

## Impacts of COVID-19 on aquatic food supply chains in Myanmar

The complete summary of survey results can be accessed [here](#).

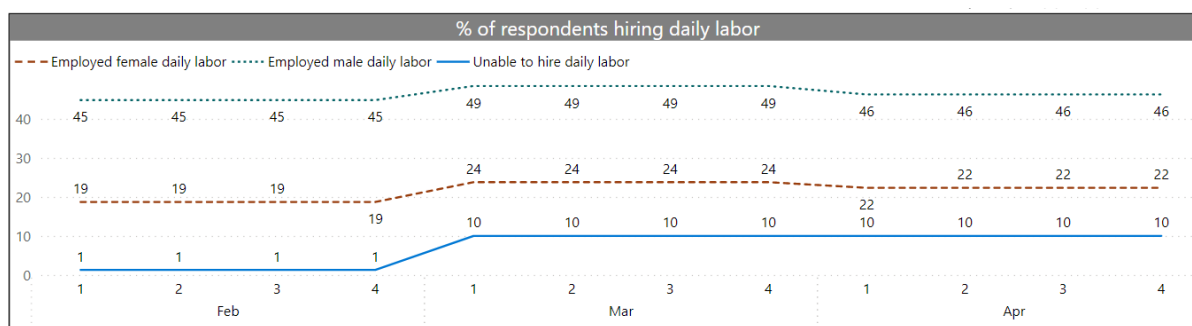
### 1. Overview

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=14), traders (n=12), processors (n=11), farmers (n=45), fishers (n=25), feed sellers (n=12), feed mills (n=4) and hatcheries (n=15). Areas covered included the regions of Ayeyarwady (29%), Yangon (21%), Shan State (25%), Sagaing (22%), and Mandalay (3%).

### 2. Key findings

While nearly all respondents were able to hire daily labour in February, 10% were unable to hire in March and April (see Figure 1).

**Figure 1.** Percentage of respondents hiring daily labor and unable to hire labor.



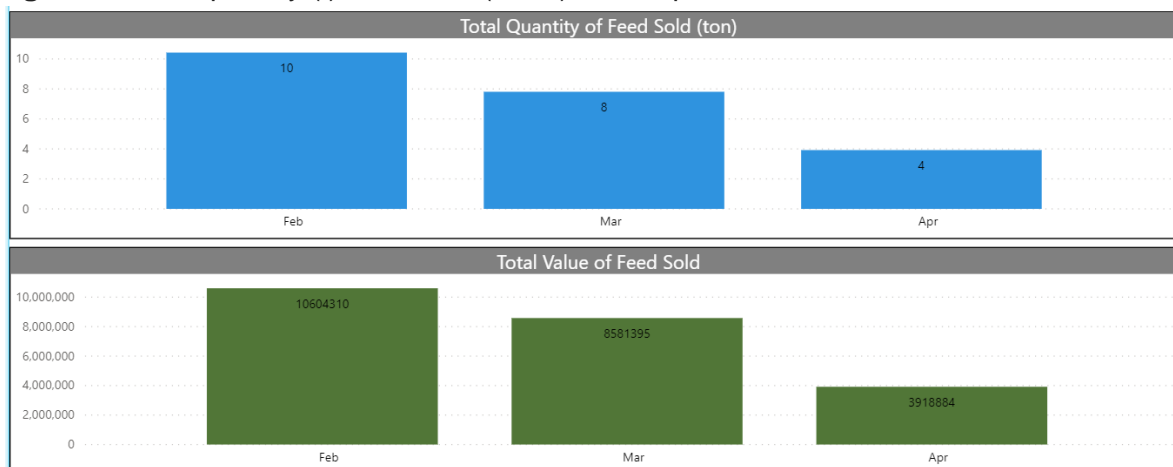
The percentage of respondents trying to buy inputs slightly declined from 57% to 47% between March and April while the percentage of respondents able to access inputs or transport declined from 91% & 97% to 85% & 88%. Similarly, the percentage of respondents trying to sell products went down from 60% to 53% between March and April while the percentage of respondents able to find buyers or access transport remained relatively stable.

**Fishers:** Fishing activity decreased, with 68% of fishers interviewed fishing in April in comparison to 88% fishing in February. Those who continued fishing went for three days a week, instead of five days in February. Amongst those who did not go fishing, 33% evoked reasons related COVID-19 including the inability to hire transport services, movement restrictions, and low demand, but seasonal factors also play an important role. Total fishing income was nearly halved in April in comparison to February and fish landed decreased by 30%.

**Hatcheries:** April showed a decrease in hatchling production (-76%), quantities fry (-97%), fingerling (-67%) sold, and sales revenue from hatchlings (-95%), as compared to March. Sales of rohu hatchlings, fry and fingerling contributed to the majority of hatchery revenue in March and April (around 90%).

**Feed sellers:** Feed sellers were open one day less per week on average in April in comparison to February and the amount of pelleted feed sold decreased by 62% in April (see Figure 2).

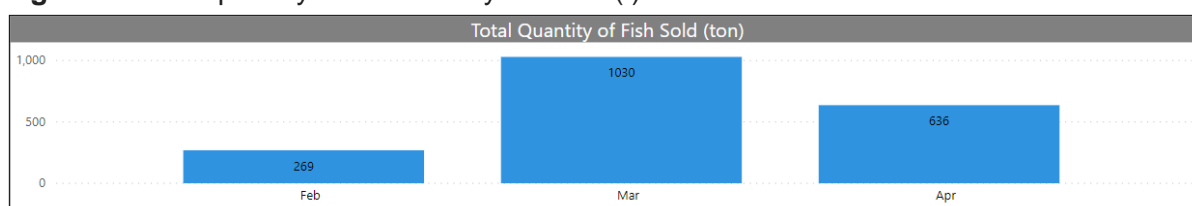
**Figure 2.** Total quantity (t) and value (MMK) of sold pelleted feed.



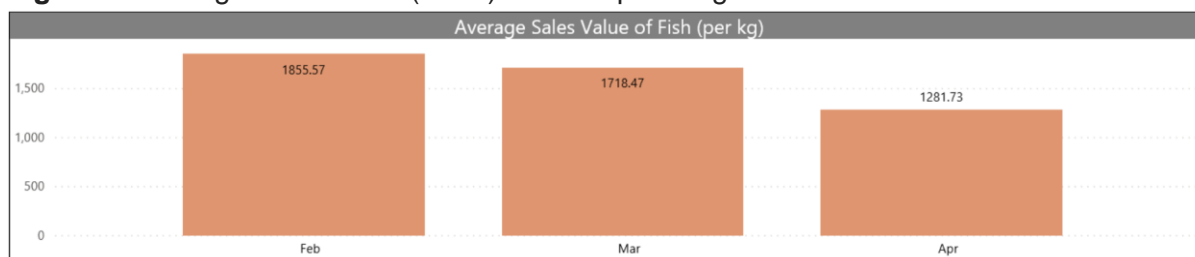
**Feed mills:** One feed mill stopped operating in April. Quantity of feed ingredients procured increased by 99 tons between February and April while quantity of feed manufactured decreased by 29 tons. Purchase prices of procured feed ingredients and sales prices of feeds increased gradually between February and April, by 7% and 28% respectively. Rice bran was the most procured item across all months followed by peanut oil cake.

**Farmers:** Between February and April, feed procurement prices per ton decreased by 11% (from MMK 330,215 to MMK 292,646) while prices paid per thousand fish seed increased by 51% (from MMK 10,625 to MMK 16,071). The quantity of fish sold declined sharply from March to April (see Figure 3) due to lower demand as a result of market closures, and the average farmgate price received for fish decreased by 23%, causing total income earned from fish sales by farms in the sample to fall by more than half. Rohu comprised 84% of April sales and had the largest market share across all months. It also had one of the largest price declines from MMK 1856/kg to 1282/kg between February and April (-31%) (see Figure 4).

**Figure 3.** Total quantity of fish sold by farmers (t).



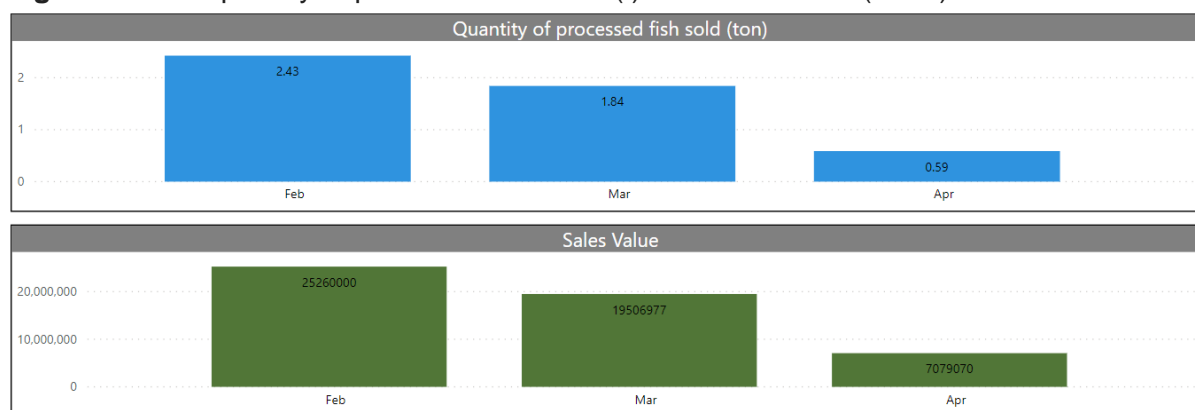
**Figure 4.** Average sales value (MMK) of Rohu per kilogram.



**Processors:** In April, processors (mainly fish smokers and driers) operated half as many days as in February, with two working days per week. Lack of stock from input suppliers was the

most cited reason (33%) next to low demand, road restrictions and temporary shutdown due to COVID-19. A 76% decrease in fish processed/sold and a 72% decrease in revenue was reported between February and April (see Figure 5).

**Figure 5.** Total quantity of processed fish sold (t) and sales value (MMK).



**Traders:** Traders who continued operations in April reduced working days from seven to four per week, as compared to previous months. Quantities sold increased while prices for farmed and freshwater fish remained stable in April. In March, the price of hilsa decreased from MMK 12,960/kg to 5215/kg (-60%) before slightly increasing to MMK 7689/kg in April. Rohu and pangasius accounted for the largest share of farmed fish sold across all months (27% and 24% on average), while hilsa accounted for nearly all freshwater sales and a majority of marine fish sales.

**Retailers:** Retailers operated one day a week less than usual in April. Farmed fish and freshwater capture sales increased in March/April while marine capture fish sales decreased. Prices of freshwater and marine fish decreased by 29% and 41% respectively in comparison to February while farmed fish increased by 9%. Rohu was the most sold farmed fish across all months with 66% of sales in April while mixed small freshwater fish accounted for most of the freshwater sales.

### 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.
- There is a need to capacity build to raise awareness of ways to manage production and post-harvest activities in a covid-19 safe manner.