

Monitoring the Impact of COVID-19 in Myanmar

Yangon peri-urban poultry farmers – late July 2020 survey round

Peixun Fang, Ben Belton, Hnin Ei Win, and Xiaobo Zhang

Key findings

- The price of broilers continued to gradually decrease in the second half of July as supply increased – recent prices are close to the 2019 average. The skyrocketing rise in the price of broiler day-old-chicks stopped in July thanks to the Myanmar government having allowed since mid-May the importation of 3.8 million day-old-chicks.
- Egg prices continued to increase, growing by 14 percent from 2,300 MMK/viss in late June to 2,620 MMK/viss in late July.
- Cash flow is still very poor for broiler farms and worsened considerably in late July for layer farms.
- The PMI operational capacity indices for broiler and layer farms were much lower than those of 2019. The indices for June and July 2020 were very similar, suggesting that the operational capacity of both broiler and layer farms did not improve in July.
- The PMI revenue index for layer farms increased considerably in July but is still much lower than the revenue index for broiler farms. This finding suggests that COVID-19 has impacted the revenue of layer farms more significantly than the revenue of broiler farms.
- Supply shortages of day-old-chicks remain a bottleneck for both broiler and layer farms. Price increases for feed have become a new challenge.

Recommended actions

- All policy recommendations in our first three policy notes still stand – prolonged or expanded income support to vulnerable households; participation in government credit guarantee schemes; temporary income support to poultry farms; temporary waiver of the import ban on day-old-chicks until at least mid- or late September; tax exemptions or deferrals; and lifting restrictions on transportation of livestock and livestock products.
- The temporary waiver of the import ban on broiler day-old-chicks should be extended to layer day-old-chicks. Many layer farms have seen their revenue decline considerably due to the COVID-19 pandemic.

Introduction

Poultry farmers in Myanmar were originally interviewed by telephone in early June, late June, and early July 2020 to determine how their businesses were being affected by COVID-19 related restrictions. The results of those surveys were published in Myanmar Strategy Support Program Policy Notes [11](#),¹ [13](#),² and [19](#),³ respectively. To trace the continuing impact of the COVID-19 pandemic on their economic activities, a fourth phone survey of poultry farmers was done in late July 2020. The fourth survey included 235 poultry farmers (166 broiler and 69 layer farms) in the Yangon peri-urban area (Ayeyarwady, Bago, and Yangon regions) who had been interviewed in the first three rounds of the survey.⁴ The same survey questionnaire was used. This Policy Note reports on the results of the fourth survey round.

Although demand for chicken and eggs has increased in the past two months compared to the beginning of the COVID-19 pandemic, demand growth is sluggish compared to 2019. Meanwhile, poultry farms are facing cash flow constraints and various supply-side challenges, including a shortage of day-old-chicks and an increase in prices for feed. These challenges prevent poultry farms from recovering their operational capacity and closed farms from reopening. Therefore, the impacts of COVID-19 on poultry farms are expected to have adverse implications for nutrition and food security in the country, especially for low-income households for whom egg is among the most important animal-source foods.⁵

This Policy Note seeks to help the Ministry of Agriculture, Livestock and Irrigation (MOALI) of the Government of Myanmar and agricultural sector stakeholders to: (1) understand the challenges that poultry farms have faced since the outbreak of COVID-19; (2) learn about adaptations and changes poultry farms are making in response to those challenges; and (3) track input procurement and marketing activities, including quantities and prices.

Effects of COVID-19 on poultry farmers

As was seen in the early July survey round, **while additional temporarily closed broiler farms reopened in late July, a small number of temporarily closed farms permanently shut down** (Table 1). The share of operational broiler farms increased from 78 to 82 percent of all broiler farms surveyed between the third and fourth survey rounds. This is expected to increase the supply of chicken to the local market and drive broiler prices down further. With the supply of broilers continuing to be lower than in 2019 (considering that so many broiler farms closed) and the recent price of broilers already being very close to the 2019 average, the demand for broilers is still likely to be much lower than that of 2019. On the other hand, some temporarily closed layer farms reopened in late July, possibly due to the recent increase in the price of eggs. Thus, the share of operational layer farms increased from 83 to 86 percent between early July and late July.

¹ Fang, P., B. Belton, Hnin Ei Win, Khin Zin Win, and X. Zhang. 2020. *Monitoring the Impact of COVID-19 in Myanmar: Yangon peri-urban poultry farmers – early June 2020 survey round*. IFPRI Myanmar Strategy Support Program Policy Note 11. Yangon: International Food Policy Research Institute (IFPRI).

² Fang, P., B. Belton, Hnin Ei Win, and X. Zhang. 2020. *Monitoring the Impact of COVID-19 in Myanmar: Yangon peri-urban poultry farmers – late June 2020 survey round*. IFPRI Myanmar Strategy Support Program Policy Note 13. Yangon: International Food Policy Research Institute (IFPRI).

³ Fang, P., B. Belton, Hnin Ei Win, and X. Zhang. 2020. *Monitoring the Impact of COVID-19 in Myanmar: Yangon peri-urban poultry farmers – early July 2020 survey round*. IFPRI Myanmar Strategy Support Program Policy Note 19. Yangon: International Food Policy Research Institute (IFPRI).

⁴ 235 out of the 247 farms from the third round were interviewed in the fourth round of the poultry farmers survey.

⁵ Belton, B., A. Cho, E. Payongayong, K. Mahrt, and E. Abaidoo. 2020. *Commercial Poultry and Pig Farming in Yangon's Peri-Urban Zone*. Feed the Future Innovation Lab for Food Security Policy Research Paper 174. East Lansing, MI, USA: Michigan State University.

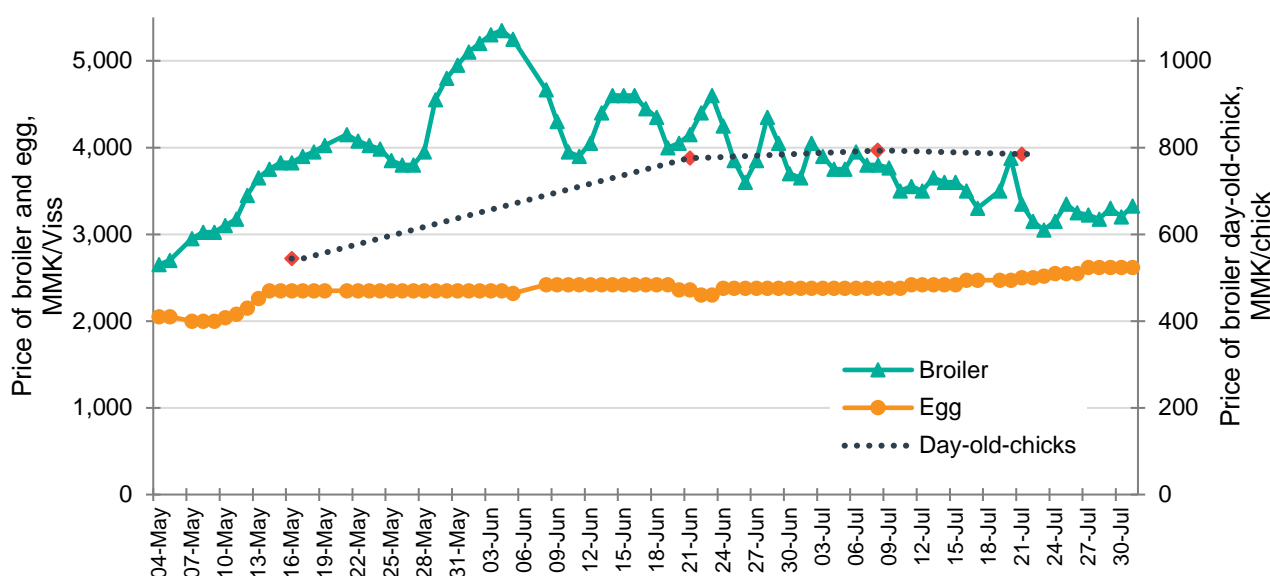
Table 1: Operational status of poultry farms, percent of farms surveyed

| | Both | | | | Broiler farms | | | | Layer farms | | | |
|--------------------|------------|-----------|------------|-----------|---------------|-----------|------------|-----------|-------------|-----------|------------|-----------|
| | early June | late June | early July | late July | early June | late June | early July | late July | early June | late June | early July | late July |
| Still in operation | 75 | 75 | 79 | 83 | 69 | 71 | 78 | 82 | 90 | 84 | 83 | 86 |
| Temporarily closed | 19 | 18 | 10 | 6 | 25 | 22 | 11 | 6 | 4 | 6 | 8 | 5 |
| Completely closed | 6 | 7 | 11 | 11 | 6 | 6 | 11 | 12 | 6 | 9 | 9 | 9 |

Source: 2020 Yangon peri-urban poultry farmer survey – first, second, third, and fourth rounds.

The price of broilers continued to gradually decrease in the second half of July as supply gradually increased (Figure 1). Recent prices are already very close to the 2019 average. However, the overall supply of broilers is still much lower than that of 2019. The price of broiler day-old-chicks increased from below 550 MMK/chick in April/May to almost 800 MMK/chick in June/July, which is much higher than the 2019 price (about 650 MMK/chick based on breeder farm data). The importation of day-old-chicks that was allowed by the Myanmar government since mid-May⁶ contributed to the stable price for chicks in June and July. Until domestic breeder farms recover their normal production capacity, which is estimated to be attained by late September, importing day-old-chicks will be essential to helping broiler farmers obtain the day-old-chicks that they require at a reasonable price.

Figure 1: Daily farmgate prices of broiler chickens and chicken eggs and price from suppliers of broiler day-old-chicks, May to July 2020



Source: Authors' compilation based on the daily broiler and egg price posted on Facebook by Myanmar Livestock Federation. The price of day-old-chicks in June and July 2020 is based on the Yangon peri-urban poultry farmer survey (four rounds).

Note: We did not present the price of layer day-old-chicks here because there are very few observations.

Viss' is a traditional unit of mass in Myanmar equivalent to 1.63 kg. In early 2020, MMK 1,375 ≈ USD 1.00.

As predicted, the price of eggs continued to increase, rising by 14 percent from 2,300 MMK/viss in late June to 2,620 MMK/viss in late July (Figure 1). Prices are expected to increase further in August as more eggs normally will be purchased for mooncake production in preparation for the Mid-Autumn Festival (this year on 1 October). According to the layer farms surveyed and key information interviews with the Myanmar Livestock Federation and the Livestock Breeding and Veterinary Department of MOALI, the minimal change in quantity of eggs sold between June and July indicates sluggish growth in egg demand. The Myanmar government should consider

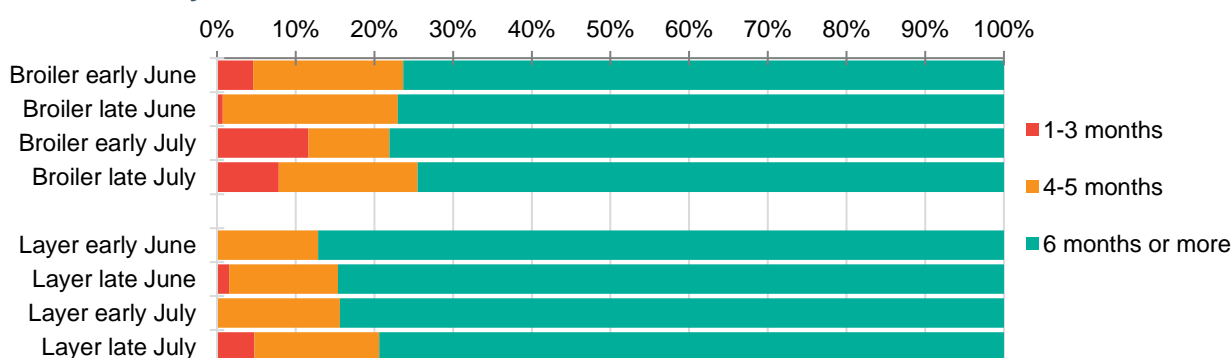
⁶ <https://myanmar.mmtimes.com/news/141022.html>

expanding its current income support to vulnerable households, as doing so would bolster not only nutrition and food security for this population but also egg demand for layer farms.⁷

Cash flow is still very poor for broiler farms and has considerably worsened for layer farms.

While the share of broiler farms reporting that they could not maintain operations on their current cash flow for longer than three months decreased from 12 to 8 percent between the third and fourth survey rounds, the share reporting that they could not maintain operations on their current cash flow for longer than 5 months increased from 22 to 26 percent (Figure 2). As was seen in the third round of survey, the high price of day-old-chicks and the price decrease for broilers are still the two main challenges for broiler farm cash flow. When answering the open-ended question of “what is the most important challenge facing your business”, 24 percent of broiler farmers reported the high price of day-old-chicks and 10 percent reported the price decrease of broilers. In addition, recent price increases for feed arose as a new challenge since the last survey, with 8 percent of broiler farmers reporting the increase as their most significant challenge in late July.

Figure 2: Expectations on ability to maintain operations with current cash flow, percent of farms surveyed



Source: 2020 Yangon peri-urban poultry farmer survey – first, second, third, and fourth rounds.

The share of layer farms reporting that they could not maintain operations on their current cash flow for longer than five months increased from 16 to 21 percent, and 5 percent reported that they could not maintain operations for longer than three months. Price increases of layer day-old-chicks and feed were the two main challenges to their cash flow reported by layer farmers. Though the demand for layer day-old-chicks is not as high as broiler day-old-chicks due to the long production cycle of layers, a supply shortage of layer chicks may affect layer farms that recently started new cycles. Similar to how it facilitated a temporary waiver of the import ban on broiler day-old-chicks, the Myanmar government should similarly facilitate the importation of layer day-old-chicks for several months.

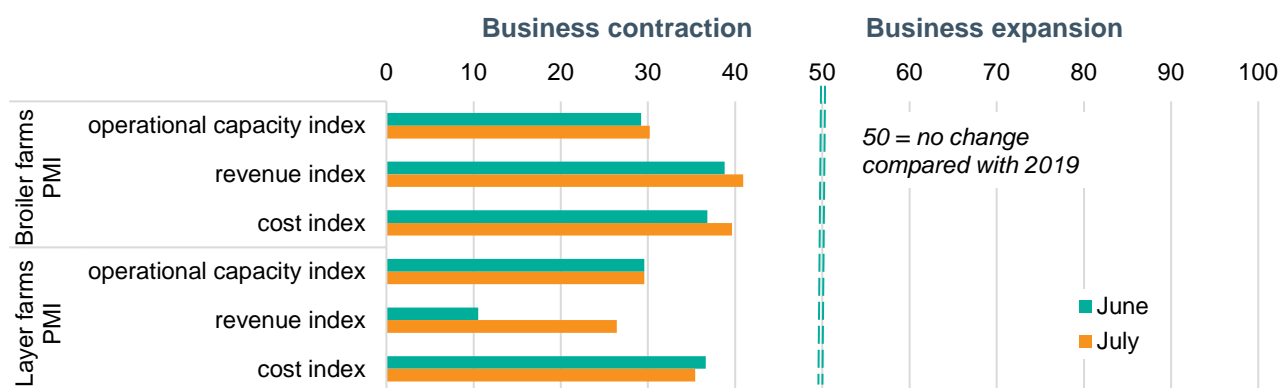
To illustrate the business operations of poultry farms in June and July 2020 compared to 2019, we derived Purchasing Managers' Indices (PMI) for operational capacity, operating cost, and revenue.⁸

- The PMI operational capacity indices for broiler and layer farms were both much smaller than those of 2019 (Figure 3). For layer farms, the PMI operational capacity index did not change between June and July 2020. For broiler farms, the index slightly increased. These findings suggest that the operational capacity of poultry farms did not improve in July, whereas the operational capacity of broiler farms slightly improved.

⁷ <https://www.mougo.gov.mm/provision-2/>

⁸ The Purchasing Managers' Index (PMI) is an index of the prevailing direction of economic trends in the manufacturing and service sectors. It consists of a diffusion index that summarizes whether market conditions, as viewed by purchasing managers, are expanding, staying the same, or contracting. An index reading of 50 means that the variable is unchanged. An index above 50 signals growth or expansion, while below 50 indicates decline or contraction.

Figure 3: Purchasing Managers' Indices (PMI) of poultry farms in 2020 compared with 2019



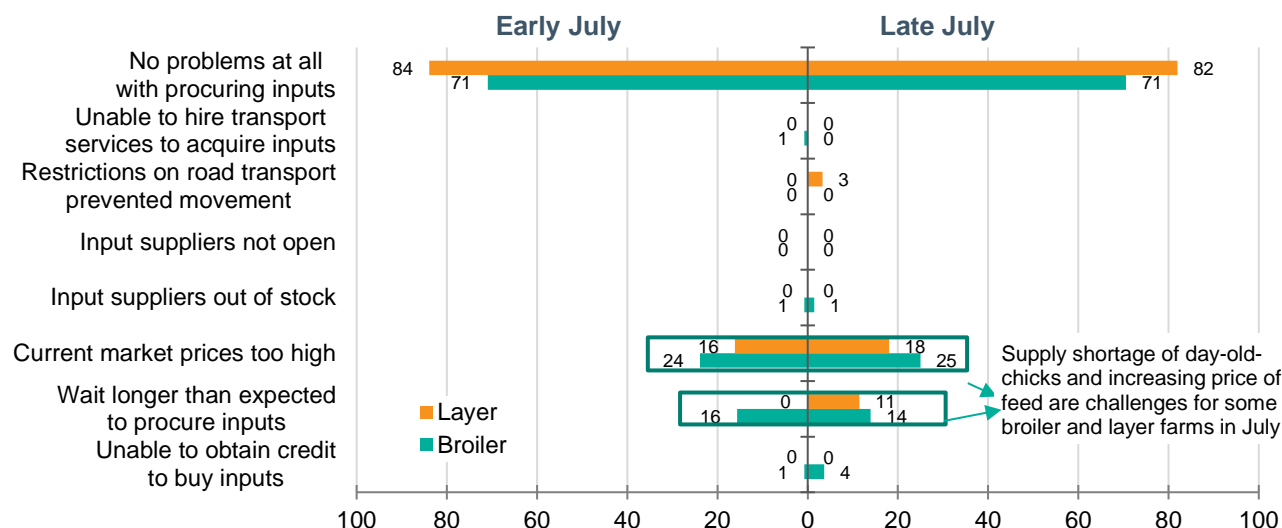
Source: 2020 Yangon peri-urban poultry farmer survey – first, second, third, and fourth rounds.

- The PMI revenue index for layer farms increased considerably in July compared with June. However, the average quantity of eggs sold by the layer farms surveyed did not increase between June and July. Thus, expectations for the revenue increases are probably due to the recent price increase for eggs. The slight PMI revenue index increase for broiler farms also indicates that their revenues improved slightly in July. However, it is important to note that the PMI index does not display the severity of the revenue loss on the farms: The share of broiler farms expecting their revenue to decrease by more than 20 percent increased from 14 to 34 percent between early July and late July. Nonetheless, the PMI revenue indices for broiler farms in June and July are much higher than those for layer farms, suggesting that the impact of COVID-19 on revenue was much more severe on operational layer farms than on broiler farms in these months.
- Despite some farmers reporting high prices for day-old-chicks and feed, the PMI cost index for broiler farms increased in July, indicating that their costs decreased in July compared to June. This suggests that the government policy to allow the importation of broiler day-old-chicks is beneficial to broiler farms. On the other hand, the cost index for layer farms decreased slightly, suggesting that their costs increased in July. The Myanmar government might consider also facilitating the importation of layer day-old-chicks.

Supply shortages of day-old-chicks has been a bottleneck for both broiler and layer farms.

Consistent with the answers to the open-ended question, “what is the most important challenge facing your business”, the supply shortage of day-old-chicks and price increases for feed were the two main supply side problems for both broiler and layer farms in July. Both broiler (14 percent) and layer (11 percent) farms reported that in late July they needed to wait longer than normal to procure day-old-chicks, and 25 and 18 percent of broiler and layer farms, respectively, reported that the prices of day-old-chicks and feed were higher than expected (Figure 4). The price increase of feed is likely the delayed effect of feed factories reducing production during the lockdown period in response to earlier reductions in demand. These supply shortages will probably soon be corrected.

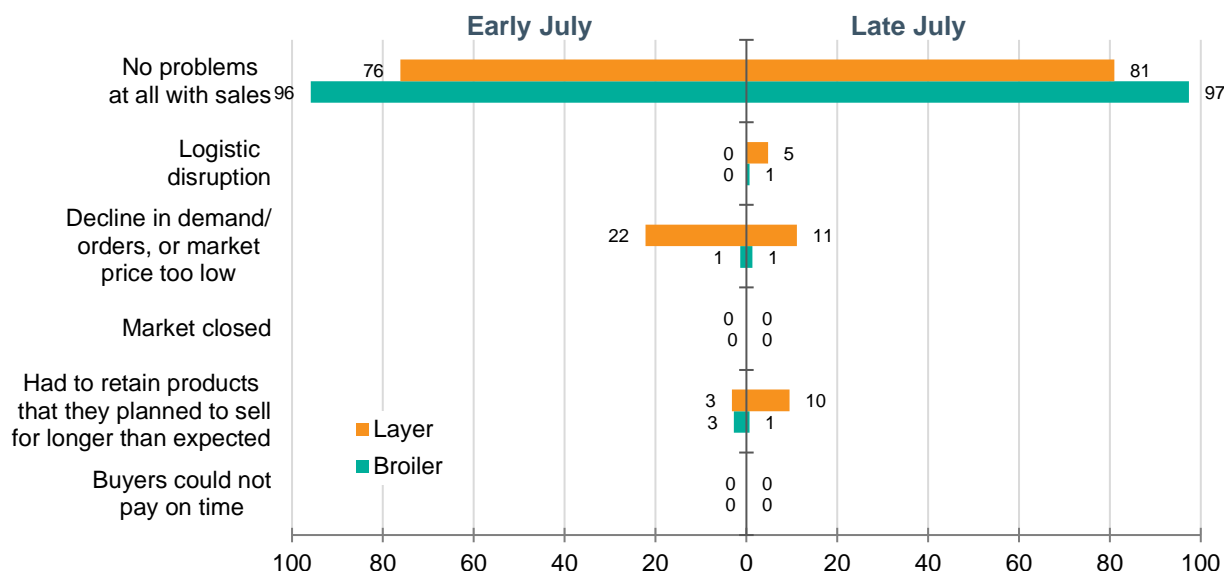
Figure 4: Problems related to accessing inputs for poultry farms, percent of farms surveyed



Source: 2020 Yangon peri-urban poultry farmer survey – first, second, third, and fourth rounds.

As in late June and early July, most broiler (97 percent) and layer (81 percent) farms stated in the late July survey round that they experienced no problems with selling products (Figure 5). The share of layer farms that reported a decline in demand decreased from 22 to 11 percent. However, more reported that it took them longer than expected to sell eggs – sluggish demand for eggs is still a challenge for layer farms.

Figure 5: Problems related to selling products for poultry farms, percent of farms surveyed



Source: 2020 Yangon peri-urban poultry farmer survey – first, second, third, and fourth rounds.

The number of hired regular workers in operational poultry farms did not change significantly between June and July. But, the number of workers is significantly lower than before lockdown (Table 2). This implies that the operational capacity of the poultry farms did not improve in June and July. Compared to before Yangon's semi-lockdown in early April, the average number of workers per operational farm decreased by 23 percent from about nine workers to fewer than seven. Taking closed farms into consideration, we find that 684 jobs were lost among the 275 surveyed farms, which makes up about 30 percent of the total labor in 2019 for the farms surveyed.

Table 2: Impacts of COVID-19 crisis on labor of poultry farms

| | Regular workers per farm, average number | | | Monthly wage, (lakh MMK), average | | |
|---------------|--|---------------------|---------------------|-----------------------------------|---------------------|---------------------|
| | Before lockdown | After lockdown June | After lockdown July | Before lockdown | After lockdown June | After lockdown July |
| Ayeyarwady | 10 | 8 | 8 | 1.6 | 1.6 | 1.6 |
| Bago | 8 | 6 | 4 | 1.5 | 1.6 | 1.5 |
| Yangon | 9 | 8 | 7 | 1.6 | 1.6 | 1.6 |
| Broiler farms | 5 | 4 | 4 | 1.6 | 1.6 | 1.6 |
| Layer farms | 16 | 13 | 14 | 1.5 | 1.5 | 1.5 |
| All | 9 | 7 | 7 | 1.6 | 1.6 | 1.6 |

Source: 2020 Yangon peri-urban poultry farmer survey – first, second, third, and fourth rounds.

Policy recommendations

Based on the analysis of the fourth survey round of poultry farms in the Yangon peri-urban area, all policy recommendations in our first three policy notes still stand– prolonged or expanded income support to vulnerable households; participation in government credit guarantee schemes; temporary income support to poultry farms; temporary waiver of the import ban on day-old-chicks until at least mid- or late September; tax exemptions or deferrals; and lifting restrictions on transportation of livestock and livestock products. The recommendation regarding income support to vulnerable households is further stressed in this report, and the recommendation regarding the importation of day-old-chicks was revised to be as follows.

- Demand for egg is still sluggish. With the price of eggs very likely to be further increased in August, egg consumption for additional households will be affected. As egg is a critical animal-source food among low-income households, prolonged or expanded income support to vulnerable households could bolster egg consumption and ensure food and nutrition security. Such support will also help layer farms.
- Thanks to the Myanmar government's temporary waiver of the import ban on day-old-chicks from mid-May to mid-August, about 3.8 million broiler day-old-chicks were imported. Thus, broiler farms were again able to obtain day-old-chicks at reasonable prices and to recover their businesses. Though the shortage of layer day-old-chicks is not as serious as that for broiler day-old-chicks, we are seeing that more layer farmers report this problem. Therefore, this temporary waiver of the import ban on day-old-chicks should be extended to layer day-old-chicks over the next couple of months to help layer farms.

The analysis of data collected through the four survey rounds of poultry farmers around Yangon highlights several key indicators to monitor in future survey rounds. These include:

- Additional farm closures due to COVID-19 related shocks and whether temporarily closed farms reopen as demand for poultry products recovers;
- Changes in the number of chickens raised and restocked;
- Operational capacity, revenue, and cost compared to 2019 through the PMI indices;
- Changes in the number of regular workers hired; and
- Problems related to selling products and accessing inputs, especially day-old-chicks.

ABOUT THE AUTHOR(S)

Peixun Fang is a Research Analyst in the Development Strategy and Governance Division (DSGD) of the International Food Policy Research Institute (IFPRI), based in Washington, DC. **Ben Belton** is an Associate Professor of International Development in the Department of Agricultural, Food, and Resource Economics at Michigan State University. **Hnin Ei Win** is a Research Analyst in DSGD of IFPRI, based in Yangon. **Xiaobo Zhang** is a Senior Research Fellow in DSGD of IFPRI and Chair Professor of Economics at Peking University.

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INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

1201 Eye St, NW | Washington, DC 20005 USA
T. +1-202-862-5600 | F. +1-202-862-5606
ifpri@cgiar.org
www.ifpri.org | www.ifpri.info

IFPRI-MYANMAR

No. 99-E6 U Aung Kein Lane
Than Lwin Road, Bahan Township
Yangon, Myanmar
IFPRI-Myanmar@cgiar.org
www.myanmar.ifpri.info



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