

STRATEGY SUPPORT PROGRAM POLICY NOTE 08

# Monitoring the Impact of COVID-19 in Myanmar

### Agricultural Input Retailers – May 2020

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Phone interviews were conducted with 221 input retailers in the regions or states of Shan, Kachin, Bago, Ayeyarwady, Sagaing, and Mandalay between 21 and 23 May 2020 in order to better understand how the agricultural input retail sector in Myanmar has been affected by the COVID-19 crisis.

- Ninety percent of retailers surveyed have experienced at least one type of disruption due to COVID-19. The top-cited effects were disruptions to demand, difficulty collecting loan repayments on recent credit lending, and general disruptions to supply.
- For 40 percent of retailers, higher transportation costs have led to higher prices for fertilizer and maize seed compared to the same time last year.
- More than half of those interviewed reported lower sales of fertilizer, maize seed, and pesticides, respectively, compared to the same time last year.
- About three-quarters of input retailers expect lower revenues in 2020 compared to 2019.

We recommend two main policies to combat the adverse effects due to COVID-19 in the agricultural input retail sector and to mitigate agricultural production decreases that may result:

- Cash or lending support to smallholder farmers should be implemented immediately and without delay. Such measures would fall under Action 2.1.7(b) of the COVID-19 Economic Relief Plan of the Government of Myanmar.
- Agricultural inputs should be allowed to freely move within Myanmar to ease supply-side restrictions on farmers' access to them.

#### 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 both for rural household welfare and for national food security.

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COVID-19 and the policies enacted to mitigate its spread have shocked Myanmar's economy. Agricultural input retailers, like many other businesses, are squeezed between both supply and demand side shocks. On the supply side, agricultural inputs have long, international supply chains that could be disrupted by restrictions on international or internal trade and transport. On the demand side, the shocks to rural households' incomes, crop prices, and uncertainty could affect input purchases.

This research note seeks to help the Ministry of Agriculture, Livestock and Irrigation of the Government of Myanmar and agricultural sector stakeholders understand the related shocks to Myanmar's agricultural input retailers. We conducted a phone survey with 221 input shop owners and managers to understand (i) the demand-side effects of COVID-19 shocks as reflected in sales of key inputs, such as fertilizers, maize seed, vegetable seeds, and pesticides,<sup>1</sup> (ii) the supply-side effects both in general and for key inputs, and (iii) business responses to COVID-19 shocks.

The phone survey was conducted on between 21 and 23 May 2020. The timing of the survey is important as farmers have either just planted or will soon plant their monsoon crops. Thus, fertilizer and seed sales will be useful leading indicators of farmer investment in monsoon crop production. We will continue to interview the same shops at two-week intervals through June to track sales and to identify potential supply-side constraints as they emerge.

Our sample consists of agricultural input retailers in six states and regions – Shan, Kachin, Bago, Ayeyarwady, Sagaing, and Mandalay. Collectively, these account for about 66 percent of Myanmar's agricultural production by value, cultivated area, and share of Myanmar's farmers.<sup>2</sup> A sample of agricultural input retailers was identified through a combination of 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. However, they should not be interpreted as population statistics.

#### Effects of COVID-19 crisis on input retailers

In order to understand demand- and supply-side effects of the COVID-19 crisis on input retailers, we asked a series of high-level questions about potential effects and a series of follow-up questions to add detail when relevant. We also ask detailed demand, i.e., sales and price, and supply questions for specific key inputs – fertilizers, maize seed, vegetable seeds, and pesticides. Because seasonal differences may drive short-term reported changes, we asked retailers to recall back to the same period in 2019.

As highlighted in Table 1, COVID-19 has had broad effects on the input retail sector. Ninety percent of the input suppliers interviewed have experienced at least one disruption from the crisis. The top-cited effects were disruptions to demand, difficulty collecting loan repayments on recent credit lending, disruptions to supply, and difficulty obtaining new credit or loans for purchases. In the two predominantly rice-producing regions, Ayeyarwady and Bago, 77 and 80 percent of input retailers, respectively, reported a disruption (Table 1). The two predominantly maize-producing regions, Shan and Kachin, had the highest shares of input retailers reporting a COVID-19 disruption with 98 and 100 percent, respectively. In Shan and Kachin, demand-side disruptions are playing a large role. Maize farmers have faced a number of threats in the past two years, including price

<sup>&</sup>lt;sup>1</sup> We limit our focus on seeds to maize and vegetables as these are the types of seed predominantly sold through input retailers. Some retailers carry other types of seed (e.g., rice, beans, pulses, and oilseeds), but the number of shops carrying them in our sample would have been too small to justify their inclusion in a phone interview.

<sup>&</sup>lt;sup>2</sup> Central Statistical Organization. .2018. *Myanmar Agricultural Statistics (2007-2008 to 2016-2017)*. Ministry of Planning and Finance, Government of the Republic of the Union of Myanmar, Nay Pyi Taw.

volatility due to China closing its border to imports and fall armyworm, a new pest. COVID-19 appears to be adding these recent challenges as demand for agricultural inputs is decreasing further. Farmers may be reluctant either to grow or to invest as much in inputs for maize as in previous years.

		Ayeyar-				Manda	
	All	wady	Bago	Shan	Kachin	lay	Sagaing
Input retailers affected by at least one type of disruption due to COVID-19	89	77	80	98	100	94	90
Types of disruptions due to COVID-19:							
Demand (harder to reach customers)	64	54	55	78	92	54	62
Difficulty collecting credit/loan repayments	55	44	57	60	50	60	52
Supply (harder to buy)	44	38	31	56	58	37	57
Difficulty obtaining new credit/loans	31	44	37	21	17	31	33
Government required closure	28	26	16	48	33	17	19
Difficulty repaying recent credit/loans	25	21	35	14	25	26	43
Employees unavailable to work	14	21	22	11	0	9	5
Less favorable credit/loan terms from suppliers	10	3	18	11	0	6	10
Other	5	5	10	3	0	9	0
Observations:	221	39	51	63	12	35	21

Table 1. Effects of COVID-19 on ag	ricultural input retailer	s in Myanmar	, by state or	region,
percent of respondents affected	k			

Source: Phone survey of input retailers, May 2020

After demand shocks, the second most common COVID-19 disruption is in collecting payments from recent credit lending to farmers. This affected 55 percent of shops (Table 1). While bad for business viability, the real threat from farmers defaulting on repayments is in the knock-on effects – input retailers themselves often receive input stocks on credit. A quarter of retailers reported difficulties repaying recent credit or loans that they had received, while 31 percent of shops reported disruptions in obtaining new credit and 10 percent reported less favorable terms on credit received. Further, input retailers may be more hesitant to offer inputs on credit to farmers if default rates are high. Indeed, 27 percent of shops reported a decrease in their offering of credit to farmers.

General supply-side disruptions are the third most cited effect of COVID-19 with 44 percent of shops reporting difficulty purchasing input stocks (Table 1). Figure 1 shows the most important countries of origin for the four types of farm input supplies—fertilizer, pesticides, maize seed, and vegetable seeds. China and Thailand were cited as the top two sources, with China leading in fertilizer and pesticides, and Thailand leading as the supplier for maize and vegetable seeds. For pesticides and fertilizer, about 25 percent of retailers listed Myanmar as the most important country of origin. Despite a heavy reliance on imports, supply disruptions appear to be driven by restrictions on travel and movement within Myanmar. Only 3 to 4 percent of retailers reported changes in the origin countries of their products between 2020 and 2019 (Table 2). So, inputs appear to be reaching retailers from the same countries as prior to COVID-19. However, there are other effects from supply-side disruptions, as noted in Table 2.



Figure 1. Reported most important countries of origin, by product

Source: Phone survey of input retailers, May 2020

	Fertilizer	Maize seed	Vegetable seed	Pesticides
Input retailers surveyed:				
Carrying input this time last year	90	37	46	74
Carrying input now	84	27	42	68
Input retailers surveyed carrying product this year:				
Changed origin countries of product	4	3	3	3
Concerned about ability to replenish stocks	25	43	16	27
Changed brands or varieties due to COVID-19	10	15	7	9
Longer order times than last year	27	10	10	19
Time to receive most recent order:				
One day	26	42	42	27
More than one day, less than one week	66	45	53	65
More than one week	8	13	5	9

## Table 2. Supply-side effects of COVID-19 crisis on fertilizer, maize seed, vegetable seeds, and pesticides, percent of respondents

Source: Phone survey of input retailers, May 2020

For example, 43 percent of retailers carrying maize seed for sale are concerned about their ability to replenish their stocks. Concerns are lower for fertilizers and pesticides and lower still for vegetable seed. Between 7 and 10 percent of shops reported changing the varieties or brands of the inputs they carry due to COVID-19 shocks. Also, between 10 and 27 percent of shops have to wait longer to receive their input orders this year compared to 2019. Surprisingly, the wait times have increased most for the two inputs mostly sourced within Myanmar, fertilizer and pesticides. While several factors could be driving these overall effects, it does not appear that cross-border restrictions are driving the supply challenges for input retailers.

For farmers, the supply-side disruptions mean higher input prices as input manufacturers, wholesalers, and retailers pass on a share of their higher transport costs in the price. Thus far, fertilizer and maize seed have the highest reported price increases (Figure 2) with 12 and 18 percent of input retailers, respectively, reporting prices at least 20 percent higher in 2020 than in 2019. All of this is in the context of otherwise depressed demand which has a downward pressure on prices. About 70 percent of retailers reported higher transport costs or transport difficulties as the primary reason for price increases. From a state and region perspective, input retailers in Shan state appear to be most affected by supply-side disruptions. Shan has the largest share of retailers reporting price increases to higher transportation costs.



#### Figure 2. Reported input prices in May 2020 relative to same time in 2019, by product

Source: Phone survey of input retailers, May 2020

The sum of the COVID-19 shocks is lower input sales. For each input, at least 40 percent of retailers reported lower sales this year compared to the same period in 2019, and well over 50 percent reported lower sales of fertilizer, maize seed, and pesticides (Figure 3). Very few shops reported sales increases. Lower input sales translate into lower expected revenues for retailers –

about 73 percent of the retailers interviewed are expecting lower revenues in 2020 compared to 2019 (Figure 4). Lower input sales could lead to lower crop yields and production in the 2020 monsoon season, which would have adverse implications for rural livelihoods and food security.





Source: Phone survey of input retailers, May 2020

#### Figure 4. Expected revenue in 2020 compared to 2019



#### **Retailer responses**

To learn about the strategies input retailers are employing to cope with the COVID-19 crisis, we asked a series of general high-level questions, with follow-up questions to add detail. Safety practices, business responses and adaptations, and hiring employees were areas of emphasis.

#### Figure 5. Input retailer responses to COVID-19 shocks



#### Source: Phone survey of input retailers, May 2020

#### Figure 6. Input retailer safety behavior adoption





Source: Phone survey of input retailers, May 2020

Retailers have responded to the demand- and supply-side disruptions from COVID-19 in a number of ways. First, 90 percent of the retailers reported adopting safety behaviors (Figure 5). The most common safety responses are regular hand washing, wearing face coverings, and maintaining a safe distance between people (Figure 6). A second response has been closing or reducing business operations. Forty-five percent of retailers reported that they had closed their business for at least one week without sales. Nine stores out of the 221 interviewed were still closed at the time of interview, only three of which expected to open within the next 30 days. Thirty percent of retail shops reduced their operating hours, but such reductions are mostly minor with 80 percent of those shops reducing by one day per week or less.

Thus far, the effects on hired labor in agricultural input shops has been small. Only 8 percent of retailers reported that they reduced the number of workers they employed due to COVID-19 shocks. However, input retailers are mostly family-run small-scale businesses that do not hire many employees. The mean number of permanent non-family employees of the retailers interviewed is 2.2 and the mean number of casual workers hired in the two weeks prior to interview was only one.

About 21 percent of retailers have responded to COVID-19 shocks by adapting their business operations or offering new services. The most common adaptation, used by 18 percent of retailers, is adding a delivery service to better reach customers when individual movements are restricted. Other adaptations center on mobile phone use: 12 percent and 14 percent of shops now make purchases and sales over the phone, respectively, while 5 percent of retailers are using mobile payment options for sales and 5 percent are using it for purchases.

#### **Policy recommendations**

From this analysis, we derive two main policy recommendations, both of which we consider urgent. First, the cash or lending support to smallholder farmers – Action 2.1.7(b) in the COVID-19 Economic Relief Plan – should be implemented immediately and without delay.<sup>3</sup> While there are many factors affecting input demand, a cash injection for rural households may help strengthen their demand for inputs and prevent any further decreases. Further, it may contribute to reducing defaults on existing input credit or loans and mitigate the knock-on effects for input retailers and further credit offerings.

Second, all agricultural inputs should be allowed to freely move within Myanmar.<sup>4</sup> We are approaching the most critical time in the agricultural calendar with the monsoon plantings. Any supply constraints, shortages, or delays will have real and negative impacts. Even in the absence of constraints or shortages, transportation restrictions are raising input prices, which will induce lower sales.

These results identify key indicators to monitor in future survey rounds as the monsoon cultivation season progresses. These include:

- Changes in the amount of input sales as monsoon rains continue to arrive throughout the country;
- Loan repayments and defaults by farmers and traders; and
- Business adaptations by input retailers, including their continued use of mobile phones to reach farmers.

<sup>4</sup> This point is also emphasized by the seed sector Seed Alert #01.

<sup>&</sup>lt;sup>3</sup> 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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