MYANMAR

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Monitoring the Agri-food System in Myanmar

Rice Millers – March 2023 survey round

In March 2023, we interviewed more than 430 active rice millers to assess business disruptions and price changes at the midstream of Myanmar's most important agricultural value chain.

Key findings

- High fuel costs and electricity supply remain the most commonly reported disruptions in March 2023, with medium/ large modern mills facing more issues related to transport costs, electricity supply, and transport restrictions.
- Among the disruptions, electricity access is the most significant disruption for both medium/large-scale mills and small/micro mills, followed by fuel costs and fuel access.
- Smaller mills experienced declines in throughput, while larger mills maintained similar monthly throughput and decreased paddy storage compared to the previous year. Larger mills were less willing to provide credit to farmers, and there was an increase in byproduct sales for smaller mills.
- Wages paid by mills increased by about 18 percent, working capital requirements to buy paddy rose significantly for both larger and smaller mills, and milling commission fees increased for both mill types compared to last year.
- Paddy and rice prices for Emata and Pawsan varieties have significantly increased in March 2023, surpassing prices from March 2021 and 2022 due to currency devaluation and a slight increase in global rice prices. Milling margins have also increased compared to previous years. Despite the price hikes, millers are not extracting a disproportionate share of rice prices, and the prices of main byproducts, like broken rice and rice bran, have remained healthy, presenting positive prospects for mill profit margins.

Looking forward

- The milling sector remains, overall, healthy and resilient: milling margins are stable – implying that higher rice prices are still passed through to farmers – and byproduct markets are still functioning.
- However, the decline in paddy and rice stocks suggests a more restricted supply ready to move to the market in the coming months. This may put additional upward pressure on Myanmar's rice prices, which (even at the parallel exchange rate) have risen faster than global rice prices in the past year with negative implications for consumers.
- The share of medium/large mills providing credit to farmers declined to just 20 percent (the lowest recorded value in our surveys) during the 2022 monsoon season. If that trend continues, there will be less credit available for farm inputs during the 2023 monsoon. However, buoyant rice prices and declining input prices may allow millers to increase or restart lending to farmers in 2023.

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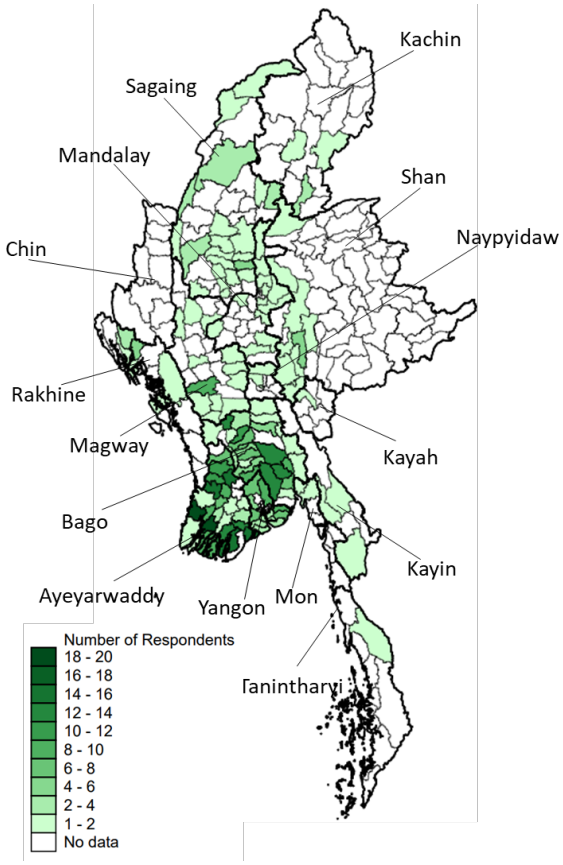
Introduction

Rice mills are the major link between farmers and consumers in the rice value chain. Disruptions to rice mills affect both rural rice-producing households and urban consumers. We have been monitoring shocks and business responses of rice millers in Myanmar with a panel phone survey since June 2020. In this research note – the 13th note in the rice miller series – we present the results from telephone interviews with 434 active rice millers conducted in March 2023, including 1) milling disruptions, 2) changes in operations such as throughput, paddy storage, wages, and working capital, and 3) trends in paddy, rice, and byproduct prices.

Rice mill sample

From February 27 to March 12, a total of 553 mills were surveyed via telephone interviews. Out of these mills, 434 (78 percent) were active in the 30 days preceding the interviews, while 119 (22 percent) were inactive (Table 1). The share of inactive mills shows a slight increase compared to the March 2022 survey. The reasons for being inactive can primarily be attributed to normal seasonal patterns (34 percent), difficulties in purchasing paddy (33 percent) or selling rice (25 percent), and to a lesser extent concerns related to safety during the crisis (10 percent).

Figure 1. Rice millers sample



Our sample is composed primarily of modern medium to large-scale mills (84 percent) which are generally more urban with higher throughput capacity (Table 1). We also interview several traditional small and micro-mills commonly known as Halar Sat and Ngar Pone Sat, which constitute 16 percent of the sample. These mills hold significant importance in remote rural communities as they provide milling services primarily for household consumption, despite having lower milling capacity. In this round, we also captured the primary power source utilized by mills. The majority of mills in our sample rely on industrial power lines as their primary energy source, accounting for 60 percent of the sample, and a higher share among the larger mills. This was followed by mills that rely on diesel power (34 percent) which are primarily smaller millers. Some mills are utilizing bio-fuels such as rice husks (15 percent), usually as a supplemental source of power.

Table 1. Miller characteristics

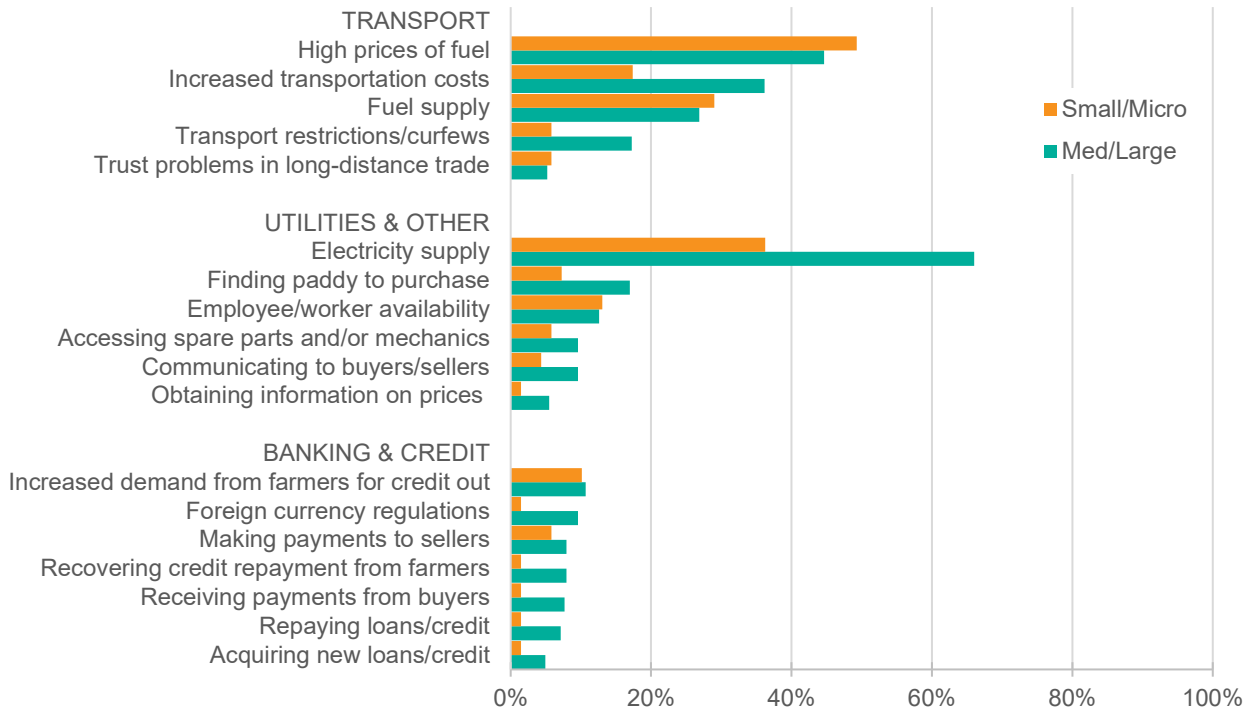
	All	Small/Micro	Medium/Large
Total reached	553	88	465
Active in March 2023, number	434	69	365
Inactive in March 2023, number	119	19	100
Urban (%)	43	19	47
Mill capacity (MT/day)	27	8	29
Sources of power			
Diesel (%)	34	77	25
Electricity (%)	66	34	70
Husk (%)	15	4	17
Gas (%)	12	0	14

Source: Miller survey–March 2023 survey round.

Disruptions to rice milling

As in other survey rounds, we asked rice millers what type of disruptions they have experienced in the last 30 days. Consistent with the March 2022 and August 2022 survey rounds, high fuel costs and electricity supply are the most common disruptions (Figure 2). Larger mills, which are more often responsible for longer-distance transport and more often rely on electrical grids for power, are more likely than smaller mills to report issues with transport costs, electricity supply, and transport restrictions. In general, issues with banking and credit have diminished from previous survey rounds, each issue affecting less than 10 percent of mills. Overall, mills were much less likely to report disruptions this round relative to previous rounds, perhaps reflecting an increasing acceptance of the multiple issues and challenges posed to businesses in the current environment.

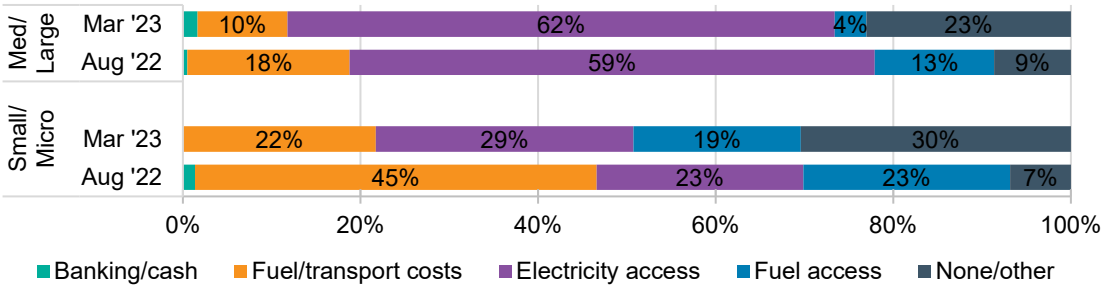
Figure 2. Disruptions experienced by rice millers in the 30 days prior to interview, percentage reporting



Source: Miller survey–March 2023 survey round

When asked which disruption category was the most significant, a majority of the medium and large-scale mills cited electricity access (62 percent), a slight increase from 59 percent in August 2022 (Figure 3). For small and micro mills, electricity access was also the most common response (29 percent) with fuel costs (22 percent) and fuel access (19 percent) not far behind. Again, mills were much more likely to report no main challenge this round compared to previous surveys.

Figure 3. Most significant business disruption experienced, percentage of rice millers reporting by survey rounds



Source: Miller survey–August 2022 and March 2023 survey rounds

Rice milling operations

A series of questions on milling operations were asked to understand how rice millers have responded to the multiple and severe challenges. The disruptions to power sources may have had larger impacts on smaller mills as throughput declined, both in the last 30 days and the monsoon harvest season overall. Larger mills somehow maintained similar monthly throughput to last year, with an increase for the entire monsoon season. Paddy storage continued a declining trend observed in previous rounds with larger mills holding 20 percent less paddy this year compared to 2022, perhaps reflecting a decline in production. Larger mills were less willing to provide credit to farmers compared to a year prior, though the average amount among those lending increased by 15 percent, reflecting higher input costs during the 2022 monsoon season. The share of mills taking credit in remained stable from one prior. Byproduct sales – specifically broken rice and rice bran – are an important source of revenue for mills. The share of larger mills selling byproducts has remained effectively stable, while we observe a large increase in the share of smaller mills selling byproducts compared to 2022.

Increasing trends in working capital, wages, and milling fees observed in August 2022 have accelerated. Wages paid by mills now are about 18 percent higher than a year ago, though we note that the rate of growth fell well below food price changes. Working capital requirements to buy paddy increased by nearly 50 percent for larger mills and more than 100 percent for smaller mills, more cash is needed to buy paddy under higher prices. Lastly, milling commission fees increased by about 28 percent and 55 percent for larger and smaller mills, respectively.

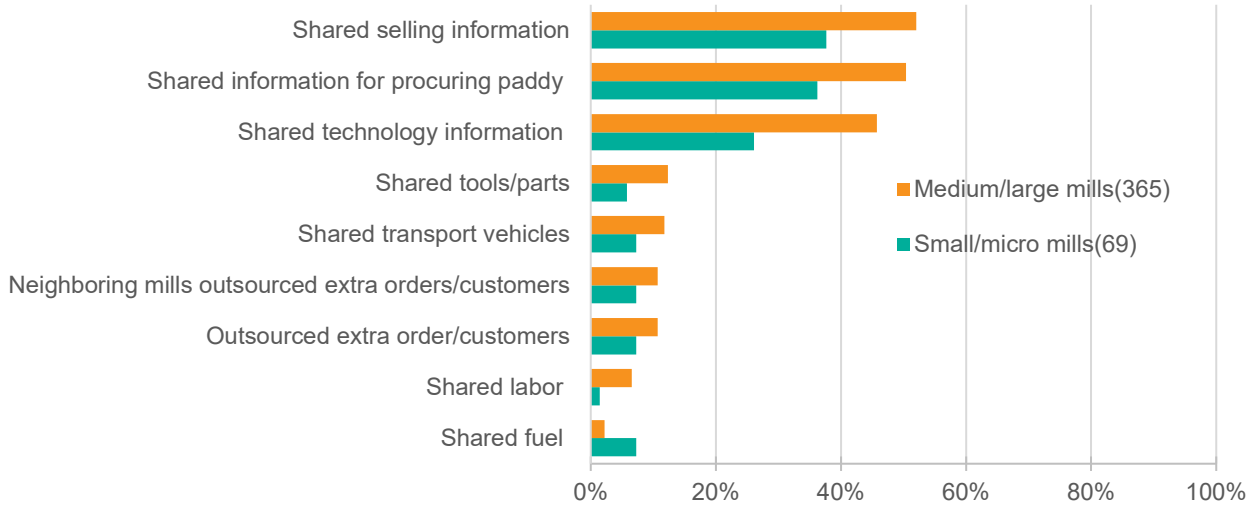
Table 2. Operations, employment, and credit in March 2023 compared to March 2022

	Small / micro mills		Medium / large mills	
	March '22	March '23	March '22	March '23
Throughput				
Last 30 days (MT)	71	46	291	293
Monsoon harvest season (June - December, MT)	432	264	1,308	1,650
Storage				
Paddy (# of bags)	3,551	2,685	21,673	17,291
Rice (# of bags)	83	157	815	814
Credit lent out to farmers				
Share lending out (%)	6	8	25	20
Conditional average amount ('00,000 MMK)	288	353	623	721
Credit borrowed in				
Share borrowing (%)	8	8	16	16
Conditional average amount ('00,000 MMK)	153	137	1,517	1,747
Share selling byproducts				
Broken rice (%)	40	60	76	78
Rice bran (%)	44	62	87	85
Others				
Daily wage for casual workers (MMK/day)	6,833	8,000	7,643	9,030
Weekly working capital ('00,000 MMK)	55	116	589	861
Milling commission fees (MMK/bag)	1,068	1,652	1,328	1,706

Source: Miller survey–March 2022 and March 2023 survey rounds. Only common sample of mills used for more direct comparisons; N=346).

To better understand cooperation and competitiveness in the milling sector, we added questions to the March 2023 survey about how mills collaborate and interact with other mills. Mills are highly collaborative in sharing information for procuring and selling with each other (Figure 4). To lesser degrees, mills also share transport, tools/parts, and customers. Medium and larger mills are much more likely to collaborate in these ways perhaps due to networks and locations.

Figure 4. Cooperation behavior with other mills, percentage reporting

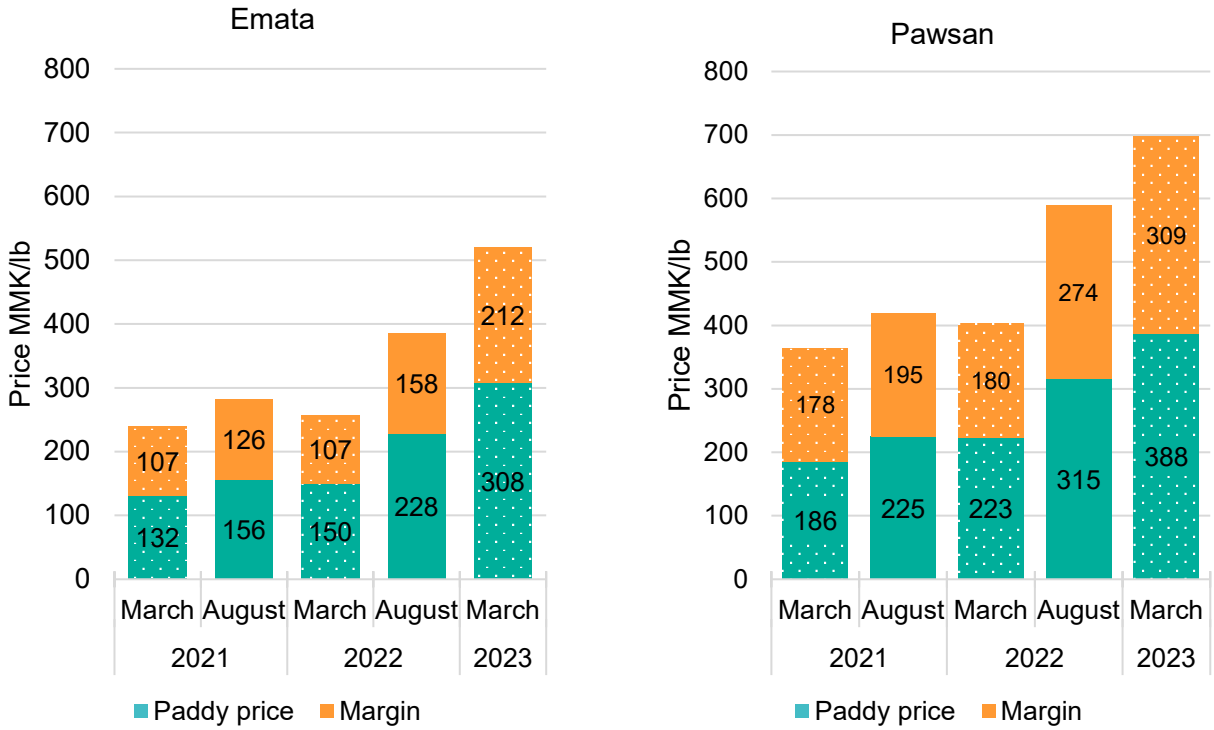


Source: Miller survey–March 2023 survey round.

Changes in prices and margins

In each survey, we collect mill-level price data for paddy, rice, and milling byproducts. Paddy and rice prices – for both Emata and Pawsan variety groups – continued their rapid ascents in March 2023, with average Emata prices surpassing 500 kyat per lb, more than double the prices in March 2022. Milling margins (milled rice prices less the price of paddy) have also increased relative to the same time in 2021 and 2022 (Figure 5). However, in percentage terms, margins have decreased slightly since 2021, suggesting that milling sector is still broadly competitive and that millers are not extracting a disproportionate share of rice prices in the current context.

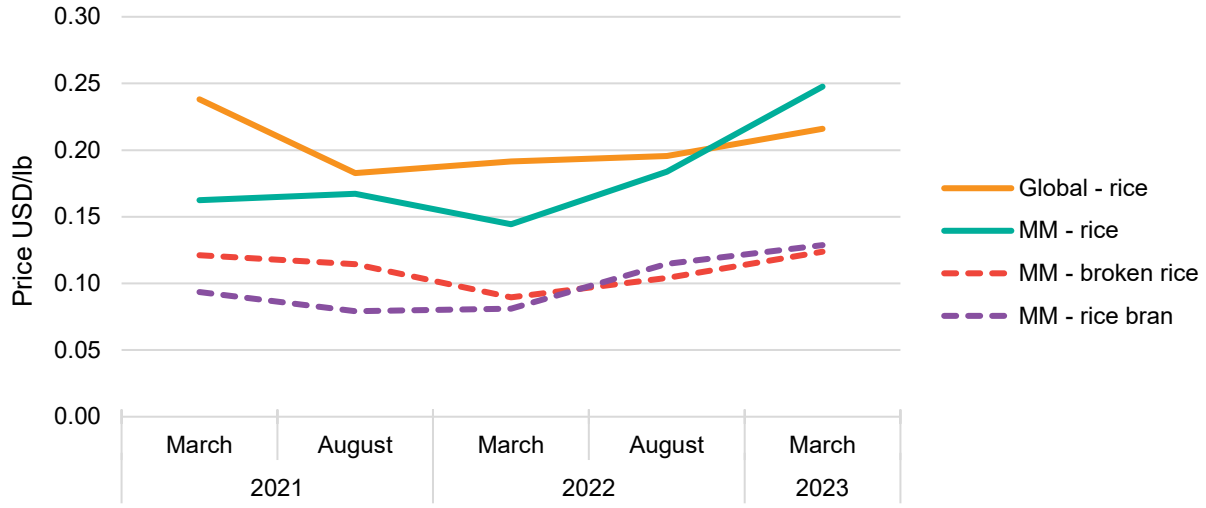
Figure 5. Paddy prices and milling margins in March and August from 2021 to 2023



Source: Miller survey–March and August survey rounds from 2021, 2022 and 2023.

The observed paddy and rice price increases are due primarily to currency devaluation of the kyat relative to the US dollar, though global rice prices have also increased slightly (Figure 6) putting upward pressure on Myanmar's rice prices. In USD terms (converted at the official CBM rates), mill rice prices have risen faster than global prices in the past year, suggesting perhaps more shocks or lower supply in the local Myanmar market. However, we note that the change in rice prices at the parallel exchange rate is less severe with lower percentage changes. Prices of the two main byproducts – broken rice and rice bran – remain healthy and have increased slightly in USD terms over the past year, presenting a positive signal for mill profit margins.

Figure 6. Rice product prices for Myanmar mills and global markets, USD per pound, March 2021-March 2023



Sources: World Bank Pink Sheet and Miller survey – March 2021 through March 2023 rounds. MMK to USD conversions done at CBM official rates. Myanmar rice prices are Emata variety group averages.

Looking forward

The milling sector remains, overall, healthy and resilient: milling margins are stable – implying that higher rice prices are still passed through to farmers – and byproduct markets are still functioning. Yet, there are some potentially troubling indicators for months ahead. First, paddy and rice stocks have declined since last year, suggesting a more restricted supply ready to move to the market in the coming months. This may put additional upward pressure on Myanmar's rice prices, which (even at the parallel exchange rate) have risen faster than global rice prices in the past year with negative implications for consumers. Second, the share of medium/large mills providing credit to farmers declined to just 20 percent (the lowest recorded value in our surveys) during the 2022 monsoon season. If that trend continues, there will be less credit available for farm inputs during the 2023 monsoon. However, buoyant rice prices and declining input prices may allow millers to increase or restart lending to farmers in 2023.

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