

Monitoring the Impact of COVID-19 in Myanmar

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

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

Key findings

- Some temporarily closed broiler farms reopened their businesses in early July to meet the recent increasing demand for chicken, but other temporarily closed farms shut down permanently. The share of closed layer farms further decreased by 2 percent, cumulatively by 17 percent compared to 2019. With very few new poultry farms established, the supply of broilers and eggs is likely to be significantly less in coming months compared to 2019.
- The price of broilers has gradually decreased from its peak of 5,350 MMK/viss in early June to around 3,300 MMK/viss in mid-July.
- Supply shortages of day-old broiler chicks continues to be the main problem preventing broiler farms from fully recovering their operational capacity. It was also the most important challenge reported in our open-ended question to poultry farmers.
- Cash flow worsened considerably for broiler farms in early July due to the recent price increase of day-old-chicks and the price decrease of broilers.
- The number of hired regular workers in operational poultry farms remained similar compared with June, which is still much lower than before the outbreak of COVID-19. Since March, the total job loss among the 275 surveyed farms was 793 workers – 35 percent of the total labor on those farms.

Recommended actions

- All recommendations in our first two policy notes still stand – temporary income support to poultry farms; participation in government credit guarantee schemes; temporary waiver of the import ban on day-old-chicks; tax exemptions or deferrals for poultry farmers; and further lifting of restrictions on transportation of livestock and livestock products.
- The temporary waiver of the import ban on day-old-chicks by the Myanmar government should be continued. However, to protect domestic breeder farms and related businesses, the total supply of day-old-chicks should be monitored and the import waiver phased out when domestic breeder farms return to normal production capacity. We estimate this should be in two to three months.

Introduction

Poultry farmers in Myanmar were originally interviewed by telephone in early and late June 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 and [13](#),² respectively. To trace the continuing impact of the COVID-19 pandemic on their economic activities, a third phone survey of poultry farmers was done in early July 2020. The third survey included 247 poultry farmers (177 broiler and 70 layer farms) in the Yangon peri-urban area (Ayeyarwady, Bago, and Yangon regions) who had been interviewed for the second round of the survey.³ The same survey questionnaire was used. This Policy Note reports on the results of the third survey round.

Although demand for chicken and eggs is gradually returning to normal, poultry farms in the Yangon peri-urban area are still facing challenges due to the COVID-19 pandemic. Cash flow constraints and a shortage of day-old-chicks continued to be the two main problems facing poultry farms as they worked to recover their operational capacity. Because chicken and egg are, with fish, are the most important animal-source foods in Myanmar, the impacts of COVID-19 on poultry farms are expected to have adverse implications for nutrition and food security in the country, especially among low-income households for whom egg is the most important animal-source food.⁴

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

While some temporarily closed broiler farms reopened their businesses in early July to meet increasing demand, other temporarily closed ones permanently shut down (Table 1). Because twelve broiler farms reopened and no operational broiler farms closed (Figure 1), the share of operational broiler farms increased from 71 to 78 percent of all broiler farms surveyed between the second and third survey rounds. Meanwhile, the share of permanently closed broiler farms increased from 6 to 11 percent. Respondents from permanently closed broiler farms reported that they have started new businesses or jobs and it would be unlikely that they would raise broilers in the immediate future. As most of these respondents reported that limited cash flow was the main reason for temporarily closing their farms, it is likely that this factor also prevented them from reopening.

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

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

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

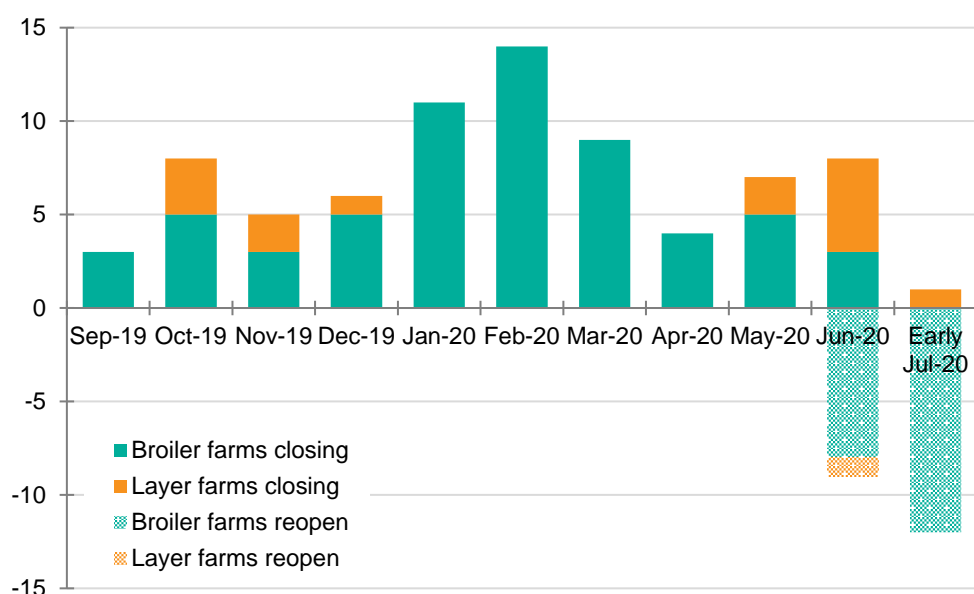
¹ Fang, P., B. Belton, Hnin Ei Win, Khin Zin Win, and X. Zhang. 2020. *Monitoring the Impact of COVID-19 in Myanmar: Yangon peri-urban poultry farmers – early June 2020 survey round*. IFPRI Myanmar Strategy Support Program Policy Note 11. Yangon: International Food Policy Research Institute (IFPRI).

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).

³ 247 out of the 249 farms from the second round were interviewed in the third round.

⁴ 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.

Figure 1: Broiler and layer poultry farms closed and reopened by month, September 2019 to early July 2020, number



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

Note: Our survey started in June, so we do not have data regarding farms reopening before June. However, farms were unlikely to reopen before June as the demand for poultry products was very low.

The share of operational layer farms decreased slightly. No layer farms reopened between the second and third rounds of the survey. Importantly, more layer and broiler farms reported in the third round that they are considering closing their farms because it is very hard for them to remain in business.

Broiler supply is likely to increase in the immediate future due to the recently reopened broiler farms. However, overall broiler production this year is likely to be considerably lower than was the case in 2019, mainly due to the permanently closed farms. With continuing cash flow problems and the challenge of procuring day-old-chicks, many of the farms that now are reported to be temporarily closed can be expected to permanently cease business. Moreover, according to key informants with the Livestock Breeding and Veterinary Department of MOALI, there have been no recently registered poultry farms in the Yangon area. Regarding the supply of eggs, this is expected to decrease further by 2 percent and cumulatively by 17 percent compared to 2019.

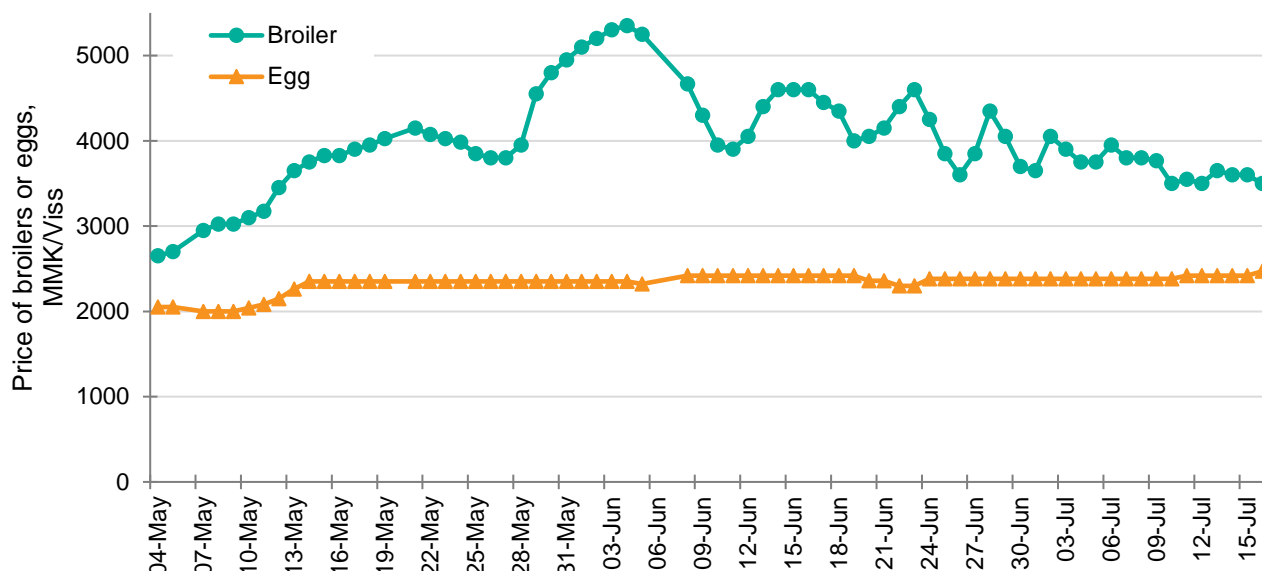
The **price of broilers has been gradually decreasing** since early July compared with June **as supply has gradually increased**. The price of broiler chickens in the first half of July fluctuated around 3,500 MMK/viss (Figure 2). The recent lowest price (3,300 MMK/viss) is only slightly higher than the 2019 average. With the decreasing price of broilers and the increasing price of day-old-chicks, it will become increasingly difficult for broiler farms to survive. Some broiler farms reported that they will retain their mature chicken and wait for higher prices. Such lengthening of production cycles will again decrease broiler supply.

The price of eggs has increased slightly by 7 percent from 2,300 MMK/viss in late June to 2,470 MMK/viss around mid-July (Figure 2). Prices are expected to increase significantly in August as more eggs would normally be purchased for Chinese Moon Cake baking (the Mid-Autumn Festival is on October 1st in 2020). This increased demand should mitigate cash flow problems for some layer farms. However, the price increase would also have adverse implications for nutrition and food security among low-income households for whom egg is a critical animal-source food. Fortunately, the Myanmar government's COVID-19 Economic Relief Plan⁵ (CERP) has started providing

⁵ Government of the Republic of the Union of Myanmar. (2020). *Overcoming as One: COVID-19 Economic Relief Plan*. Government of the Republic of the Union of Myanmar, Nay Pyi Taw.

unconditional cash transfer to households without regular income. Income support to the vulnerable groups would probably increase demand for eggs and, in turn, can help layer farms.⁶

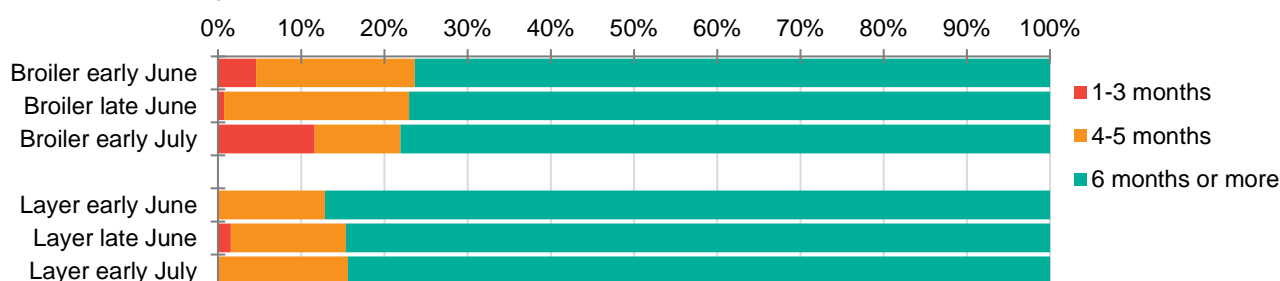
Figure 2: Daily farmgate prices of broiler chickens and chicken eggs, May to mid-July 2020



Source: Authors' compilation based on the daily broiler and egg price posted on Facebook by Myanmar Livestock Federation.
Note: 'Viss' is a traditional unit of mass in Myanmar equivalent to 1.63 kg. In early 2020, MMK 1,375 ≈ USD 1.00.

Cash flow considerably worsened for broiler farms in early July due to recent price increases for day-old-chicks and price decreases for broilers. The share of broiler farms that reported that they could not maintain operation on the basis of their current cash flow for longer than three months increased from 1 to 12 percent between the second and third survey rounds (Figure 3). All broiler farms reported that the recent price increase of day-old-chicks was the most important challenge facing their business. Some respondents were also worried about a further price decrease of broilers, which would further worsen their cash flow. This is likely to happen, as the supply of broilers is increasing.

Figure 3: Expectations on ability to maintain operations with current cash flow, percent of farms surveyed



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

As was seen in the first two survey rounds, cash flow continues to be a significant problem for operational poultry farms. Twenty-two and 16 percent of operational broiler and layer farms, respectively, report that they would not be able to maintain operations for longer than five months on their current cash flow (Figure 3). Expectations of total operating costs did not change much recently

⁶ <https://www.mougo.gov.mm/provision-2/>

for both broiler and layer farms. Around one-third of both broiler and layer farms expect their costs to increase and only about 10 percent expect their costs to decrease (Table 2).

Table 2: Expectations of changes in business operations of broiler and layer farms in 2020 compared to 2019, percent of surveyed farms

	Operational capacity level			Total operating costs			Total revenue		
	Early June	Late June	Early July	Early June	Late June	Early July	Early June	Late June	Early July
BROILER FARMS									
Increase > 20%	3	0	1	2	1	0	5	0	0
Increase 0 to 20%	7	1	1	31	35	30	9	34	25
The same	48	46	50	56	59	59	51	9	29
Decrease 0 to 20%	22	22	20	7	2	9	31	41	27
Decrease > 20%	20	30	28	4	3	2	4	16	14
LAYER FARMS									
Increase > 20%	3	2	0	9	2	0	3	3	0
Increase 0 to 20%	3	3	3	33	32	33	1	3	6
The same	41	57	42	46	55	58	10	11	25
Decrease 0 to 20%	22	6	27	3	6	6	41	52	47
Decrease > 20%	32	32	28	9	5	3	44	31	22

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

As was observed in the second survey round, access to day-old-chicks is likely to affect broiler farms' expectations of total revenue. Farms reporting problems with accessing day-old-chicks were more likely to expect their revenues to decrease. For layer farms, however, the recent slight increase in egg prices seems to result in more positive expectations of revenue: The share of layer farms expecting diminished revenue decreased from 83 percent in the second round to 69 percent in the third (Table 2).

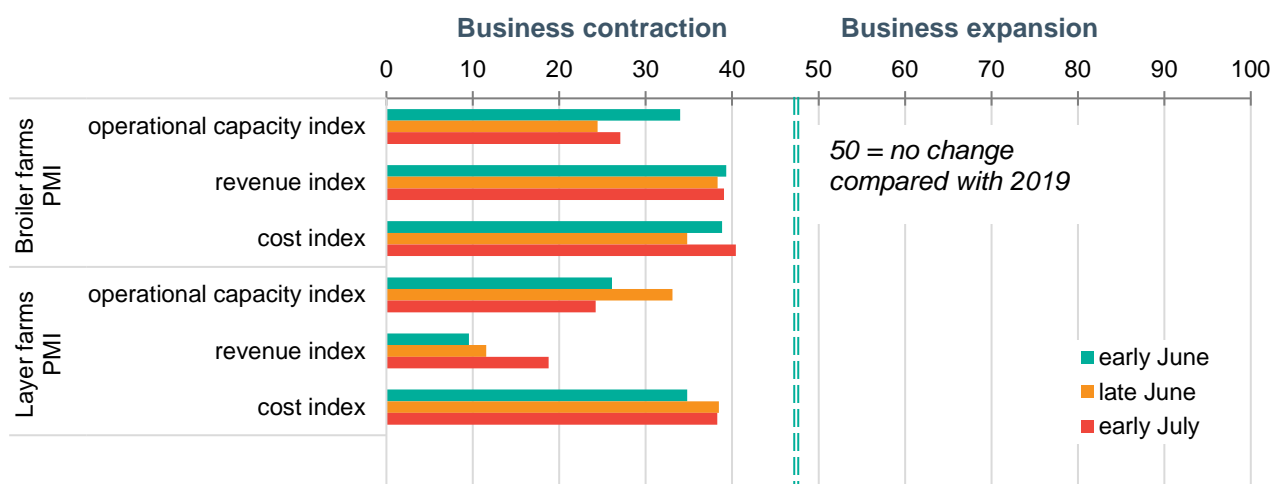
Expectations of operational capacity for broiler farms did not change much – about half of broiler farms expect they will operate at a lower capacity level compared to 2019. This also is likely related to limited access to day-old-chicks. About half of layer farms expect their operational capacity level to decrease, which is likely due to sluggish demand for eggs.

To better illustrate the business operations of poultry farms in 2020 compared with 2019, we derived Purchasing Managers' Indices (PMI) for the three indicators of operational capacity, operating cost, and revenue.⁷

- The PMI operational capacity indices for both broiler and layer farms are significantly less than 50, implying significantly lower operational capacity in 2020 compared with 2019. The PMI operational capacity index of broiler farms in late June and early July was lower than in early June, indicating that broiler farms decreased operational capacity due to limited access to day-old-chicks.
- Much lower PMI revenue indices for layer farms than for broiler farms suggests that revenue decreases have been more serious for layer farms. The PMI revenue index for layer farms increased in early July thanks to the recent price increase of eggs, which is consistent with the patterns seen in Table 2.
- The PMI cost indices are less than 50 for both broiler and layer farms, suggesting that their costs are higher in 2020 compared with 2019.

⁷ 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 and below 50 indicates decline or contraction.

Figure 4: Purchasing Managers' Indices (PMI) of poultry farms in 2020 compared with 2019

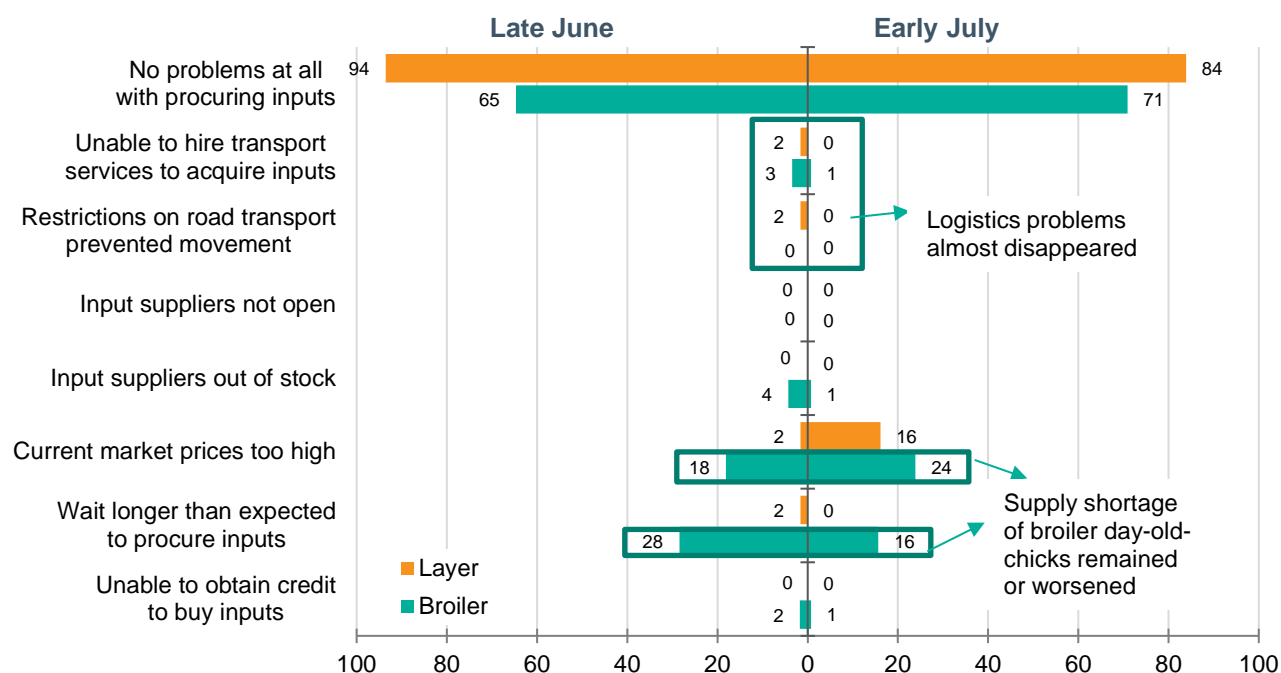


Source: 2020 Yangon peri-urban poultry farmer survey – first, second, and third rounds.

Supply shortage of day-old-chicks continues to be the bottleneck for broiler farms. Though fewer respondents (decreasing from 28 to 16 percent) reported longer waiting times for day-old-chicks, a higher share of respondents (increasing from 18 to 24 percent) reported the price of day-old-chicks as being too high for them (Figure 5). In the third survey round, about half of broiler farms responded to our open-ended question about the most important challenge that they experienced. Eighty-five percent of the challenges reported were related to longer-than-expected waiting times or high prices (normally paid to agents) for day-old chicks.

There were few input-related problems for layer farms in late June. However, 16 percent of layer farms reported in early July that the price of layer feed had become too high for them.

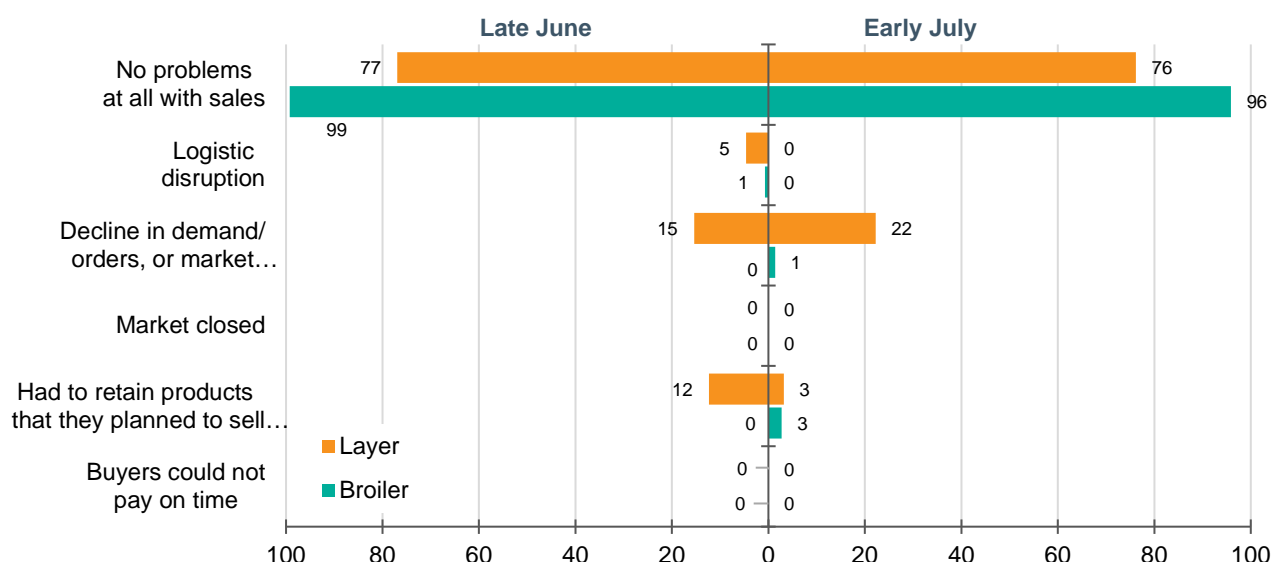
Figure 5: Problems related to accessing inputs for poultry farms, percent of farms surveyed



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

Similar to late June, almost all broiler farms and 76 percent of layer farms claimed that they experienced no problems with selling products (Figure 6). However, 22 percent of layer farms reported as their current main problem persistent low egg prices due to sluggish demand.

Figure 6: Problems related to selling products for poultry farms, percent of farms surveyed



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

The number of hired regular workers in operational poultry farms remained stable (Table 3). Compared with before Yangon's semi-lockdown (i.e. early April), the average number of workers per operational farm has decreased by 24 percent from about nine workers to fewer than seven. Taking closed farms into consideration, total jobs lost among the 275 surveyed farms are 793, which makes up about 35 percent of the total labor in 2019 for the farms surveyed. As mentioned in the first two policy notes, cash flow problems will create difficulties for poultry farms to maintain the number of workers they require. Severe job losses in the poultry or livestock sector would adversely affect livelihoods. With more permanently closed poultry farms, such job losses will be hard to recover.

Table 3: 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 till early June	After lockdown late June	After lockdown early July	Before lockdown	After lockdown till early June	After lockdown late June	After lockdown early July
Ayeyarwady	10	9	7	8	1.6	1.5	1.6	1.6
Bago	8	7	6	4	1.5	1.5	1.6	1.6
Yangon	9	8	7	8	1.6	1.6	1.6	1.6
Broiler farms	5	5	4	4	1.6	1.6	1.6	1.6
Layer farms	16	14	13	13	1.5	1.5	1.5	1.5
All	9	8	7	7	1.6	1.6	1.6	1.6

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

Policy recommendations

Based on the analysis of the third survey round of poultry farms in the Yangon peri-urban area, all policy recommendations from our first and second policy notes still stand – temporary income support to poultry farms; participation in government credit guarantee schemes; temporary waiver of the import ban on day-old-chicks; tax exemptions or deferrals; and lifting restrictions on transportation of livestock and livestock products. Two of these recommendations are stressed below, and a new recommendation regarding income support to vulnerable households is added.

- Egg is a critical animal-source food among low-income households. Income support to vulnerable households not only can mitigate nutrition security problem, but it could also

increase demand for eggs, which, in turn, will help layer farms. The Myanmar government already adopted this policy under CERP Action 4.1.2. This policy can be prolonged or expanded after the two rounds of implementation.

- Because of recent price decreases for broilers and price increases for day-old-chicks, cash flow worsened for broiler farms. Layer farms also have suffered from persistent low egg prices. Many operational poultry farms reported that they are considering closing their farms. Therefore, the recommendation in our first two policy notes of mitigating cash flow problems still stands – providing temporary income support based on either the number of employees or the sales from last year would help operational farms buffer COVID-19 related shocks for several months and help some closed farms resume operations. The support should extend to both registered and unregistered farms. This recommendation falls within Action 2.1.7(b) of the CERP of the Government of Myanmar. However, income support to vulnerable households and government credit guarantee schemes should be prioritized ahead of income support to poultry farms.
- The supply shortage of day-old-chicks remains a significant bottleneck to increasing broiler production. A temporary waiver of the import ban on day-old-chicks by the Myanmar government allowed for the importation of 1.9 million broiler day-old-chicks between mid-May and mid-July. This measure should be continued. However, to protect domestic breeder farms and related businesses, the total supply of day-old-chicks should be monitored and the temporary import waiver measure phased out when domestic breeder farms return to their normal production capacity. This should be in about two to three months, assuming breeder farms started increasing their production in mid-May.

The analysis of data collected through the three 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 the level of operational capacity of both broiler and layer farms;
- Changes in the number of regular workers hired; and
- Problems related to selling products and accessing inputs, especially the supply of day-old-chicks and pullets.

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