Impacts of COVID-19 on aquatic food supply chains in Egypt

The complete summary of survey results can be accessed here.

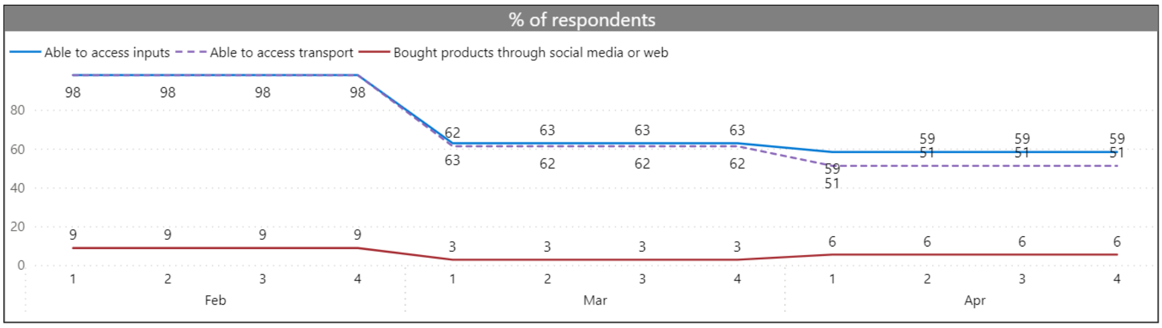
1. Overview

A survey was conducted with fish supply chain actors to assess impacts of COVID-19 on the availability and price of aquatic foods and production inputs. Respondents answered questions about their activity during the months of February, March, and April 2020. The sample was constituted of retailers (n=16), farmers (n=25), feed sellers (n=10), feed mills (n=7) and hatcheries (n=10). The areas covered included the Governorates of Kafr El-Sheikh (51.9%), Sharkia (32.5%), Beheira (3.9%), Fayoum (3.9%), Giza (2.6%), Damietta (2.6%), Cairo (1.3%) and Dakahlia (1.3%). Most farmers were located in the Kafr El-Sheikh and Sharkia Governorate.

2. Key findings

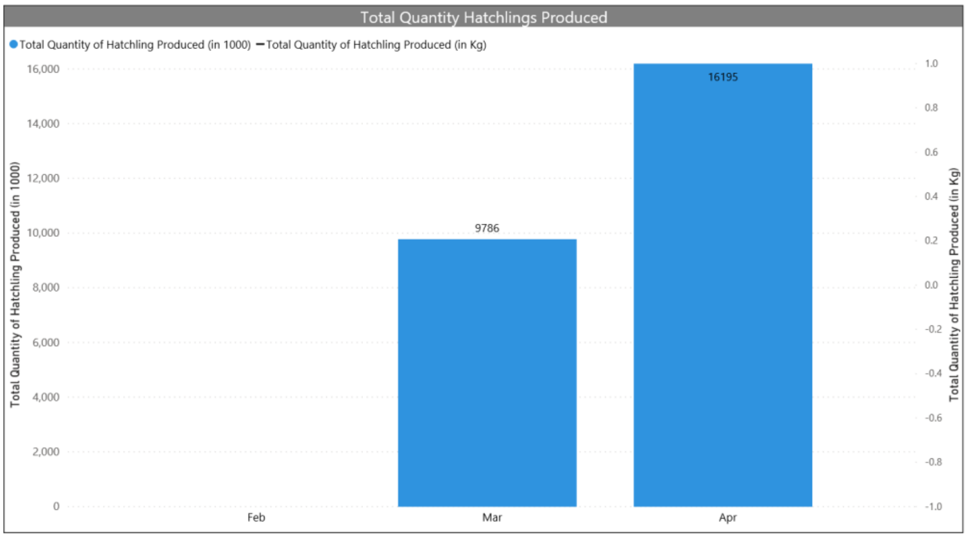
The percentage of respondents trying to buy inputs went up from 73% to 93% between February and April while the percentage of respondents able to access inputs or transport declined from 98% to 59% & 51% (see Figure 1). Similarly, the percentage of respondents trying to sell products went up from 45% to 76% between February and April while the percentage of respondents able to find buyers or access transport declined from 100% to 58% & 37%. The demand for inputs typically increases at this time of year as the manufacture and trade of fish feed begins at the end of February/early March and the farmed fish growing season starts in April. The large decline in access to inputs, transportation, and difficulty to find buyers may be due to COVID-19 related impacts.

Figure 1. Percentage of respondents able to access inputs, transport and who bought products through social media or web



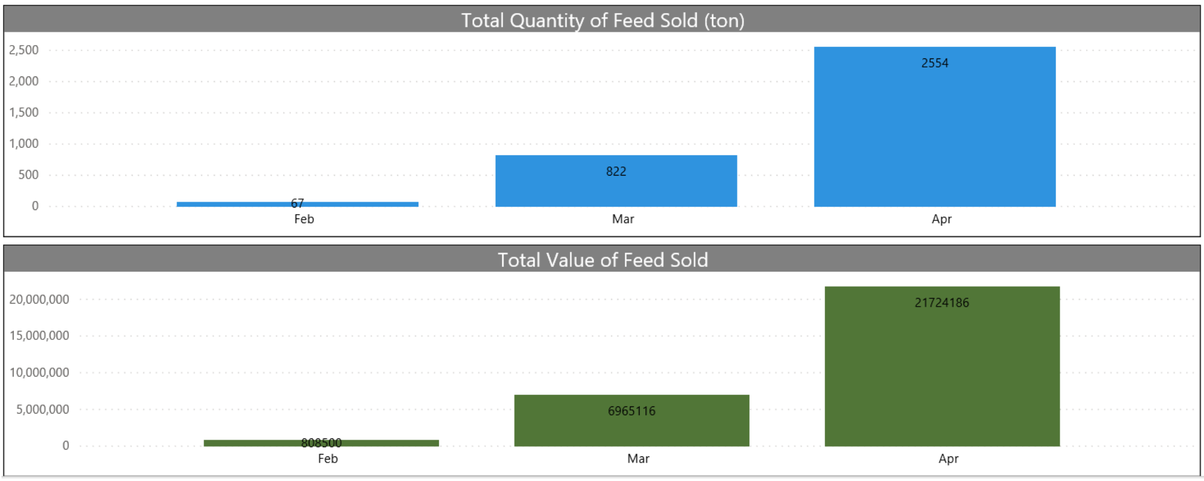
Hatcheries: All hatcheries remained open through March and April. Rising temperatures in April caused a 65% increase in tilapia hatchling production (see Figure 2), and quantities for tilapia fry sold increased by 83% in comparison to March.

Figure 2. Quantity of hatchlings produced (in 1000)



Feed sellers: One pelleted feed seller temporarily stopped operating in March due to COVID-19 but started working again in April. Feed sellers were open four days more per week on average in April (6 days) in comparison to February (2 days), reflecting increasing demand from feed from farms as temperatures rose. The amount of pelleted feed sold increased rapidly from February to April (+2487 tons) with sinking fish feed contributing 84% of April sales (see Figure 3). Average sales value per ton of feed decreased from EGP 12,067/t February to EGP 8,470/t in March (-30%), but remained stable in April.

Figure 3. Total quantity (t) and value (EGP) of feed sold



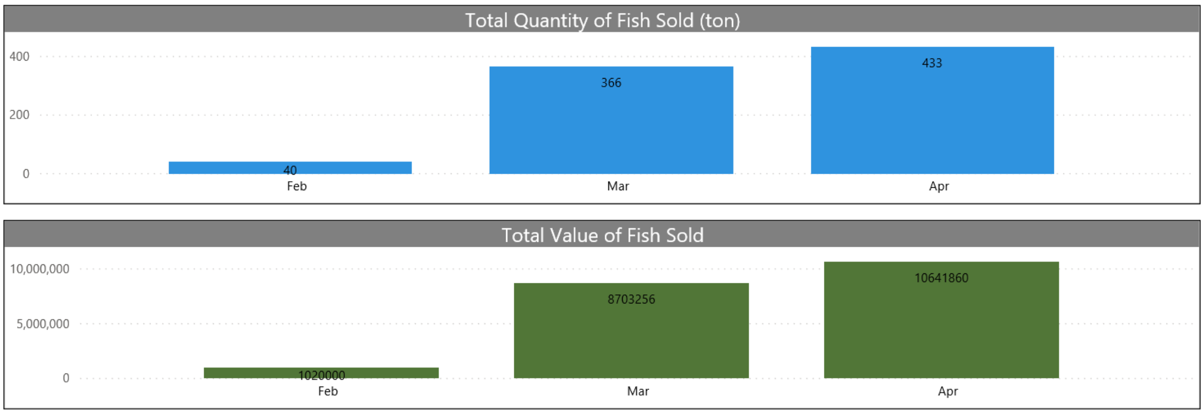
Feed mills: All feed mills were operational in April while some had halted their activity in the previous months due to cold weather or not needing to open. In April, the quantity of feed manufactured increased by 5492 tons in comparison to February while price per ton decreased by 31%.

Farmers: Nearly all farmers remained operational throughout March and April. The quantity of feed procured by farms in the sample increased between February and April (+244 tons), causing farmers to spend 16 times more, as rising temperatures caused fish metabolism to increase, requiring more food. Extruded sinking feed accounted for 99% of feed purchased in

April due to the decline of temperature compared to previous years. Near 11 million more seeds were procured in April in comparison to March.

The quantity of tilapia sold by surveyed farms increased sharply from 40 tons in February to 433 tons in April (see Figure 4), but the farmgate price remained fairly stable at around EGP 25/kg.

Figure 4. Total quantity (t) and value (EGP) of fish sold by farmers



Traders: All traders continued operating throughout April, but number of days of operation per week decreased from 7 to 5. The quantity of fish sold declined by 30% from February to March and rose again by 19% in April. In February tilapia was EGP 27/kg. The average farmed fish price declined steadily, reaching its lowest point in April with -15% for tilapia (EGP 23/kg). As a result, traders' income dropped by 29% in April compared to February.

Retailers: Four retailers were not operational in March with two permanently stopping their activity due to COVID-19 and two temporarily closing. One resumed activity in April. In April, Retailers operated one day a week less than usual. The quantity of fish sold declined by 36% from February to April and the average price of Tilapia increased by 13%. Retailer income dropped by 28%. This was due to a decline in consumer purchase power as the income of many people dropped after the COVID-19 outbreak.

3. Recommendations

- Keeping markets open in a safe way is key to safeguarding demand and keep the supply chain from functioning adequately.
- Provide financial support to actors of supply chain who have lost substantial amounts of revenue.
- Safeguard ability to access transportation and movement of merchandise.
- Conduct research on how COVID-19 may transfer through fish market practices and ways to mitigate this.