Monitoring the Impact of COVID-19 in Myanmar
Agricultural Input Retailers – June 2020 survey round

Joseph Goeb, Duncan Boughton, Mywish K. Maredia, A Myint Zu, and Nang Lun Kham Synt

Agricultural input retailers from Shan, Kachin, Bago, Ayeyarwady, Sagaing, and Mandalay were originally interviewed by telephone in early May 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 08. To trace the continuing impact of the COVID-19 pandemic on their economic activities, a second phone survey was done between 5 and 7 June 2020. This Note reports on the results of this second survey.

Key findings

- Seventy percent of input retailers reported at least one disruption caused by COVID-19 in the two weeks prior to the survey.
- In-kind lending is an important component of the input retail sector – 62 percent of retailers receive inputs on credit from suppliers and 75 percent offer credit to customers. The COVID-19 crisis is adversely affecting these credit relationships. Difficulty collecting repayments on recent lending was the most commonly cited disruption – 55 percent of input retailers reported experiencing this difficulty in the last two weeks.
- Fertilizer, pesticide, and vegetable seed sales increased since the May survey, but sales are still lower than the same period in 2019.

Recommended actions

- Cash or lending support to farmers – in line with Action 2.1.7(b) under the COVID-19 Economic Relief Plan (CERP) of the Government of Myanmar – is still an immediate need and would facilitate greater input investment to increase monsoon crop production.
- Extend working capital loan support (CERP 2.1.1) to input retailers and other key actors in the agri-food system to mitigate low repayment from farmers and to allow investment.
- Remove or delay payments of business taxes and fees (CERP 2.1.3) for input retailers.
- Ease transportation restrictions at all levels, including for travel within townships.
- Local and national governments should plan and design future lockdown protocols that allow input retailers and other essential actors in the agri-food system to function with limited interruption, provided they follow specified safety protocols.
Introduction

Agricultural input retailers play a key role in Myanmar’s agri-food system by supplying farmers with fertilizer, seed, pesticides, and other inputs necessary for successful harvests. Because farm-level input use is an important driver of yields for all major food crops, shocks to the input retail sector have major implications for the welfare of rural households, as well as for their food security.

This policy note presents results from round two of a five-round phone survey of agricultural input retailers. Our purpose is to provide data and insights to the Ministry of Agriculture, Livestock, and Irrigation (MOALI) and other agricultural sector stakeholders to assist them in better understanding COVID-19 related shocks to Myanmar’s agricultural input retailers. The round one results emphasized (i) widespread disruptions from the COVID-19 to both input supply and demand, (ii) higher transportation costs leading to higher input prices, and (iii) dramatically lower revenue expectations for retailers in 2020 compared to 2019.¹ This note builds on the round one results by (i) exploring the effects of the COVID-19 crisis since the first-round interviews, (ii) tracking sales changes since the first round of the survey, and (iii) providing more detailed information on retailer credit and transportation.

The round two phone survey was conducted between 5 and 7 June 2020 – approximately two weeks after the round one survey – on the same sample of input retailers interviewed in round one.² The panel nature of the survey allows us to track changes at the input retailer level. The round two sample consists of 182 input retailers in Shan, Kachin, Bago, Ayeyarwady, Sagaing, and Mandalay.³ Collectively, these states and regions account for about 66 percent of Myanmar’s agricultural production both by value and by cultivated area as well as 66 percent of Myanmar’s farmers. In the monsoon season, over half of the sample sells to farmers primarily growing rice (Table 1). Maize is the second most prominent monsoon crop grown by the sample’s customers.

Table 1 shows how important credit is for input retailers. Sixty-two percent of retailers receive inputs on credit from their suppliers or distributors. Fertilizer and pesticides are the most common inputs received on credit. Less than 10 percent of retailers receive seed on credit. Providing credit to customers is also an important part of the business practices of input retailers – 75 percent offer credit to some of their customers. However, shops that offer credit are selective as to whom they offer credit – on average, only 25 percent of their customers are offered credit.

Table 1. Input retailers – customers’ main monsoon crops, annual profit, credit received, and credit offered

| Main monsoon crop for customers, % | Rice 52 |
|-----------------------------------|---------|
|                                   | Maize 22|
|                                   | Oilseeds / pulses 13 |
|                                   | Horticultural crops 13 |
| Median annual profits, MMK        | 40 lakh |
| Receive inputs on credit from suppliers, % | Any 62 |
|                                    | Fertilizer 55 |
|                                    | Maize seed 9 |
|                                    | Vegetable seed 8 |
|                                    | Pesticides 40 |
| Offer credit to customers, %       | 75 |
| Share of customers to whom credit offered by those input retailers offering credit, % | 25 |

Source: Agricultural input dealer phone survey, June 2020.

¹ Goeb, J.; D. Boughton, and M.K. Maredia. 2020. Monitoring the impact of COVID-19 in Myanmar: Agricultural input retailers – May 2020 survey round. IFPRI Myanmar SSP Policy Note 8. Washington, DC: International Food Policy Research Institute (IFPRI).

² For our round one sample, we identified a sample of agricultural input retailers through a combination of sources including previous studies, government registration lists, and private sector contacts. While our sample provides regional and agro-ecological variation, it is not representative at any municipal level. Thus, all analyses and results in this report are illustrative and provide useful insights into the sector but should not be interpreted as population statistics.

³ Approximately 20 percent of the round 1 sample declined participation in the second-round interview.
Two-week effects of COVID-19 crisis on input retailers

To understand the recent effects of the COVID-19 crisis on input retailers, we asked a series of high-level questions about perceived effects during the two-week period between the round one and the round two interviews. We asked a series of follow-up questions to add detail, including on demand (i.e., sales and price) and on supply and procurement questions for key inputs – fertilizer, maize and vegetable seed, and pesticide.

Table 2 shows that the COVID-19 crisis continues to have broad effects on the agricultural input sector. Seventy percent of retailers reported at least one disruption in the two weeks prior to 7 June. Mandalay and Sagaing were the most affected regions with 85 and 88 percent of retailers reporting challenges, respectively.

Table 2. Recent effects of COVID-19 on agricultural input retailers in Myanmar, by state or region, percent of surveyed retailers affected

| Types of disruptions due to COVID-19: | All | Shan | Ayeyarwady | Kachin | Bago | Mandalay | Sagaing |
|-------------------------------------|-----|------|------------|-------|------|----------|---------|
| Difficulty collecting credit/loan repayments | 49  | 44   | 37         | 11    | 53   | 70       | 75      |
| Demand (harder to reach customers)   | 42  | 38   | 32         | 33    | 43   | 56       | 63      |
| Supply (harder to buy)               | 22  | 17   | 11         | 56    | 28   | 11       | 50      |
| Difficulty obtaining new credit/loans| 16  | 6    | 24         | 0     | 15   | 22       | 31      |
| Difficulty repaying recent credit/loans| 15  | 0    | 11         | 0     | 18   | 33       | 44      |
| Less favorable credit/loan terms from supplier | 6   | 4    | 0          | 22    | 3    | 15       | 13      |
| Government required closure          | 4   | 4    | 0          | 0     | 5    | 7        | 6       |
| Employees unavailable to work        | 3   | 0    | 0          | 0     | 5    | 4        | 19      |
| Other                               | 2   | 0    | 0          | 0     | 0    | 0        | 19      |
| Observations                        | 182 | 52   | 38         | 9     | 40   | 27       | 16      |

Source: Agricultural input dealer phone survey, June 2020.

Nearly 50 percent of input retailers cited difficulties collecting repayment from credit lent out. This is a similar overall share to round one (55 percent), suggesting that credit repayment is an ongoing challenge that may affect input retailers throughout the monsoon season. Mandalay and Sagaing show the largest share of retailers affected with 70 and 75 percent, respectively. These two regions are also most affected by corresponding knock-on effects. Specifically, they have the largest shares of input retailers with difficulties repaying credit from suppliers – 44 and 33 percent for Sagaing and Mandalay, respectively – as well as high shares reporting difficulties obtaining new credit and less favorable credit terms from suppliers.

The second most common COVID-19 related shock was a decline in demand for inputs – 42 percent of all retailers reported demand disruptions in the two weeks prior to interview. Figure 1 shows more detail on demand changes by input type. To compare sales volumes over time, in each survey round we ask about sales volumes by input for the two-weeks prior to interview. There are some encouraging indicators in Figure 1. Pesticide, vegetable seed, and fertilizer all show net increases in sales. Pesticide sales show the most pronounced increase overall with 70 percent of shops selling pesticides having higher sales in the two weeks prior to the round two interview than in the two weeks prior to the round one interview. For fertilizer, more retailers (51 percent) reported increased sales than decreased sales (40 percent), though the sale changes vary geographically. Mandalay and Sagaing had more retailers reporting decreases in fertilizer sales than increases, suggesting declining demand in the Central Dry Zone, perhaps related to the late arrival of the monsoon rains. The other states and regions show net increases in fertilizer sales, with Bago
showing the largest increases. Maize seed sales appear to be slowing. As the monsoon season progresses, most farmers have either planted or already purchased seed.

**Figure 1. Two-week sales changes in round two compared to round one, by input type**

| Input Type       | Change        |
|------------------|---------------|
| Pesticide (95%)  | Decrease 28%  |
| Vegetable seed (45%) | No change 39% |
| Maize seed (31%) | Increase 50%  |
| Fertilizer (90%) | Decrease 40%  |

Source: Phone survey of input retailers – Round 2, June 2020

Despite these modest indicators of growth, many shops are still reporting lower input sales compared to the same time last year (Figure 2). More than half of input retailers report lower sales for fertilizer and maize seed this year. Vegetable seed is the least affected with 68 percent of input retailers reporting no change and 8 percent reporting higher sales compared to the same period in 2019. Again, we find some optimism in comparisons to the round one survey – the share of firms reporting lower sales for pesticide and fertilizer compared to the same period in 2019 have decreased 15 and 11 percentage points, respectively.

**Figure 2. Reported input sales volume in May/June 2020 compared to same time in 2019, by product**

- Pesticides: 43% Lower, 52% No change, 5% Higher
- Vegetable seed: 24% Lower, 68% No change, 8% Higher
- Maize seed: 56% Lower, 31% No change, 11% Higher
- Fertilizer: 57% Lower, 37% No change, 6% Higher

Source: Phone survey of input retailers – Round 2, June 2020

The third most common disruption from the COVID-19 crisis reported by input retailers was general supply shocks. Twenty two percent of the sample reported difficulties in reaching suppliers in the two weeks prior to the interview (Table 2). Figure 3 and 4 show details on the transportation used and source locations, respectively, by input type. Fertilizer, maize seed, and pesticide have similar supply chains with common patterns for how shops receive obtain their input orders (Figure 3). About half use hired transport, about 20 percent use their own transport, and about 30 percent have the input delivered directly to the shop. Vegetable seed has much a lower share of delivery (19 percent) and a greater reliance on own transport, perhaps because vegetable seed packets are relatively smaller and can be carried by smaller vehicles, e.g., bicycles and motorcycles.

**Figure 3. Types of transport used for most recent input order, by product**

- Pesticides: 29% Delivered to shop, 22% Own transport, 50% Hired transport
- Vegetable seed: 19% Delivered to shop, 40% Own transport, 41% Hired transport
- Maize seed: 31% Delivered to shop, 16% Own transport, 53% Hired transport
- Fertilizer: 32% Delivered to shop, 17% Own transport, 52% Hired transport

Source: Phone survey of input retailers – Round 2, June 2020

Figure 4 shows that vegetable seed is mostly procured within the same township as the input shop. Vegetable seed and maize seed have similar patterns of procurement location: each have approximately 60 percent of shops procuring in the same township, approximately 40 percent procuring from another township, and 1 percent or less from a different state or region. In contrast, the last links in the supply chains for fertilizer and pesticides are longer, with about 50 percent of...
shops procuring from another state or region, about 33 percent from another township, and only about 16 percent from within the same township. The probability of reported input delays increases with the length of the last supply chain link to the input retailer. Fifteen percent of inputs sourced from another state or region took longer to obtain this year compared to the same time in 2019. For inputs sourced in the same township, that percentage drops to 10 percent. However, this still suggests that input supply chains are disrupted even at the township level.

**Figure 4. Source location for most recent input order, by product**

Source: Phone survey of input retailers – Round 2, June 2020

**Retailer responses**

Following a trend from the previous report, input retailers are continuing their increased adoption of mobile phones and delivery services in response to COVID-19 shocks (Figure 5). Thirteen percent of retailers were offering input deliveries direct to farmers, and similar shares were selling or taking orders by phone (13 percent) or buying inputs by phone (15 percent). However, mobile payment and banking use rates were low for both sales and purchases.

**Figure 5. Business adaptations to COVID-19 in the two-weeks prior to survey**

Source: Phone survey of input retailers – Round 2, June 2020

To learn about input retailers’ preferences for potential policy responses, we asked respondents to rank policies that would provide the greatest benefits to their businesses. Despite only 4 percent of retailers being forced to close by government in the two-weeks prior to the interviews, input retailers showed a strong preference for preventing future government required business closures – this policy preference received 36 percent of selections for the most helpful policy option and 29 percent as the second most helpful policy option.

**Figure 6. Input retailers’ preferences for potential policy responses that would provide greatest benefits to their businesses**

Source: Phone survey of input retailers – Round 2, June 2020

---

*Goeb, J.; D. Boughton, and M.K. Maredia. 2020. Monitoring the impact of COVID-19 in Myanmar: Agricultural input retailers – May 2020 survey round. IFPRI Myanmar SSP Policy Note 8. Washington, DC: International Food Policy Research Institute (IFPRI).*
The other policy options were listed as either the first or second-most helpful by between 17 and 29 percent of input retailers. Cash support to farmers was the second most popular policy (29 percent combined), which highlights the magnitude of demand-side shocks. Cash support to farmers would both increase current demand and help mitigate credit defaults on in-kind lending. Reducing taxes received 18 percent of the most helpful selection (24 percent combined). Supporting small business loans was listed by 21 percent of retailers. Easing input imports and input transportation were selected by 20 and 17 percent of retailers, respectively.

Policy recommendations

The above results highlight the challenges facing the input retail sector in Myanmar. Although sales for many retailers increased in the two weeks between the round one and round two interviews, most retailers are still reporting lower sales this year compared to the same period in 2019. We suggest the following five policies to mitigate the effects COVID-19 shocks on the agricultural input sector.

• Reiterating a central recommendation from the round one report, cash support to farmers is still an immediate need and would facilitate greater input investment to increase monsoon crop production – this recommendation is aligned with Action 2.1.7(b) under the COVID-19 Economic Relief Plan (CERP) of the Government of Myanmar. The recently announced input voucher scheme to be implemented by the Cooperatives Department of MOALI should be implemented quickly and the scheme should allow vouchers to be used to pay off debts for inputs already received on credit.

• Extend working capital loan support (CERP 2.1.1) to input retailers and other key actors in the agri-food system. This would help mitigate effects of low credit repayment by farmers and allow for productive investments.

• Remove or delay payments of business taxes and fees (CERP 2.1.3) for input retailers.

• Ease transportation restrictions at all levels, including for travel within townships.

• Local and national governments should plan and design future lockdown protocols that allow input retailers and other essential actors in the agri-food system to function with limited interruption even during lockdowns, provided they follow specified safety protocols.

The results also point us towards two key indicators to be monitored in future survey rounds:

• Continue to monitor changes in input sales as the monsoon season progresses and as policies potentially change; and

• Mobile phone and other technology use as a response to COVID-19 threats and risks.

---

5 Ibid.
6 Government of the Republic of the Union of Myanmar. 2020. Overcoming as One: COVID-19 Economic Relief Plan. Nay Pyi Taw: Government of the Republic of the Union of Myanmar.
7 Thant, Htoo. 2020. “Myanmar co-op department to distribute equipment vouchers to help farmers.” Myanmar Times, July 1, 2020. https://www.mmtimes.com/news/myanmar-co-op-department-distribute-equipment-vouchers-help-farmers.html.
ABOUT THE AUTHOR(S)

Joseph Goeb is a Research Associate in the Department of Agricultural, Food, and Resource Economics of Michigan State University (MSU), based in Yangon. Duncan Boughton is a Professor of International Development at MSU, Policy Advisor for the Ministry of Agriculture, Livestock and Irrigation of the government of Myanmar, and a lecturer at Yezin Agricultural University, based in Nay Pyi Taw, Myanmar. Mywish K. Maredia is a Professor of International Development in the Department of Agricultural, Food, and Resource Economics at MSU, based in East Lansing, MI, USA. A Myint Zu is a Consultant with MSU, based in Yangon. Nang Lun Kham Synt is a Research Assistant with the Development Strategy and Governance Division of the International Food Policy Research Institute, based in Yangon.

ACKNOWLEDGMENTS

This work was undertaken as part of the Myanmar Agricultural Policy Support Activity (MAPSA) led by the International Food Policy Research Institute (IFPRI) in partnership with Michigan State University (MSU). Funding support for this study was provided by the CGIAR Research Program on Policies, Institutions, and Markets (PIM), the United States Agency of International Development (USAID), and the Livelihoods and Food Security Fund (LIFT). This Policy Note has not gone through IFPRI’s standard peer-review procedure. The opinions expressed here belong to the authors, and do not necessarily reflect those of IFPRI, MSU, USAID, LIFT, or CGIAR.

© 2020, Copyright remains with the author(s). This publication is licensed for use under a Creative Commons Attribution 4.0 International License (CC BY 4.0). To view this license, visit https://creativecommons.org/licenses/by/4.0.