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Monitoring the Agri-food System in Myanmar

Rice Millers – April 2021 survey round

To understand the effects of recent economic and political disruptions on Myanmar's rice sector, an additional round of a telephone survey of rice millers was conducted in April 2021.

Key findings

- Paddy and rice prices for Emata varieties–those linked to export markets–declined significantly between January and April 2021, opposite to their usual seasonal trends. Prices for Pawsan varieties–those of higher quality and preferred domestically–increased, but only by about half the rate of increase over the same period a year earlier. Similarly, gross milling margins increased slightly, but by only a third of the rate observed in 2020.
- Byproduct prices declined sharply between January and April, potentially due to reduced demand for their use in feed for aquaculture, poultry, or pig rearing.
- Among active mills, milling throughput declined 36 percent in April 2021 relative to April 2020. Further, 36 percent of mills were inactive in April. While partly due to seasonal factors, this primarily reflected business challenges associated with the current political instability.
- The banking sector slowdown caused the largest disruptions to the business operations of rice millers, resulting in their facing difficulties both in paying for paddy (79 percent of millers reporting) and receiving payment for the milled rice they produced (83 percent). More than half of the millers surveyed reported disruptions to transportation, information gathering, and credit–both borrowing in and lending out.
- The combination of lower throughput and lower byproduct prices implies lower profitability for the milling sector. Recovery will depend on the quality of the monsoon paddy harvest and the pace of recovery in demand for livestock feed.

Recommended actions

- Restore inter-bank transfer services, particularly for rice millers and crop traders. This will alleviate the largest constraint in the rice value chain and facilitate smoother trade in agricultural commodities, which will benefit both farmers and consumers.
- Immediately expand credit access to farmers. This will enable agricultural investment early in the monsoon season–a critical time in the agricultural calendar–and mitigate risks of low food production and rising food prices.

Introduction

Rice mills are the most important link in Myanmar's rice value chain. Mills buy paddy from farmers and process it into rice, the primary staple of Myanmar accounting for more than 50 percent of calories consumed in the country. Thus, disruptions to the milling sector have important upstream implications for farm incomes as well as downstream implications for household food security.

In this Research Note, we present results and analysis of recent economic disruptions to rice mills from an April 2021 round of a telephone panel survey of 445 millers in Ayeyarwady, Bago, and Yangon. We examine (i) disruptions caused by the current political and COVID-19 crises; (ii) responses to these disruptions; and (iii) and price changes for paddy, head rice, broken rice, and rice bran in April 2021 relative to April 2020 and to January 2021, prior to the political crisis that began on 1 February.

Rice mill sample size and location

In mid-April 2021, 445 mills were reached via telephone for interview, of which 281 (63 percent) were active and had milled rice in the 30 days prior to interview (Table 1). Among the inactive mills, 66 percent cited safety concerns due to political instability as a reason for not milling. Normal seasonality was a contributing factor for 34 percent of inactive mills, while COVID-19 was cited by just 21 percent. Seasonality also influenced the main rice variety milled and activity by region. Pawsan, the preferred and more expensive domestic variety, is not grown during the summer season. Thus, it was the main variety milled by only 7 percent of active mills. Emata varieties, which are the main varieties grown under summer irrigation, were milled by 91 percent of active mills in April. Ayeyarwady, which produces about half of the total summer rice harvest, had the highest share of active mills (74 percent), while Yangon and Bago, which collectively account for about 15 percent of summer paddy production, had lower shares–37 and 47 percent, respectively. Yangon and Bago also had a higher share of mills inactive due to political instability.

Table 1. Rice miller sample, main reasons for inactivity, and main rice varieties by region

	All	Ayeyarwady	Bago	Yangon
Active in April 2021, number	281	168	71	25
Not active in April 2021, number	164	58	81	42
Total number	445	226	152	67
If not active, main reasons not active				
Safety related to political instability (%)	66	56	74	64
Seasonality (%)	34	34	35	29
COVID-19 (%)	21	27	14	25
If active, main rice variety milled in April				
Emata (%)	91	92	94	75
Pawsan (%)	7	7	6	14
Other (%)	2	1	0	11

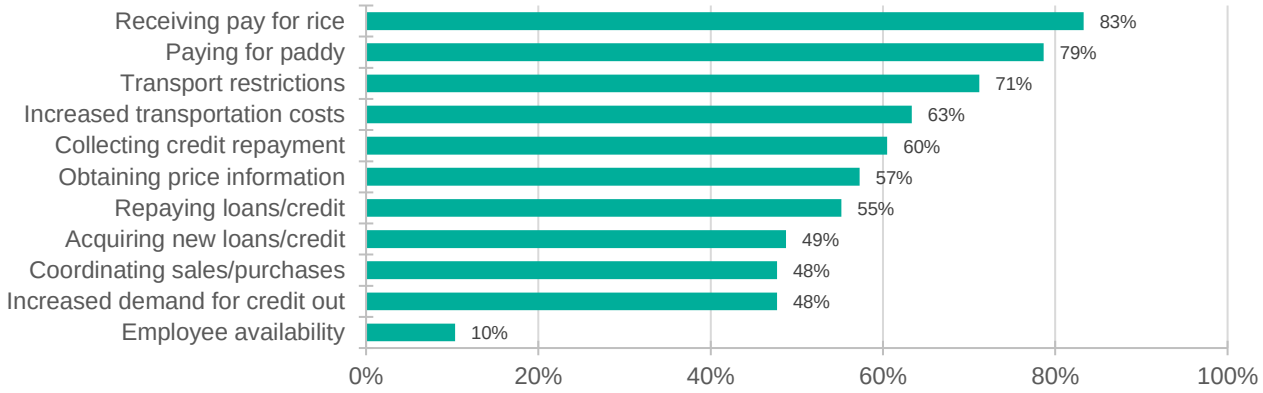
Source: Rice miller phone survey, April 2021.

Effects of economic disruptions on rice millers

To understand the effects of recent economic disruptions on rice millers, we asked a series of questions on the different types of disruptions that mills experienced since 1 February. Most rice millers report multiple sources of disruption and, relative to surveys conducted in January 2021 and throughout the COVID-19 crisis in 2020, disruptions were much more prevalent (Figure 1). Amongst the most frequently encountered disruptions were increases in delays in receiving payment for rice sold (83 percent of millers reporting), challenges in making payment for paddy purchased

(79 percent), transportation restrictions (71 percent), and increased transportation costs (63 percent). More than half of all millers experienced multiple credit related disruptions. Sixty percent had difficulty collecting repayment from farmers on credit that they had offered out, and 48 percent experienced an increased demand for credit from farmers ahead of the monsoon season. Disruptions to cellphone network and internet connectivity also adversely impacted millers' ability to obtain price information (57 percent) and coordinate sales and purchases (48 percent). There was relatively little variation in these disruptions across regions.

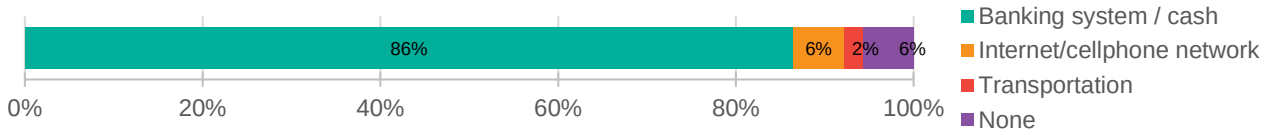
Figure 1. Disruptions experienced by rice millers since February 1, percentage reporting



Source: Rice miller phone survey, April 2021.

Figure 2 shows which disruptions millers identified as most serious. Eighty-six percent of millers reported difficulties in the banking sector (making and receiving payments) as the most serious. A very distant second was cellphone internet access (6 percent). Transport costs were only identified as most serious by 2 percent. Again, there was relatively little variation across regions.

Figure 2. Most significant business disruption experienced by rice millers since February 1, percentage reporting



Source: Rice miller phone survey, April 2021.

Rice miller responses to economic disruptions

Rice millers were asked a series of questions to understand how they have responded to the disruptions reported above. Among active mills, throughput declined by 36 percent compared to 2020 (Table 2). Mills also have 24 percent less working capital available in April 2021 than in April 2020. Average stocks of paddy were 32 percent lower this year and rice stocks were 7 percent lower.

Table 2. Changes in throughput, working capital, and stocks, averages among active mills

	Apr 2020	Apr 2021	% change
Monthly throughput (MT)	420	270	-36
Working capital ('00,000 MMK)	700	532	-24
Stocks (bags)			
Paddy	69,777	47,291	-32
Rice	1,746	1,621	-7

Source: Rice miller phone survey, April 2021.

As observed in other sectors of the agri-food system,[1] there were large shifts in how millers made and received payments in April relative to January. Cash was the most common form of payment, and its share of transactions increased both in buying paddy (18 percent increase) and selling rice (35 percent). There was a steep decline in bank transfers due to political crisis related disruptions to the banking sector and branch closures. Several millers also re-introduced the Hundi system (i.e., making and receiving cash payments through intermediaries). Ten percent of millers used the system to receive payments in April 2021, up from just 1 percent in January. Five percent used the system to purchase paddy in April 2021, whereas none used the system in January.

Table 3. Changes in payment methods by rice millers, percentage reporting

	Buying paddy			Selling rice		
	Jan 2021	Apr 2021	Change	Jan 2021	Apr 2021	Change
Cash	71	89	18	46	81	35
Inter-bank transfer	24	1	-22	48	5	-43
Mobile payment	3	0	-2	3	0	-2
Hundi	0	5	5	1	10	9
Credit	2	4	2	3	4	2

Source: Rice millers phone survey, April 2021.

Changes in prices over time

In the January and April 2021 rounds of the rice miller survey, we tracked changes in prices and milling margins by collecting price data at the time of interview with recall to one year prior (Table 4). For Emata types, paddy and rice prices declined between January and April 2021, while gross milling margins remained unchanged. This is the opposite of usual seasonal patterns, especially given lower processing volumes and stocks, and may reflect increased frictions in domestic trading and the closure of the border to China at Muse due to COVID-19.[2] For the high quality Pawsan types, paddy and rice prices increased between January and April 2021, but only by about half of the rate of increase in the previous year. Gross milling margins also increased slightly, but by only a third of the rate of the previous year. Prices for milling byproducts (i.e., broken rice and bran) declined by 9 and 13 percent, respectively, between January and April 2021. Such a steep decline is surprising in view of the lower throughput and suggests that demand for these byproducts for use as feed for aquaculture, poultry, or pig rearing has declined sharply.

Table 4. January to April changes in rice prices and margins in 2020 and 2021, MMK per pound

		2020			2021		
		Jan	Apr	% Change	Jan	Apr	% Change
Emata rice types	Rice	214	223	4	231	216	-6
	Paddy	131	128	-2	146	131	-10
	Margin	83	95	14	85	85	0
Pawsan rice types	Rice	304	360	18	321	347	8
	Paddy	187	222	19	198	217	10
	Margin	117	138	18	123	130	6
Byproducts	Broken rice	161	167	4	175	160	-9
	Bran	114	113	-1	115	100	-13

Source: Rice miller phone survey, January and April 2021.

[1] Myanmar Agriculture Policy Support Activity (MAPSA). 2021. "Monitoring the agri-food system in Myanmar: Agricultural commodity traders - March 2021 survey round". Myanmar SSP Research Note 48. Washington, DC: International Food Policy Research Institute (IFPRI). https://doi.org/10.2499/p15738coll2.134332

[2] USDA. 2021. "Burma: Rice Trade–Monthly". United States Department of Agriculture GAIN Report. https://www.fas.usda.gov/data/burma-rice-trade-monthly-1

Looking forward

The combination of low rice mill throughput, low prices for byproducts, and static gross milling margins implies a recent sharp reduction in the overall profitability of the milling sector. The reduction in rice exports is currently preventing price increases that might have been expected given lower availability of rice and the rapid devaluation of the Myanmar Kyat. This has been a temporary benefit to consumers but a net negative for millers and farmers. Further, farmers are also facing decreased availability of credit and higher input costs going into the monsoon season, especially for fertilizer[3] and mechanization services. With higher input costs and challenges in marketing,[4] as well as increased price volatility and uncertainty, farmers are likely to reduce the amount of input they use on monsoon rice and possibly reduce area as well.[5] If the monsoon harvest is poor and demand for rice exports or byproducts recovers, the stage could be set for sharp increases in domestic market prices given the depreciated exchange rate of the Myanmar Kyat, particularly for Emata varieties.

Recommended actions

There are numerous policy actions that could lessen the disruptions facing Myanmar's rice sector documented in the above analysis. We see the two following actions as especially salient:

- Restore inter-bank transfer services, particularly for rice millers and crop traders. This will alleviate the largest constraint currently hampering the performance of the rice value chain and facilitate smoother trade in agricultural commodities, which will benefit both farmers and consumers.
- Immediately expand credit access to farmers. This will enable agricultural investment early in the monsoon season–a critical time in the agricultural calendar–and mitigate risks of low food production and rising food prices. Other methods of alleviating farmer cash constraints should also be considered, including extending repayment times for past loans and cash transfers.

[3] Myanmar Agriculture Policy Support Activity (MAPSA). 2021. "Monitoring the agri-food system in Myanmar: Agricultural input retailers–March 2021 survey round". Myanmar SSP Research Note 49. Washington, DC: International Food Policy Research Institute (IFPRI). https://doi.org/10.2499/p15738coll2.134379

[4] Myanmar Agriculture Policy Support Activity (MAPSA). 2021. "Early impacts of the Myanmar political crisis on rural farm households: findings from March-April 2021". Myanmar SSP Research Note 52. Washington, DC: International Food Policy Research Institute (IFPRI). https://doi.org/10.2499/p15738coll2.134417

[5] Myanmar Agriculture Policy Support Activity (MAPSA). 2021. "The outlook for Myanmar's inorganic fertilizer use and 2021 crop harvest: An ex-ante assessment". Myanmar SSP Working Paper 10. Washington, DC: International Food Policy Research Institute (IFPRI). https://doi.org/10.2499/p15738coll2.134368

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