integrity	Ahold Delhaize
Director	FENIP
Director	FEDEPESCA
Director	Grotius Consulting
Co-CEO	Pacifico Aquaculture
Executive Director	National Chamber of Aquaculture (Ecuador)

Source: Own elaboration.

SESSION 3

Job Position	Organization
Engineer	GIPP
Associate Professor	National Autonomous University of Mexico (UNAM)
Chair of the Scientific Advisory Group	WECAFC
Executive Director	CeDePesca
Manager Action Platform for Sustainable Business	UN Global Compact
President	Europêche
Fisheries Development Officer	Pacific Island Fisheries Forum Agency
Director	INFOFISH
Senior Adviser	The Danish Institute of Human Rights

Source: Own elaboration.

6.2 Appendix II – Questions for participants

- What have been the major social issues that you have had to deal with during the pandemic?
- Before COVID-19, what was your work situation like, were you facing social problems or general problems that could affect the social part of the sector (if so, could you define what those problems were), were you working towards social responsibility?
- And to conclude, could you share how you are managing this situation, particularly social issues (workers, employees).
- Currently, what is the status of the FAS in terms of social issues?
- What could be done to help the industry, particularly SMEs, to face the social problems that the sector is experiencing?
- What do you think the long-term implications are for social issues in fisheries and help in the current situation and in the future?

- And finally, could you give some recommendations to all actors along the fish value chain on how to improve and ensure social responsibility in the sector.

7. References

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