



Monitoring the Agri-food System in Myanmar

Agricultural Input Retailers – March 2021 survey round

To understand the effects of recent disruptions on Myanmar's agricultural input sector, a telephone survey of input retailers was conducted in March 2021.

Key findings

- The majority of input retailers report declines in sales of all types of inputs compared to a year ago. Uncertainty about crop output prices and difficulties in accessing markets are reported as the main drivers of lower input purchases.
- Fertilizer prices have risen between 10 and 20 percent compared to a year ago. With prices expected to rise substantially in the coming months due to shipping and transportation cost increases, retailers anticipate reductions in fertilizer purchases.
- As is the case for commodity traders, input retailers are switching to cash purchases in place of inter-bank transfers for obtaining their inventory due to limited banking services.
- Two-thirds of retailers have made credit available to customers, and 88 percent of those who have done so have experienced late repayments from farmers. Even though most input retailers expect eventual repayment, 30 percent plan to reduce the credit they will extend to farmers for the coming season.
- The combination of uncertain crop prices, higher costs to access markets, financial market disruptions, and expected increases in input prices all point to lower farm investment in production inputs for the coming monsoon season.

Recommended actions

- The restoration of inter-bank transfer services will reduce transactions costs for input retailers.
- Imports of fertilizer and agro-inputs through the ports need to be expedited. Similarly, restrictions on transportation must be lifted to avoid late delivery of inputs to farmers for the monsoon season.
- Temporary measures to offset expected fertilizer price increases and to avoid reductions in fertilizer use by smallholder farmers in the coming monsoon season should be considered.

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, economic shocks to the input retail sector have major implications for rural household welfare as well as for food security.

In this research note, we present results and analysis of recent economic disruptions on agricultural input retailers from a telephone panel survey of 146 retailers in Shan, Kachin, Bago, Ayeyarwady, Sagaing, and Mandalay conducted in March 2021. This note examines (i) disruptions caused by the political and COVID-19 crises, (ii) responses to these disruptions, (iii) sales of fertilizer, maize seed, vegetable seed, and pesticides, and (iv) the potential impacts on levels of future fertilizer sales of rising fertilizer costs due to shipping and transportation costs.¹

Input retailer sample size and location

A total of 146 input retailers were contacted, of which 109 (75 percent) were active (Table 1). Of the 37 inactive retailers, 11 (30 percent) attributed their inactive status to disruptions following the events of February 1. The larger share of inactive retailers in the Dry Zone is in part a reflection of seasonality, since access to irrigation is essential for post-monsoon crop production. Anecdotal reports indicate that irrigation water has been less available in the current post-monsoon season compared to other seasons. The share of active retailers selling different types of fertilizer has changed little from a year ago, except for a small decrease in the number of retailers in the Delta selling urea (from 86 to 74 percent) and a small increase in the Hills (from 71 to 84 percent).

Table 1. Input retailer sample and inputs sold by agro-ecological zone

	All	Hills	Dry Zone	Delta
Active since February 1	109	44	32	33
Not active since February 1	37	7	25	5
Total, number	146	51	57	38
Selling inputs in March 2021, percent				
Compound fertilizer	84	84	89	81
Urea fertilizer	80	84	84	74
Maize seed	23	51	16	4
Selling inputs in March 2020, percent				
Compound fertilizer	82	90	89	70
Urea fertilizer	81	71	87	86
Maize seed	21	41	18	5

Source: Input Retailer Phone Survey, March 2021.

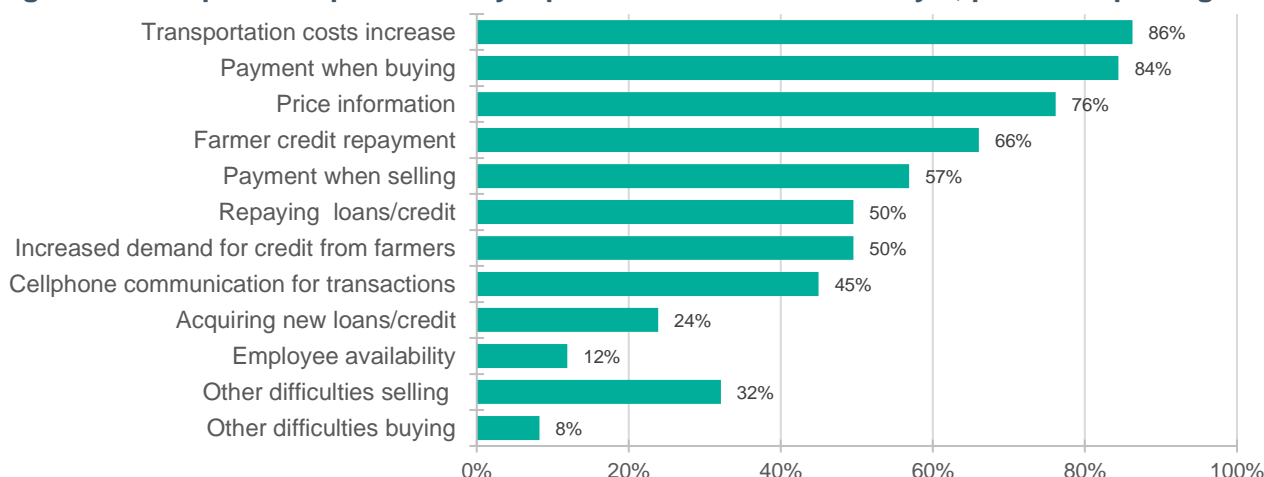
Effects of economic disruptions on input retailers

To understand the effects of recent economic disruptions on input retailers, we asked a series of questions on the different types of disruptions that retailers experienced in the two weeks prior to the interview. Figure 1 shows the share of input retailers reporting various types of disruptions to their business. Most input retailers reported multiple sources of disruption. Among the most frequently encountered disruptions were increases in transportation costs (86 percent of input retailers reporting), making payments for inventory (84 percent), accessing price information (76 percent),

¹ Also see: *The outlook for Myanmar's inorganic fertilizer use and 2021 crop harvest: An ex-ante assessment*. [Myanmar SSP Working Paper 10](#). Yangon: International Food Policy Research Institute.

obtaining repayment of inputs sold on credit (66 percent), and receiving payment for sales (57 percent). Half of all input retailers reported difficulties in credit management, both in repaying their own loans and in facing increased demand for credit from customers.

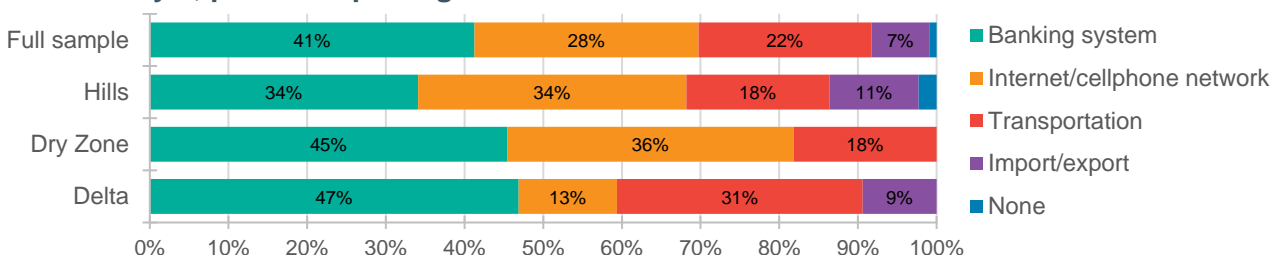
Figure 1. Disruptions experienced by input retailers since February 1, percent reporting



Source: Input Retailer Phone Survey, March 2021.

Figure 2 shows which disruptions input retailers identified as most serious. Across the entire sample, 41 percent reported that the most serious was the difficulties they faced in making payments due to disruptions in the banking system, followed by problematic cellphone internet access (28 percent), and higher transport costs (22 percent).

Figure 2. Most significant business disruption experienced by input retailers since February 1, percent reporting



Source: Input Retailer Phone Survey, March 2021.

Figure 2 also shows that different regions of the country experienced specific disruptions with greater intensity than others. Lack of cellphone internet access caused more difficulties for input retailers in the Dry Zone and the Hills, while transport cost increases were most frequently reported by input retailers in the Delta.

Input retailer responses to economic disruptions

Input retailers were asked a series of questions to understand how they have responded to these disruptions. While bank transfers were the most common means of payment for inventory in the month prior to the political disruption, this method was no longer possible after February 1. As a result, the share of retailers using cash for input purchases increased from 30 percent to 76 percent, while those using the Hundi system, a traditional informal money transfer system that has been used for centuries in Myanmar and south Asia, increased from a single case to 12 percent (Table 2). Customers that had previously used bank transfers were also forced to pay entirely with cash. The increased use of cash increased risk for both input retailers and their customers, while the Hundi system raises the cost of transactions.

Table 2. Changes in payment methods by input retailers, percent reporting

	Buying			Selling		
	January 2021	March 2021	Change	January 2021	March 2021	Change
Cash	30	76	46	88	98	10
Inter-bank transfer	62	1	-61	9	0	-9
Mobile payment	7	11	4	2	1	-1
Hundi	1	12	11	1	1	0

Source: Input Retailer Phone Survey, March 2021.

As in previous rounds of the survey of input retailers, credit remains a significant management challenge. Thirty-nine percent of respondents had outstanding loans that they used for the purchase of their inventory, and only 60 percent expected to be able to repay on time (Table 3). A much higher proportion of input retailers, 64 percent, had loans out to farmers and a very high percentage, 88 percent, experienced late repayment. Although almost three-quarters of input retailers with outstanding loans to customers expect to be repaid, delays have implications for their cash flow management. One-third of input retailers expect to decrease the credit they offer farmers in the coming monsoon season.

Table 3. Credit management situation of input retailers, percent reporting

	Share (%)
Current debt on recent loans received	39
Expect to fully repay on time	60
Current credit out to farmers	64
Of those with credit out ...	
Some credit out is past due or late	88
Expect to be fully repaid	74
Expected change in credit offered to farmers in 2021	
Decreased credit offered	34
No change	64
Increased credit offered	3

Source: Input Retailer Phone Survey, March 2021.

Changes in input prices and sales over time

To track input sales over the most recent phase of the COVID-19 crisis, further aggravated by the political turmoil since February 1, we asked retailers about their sales volumes in the two weeks prior to each interview for four common inputs—fertilizer, maize seed, vegetable seed, and pesticides. Because fertilizers are especially sensitive to changes in transport costs, we also asked about fertilizer price changes to help interpret changes in sales volume.

Table 4. Changes in fertilizer prices by region, percent reporting

Type	January 2021 to March 2021				March 2020 to March 2021			
	All	Hills	Dry Zone	Delta	All	Hills	Dry Zone	Delta
Compound	6	5	7	7	10	12	8	10
Urea	15	12	19	14	22	21	26	19

Source: Input Retailer Phone Survey, March 2021.

During the past year, the price of compound fertilizer increased by an average of 10 percent and that of urea fertilizer by 19 percent (right panel of Table 4). Most of this increase occurred between

January and March this year (left panel of Table 4). The higher percentage increase in urea prices compared to compound fertilizer prices reflects the higher share of transport cost relative to total cost per bag for urea. Increases in freight and distribution costs are the major factor driving fertilizer price increases to date. The slightly higher increases reported by input retailers in the Dry Zone reflect more recent deliveries to that region.

Among retailers receiving new stock deliveries in the month before the interview, two-thirds report longer delivery periods for fertilizer and pesticides, and half report longer delivery periods for seed (Table 5). This most likely reflects delays in port arrival and unloading for imported inputs and curfews preventing overnight truck transport. A high proportion of input retailers report lower sales during the two weeks prior to the interview compared to a year ago—76 percent report lower fertilizer sales, 67 percent report lower pesticide sales, and 57 percent report lower vegetable and fruit seed sales. While a high proportion (83 percent) also report lower maize seed sales, it is important to remember that post-monsoon maize is grown on a very limited area, mainly on riverbeds. When input retailers were asked why they think input sales have dropped, they emphasized the uncertain market prices and difficulties in market access (transportation) faced by farmers.

Table 5. Input order delivery times and sales volume compared to one year ago, percent reporting

	Share that received new stock in last 30 days	Time to receive compared to last year			Total sales quantity in last 2 weeks compared to same time last year		
		Longer	Same	Shorter	More	Same	Less
Fertilizer	43	65	33	2	5	19	76
Maize seed	10	43	50	7	0	17	83
Vegetable/fruit seed	21	52	45	3	7	36	57
Pesticides	29	64	36	0	7	26	67

Source: Input Retailer Phone Survey, March 2021.

Looking forward

Given that fertilizer prices are expected to rise even more in coming weeks, the significant reduction in sales reported by input retailers is of concern. These price increases are due to large increases in the costs of shipping fertilizer to Myanmar, higher domestic transport costs, and depreciation of the Myanmar Kyat (MMK).² We therefore asked input retailers what they anticipate would be the effect of a price-per-bag increase of 10,000 MMK on their fertilizer sales, which is equivalent to a 30 percent increase in the price of compound fertilizer and a 45 percent increase in that of urea, compared to the median price in March 2020.

Across the full sample, 73 percent anticipate that a price-per-bag increase of 10,000 MMK would result in a decrease in their fertilizer sales, with 45 percent anticipating it would cause a decline of 50 percent or more in sales volumes (Table 6). However, there are important regional differences in input retailers' expectations. In the Delta, which accounts for the majority of monsoon rice production, 85 percent of input retailers anticipate a decline in fertilizer sales with 57 percent expecting a decline of 50 percent or more. This response is consistent with the fact that the Delta uses twice as much urea as compound fertilizer, whereas the Dry Zone and Hills use roughly equal proportions. A price-per-bag increase of 10,000 MMK therefore represents a higher average price increase across all fertilizer consumption in the Delta. In the Dry Zone, 75 percent of input retailers expect a reduction of sales and 48 percent expect a decrease of 50 percent or more in sales volume. Fertilizer sales are expected to be least sensitive to a price increase in the Hills, where 56 percent of input retailers

² According to Nikkei Asia the Myanmar kyat depreciated 14 percent and gasoline prices increased 20 percent in the two months after February 1. <https://asia.nikkei.com/Spotlight/Myanmar-Coup/Myanmar-s-brewing-currency-crisis-causes-consumer-prices-to-soar>

anticipate a decrease and only 29 percent expect a volume reduction of 50 percent or more. Fertilizer use in the Hills is likely less sensitive to prices relative than elsewhere because of the importance in the cropping system of crops that are highly responsive to fertilizer application, such as vegetables and maize.

Table 6. Expected change in fertilizer sales in response to a price-per-bag increase of 10,000 MMK, percent reporting

	Full sample	Hills	Dry Zone	Delta
No change	27	44	25	15
Decrease 25%	28	27	28	29
Decrease 50%	34	27	42	35
Decrease >50%	11	2	6	22

Source: Input Retailer Phone Survey, March 2021.

Recommended actions

The extent of disruptions in retail input distribution since February 1, the already financially weakened circumstances of farmers due to the impacts of COVID-19, and expected increases in fertilizer prices all point to further significant reductions in crop input purchases by farmers in the coming monsoon season. This will impact crop yields and production. There are several actions that could be taken to mitigate the situation:

- Restore inter-bank transfer services to reduce transactions costs for input retailers and encourage the use of mobile banking services by farmers for input purchase;
- Ensure that imports of fertilizer and agro-inputs through the ports are expedited and lift restrictions on nighttime transport to avoid late input delivery for the monsoon season; and
- Consider measures to make fertilizer more affordable to smallholder farmers to offset expected price increases due to higher shipping and transport costs.

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