

Monitoring the Impact of COVID-19 in Myanmar

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

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

Key findings

- With increasing demand for chicken, the reopening rate of broiler farms in June has overtaken closures. Their challenges have switched from the demand side to the supply side due to a shortage of day-old-chicks.
- However, more layer farms closed in June than previously. The share of layer farms that are operational decreased from 90 to 85 percent with further decreases expected.
- Cash flow remains the main driver of poultry farms closures. Even though most operational farms did not have problems selling their products due to increasing demand, cash flow remains a problem for them. In the second half of June, cash flow slightly improved for boiler farms, while it slightly worsened for layer farms.
- The price of broilers peaked at 5,350 MMK/viss in early June due to a supply shortage. Since then, the price has fallen to around 4,000 MMK/viss with recent increases in supply.
- Supply shortages of day-old broiler chicks was the main problem that prevented broiler farms from fully recovering their operational capacity. Some broiler farms expect their total revenue to increase, while others expect a decrease.
- In the past two weeks, the number of hired regular workers in operational poultry farms has further decreased by approximately one worker per farm. Since March, total job losses among the 275 surveyed farms was 900 – 39 percent of the total labor on those farms.

Recommended actions

- All four recommendations in our first policy note still stand – temporary income support to poultry farms; participation in government credit guarantee schemes; tax exemptions or deferrals; and lifting restrictions on transportation of livestock and livestock products.
- In addition, monitor the total supply and price of day-old-chicks when the temporary waiver of the day-old-chicks import ban is imposed. This waiver should phase out when domestic breeder farms return to normal production capacity. This will be approximately within three months, assuming breeder farms have started increasing production since mid-May.

Introduction

Poultry farmers, both egg (layers) and broiler producers, were originally interviewed by telephone in early June 2020 to determine how their businesses were being affected by COVID-19 related restrictions. The results of that survey were published in [Myanmar Strategy Support Program Policy Note 11](#).¹ To trace the continuing impact of the COVID-19 pandemic on their economic activities, a second phone survey was done between 15 and 27 June 2020, immediately after the first survey round with 249 poultry farmers (177 broiler and 72 layer farms) in the Yangon peri-urban area (Ayeyarwady, Bago, and Yangon regions) that were interviewed for the first round of the survey.² The same survey questionnaire was used. This Note reports on the results of this second 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. Though some poultry farms reopened over the past two weeks, numerous farms closed their businesses due to an inability to recover their operational capacity in light of problems such as cash flow and limited quantities of day-old-chicks. Because chicken and egg are the two most important animal-source foods in Myanmar other than fish, COVID-19 impacts 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.³ Moreover, as the labor market for the labor intensive poultry sector continues to worsen, rural livelihoods will be adversely affected as well.

This research note seeks to help the Ministry of Agriculture, Livestock and Irrigation 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

The **reopening rate of broiler farms has now overtaken the closure rate** thanks to the increasing demand for chicken in June. On the other hand, there are **still more layer farms closing their businesses than reopening**, as predicted in the first policy note. Overall, the share of closed poultry farms remained the same as in the first half of June: 25 percent of poultry farms surveyed remained closed at the time of the second round (Table 1). Because more broiler farms reopened, the share of operational broiler farms increased from 69 to 71 percent between the two survey rounds. On the other hand, the share of operational layer farms decreased from 90 to 84 percent (Figure 1). Such layer farm closures were likely due to the COVID-19 impacts discussed in the first policy note; layer farm closures were expected to follow broiler farm closures with a time lag because of their longer production cycles.

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).

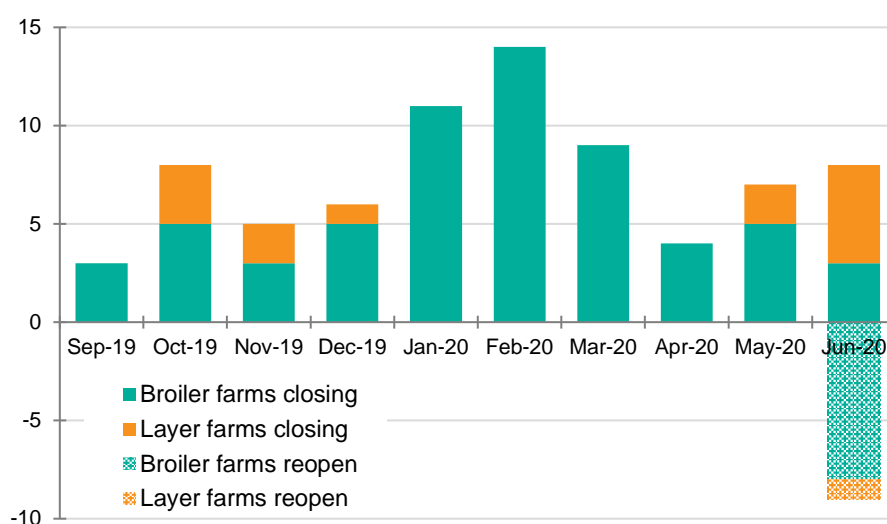
² Due to some farms being permanently closed and to some farmers being unable or unwilling to participate in the second round of the survey, 249 out of the 275 farms interviewed in the first round were interviewed in second round, an attrition rate of 9.5 percent.

³ 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 June	late June	early June	late June
Still in operation	75	75	69	71	90	84
Temporarily closed	19	18	25	22	4	6
Completely closed	6	7	6	6	6	9

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

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

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

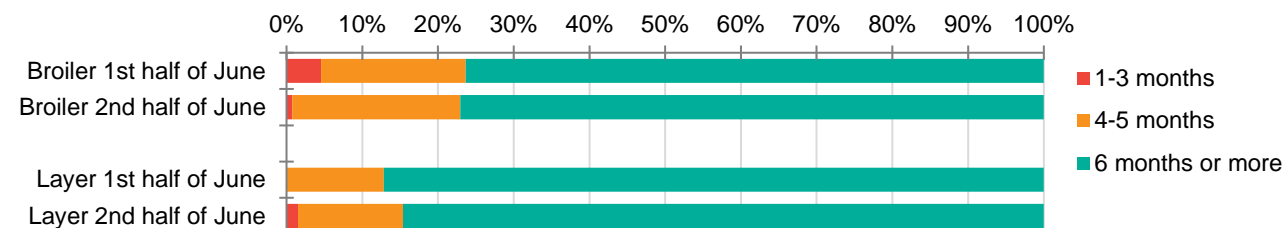
Note: Our survey started in June, so we do not have the data regarding farms reopening before June. However, farms were very unlikely to reopen before June when the demand for poultry products was very low.

As was observed with the first survey round, **the most cited reason for closing business in June was cash flow**. However, though low prices and low demand were the main challenges prior to June, according to the first round of the survey, they no longer seem to be significant issues. Only one closed layer farm reported low prices or insufficient buyers in our second survey round as a principal reason for shutting down. Other factors, including access to inputs, labor issues, disease, or government COVID-19 restrictions also were found not to be substantial drivers in causing farms to close their businesses.

Cash flow has slightly improved for broiler farms thanks to recent increases in demand. However, the **situation slightly worsened for layer farms** in the second half of June. Thus, we have seen more layer farms close than broiler farms in June. In our first survey round, 5 percent of broiler farms could not maintain operations on current cash flow for longer than three months. This number decreased to 1 percent in the second survey round. However, the share of layer farms that could not maintain operations on current cash flow for longer than five months increased from 13 to 16 percent, including 2 percent that could run for only one to three months. Overall, cash flow is still a main problem for operational poultry farms. There are still 23 and 16 percent of operational broiler and layer farms, respectively, that judge that they would not be able to maintain operations for longer than five months on their current cash flow (Figure 2).

The **share of surveyed farms participating in contract farming arrangements increased** from 2 percent in 2019 to 6.5 percent in 2020. All farms that turned to contract farming during the COVID-19 pandemic reported that they were impacted by the shock and could not continue operations on their own. Most of them have contracts with Charoen Pokphand (CP).

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

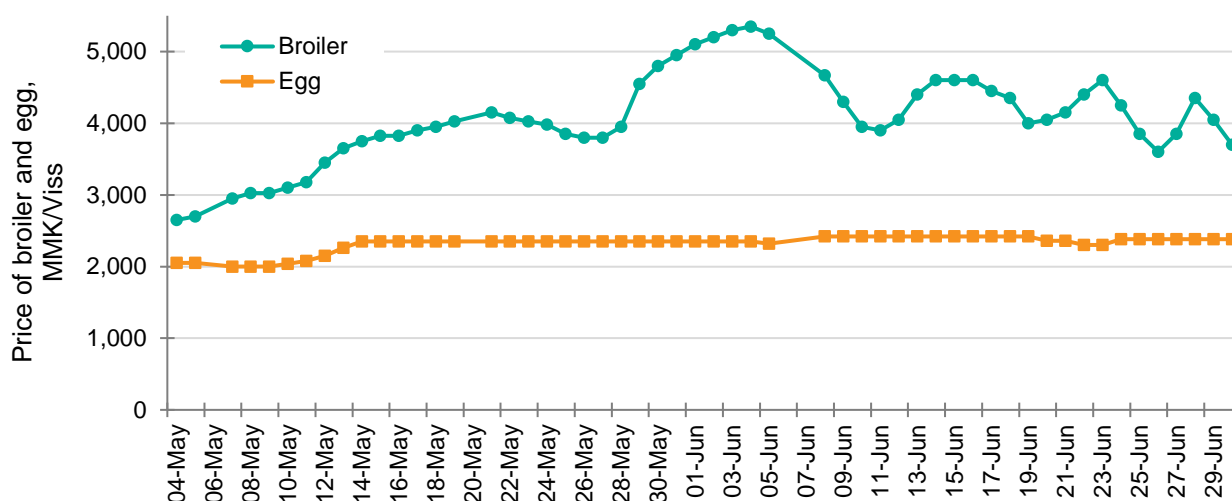


Source: June 2020 Yangon peri-urban poultry farmer survey, first and second rounds.

Closures of broiler and layer farms are still the main driver for the supply reduction of chicken and eggs. Other factors, such as reduction in stock density or lengthening the production cycle, were not reported to be major drivers. Even if the currently operational farms shorten their production cycle, broiler production in 2020 could still decrease by 28 percent if the closed farms do not reopen or if no new broiler farms are established. Because of additional layer farm closures over the past two weeks, the egg supply is expected to further decrease by 5 percent, cumulatively by 15 percent compared to 2019.

Broiler supply has gradually increased in June to meet increasing demand. The price of broiler chickens peaked at 5,350 MMK/viss in early June due the supply shortage. Since then, it gradually decreased to around 4,000 MMK/viss in late June, which is still much higher than the 2019 average (Figure 3). This implies that the broiler supply started increasing in June but has not yet returned to 2019 levels. Newly reopened broiler farms and already operational broiler farms that increased production contributed to the recent supply increase.

Figure 3: Daily farmgate prices of broiler chickens and chicken eggs, May and June 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.

The price of eggs has been stable since mid-May. However, as numerous layer farms closed in June due to sluggish demand and low prices, layer farmers are facing greater cash flow challenges. **The price of eggs is likely to increase in the coming months.** This is particularly important to low income households in Myanmar for whom egg is a critical animal-source food; increasing egg prices may hurt the food security of these households.

About **35 percent of broiler and layer farms expect their operating costs to increase in 2020** compared to costs in 2019 (Table 2). Comparing the results from the second round of the survey with those of the first round, we find that the share of layer farms expecting their costs to increase in

2020 dropped from 42 to 34 percent. On the other hand, a slightly higher share of broiler farms in the second round expected their costs to increase, which is likely due to the recent price increase for day-old-chicks.

Interestingly, though **more broiler farms in the second half of June expected their total revenue to increase** compared with their expectation in the first half of June, **more broiler farms also expected their total revenue to decrease** (Table 2). Thanks to the increasing price of broilers, the share of broiler farms expecting greater revenue increased from 14 to 34 percent. Meanwhile, the share of broiler farms expecting diminished revenue also increased from 35 to 57 percent. (The share of farms expecting revenue to be the same dropped from 51 to 9 percent). Our data shows broiler farms that procured day-old-chicks in the last two weeks were more likely to expect their revenue to increase than broiler farms that did not (62 percent vs. 48 percent). **For layer farms**, there is little change between our two survey rounds; **more than 80 percent of layer farms continue to expect their revenue to decrease in 2020** compared with 2019.

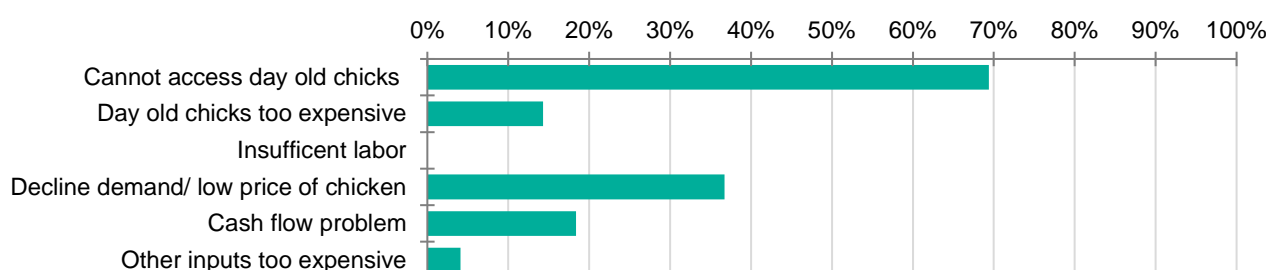
Table 2: Expectations of changes in business operations of poultry farms in 2020 compared to 2019, percent of surveyed farms

	Operational capacity level				Total operating costs				Total revenue			
	Broiler farms in June		Layer farms in June		Broiler farms in June		Layer farms in June		Broiler farms in June		Layer farms in June	
	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half
Increase > 20%	3	0	3	2	2	1	9	2	5	0	3	3
Increase 0 to 20%	7	1	3	3	31	35	33	32	9	34	1	3
The same	48	46	41	57	56	59	46	55	51	9	10	11
Decrease 0 to 20%	22	22	22	6	7	2	3	6	31	41	41	52
Decrease > 20%	20	30	32	32	4	3	9	5	4	16	44	31

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

The share of broiler farms expecting their operational capacity level to decrease rose from 42 to 52 percent between the first and second rounds of the survey (Table 2). This likely is due to a recent shortage in day-old-chicks. Broiler farms have sought to increase their operational capacity to meet the current unmet demand for broilers. However, 70 percent of broiler farms were unable to do so because they could not access day-old-chicks (Figure 4). Despite improved demand, respondents remained pessimistic about expected revenues. About 57 and 83 percent of broiler and layer farms, respectively, expected their revenue to decrease.

Figure 4: Reported main reasons for not restocking broiler houses, percent of broiler farms that could not restock



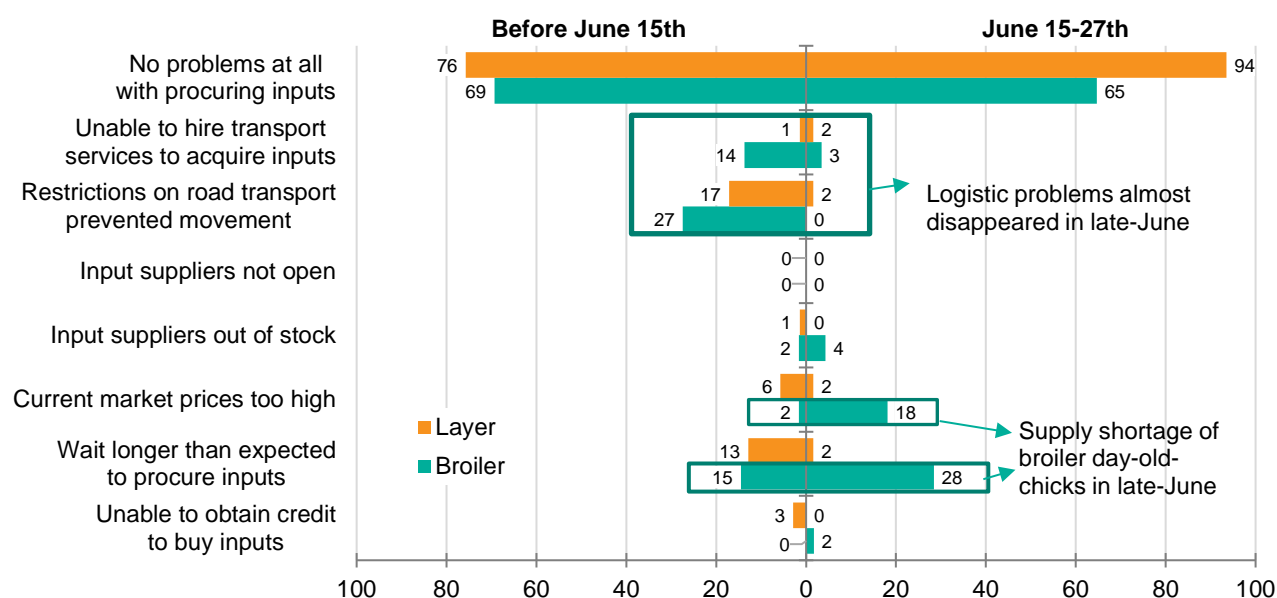
Source: June 2020 Yangon peri-urban poultry farmer survey, first round.

The **main problem regarding input procurement has become the supply shortage of broiler day-old-chicks**, which is the new bottleneck for broiler farms. In the second round of the survey, 18 percent of broiler farms reported issues with the recent high day-old-chick price, whereas only 2 percent did so in first round of the survey. Meanwhile, the share of broiler farms that reported longer

waiting times for day-old-chicks increased from 15 to 28 percent (Figure 5). Both problems were caused by the supply shortage of day-old-chicks.

Breeder farms that produce day-old-chicks were not the focus of our phone survey. However, in order to gain a better understanding of the supply shortage of day-old-chicks, we conducted about a dozen key informant interviews with members of the Myanmar Livestock Federation, breeder farms and businesses (e.g. CP, Sunjin, New Hope, CJ, etc.), and day-old-chick traders. To cope with the low demand for broilers over the past several months, it was reported that some breeder farms lowered day-old-chick production by either selling breeders as meat or producing and selling more eggs instead of incubating them. Some breeder farms reduced their day-old-chick supply between February and early May when the price was very low. Some breeder farms even closed. For the farms that kept their breeders, it would take them at least 21 days to incubate a new wave of day-old-chicks. For the farms that got rid of their breeders, it would take them an additional four months to rear new breeders.

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



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

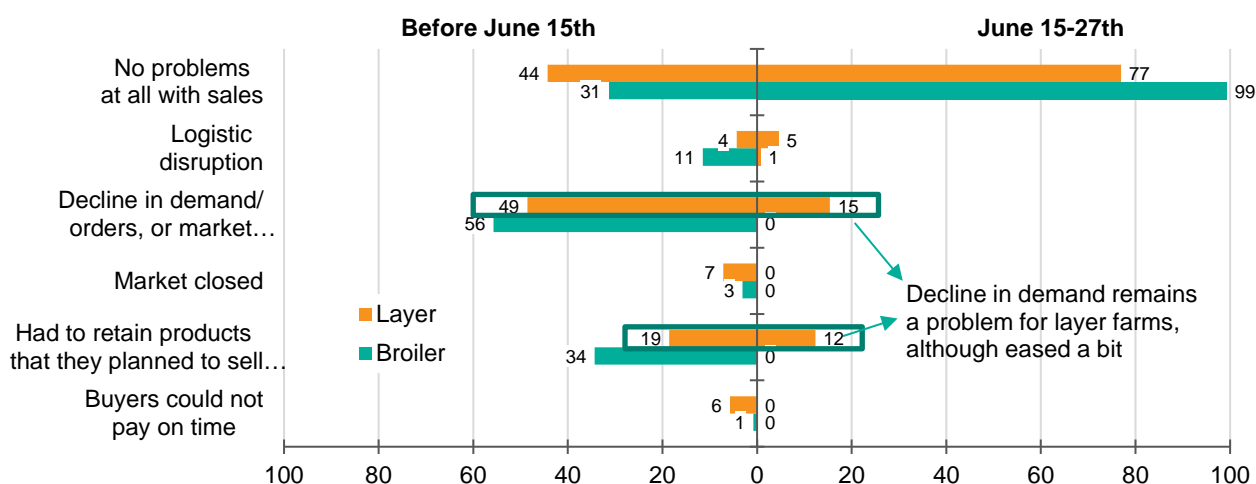
The Myanmar government has temporarily allowed 1.9 million broiler chicks for import between mid-May and mid-July to fill in such a supply shortage gap.⁴ This temporary measure is crucial for the broiler supply to recover and can be phased out after breeder farms regain their previous day-old-chick production levels in around three months.

Logistical problems, which affected about a quarter of poultry farms in early June, **almost disappeared in late June**. Few other problems related to accessing inputs were reported. 65 and 94 percent of broiler and layer farms, respectively, reported no problems with procuring inputs (Figure 5).

Almost all broiler farms and 77 percent of layer farms claimed that they experienced no problems with selling products (Figure 6). In the first round of the survey a half-month earlier, only one-third of poultry farmers reported no problems in making sales. Increasing demand for broilers and eggs led to this drastic change in such a short period. Decline in demand remained a problem for only about 15 percent of layer farms.

⁴ <https://www.globalnewlightofmyanmar.com/over-1-9-mln-broiler-chicks-permitted-to-import-within-2-months-mlf/>

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



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

The **number of hired regular workers in operational poultry farms has further decreased** from eight to seven workers per farm on average in the past two weeks (Table 3). Compared with before Yangon's semi-lockdown, i.e. early April, the average number of workers per operational farm has decreased by 27 percent from about nine workers to fewer than seven. Taking closed farms into consideration, total job losses among the 275 surveyed farms is 900, which makes up about 39 percent of the total labor in 2019 for the farms surveyed. Among total jobs lost, one-third was caused by temporary farm closures. With cash flow problems, it will be difficult for poultry farms to maintain the number of workers they require. Severe job loss in the poultry or livestock sector would adversely affect rural livelihoods. Fortunately, the Myanmar government's COVID-19 relief plan is paying attention to the sector.⁵

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 June 14	After lockdown June 15-27	Before lockdown	After lockdown till June 14	After lockdown June 15-27
Ayeyarwady	10	9***	7**	1.6	1.5	1.6
Bago	8	7***	6	1.5	1.5	1.6
Yangon	9	8***	7	1.6	1.6	1.6
All	9	8***	7*	1.6	1.6	1.6

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

Note: Asterisks show statistical significance of difference in means test for mean indicators before lockdown and the first round of the survey (after lockdown through 14 June) and between the first round and the second round of the survey.

*** p<0.01, ** p<0.05, * p<0.1

Policy recommendations

Based on the analysis of the second round of the survey of poultry farms in the Yangon peri-urban area, all the policy recommendations from our policy note based on the first round of the survey still stand – temporary income support to poultry farms; participation in government credit guarantee schemes; 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 day-old-chick supply is added.

⁵ International Food Policy Research Institute. (2020). *COVID-19 Policy Response (CPR) Portal*. Washington, DC: IFPRI. Retrieved June 21, 2020 from <https://www.ifpri.org/project/covid-19-policy-response-cpr-portal>.

- Though poultry farms, especially broiler farms, reported having few problems in selling products thanks to increasing demand, cash flow remained the major problem for both the farms that closed business in the second half of June and for some operational farms. Therefore, the recommendation in our first policy note of the need to mitigate 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 COVID-19 Economic Relief Plan (CERP) of the Government of Myanmar.⁶
- As the labor market for the poultry sector continues to worsen, support to help poultry farms maintain workers should now be provided. Therefore, this recommendation from the first policy note also stands – include livestock farmers as beneficiaries of government credit guarantee schemes, conditional upon maintaining or rehiring workers. This would help livestock farmers ease their cash flow problems and maintain their regular workforce. This measure could be implemented prior to the temporary income support measures. This recommendation falls under CERP Action 2.1.2.
- Currently, the supply shortage of day-old-chicks is a significant bottleneck to increasing broiler production. A temporary waiver of the import ban on day-old-chicks by the Myanmar government could mitigate the shortage of day-old-chicks. However, in order 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 three months, assuming breeder farms started increasing their production in mid-May.

The analysis of the first two rounds of the survey 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 the demand for poultry products recovers.
- Changes in the number of chickens raised and in the level of operational capacity of both broiler and layer farms.
- Changes in the number of regular workers hired.
- Problems related to selling products and accessing inputs, especially the supply of day-old-chicks and pullets.

⁶ 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.

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