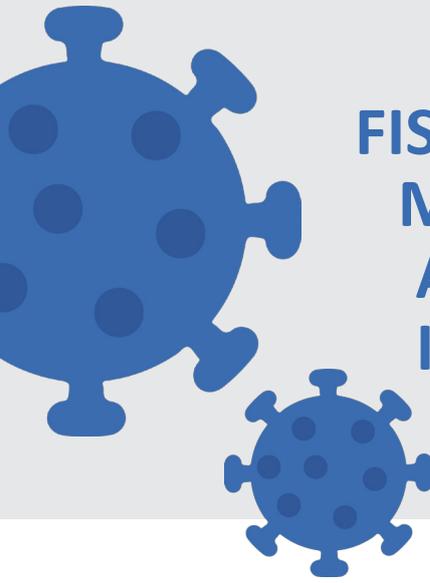




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## FISHERIES AND AQUACULTURE IN THE MEDITERRANEAN AND BLACK SEA: A PRELIMINARY ANALYSIS OF THE IMPACTS OF THE COVID-19 CRISIS

Throughout the world, the fisheries and aquaculture sectors are facing the consequences of the COVID-19 pandemic. With a view to sharing information among its countries and facilitating a reflection on future responses, the General Fisheries Commission for the Mediterranean (GFCM) has conducted a preliminary analysis of the impacts of this crisis on the fisheries and aquaculture sectors in the Mediterranean and the Black Sea region.

The analysis was carried out from the beginning of the crisis, on the basis of available information. The main sources used included responses to a questionnaire circulated by the GFCM to its countries, direct consultations with relevant partners, media articles and digital posts published from 1 March 2020.

It clearly emerges from this analysis that the COVID-19 crisis has had an effect on fisheries and aquaculture production as well as on markets for fisheries and aquaculture products. The extent of the impacts and the measures taken have varied from country to country and are constantly evolving. The main findings are outlined below.



## FISHERIES AND AQUACULTURE ACTIVITIES

In capture fisheries, reductions of up to 80 percent in the number of operating vessels have been observed. Small-scale/coastal vessels were the hardest hit (with less than 10 percent still operating in some cases) while, for large-scale operations, the range of vessels still operating was much higher (40–100 percent depending on the cases).

Social-distancing restrictions were reported to be the hardest to comply with, especially in fisheries involving small vessels.

For aquaculture farms, the level of activity has varied widely depending on the type of species reared. Finfish farms, which generally require daily distribution of food, environmental monitoring and pathology control, remained active but with a reduction in the number of their employees, whereas farms rearing other species requiring less regular maintenance decreased their activity. In Tunisia, aquaculture farms and facilities continued operating, while in some regions of Italy the number of active farms varied between 50 and 95 percent.

## PRODUCTION

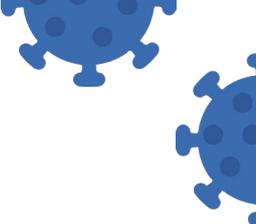
For capture fisheries, the immediate response was a general decrease in production, greater than 75 percent in most of the countries. A notable exception was Turkey, where production continued at pre-crisis levels thanks to a constant demand, encouraged by decreasing prices and dedicated consumer campaigns. Some signs of improvement have been evident in April with some fisheries adapting (e.g. changes in target species and in marketing strategies in line with changes in the demand) and small-scale fisheries potentially better adjusting to market demand.

For aquaculture, overall production has decreased in the region. This decline can primarily be attributed to the lack of export markets and the closure of restaurants. However, the impacts have varied throughout the region. While the sales and production decreased in some countries (50 to 60 percent reduction in sales for Cyprus and Greece, 30 percent decrease production in Tunisia), for others like Algeria, Egypt, Lebanon and Montenegro production levels have generally remained unchanged, due to stable national fish consumption, particularly with regard to tilapia in Egypt and trout in Lebanon.

## ECONOMIC AND MARKET IMPACTS

In general, the capture fisheries sector has suffered significant immediate economic impacts, with declines in fishing activity, landings and ex-vessel prices. In some cases, the drop in prices has not reached consumers, while in others, government action has reduced prices to facilitate continued demand.

Prices for marine fishery products in the region have generally declined between 20 and 70 percent, with most available information citing an approximate 50 percent decline overall; some recovery or stabilization of prices has been observed since the end of March 2020.



Changes in prices have been principally driven by a drastic decline in demand from the hotel/restaurant/tourism industry, limited ability to export to international markets, changes in consumer preferences (including towards lower-value species and canned products) and temporary over-availability of fresh fish leading to wastage.

Price decreases have been variable among different capture fisheries species, with a 90 percent decrease reported for blue and red shrimp in Spain, a 50 percent decrease for turbot and john dory in Bulgaria and France respectively, and a 25 percent decrease for squid in Egypt.

The economic impacts on aquaculture are also heterogeneous in the region. While aquaculture farms in European Union countries have generally experienced a 30–40 percent decline in revenue due to closures of export markets, these impacts were not always evenly felt throughout the region. For example, exports of seabass and seabream from Greece and Turkey to Italy dropped 50 percent; however, this has helped maintain the production of Italian aquaculture farms (that only experienced a 15 percent decline).

Revenue from shellfish, seabass and sea bream has been particularly affected due to the closure of the restaurant industries. This is the case in France (46 percent decrease in revenue for oysters), in Spain (83 percent decrease for mussels), in Turkey (reduction of price for seabream) and in Greece (an estimated EUR 1.8 million per week in lost revenue for seabream).

Despite an increase in demand, ex-farm prices have decreased in certain countries due to falling prices from capture fisheries landings. The prices for seabass and seabream in Tunisia decreased by 10 percent while in Egypt, tilapia prices increased slightly due to strong demand for this popular fish.

While the repercussions for the aquaculture sector are not yet well understood, it appears that liquidity will soon become an issue for many farmers, as they must maintain the fish stock in tanks and cages. Furthermore, should the situation persist and sales not restart, production for 2021 could be affected.

## **IMPACT ON MARINE SPECIES AND ECOSYSTEMS**

In addition to the above, some quick reactions of marine species and marine ecosystems to the reduction of marine and maritime human activities, including fisheries, are becoming apparent. In coastal areas, there has been an increase in sightings of marine mammals (whales and dolphins) and other species such as sharks. The turbidity of the waters around and inside the Venetian canals has also drastically reduced and an increase in the presence of marine wildlife is becoming visible. Whether these quick reactions will have a long-lasting effect on ecosystems, including on the abundance or distribution of particular species, is yet to be confirmed and will also depend on the duration and potential medium- to long-term effects of the crisis on marine and maritime human activities. Notwithstanding that, the quick reactions observed in coastal areas sustain that various anthropogenic activities have important effects on the ecosystems and species inhabiting those areas, including on animal behaviour.

## MAIN RESPONSES BY COUNTRIES

Numerous and heterogeneous measures have been taken across the region. As a first reaction, most countries have taken steps to ensure health and safety by closing ports and/or quarantining foreign vessels, closing open-air fish markets, disinfecting ports and fishing boats, providing masks for workers and raising awareness among fishers and aquaculture farmers about sanitary measures (e.g. washing hands and ensuring social distancing on board). Market measures have also been taken, for instance ensuring the continuity of food supply, expanding home delivery and direct sales and supporting national and local production through consumer awareness campaigns. Finally, in response to the considerable economic impacts of the crisis, various social protection measures, such as social assistance (e.g. cash transfers), social insurance (e.g. health insurance) and labour market programmes (e.g. unemployment benefits) are being enacted. These measures are being complemented with enhanced investment in the fisheries and aquaculture sectors, as well as changes in specific fisheries management and control measures.

## NEXT STEPS

In light of the notable impacts on the fisheries and aquaculture sectors, there will be a need to continue monitoring the evolution of this crisis and taking steps to support recovery. Special attention will have to be paid to the impacts on the livelihoods of fishers and aquaculture farmers – as well as of fish workers along the value chain – in view of strengthening resilience. Such efforts will necessarily include continuing to promote decent working conditions so that those able to work can do so safely, strengthening the supply chains and avoiding wastage, promoting direct sales and innovative marketing channels, enhancing access to social protection systems to reduce vulnerability and supporting investment in the fisheries and aquaculture sectors. Furthermore, there will also be a need to evaluate the effects of reducing fishing pressure on natural resources in order to have an understanding of any potential change to the status of resources. A mix of immediate action and longer-term strategic initiatives is needed to secure and reconcile the economic, social and environmental sustainability of fisheries and aquaculture sectors in the Mediterranean and the Black Sea. The post-2020 strategy of the GFCM will heed this call.

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