



# Food systems and COVID-19 in Latin America and the Caribbean: Towards inclusive, responsible and sustainable fisheries and aquaculture

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## 1. Editorial



In Latin America and the Caribbean, fishing and aquaculture are fundamental in social, economic and nutritional terms: 85 percent of fish and seafood products that reach the tables of the region's households come from small-scale fishing. Besides, it represents the livelihood of 1.8 million families.

Unfortunately, the crisis has heavily affected fisheries and aquaculture. The restrictive health measures have had adverse effects on the free operation of the sector, and the crisis has changed consumption habits.

The sector needs short term action; it also needs to modify some aspects of the activity that have been dragging on for some time. Thus, for example, technology and innovation can play an essential role in the fisheries and aquaculture of the future.



## 2. Key messages



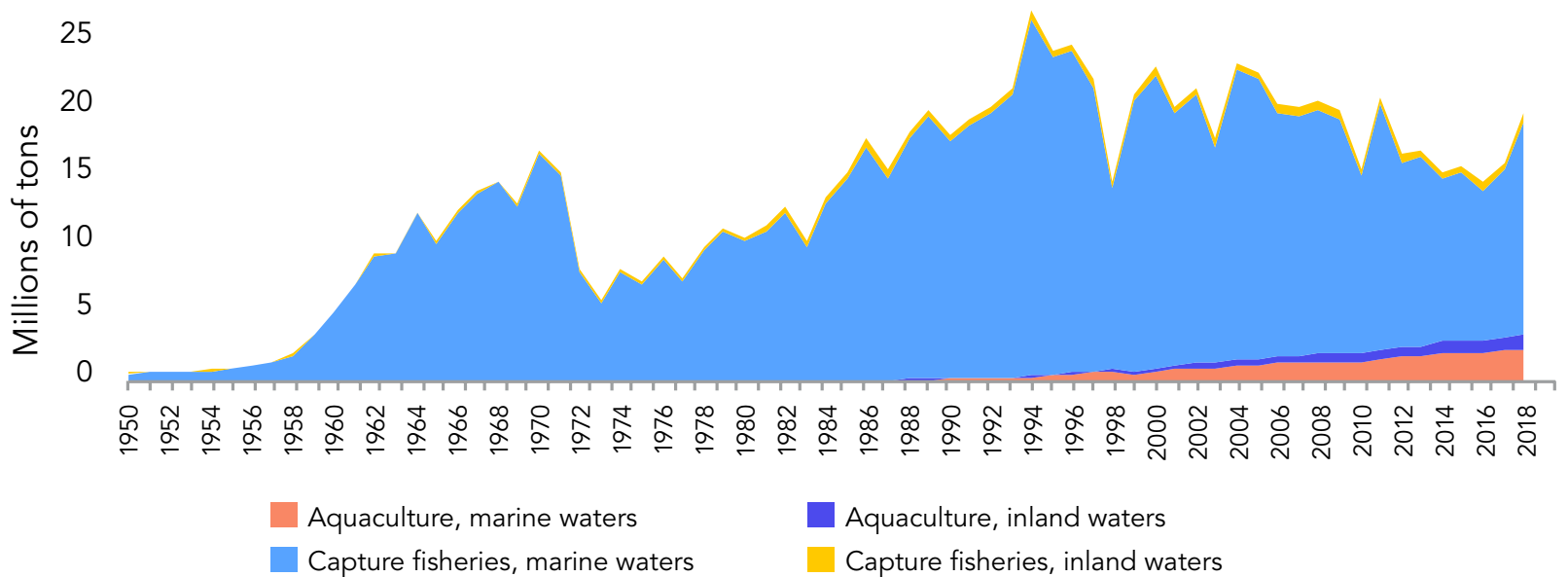
- In the region, fisheries and aquaculture have not been affected in the same way; it depends on the way the product is processed or caught and its destination.
- The pandemic has affected the operation of the sector, especially industrial extractive fishing, by disrupting the regular circulation and operation of its crew.
- Changes in consumer patterns have had a disparate impact on demand. While the consumption of fresh and high-value products has decreased, the consumption of cheaper and canned products, such as canned tuna, has increased.
- A significant percentage of industrial extractive fishing is reduced to fishmeal and oil. This product has had an uneven performance in the region. While it has suffered a substantial fall in Peru, it has substantially increased its commercialisation in Chile.
- In contrast, small-scale fishing has been affected in a more homogeneous way throughout the region. In all countries, demand has fallen considerably due to the closure of markets and restaurants.
- The increase in the cost of the production process is the main effect of the pandemic on aquaculture activity. The lower output and overstocking of products has increased the cost of feeding and freezing for products that could not be sold. This happened in the case of shrimp and salmon.
- In the case of tilapia, demand has not decreased as much as the products mentioned above, since this product belongs to the lower price segment.
- Short-term measures aim to improve crew conditions in industrial fisheries, reduce costs in aquaculture and improve the output of artisanal fisheries and aquaculture products.
- Also, in the short and medium term, it is necessary to worry about the protection of small-scale fishers against COVID-19 and to improve social security conditions in the future.
- Innovation and technology will play an important role in the traceability and sale of marine products, adding value to artisanal products. As for traceability, the use of blockchain is recommended; in sales, the implementation of online sales platforms for retail and wholesale.

### 3. Evolution of the state of fisheries and aquaculture



To analyse the impact of COVID-19 on fisheries and aquaculture, it is necessary to know its structure and distribution. In the region, unlike the rest of the world, marine capture fisheries represent 80 percent of fishing and aquaculture production. On the other hand, in the world, aquaculture production is close to the total amount of fish caught in the sea. Besides, fish caught in marine waters in Latin America and the Caribbean represent nearly 15 percent of the fish caught worldwide (FAO, 2020a).

Figure 1/ Capture fisheries and aquaculture production in Latin America and the Caribbean, 1950–2018.

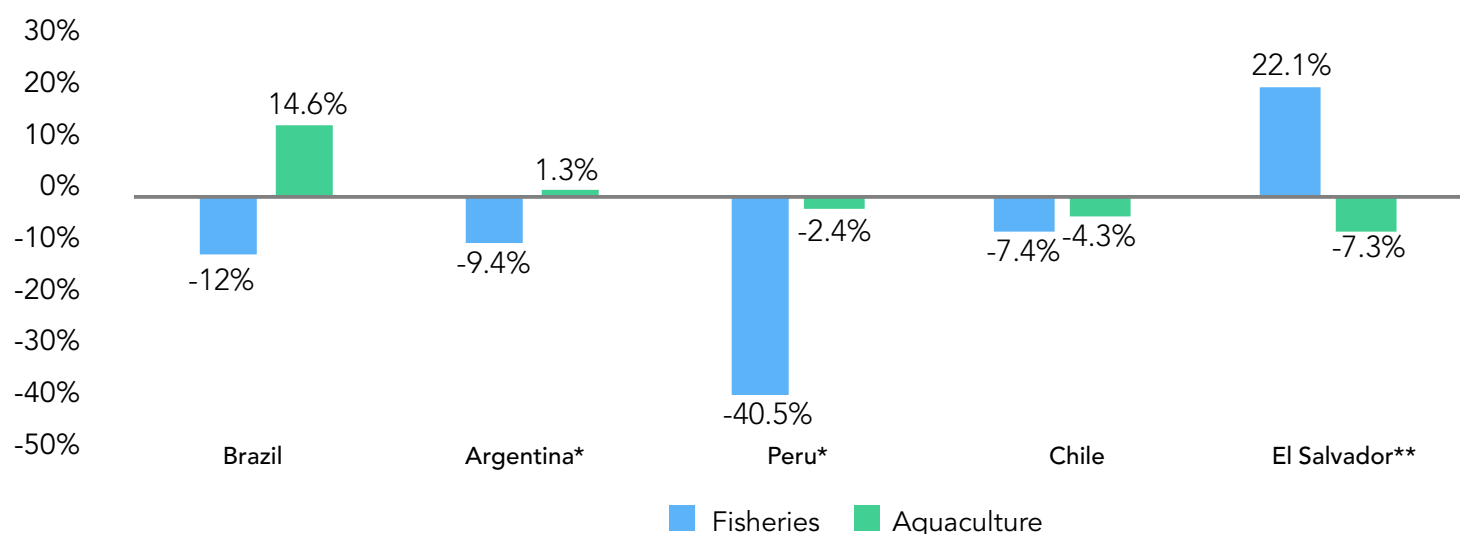


Source: FAO, based on FAO (2020b).

When analysing the key activities of the fisheries or aquaculture supply chain – fishing or aquaculture production, processing, value addition, transport and marketing, whether in industrial or artisanal activity, it is easy to infer that all links in the chain can be disrupted or interrupted due to the effects of COVID-19 (FAO, 2020c).

Therefore, when looking at the food sectors most affected by the pandemic, fisheries and aquaculture appear highly vulnerable. In a sample of five countries, almost all countries – except El Salvador – show drops in fisheries sector exports at levels that exceed the reduction observed in the agricultural sector (see Figure 2).

Figure 2/ Percentage change in the value (FOB) of exports, January-August 2020 versus the same period in 2019.



Note: "Fisheries" corresponds to Section 03 of the Harmonised System; "Agriculture" to Sections 01 to 23 of the same system.

\*Data until July 2020.

\*\* El Salvador's figures are highly affected by high fish sales to Spain in April.

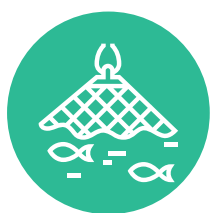
Source: ECLAC, based on official information from each country.

In general terms, fish and seafood exports from the region have decreased dramatically or stopped (Aguilar and Flores Nava, 2020). The causes of this decline may be due to supply or demand problems.

The difficulties related to capture and production, together with a drastic decrease in demand, have generated the need to store fish products for longer periods, with the consequent repercussions on the quality of the product and the costs of refrigerated storage, leading to food losses (FAO, 2020c).

Even if it is assumed that the closure of fishing operations will offer a respite to some overexploited fish stocks (Aguilar and Flores Nava, 2020), it is too early to speak of a recovery of marine and coastal biodiversity, especially when the life cycle of many species is longer than a year. What may have changed, due to reduced fishing pressure, is the distribution of some species, which requires comprehensive monitoring before, during and after the crisis.

However, stock monitoring (fishing stocks) is one of the activities that has also been affected by restrictive measures, which will delay the implementation of certain management measures and the control of compliance of these measures; which may encourage some illegal catches (FAO, 2020c).



### 3.1. Impact on industrial fisheries

At a global level, industrial fishing has been affected both by activities related to the capture of the product, and a decrease in the demand for fish.

#### a) Decrease in demand

Compulsory quarantines and the perceived risk of contagion through consumption have reduced commercial activity in markets, restaurants and tourism-related services (HORECA channel), where large quantities of fishery and aquaculture products were consumed (FAO, 2020d). The above is particularly relevant in the main markets for fishing products: the United States of America, China, and the European Union.

Besides, the widespread economic contraction in the region has meant a loss of purchasing power for thousands of families, putting negative pressure on demand. People have been forced to change their consumption patterns. They have stopped buying fish and seafood, preferring products considered more accessible and with greater distribution in popular markets (FAO and ECLAC 2020).

When analysing the demand for fish, it can be seen that, during the pandemic, it has fallen in practically all countries between 40 and 75 percent. The lower demand is mainly due to changes in consumption patterns at the household level, the high value of these products and the closure of restaurants and tourism-related activities (Aguilar and Flores Nava, 2020).

#### b) Limitation of supply

The initial links in the fisheries value chain have been damaged by interruptions of boat repair and maintenance of the cold chain. The procurement of some essential supplies for the operation of boats, such as fuel, fishing gear and baits, has also been affected due to the closure of suppliers.

The inability of suppliers to provide inputs on credit – as boat owners have less liquidity – has also limited fishing activities (Aguilar and Flores Nava, 2020).

#### c) Labour shortages due to restrictive measures

Ship crews – mainly composed of migrants – often work on a seasonal basis (FAO, 2020c). The closure of borders has affected the free movement of workers, leaving many boats unmanned.

The lack of workers also affected post-capture links, such as the processing and marketing of captured products. In this sense, women have been the most affected, as they are usually in charge of these activities (FAO, 2020c).

#### d) Logistical problems

The closure of ports has prevented boats from stocking up and changing crews, with the consequent operational problems.

Logistical problems have also affected boats (FAO, 2020c). Even though many countries have been relaxing blockades in their ports, restrictions have been maintained in some of them. Satellite images of fishing vessel movements show that trips to destinations with crew change restrictions have been reduced by almost 20 percent for container ships compared to previous years (Heiland and Ulltveit-Moe, 2020). However, maritime container trade in Latin America and the Caribbean has decreased by an average of 6 percent between January and May, compared with the same period in 2019 (ECLAC, 2020).

In addition to the disruptions to fishing activity, it is necessary to consider the impact of the pandemic on fishing workers. Crew members on large-scale industrial vessels work intermittently for several weeks or months. At sea, they work 10- to 12-hour shifts seven days a week. However, many have been working beyond their contractual terms in recent months, as they are unable to go ashore due to flight restrictions and quarantine periods, resulting in an increasing number of exhausted crews worldwide. It is estimated that the usual replacement worldwide is 100 000 sailors every month (Huileng, 2020).

Furthermore, if COVID-19 spreads among the crew of a vessel and medical assistance is not available, crew members who are not citizens of the port state may not be allowed to enter the country (Torero, 2020). This problem is exacerbated by the lack of safety inspections of ships and their workers (ILO, 2020).



### 3.2. Impact on aquaculture

The closure of restaurants and fresh produce (wet) markets in China and the European Union during the first half of the year generated an excess inventory of imported products, which is affecting the purchase of salmon, shrimp, lobster and crab (INFOPECSA, 2020).

The lower output of products has meant extra cost that is not appreciated in the extractive activities, since the decrease in demand forces producers to keep the animals alive in their cages or, if they have already been processed, to keep them frozen. Whatever the measure, it implies an increase in costs, expenses and risks (FAO, 2020c).

Exporters of fresh salmon from Chile and Norway are redirecting their shipments from China to the United States of America and Brazil. While the negative impact for the first quarter was small, it has worsened over the months (INFOPECSA, 2020).

Ecuadorian shrimp has also been affected, not only by the Chinese market fall but also by the fall in demand from the European Union. Italy, one of the main destinations for Ecuadorian shrimp, has considerably reduced its demand, which has led to a considerable drop in prices. Between December 2019 and the first harvest in March 2020, prices of Ecuadorian shrimp fell by 21 percent (INFOPECSA, 2020)

Perhaps for the same reason, lower-cost products such as tilapia (freshwater fish widely consumed because of its low market prices) have not been as affected. Fish farming in Brazil (one of the largest producers of these fish) continues to supply the market normally, which is directly related to "the challenge of maintaining quality food supplies for the Brazilian population", according to the country's government authorities (INFOPECSA, 2020).



### 3.3. Impact on small-scale fisheries and aquaculture

The socio-economic impact of artisanal fisheries and small-scale aquaculture in the region can be considerable, providing a livelihood for 1.8 million families in Latin America (UN News, 2019). Consequently, a decrease in family income ends up affecting the local economy.

Although in some cases, artisanal fishers have been able to adapt better than industrial fisheries (for instance, by selling directly to consumers), in general, artisanal fishers and workers are the most affected by the reduction in demand, since their household economy depends on daily income (FAO, 2020d).

Furthermore, the characteristics of this sector make it vulnerable to the pandemic (Crowley and Zelaya, 2020; FAO, 2020d):

- Lack of capital needed to overcome the difficulties.
- Daily income/food depends on fishing.
- Changing consumer demands.
- Market access problems.
- Logistical difficulties related to transport.
- Little diversity in processing and marketing channels.
- Low domestic demand for fish and seafood (Latin America and the Caribbean: 9.8 kg/person per year, compared to the world average of 20.4 kg/person per year).
- High dependence on intermediaries and external markets.
- High perishability of the product and low storage capacity.
- High level of informality in the workplace and lack of social security which, in a scenario of an ageing population, undermines savings in the event of illness, including COVID-19.

The current crisis has caused most of the small-scale fishers' boats to stay tied to the quayside. Although they are not banned from going to sea, containment measures and movement restrictions due to the pandemic prevent them from carrying out their work regularly (Crowley and Zelaya, 2020; Flores Nava, 2020).

The main reasons why fishers have been affected are (Crowley and Zelaya, 2020; Flores Nava, 2020):

- Decline in demand for fish – 50 percent in Central America and 80 percent in Chile – due to the closure of markets, restaurants, hotels, established shops, and even exports.
- Temporary suspension of companies in intermediate links of the value chain.
- Difficulty in obtaining spare parts for boat and fishing gear engines, and inputs for aquaculture (such as feed and seed).

However, fishers' families have also been affected by the high level of informality in the sector, which is an additional obstacle to the access of fishers, women fishers and fish farmers to the protection provided by labour market policies and contributory social protection mechanisms (FAO, 2020d).

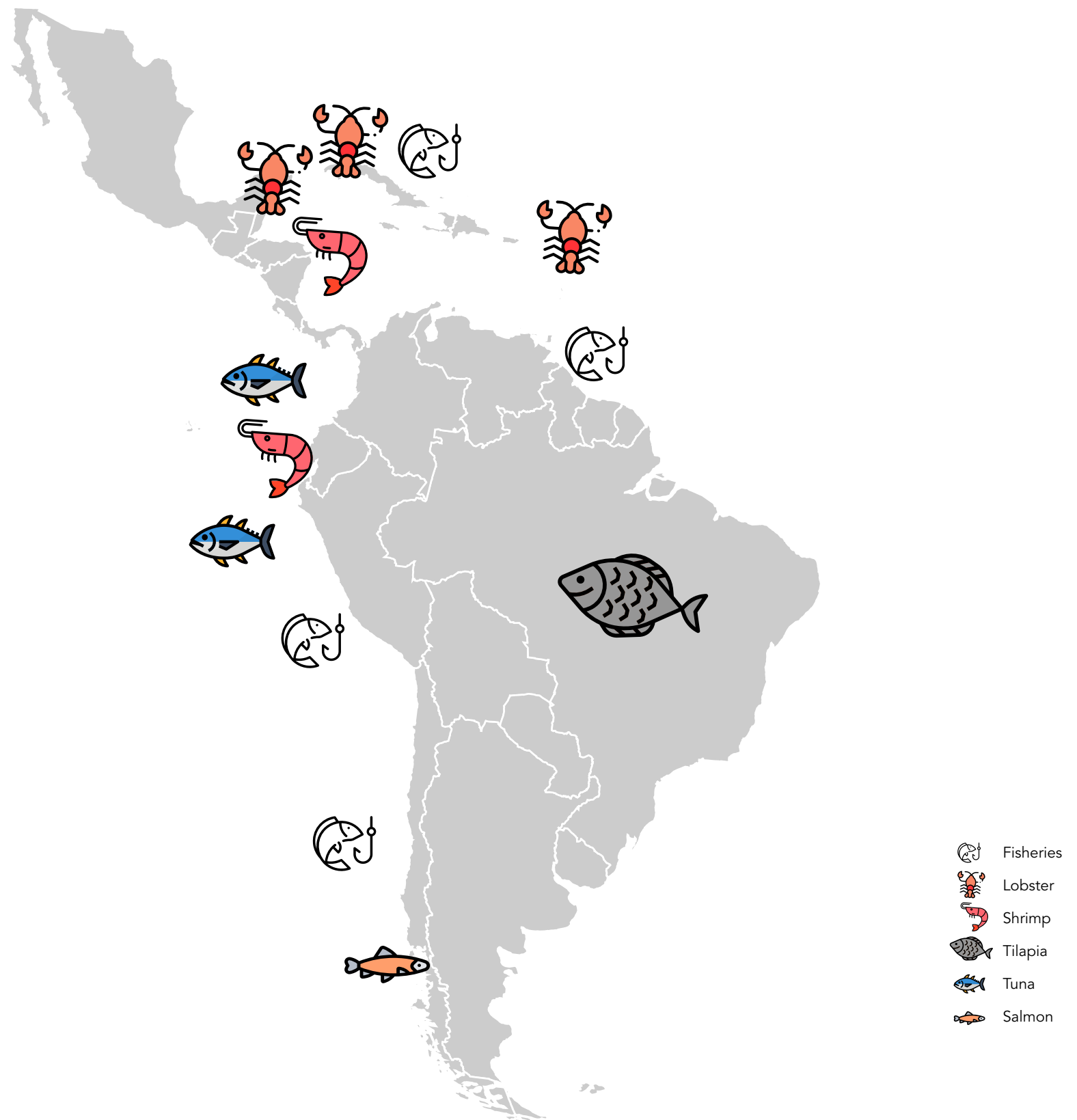
One of the most affected areas is the Caribbean, where artisanal fishers cannot go on board because of mobility restrictions and consequently do not bring food home (WFP, 2020). Also, it should be noted that they do not have buyers for their products because they depend almost exclusively on tourism, which reduced significantly in recent months.



### 3.4. Impact of the main products at the national level

Latin America and the Caribbean is a region where fish, crustaceans, shellfish and algae are produced and caught for the local and international market, so the impact varies according to product and country.

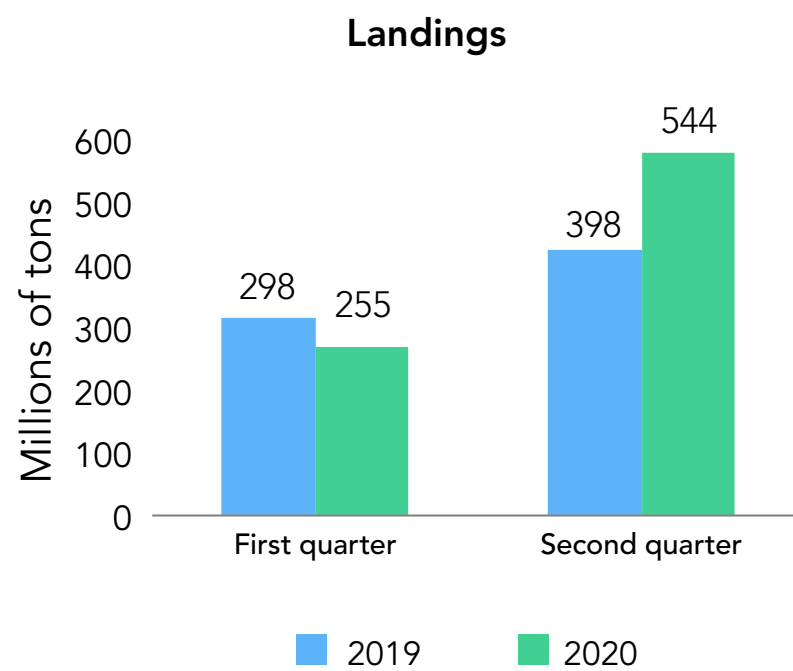
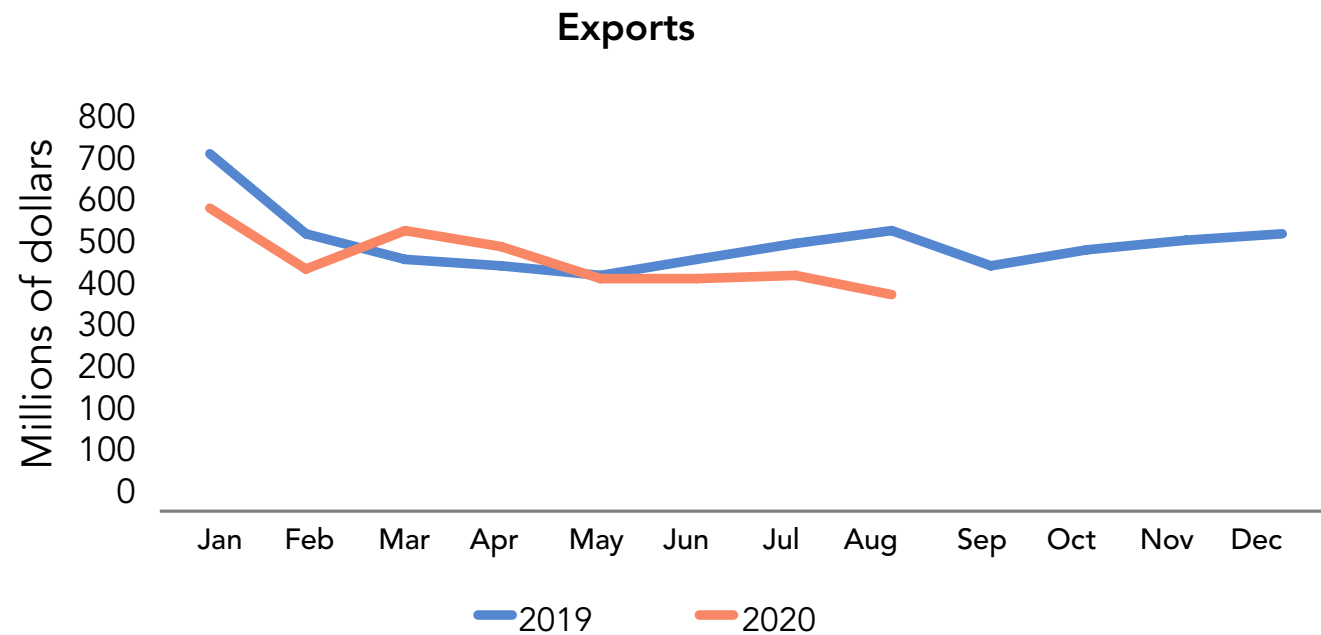
**Figure 3/** Specialisation in exports of fishery and aquaculture products in Latin American and Caribbean countries, 2020.



Source: According to Map No. 4170 Rev. 18.1 UNITED NATIONS (February 2020).

In the case of Chile, between January and August 2020, seafood exports fell by 7.4 percent compared to 2019, with a more remarkable fall in July and August so far in 2020. The products that recorded the most significant drop were salmon and trout (-16 percent) and other seafood products (-12 percent), due to lower demand in the destination countries, such as China and the United States of America.

Figure 4/ Seafood exports and landings in Chile, 2019 and 2020.



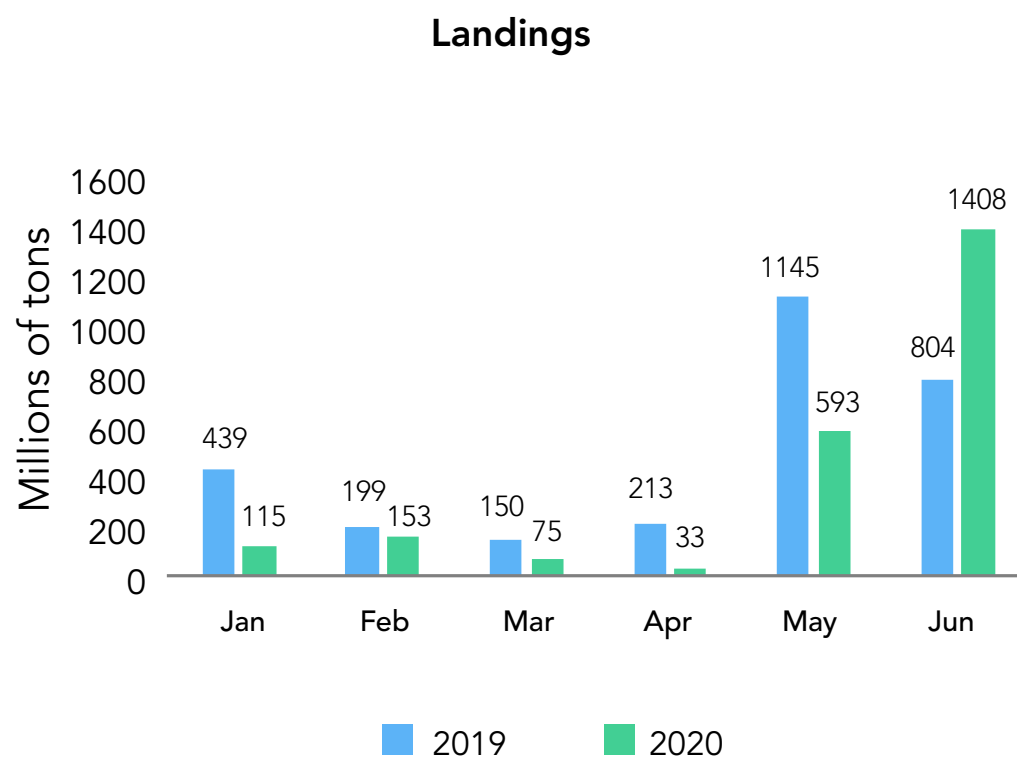
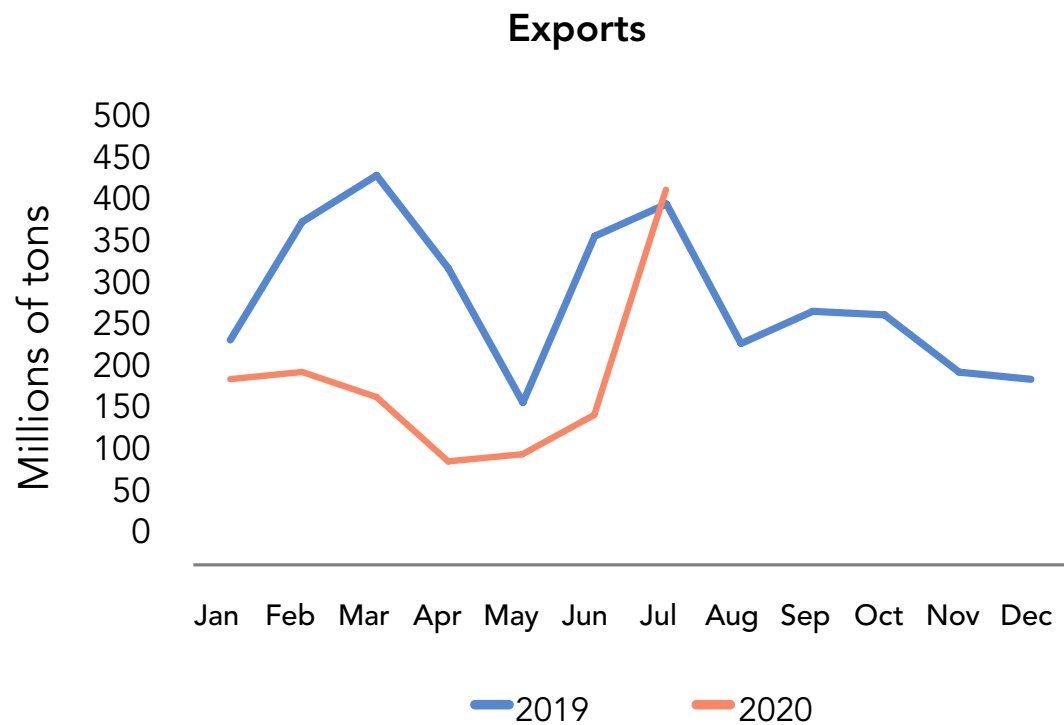
Source: FAO, based on Chilean Customs (2020) and SERNAPESCA (2020).

However, between January and August 2020 compared to the same period in 2019, canned and prepared fish and shellfish products show a 28 percent increase, possibly due to changes in consumption patterns (during the crisis, the purchase of non-perishable products has increased).

The 79 percent increase in fishmeal exports, compared to the same period last year, is striking. This increase occurs in a context of fall in aquaculture production, which represent a significant demand for fishmeal, and when the export of its main competitors has fallen dramatically, as is the case of Peru. Perhaps because of this increase in fishmeal exports, landings in the country have shown a 15 percent increase compared to 2019.



Figure 5/ Seafood exports and landings in Peru, 2019 and 2020.



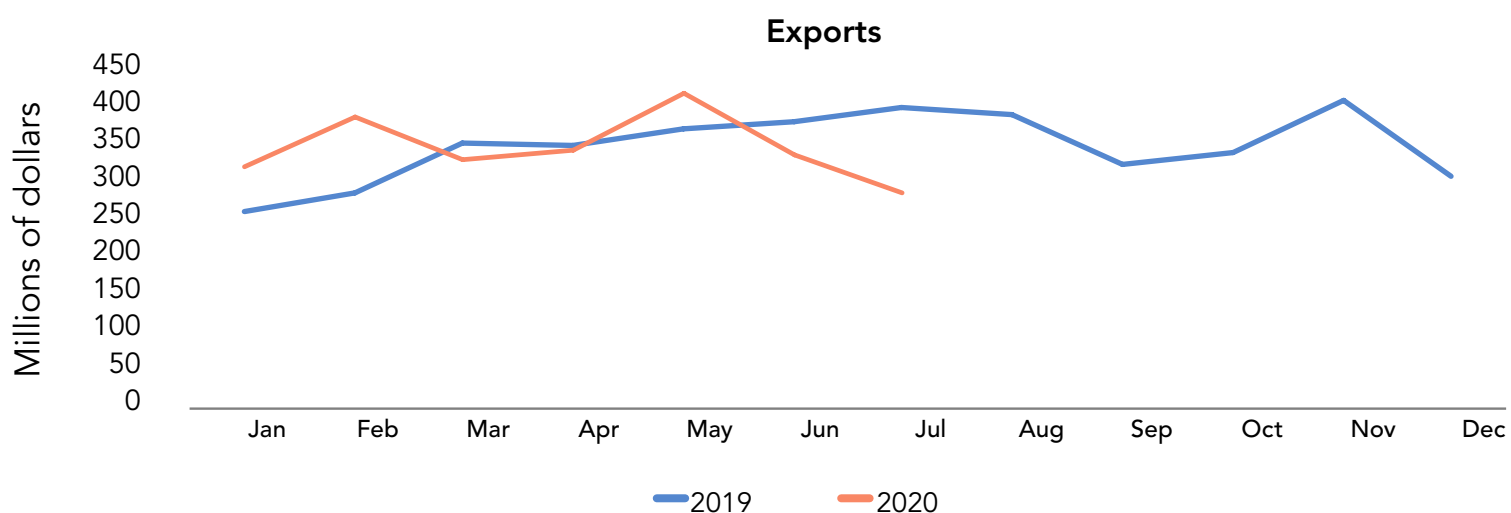
Source: FAO, based on Ministry of Production of Peru (2020) and INEI (2020).

Peru's fisheries exports recorded a 50 percent drop during the first seven months of 2020, compared to the same period in 2019. As for landings during this same period, a 19 percent drop was registered. The only increase in exports is in cured products; canned products are among those that have experienced the least decline, with a 7 percent decrease. Fishmeal also records a 62 percent drop in exports in the first half of the year.

According to the Global Fishing Watch database (Aroni, 2020), fishing activity in Peru's vessel monitoring system fell by approximately 80 percent after the government decreed stay-at-home measures on 16 March 2020 in response to the COVID-19 pandemic. The industrial fleet stopped operating altogether, and the artisanal fleet is struggling to continue operating.

The President of the Peruvian Fishing and Aquaculture Committee of the National Society of Industries (SNI, by its acronym in Spanish), announced that fishing companies would stop exporting their products – such as giant squid – to China and other Asian countries due to COVID-19 (INFOPECA, 2020).

Figure 6/ Seafood exports and landings in Ecuador, 2019 and 2020.

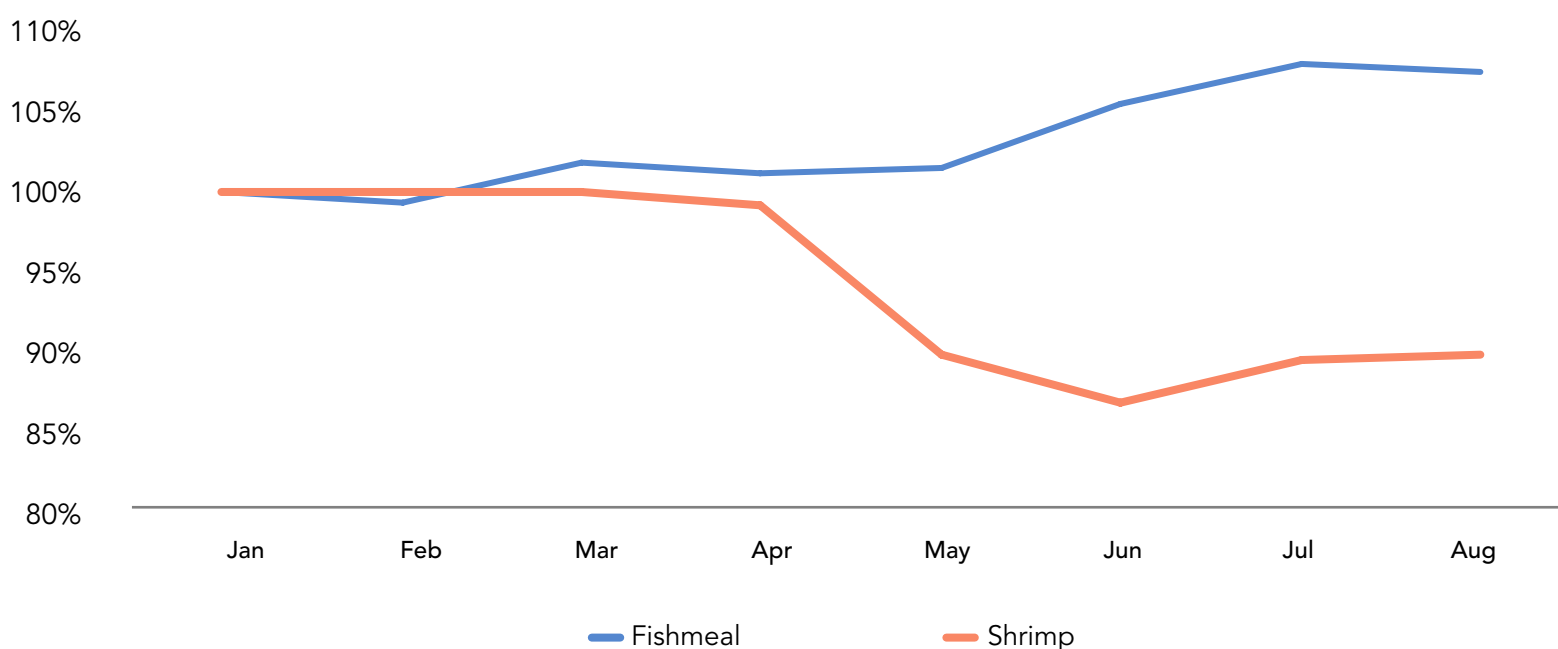


Source: FAO, based on Central Bank of Ecuador (2020).

Ecuador recorded a 0.7 percent increase in seafood exports between January and July 2020, compared to the same period in 2019. It is worth noting that between May and July of this year, a 10 percent drop in seafood exports was registered with respect to the same period in 2019, with shrimp being the most affected product – with a drop of approximately 11 percent.

In Ecuador, tuna fishing continues to work, although under strict biosecurity measures, in order to safeguard the health of the crew, complying with all the health safety measures and protocols established by the authorities (INFOPECSA, 2020).

Figure 7/ Variation in international prices of shrimp and fishmeal (%), 2020.



Source: FAO, based on World Bank (2020).

From the above, it can be concluded that high-value products, such as shrimp, have been mostly affected during the pandemic, with canned products being preferred by the population to allow for longer storage periods. As for seafood products, a drop in shrimp prices was registered since April, even decreasing by 13 percent in June compared to January 2020. On the other hand, fishmeal (the main ingredient for aquafeed processing) registered a 5 percent increase between June and August (see Figure 7).

Global uncertainty about the full impact of the COVID-19 pandemic is causing people to significantly increase their supply of canned food, including tuna and other fish products. Operators see increased orders, especially in retail trade in the United States, Europe and Latin America. In this context, some canning brands are seeking to innovate with new proposals, recipes and designs to seize the moment (INFOPECSA, 2020).

## 4. Immediate response to the COVID-19 crisis



The COVID-19 pandemic may indirectly affect the livelihoods, food security and nutrition of populations that depend on aquatic animals for food or income. However, outbreaks of COVID-19 can also lead to increased local community consumption and/or use of marine animals for food due to limited transport and trade outside of fishing and harvesting communities, or limited supplies of alternative sources of animal protein (Goodness-Reantaso *et al.*, 2020).

Therefore, the continuity of food production and supply are part of the priorities that governments have set during the pandemic, implementing various actions aimed at stimulating the continuity of food systems, including fisheries and aquaculture. These measures include permits for their workers, temporary tax deferment or elimination on the marketing of fish and seafood, guarantee prices for some products, subsidies for the transport of fresh and frozen products, creation of direct economic transfer programmes by boat or by aquaculture pond, and activation of disaster insurance, among others (Flores Nava, 2020).

Concerning international trade, international bodies have made a major effort to promote a dialogue between the public and private sectors to ensure trade flow between countries. Thus, to continue with the normal functioning of the supply chain, support has been provided through temporary storage of fish, diversion of fish to the national market, collaboration with processors to adjust supply to the national market, and the substitution of fish product imports (FAO, 2020c).

### 4.1. Measures in industrial fisheries

Measures for industrial fisheries have two main objectives: the continuity of the extraction activity and the protection of the working and health conditions of crews. These measures are (FAO, 2020c) and (INFOPECSA, 2020):

- The international certifier of sustainable fishing practices, the Marine Stewardship Council (MSC), announced an extension of six months to the usual deadlines for fisheries assessments and certifications.
- Designate, if not already done, fishers and crew members as "essential workers".
- Issue visas for temporary, seasonal and foreign workers to catch fish and seafood and return home once the extraction activities are over.
- Ensure safety by allowing only fully crewed vessels to leave the port for fishing operations.
- Support inter-institutional coordination through exchanges of data and information between authorities responsible for development and fisheries governance to ensure that fishers are covered in terms of health care and repatriation.

### 4.2. Measures in aquaculture

Measures related to aquaculture pursue one main objective, which is to reduce the economic impact related to increased costs and decreased income (FAO, 2020c).

- Declare aquaculture as a priority activity alongside agriculture for crop insurance, energy tariffs and other taxes.
- Facilitating farmers' access to credit programmes with reduced interest rates, flexible loan repayment and options to restructure loans and related payment schedules.
- Implement programmes to cover production and income losses in order to maintain national seafood supply chains and ensure continuity of operations.

- Suspend or postpone payments of certain financial obligations, such as water, electricity and gas bills, property taxes and mortgages.
- Adjust supply by slowing down production where there is a drop in demand or reduced market access, especially if exports remain low and the aquaculture workforce has been lost.
- Replace imports temporarily, favour the domestic supply of fishery products, to make up for the reduction in exports.
- Ensure technical and organisational assistance from the state to strengthen small-scale aquaculture (SSA) and achieve increased representation of small-scale fish farmers, as well as artisanal fishers who wish to engage in this activity (Crowley and Zelaya, 2020).

### 4.3. Measures in small-scale fisheries and aquaculture

Small-scale fishing is more vulnerable, as this sector has little capital and low levels of social protection. However, available literature suggests that it has more opportunities than other sectors to adapt and recover from the pandemic (Crowley and Aguilar-Manjarrez, 2020; FAO, 2020c). Suggested measures include:

- Allow small-scale fishers to access their fishing areas, always applying a precautionary approach (without jeopardising the sustainability of fish stocks).
- Strengthen public policies that promote the consumption and purchase of fish and seafood. Food procurement programmes can be implemented by public institutions (food baskets that will be delivered to the most vulnerable population located near the coast). Short marketing circuits and online sales with home delivery can also be encouraged.
- Make the institutional framework that certifies processing plants and procedures in transport chains more dynamic. Today, many health regulations do not reflect the reality of small-scale fishing. For example, for online sales, fishers have to go through many processes, which encourages them to carry out these activities illegally.
- Extend the fishing season to compensate for economic losses. This would require consideration of the state of fisheries, which is difficult for inspection bodies because of staffing constraints due to restrictive measures.
- Compensate the owners and crew of the boats that cannot go out to fish.
- Facilitate access by fishers to credit and microfinance programmes with reduced interest rates, flexible loan repayment and options to restructure loans and related repayment schedules.
- Limit the level of fishing activity currently undertaken (for example, by establishing a collective and transparent quota or a draw system), in order to adjust it to current demand, while ensuring that local food security is not adversely affected.
- Promote value addition to increase income with equal or lower catch volumes while increasing the shelf life of products.
- Digitalise a large part of the administrative processes and records.
- Incorporate innovation and technology to ensure that these highly perishable foods reach the rest of the country under the recommended safety conditions.
- Provide refrigerated trucks and door-to-door sales, or temporary sales outlets, close to consumption centres.

## 5. Opportunity to transform fisheries and aquaculture post COVID-19



In the post-pandemic period, the fishing and aquaculture sector must be inserted into local development, being able to obtain its own resources and consolidate itself as a fundamental link in the food supply chain in times of crisis (Aguilar and Flores Nava, 2020; Crowley and Zelaya, 2020). To achieve this, the links that connect producers, buyers and sellers, as well as each phase of the supply chain, must be protected (FAO, 2020c).

The new policies must aim at building a local value chain capable of absorbing external impacts, allowing sustainability for the activity.

- Encourage joint work with other countries, with various public sectors and also the private sphere, which will enrich policy formulation, management and technical advice.
- Implement actions to ensure that this food reaches all territories.
- Support the diversification of their marketing channels.
- Enhance associativism, which requires the strengthening of cooperatives and fishers' associations.
- Promote innovation and technology, since these play a vital role in the traceability and sale of marine products and add value to artisanal products. In terms of traceability, we recommend the use of blockchain and online platforms for retail and wholesale sales, such as the one implemented in Oman (FAO, 2020e) and Chile, where the National Fisheries and Aquaculture Service (SERNAPESCA) created a portal for artisanal fisheries that aims to make artisanal coves, fishers and their resources visible.
- Improve, where possible, remote surveillance and monitoring programmes without observers (cameras, logbooks, electronic reporting systems) (FAO, 2020c).
- Raise awareness of the banking and insurance sector to support fisheries and aquaculture.

In the specific case of small-scale fishing, it is recommended strengthening the social protection system.



### Strengthening the supply chain

The first thing is to classify fishing activities according to their destination, and then, identify the links in the value chain and their associated components. In general, five chains are identified in artisanal fisheries, according to their marketing channels. These are internal human consumption, external human consumption, reduction (fishmeal and oil), by-products (export for the extraction of its derivatives) and supply chains (other links in the value chain) (Oceana, undated).

Only then can an analysis be made of the gaps in productive activity in different components, such as health measures, labour and input supplies, demand and fisheries management, taking into account the gender approach.

Based on the analysis, a triple link can be generated in the recovery process, which considers management objectives, the recovery of fisheries and the protection of habitats.

### Strengthening the social protection system

Progress is needed in implementing a social protection system of minimum guarantees for small-scale fishing. This system must pursue three fundamental objectives:

- i. Ensure income security for all rural people, throughout the various stages of their life cycle, to achieve basic levels of well-being. This is achieved with the specific objective of effective coverage.
- ii. Adapt current social protection systems to rural reality, taking into account life cycle and poverty as critical variables in their design. This adaptation must consider rural livelihoods and the variables of employment and rural economy as a structuring axis.
- iii. Promote an **extended social protection agenda for double inclusion** (social and economic) by promoting synergies between social protection policies and productive policies, thus taking a first fundamental step towards establishing a framework of renewed strategies for inclusive and sustainable development in the region's rural territories (Winder Rossi and Faret, 2019).



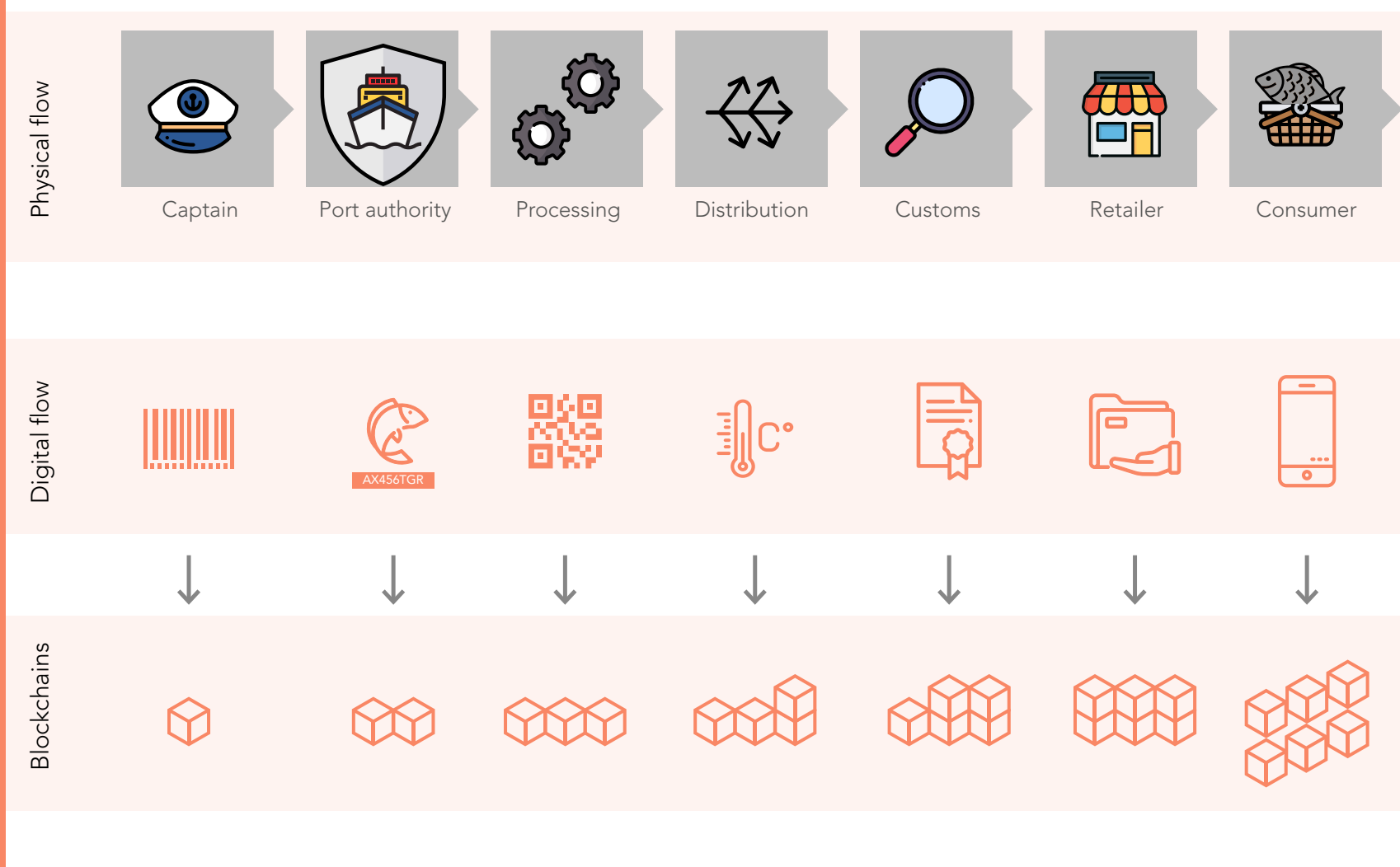
### Box 1. The role of blockchain in the fisheries and aquaculture of the future.

Blockchains have considerable potential to improve traceability, accuracy and accountability along fish and aquaculture product value chains. They can provide a data infrastructure to enable online traceability and share key data, such as catch areas, species and type of product, production date or shelf life. In addition, they allow tracking of fishing vessel operations, landings and processing sites.

Blockchains are a chain of links that stores auditable data in units called blocks. They can be used to record, track and monitor physical and digital assets in fish supply chains. They offer opportunities to integrate and manage, in real time, processes, product attributes and transactions that are added by supply chain agents, through sensors and other devices.

They allow to improve food safety, traceability and transparency, and enhance performance, income, accountability, data protection and brand protection. Operationally, in fish value chains, blockchains could provide incentives for different industry stakeholders. For the private sector, they could improve the efficiency of operations and strengthen brands in the marketplace; while for government authorities, they could be a means to verify and validate catch reports and check compliance with export market requirements. The implementation of blockchains is possible in a context of high-value fish products with clearly defined value chains, where there is effective acceptance by stakeholders in the value chain.

#### The sensors transmit data on time, place and conditions to the blockchains



Source: FAO (2020c).

## 6. Interviews



### **Alejandro Flores Nava**

Senior fisheries and aquaculture officer at the Food and Agriculture Organization of the United Nations (FAO)



#### **What are the main actions that governments and international agencies should implement in the short-term recovery process?**

Firstly, fisheries and aquaculture should be added to the list of essential activities, which would allow the mobility of production inputs and marketable fish and aquaculture products. Similarly, it would be necessary to rapidly assess the intensity and nature of the impact on the production and supply chains of both subsectors, in order to target social protection mechanisms to low-income families of artisanal fishers and small-scale fish farmers; preferential credit support mechanisms for enterprises should also be considered, according to their scale and needs, stimulating their recovery and, above all, safeguarding jobs. Another area of urgent support is undoubtedly the recovery of markets; so, efforts must be made to standardise and even improve marketing channels, avoiding, as far as possible, intermediary chains to make products available to consumers at accessible prices.

#### **What are the main lessons that industry and small-scale fisheries should learn from this crisis?**

Every crisis offers opportunities. I think we have learned that it is essential to have response protocols – from a sectoral perspective – to crises like this pandemic, in order to put them into practice from the early stages of the phenomenon. It is also essential to include fishers and fish farmers in national social protection schemes, as well as to strengthen partnerships within organisations, in order to better absorb the impact of crises such as the one we are currently experiencing. Last but not least, it is necessary to maintain an adequate channel of social communication, which allows for truthful and timely information to consumers on the risks and benefits of the consumption of fisheries and aquaculture products.

#### **However, consumers also have a role to play. What should be changed at the consumption level, if we want more sustainable fishing?**

Consumers respond to affordable prices, perceived food safety and intelligent communication strategies. The benefits of seafood consumption and the risks from non-transparent or unregistered sources of products must be properly communicated. With adequate and timely information, consumers will make informed choices and will undoubtedly demand products caught or farmed in a sustainable manner and with proper quality and safety.



## **Norberto Romero**

President of the Confederation of Artisanal Fishers of Central America (CONFEPESCA)



### **Which fisheries have been most affected by the crisis, and why?**

In general, all small-scale fisheries have been affected by the pandemic, such as those targeting shrimp, snapper, sea bass, corvina, mackerel, dorado and sharks, among others, which are caught in virtually all countries participating in the Confederation of Artisanal Fishers of Central America (CONFEPESCA). In the Central American Caribbean, the situation was similar, although lobster and snail fishing, which are among the most representative fisheries, were closed from March to June this year.

At first, in March this year, when the pandemic was announced, fishing was suspended in accordance with official regulations to prevent or reduce the spread of COVID-19. Yet, it was later formally recognised as an essential activity for food supply, allowing fishers to go out on their fishing days.

However, the markets, restaurants and canteens remained closed, so the market contracted and purchases of fish products fell substantially. And although the option of home delivery to the consumer was opened, the volumes of orders have not been huge.

Besides, the cooperative associations have also decapitalised due to the fall in sales volumes and income, which limits them to meet their current commitments to different suppliers – who have also reduced their operations. This is the case with suppliers of inputs, fishing tools and engine repair shops.

The employment and income effect for fishing families was heavily affected, but there is an expectation of a gradual return to pre-pandemic levels.

### **Artisanal fishers are mainly informal workers. Has this made it difficult for them to access the support provided by governments during the crisis?**

Government support during the pandemic has been largely based on a concept of family support, regardless of the type of occupation of its members, which may include formal or informal workers. This has benefited some fishers.

However, fishers express that, so far, there have been no specific support programmes aimed at fishers, whether formal or informal. The objective is that formal fishers, members of cooperatives or microenterprises be taken into account as a measure of greater impact and support, whether governmental or otherwise.

That is why we want to strengthen fishers' associations, as most of them work individually. If artisanal fishers were more formal, more of them would enjoy social security, and they would have better opportunities to participate in national programmes.

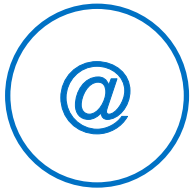
### Do you think something should be changed in the sector after the crisis? What would it be?

Yes, I believe that changes must be made, but real changes. The pandemic has highlighted the structural problems facing the fisheries sector, particularly the small-scale sector, and mostly at the fishing and marketing stages. In some countries, the sector's valuable contribution to employment, income and the supply of high-quality protein food is still "invisible", in part because of the lack of fisheries policy definitions.

What needs to be changed? The pandemic is the opportunity to act differently, driving real changes such as the following:

- Define new policies, strategies and programmes, with innovation and viability, for the sustainable use of our fishing resources.
- Strengthen inter-institutional and inter-sectoral work, with the participation of small-scale fisheries associations, to promote programmes that safeguard fishers' health and work.
- Seriously address the infrastructure for embarkation, disembarkation and market necessary for small-scale fisheries, which must ensure the required sanitary conditions and hygiene in the handling of our products.
- Promote the diversification of fishing operations, with entrepreneurship, added value and competitiveness.
- Strengthen fishers' capacities in **connectivity**, preparing leaders in the use of computer systems and virtual communication platforms to manage fishing operations better and avoid continuous and distant land or air movements for our activities.
- Move towards a new model for the marketing of our products, because, despite the many diagnoses and actions that have been carried out in this regard, their effects have not been sufficient, since fishers continue to be the least benefited from the fishing business.
- Continue to implement the **Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication**, as they are an essential reference for the social protection of our families.

## 7. Resources

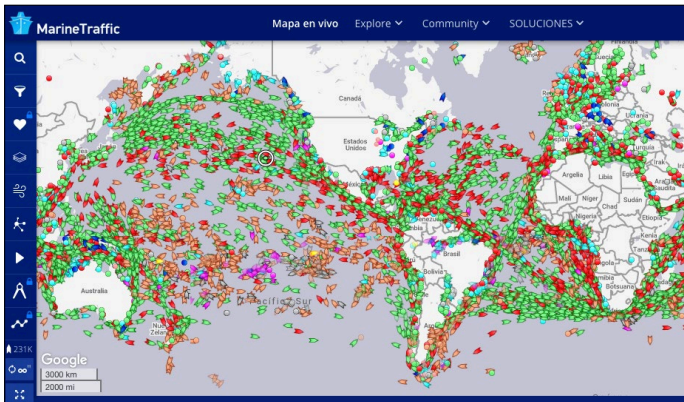


### Marine Traffic

Live map

<https://www.marinetraffic.com/es/ais/home/centerx:-33.0/centery:9.4/zoom:2>

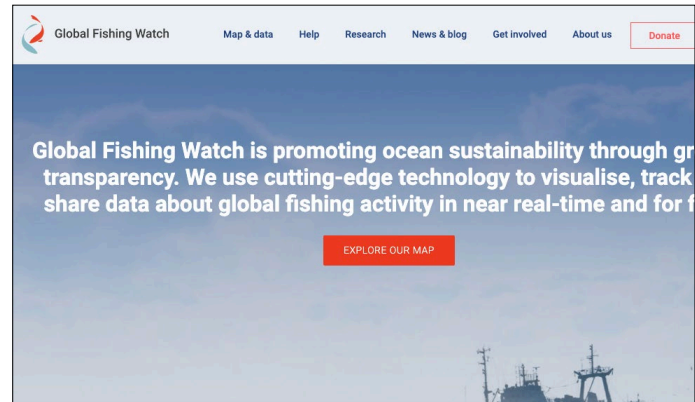
The MarineTraffic live ships map provides information and ships positions from all over the world. It can be filtered by type of ship, fishing, passenger, among others.



### Global Fishing Watch

<https://globalfishingwatch.org/>

This website seeks to promote the sustainability of the oceans. It offers visualizations, tracking and data on the global fishing activity almost in real time.



### FAO

Fisheries and Aquaculture Division

<http://www.fao.org/fishery/es>

On the FAO Fisheries Division's website, you can find updated information on the sector – statistics, blogs, publications and initiatives – and news on the impact of COVID-19 on the sector.



### Live: #ConferenciasOnlineFAO

COVID-19 and its impact on fisheries and aquaculture

<https://www.youtube.com/watch?v=AHmmlxRke2s>

Conference addressing the impact of the pandemic on the livelihoods of fishers and fish farmers in the region.



### FAO

GLOBEFISH: information and analysis on world fish trade

<http://www.fao.org/in-action/globefish/es/>

In this unit of FAO Fisheries Division, you can find various reports, statistics and information on the production and market of fisheries products.



### INFOPECA

Centre for Information and Advisory Services on the Marketing of Fishery Products from Latin America and the Caribbean

<https://www.infopesca.org/>

Service centre providing up-to-date information on the fisheries sector in the region.



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