



Monitoring the Impact of COVID-19 in Myanmar

Rice millers – November 2020 survey round

To understand how Myanmar's rice value chain has been affected by the COVID-19 crisis, a series of phone interviews is being conducted with rice millers from Ayeyarwady, Bago, and Yangon. This report presents data from interviews conducted in November 2020.

Key Findings

- Rice prices declined more than paddy prices in November and mill margins fell as a result. However, monthly rice prices appear to have followed normal seasonal trends.
- Transportation restrictions continue to be the largest disruptions to rice millers with 55 percent reporting disruptions to selling rice and 22 percent reporting disruptions to buying paddy. However, there was a dramatic improvement from the October survey when 76 percent and 68 percent of millers reported disruptions to selling and buying, respectively.
- 32 percent of millers reported that their average daily milling throughput was lower in 2020 than at the same time in 2019.
- 60 percent of millers have adopted COVID-19 related safety practices, the third consecutive month with no meaningful increase in safety practices.
- 46 percent of millers applied for COVID-19 relief loans starting in August, representing a clear demand for low-cost credit. Of these applicants, 47 percent were successful.
- Millers were less diversified in both their paddy buying and their rice sales channels in 2020—just 7 percent sold rice to exporters compared to 21 percent in 2019.

Recommended Actions

- Government should work to eliminate transportation restrictions at all administrative levels—including unofficial restrictions implemented at the township level.
- Government should facilitate a safe escalation of international trade of rice and other agricultural commodities through formal trade agreements with clearly defined safety processes and procedures.
- Government should consider expanding and extending the COVID-19 relief loans program to agrifood system firms under Action 2.1.1 of the COVID-19 Economic Relief Plan (CERP) of the Government of Myanmar.

Introduction

This is the fifth policy note in a series presenting the results from telephone surveys with approximately 450 rice millers in three important rice-growing regions of Myanmar: Ayeyarwady, Bago, and Yangon. Mills are the most important link between farmers and consumers in the rice value chain. Any serious shocks to rice mills will impact both rural rice-producing households and urban consumers.

The purpose of this series of phone surveys is to better understand how the COVID-19 crisis and the corresponding policy responses have affected rice processing businesses. The same sample of rice millers has been called monthly starting in July 2020, allowing us to track important disruptions during the monsoon harvests and during the second wave of COVID-19 in Myanmar. This report presents results from the fifth survey round conducted in November 2020. The analysis below details the sustained marketing disruptions in November caused by transportation restrictions as well as large changes in mill buying and selling channels relative to 2019. We also show that 46 percent of millers applied for government COVID-19 relief loans since August, of which 47 percent of applicants were successful. Lastly, we present the changes in paddy, rice, and byproduct prices as well as miller margins over the course of the monsoon harvest season. Rice prices appear to have followed their normal season trends during the 2020 monsoon harvest period.

In the November survey, we interviewed 447 mills (Table 1). Nearly 90 percent of the mills we reached over the phone were operating at the time of interview, the highest proportion of mills being active since we began phone surveys. This is due to this survey round being conducted around the peak of the monsoon harvest season. Of the 51 closed mills, half closed due to COVID-19 challenges, a similar share as in October at the start of the second lockdown and significantly higher than the interviews conducted before October. We captured more detailed information for the 396 operating mills, and they are our focus in the analysis below.

Table 1. Number of interviews with rice millers conducted by survey round

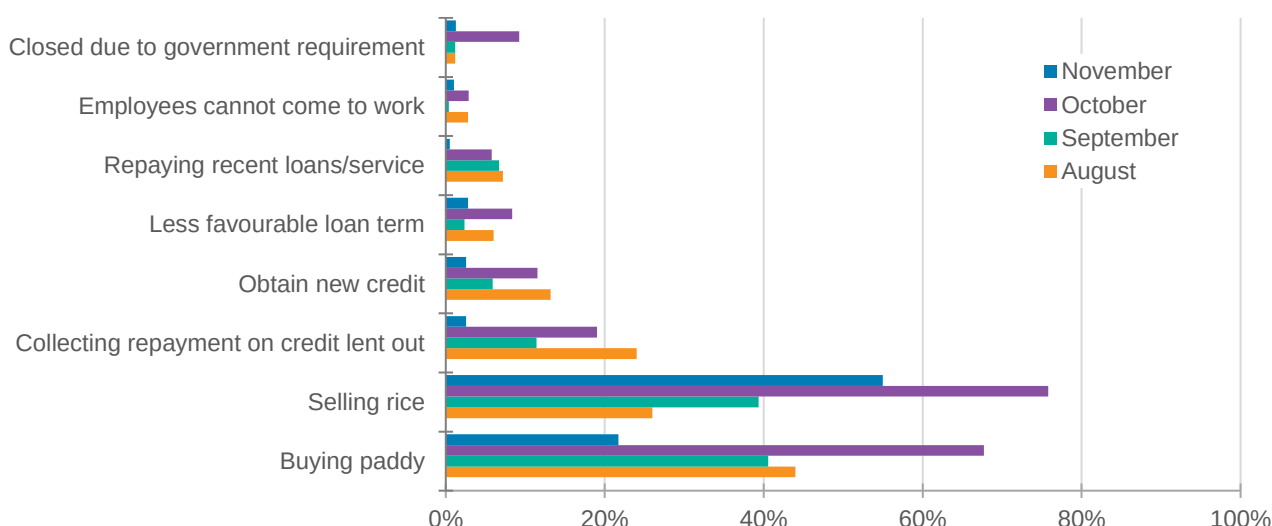
	July	August	September	October	November
Operating mills	324	252	263	349	396
Temporarily closed mills	79	119	177	121	51
Total interviews	403	371	440	470	447

Source: Rice millers phone survey—July, August, September, October, and November 2020 survey rounds

Effects of COVID-19 on the business operations of rice millers

In each survey round we asked millers about the COVID-19 challenges they faced and their responses to those challenges in the 30 days prior to interview. The greatest COVID-19 disruption in the November survey was in marketing milled rice, with 55 percent of mills reporting challenges (Figure 1). However, this represented a dramatic improvement from the October survey when 76 percent of mills reported difficulties selling rice during the second wave of lockdowns. An even larger improvement is seen in the proportion of millers that reported challenges in buying paddy—just 22 percent in November, down from 68 percent in October. These marketing improvements are good news for mills, farmers, and consumers and suggest that transportation restrictions have eased or that millers have otherwise learned to cope with the challenges those restrictions presented. Still, there is clear room for further improvement—55 and 22 percent of mills experiencing marketing disruptions downstream and upstream, respectively, represent substantial disruptions in the rice value chain.

Figure 1. Disruptions from COVID-19 for rice mills, share of respondents affected, by survey round



Source: Rice millers phone survey—August, September, October, and November 2020 survey rounds

To better understand the effects of transportation restrictions, we asked follow-up questions about where and how millers were experiencing the difficulties. Ninety-eight percent of millers that reported disruptions to buying or selling reported restrictions at the township level, while 83 and 53 percent also reported restrictions at the state/region level and at the village level, respectively. Thus, millers are facing challenges at nearly every administrative level, though the township restrictions are most common. The effects of these restrictions included increased transportation costs (75 percent of mills reported), difficulty finding transporters (55 percent), roadblocks or check points (54 percent), and stay-at-home orders (49 percent).

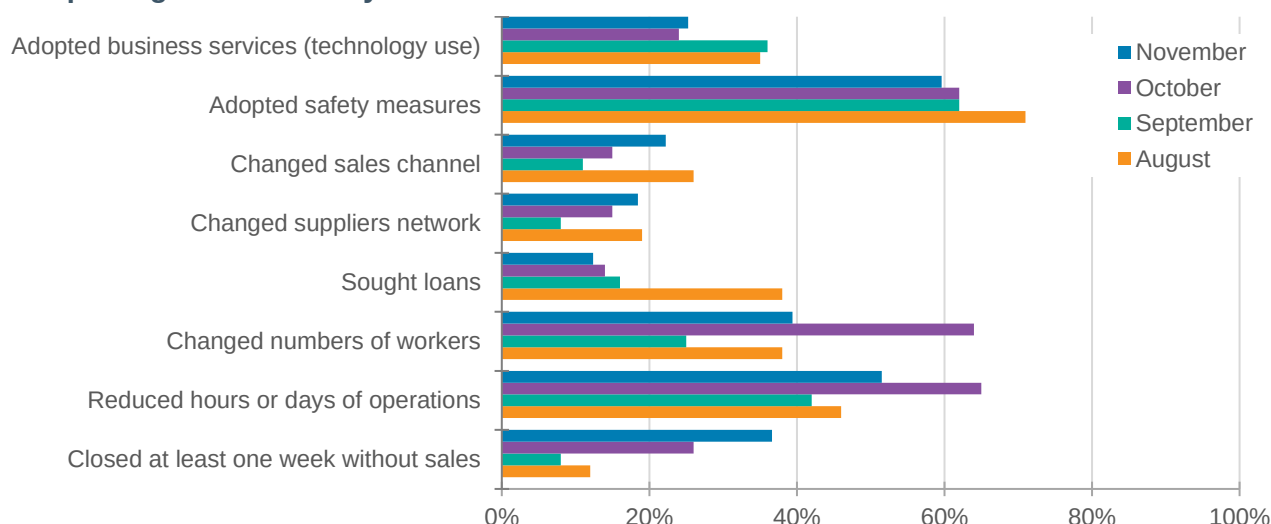
More encouragingly, the other disruptions that had been reported in earlier rounds of our survey diminished to near zero in November. Less than 3 percent of millers reported challenges with collecting repayment on credit, obtaining new credit, receiving less favorable loan terms, repaying debts, having employees unable to come to work, and experiencing government mandated closures. The decline in the share of millers unable to collect repayment from farmers on credit lent out is an especially positive result. This had been a persistent disruption not only to rice millers but also to crop traders and input retailers, and the observed decline may suggest that farmers were better able to repay their debts after selling their monsoon harvests.

Our November data on miller responses to these disruptions present a similar picture. Among the negative trends, a higher share of millers reported changing their sales channels (22 percent, Figure 2) and suppliers (18 percent) compared to October, reflecting the sustained transportation restrictions. Also, for the third month in a row, the share of millers adopting COVID 19 related safety measures was around 60 percent. Millers reported practicing similar safety measures as previous rounds, including washing hands regularly (58 percent), wearing masks or face shields (53 percent), and safe social distancing (13 percent). As emphasized in previous policy notes, adoption of these practices is lower than is desired.

A higher share reported being closed for at least one week in November (37 percent), which is partially attributable to the election in November and the Thadingyut festival in late October. However, the average number of days of operation in the 30 days prior to interview increased to 18 days in November (Figure 2) from just 13 days in October. Further, a smaller share of mills reduced their operating hours per day relative to October—though the share with reduced operations still exceeded 50 percent in November. Millers also hired a greater number of temporary employees in

November on average. Interestingly, the average daily throughput declined from 30 metric tons in October to 26 metric tons in November.

Figure 2. Rice millers' business responses to the COVID 19 crisis, percent of respondents reporting in each survey round



Source: Rice millers phone survey–August, September, October, and November 2020 survey rounds

Comparisons of mill operations in 2020 to the same period in 2019 can help show the effects of COVID-19. In the November interviews, millers continued to report lower throughput year-on-year. Thirty-two percent of millers reported that the average daily throughput was lower in 2020 and only 1 percent reported an increase (Table 2). Note however that this is a 12-percentage point improvement since October when 44 percent reported lower throughput year-on-year. The most common reasons cited for the decline in throughput in November reflect difficulties buying paddy in 2020–73 percent of millers reporting a decline attributed it to transportation restrictions that made paddy more difficult to buy, while 47 percent reported that farmers sold less paddy in 2020.

Table 2. Mill operating days, daily throughput, and number of temporary employees hired, by survey round

	August	September	October	November
Number of days operating in last 30 days, average	16	16	13	18
Daily throughput, average, metric tons	25	27	30	26
Number of temporary employees hired, average	15	15	16	19

Source: Rice millers phone survey–August, September, October, and November 2020 survey rounds

In the November interviews, we continued to track how mills were utilizing their available storage space. The data show that paddy storage returned to near pre-monsoon levels after dropping in October (Table 3). The increased paddy space came from declines in storage areas devoted to rice owned by others and vacant and other storage. Most millers were storing rice for similar durations in November 2020 compared to 2019 (85 percent), which has been the case since interviews began in July. Yet, for the second month in a row, the share of millers storing for a longer period than last year far outweighed the share storing for a shorter period–13 and 2 percent in November, respectively. The most common reasons for increased storage times were transportation restrictions (83 percent) and challenges finding transporters (76 percent), suggesting that transportation disruptions prevented some millers from selling rice when they would have wanted to do so.

Table 3. Average allocation of storage space, percentage of rice millers by survey round

	August	September	October	November
Own rice	20	15	23	24
Other's rice	5	2	8	3
Paddy	61	44	31	42
Other purposes	5	10	10	6
Vacant	9	29	27	24

Source: Rice millers phone survey–August, September, October, and November 2020 survey rounds

Credit and government COVID-19 relief loans

Demand for credit appeared to decline in the November interviews as only 12 percent of the sample sought loans, the smallest share since the survey began. This result was likely related to increased revenue during the monsoon harvest season. As documented in previous policy notes in this series, demand for credit was highest when government made COVID-19 relief loans available to agribusinesses starting in August. We added questions to the November survey to better understand these applications.

Our results show that there was clear demand for low-interest loans in the sector, as nearly half of millers applied for a government relief loan (Figure 3). The program appears to have done well in reaching millers with information about the loans, as only 20 percent of those that did not apply (11 percent of the total sample) did not know about the program. Among those that did not apply, the most common reason was that they did not need the loan (61 percent). An additional 15 percent (8 percent of all mills) did not know how to apply, and only 6 percent (3 percent of all mills) did not apply because they believed they would not meet the loan requirements. Twenty-four percent of all millers (53 percent of those that applied) had successful loan applications, though less than half of those had received their funds by November. None of the funds allocated by November were issued through mobile applications—all were received through in-person bank transfers. A large share of all mills—21 percent of the full sample and 47 percent of those that applied—were either unsuccessful in their applications or still awaiting a decision.

Figure 3. Government COVID-19 relief loan applications and outcomes, percentage share of mills

Source: Rice millers phone survey–November 2020 survey round

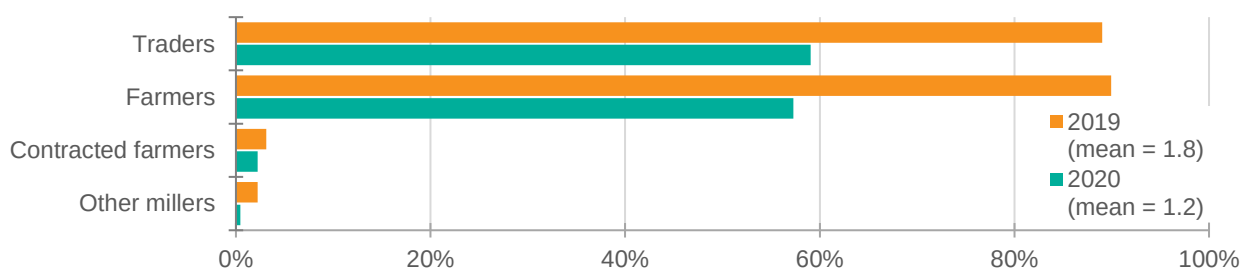
To better understand loan usage, we asked applicants how they intended to use loan funds if they were successful. The most reported intended uses were to buy paddy (84 percent) and to cover operating costs (80 percent). A smaller share of loan applicants said they intended to use their funds to repair their machines (19 percent) or buy new ones (9 percent). The stated intended uses were similar for successful applicants, for unsuccessful applicants, and for those still waiting a decision on their loan application. We interpret these results with caution, as millers may not want to admit to using government loans to upgrade machinery during the crisis. Thus, our results should not necessarily be interpreted as evidence that millers required funds to cover operating costs during the pandemic.

Paddy purchasing and rice selling

The previous policy notes in this series and the above analysis make clear that rice supply chains have been disrupted by policies to slow the spread of the COVID-19 virus in Myanmar. In particular, transportation restrictions have affected millers' paddy buying and rice selling practices. To add detail to these upstream and downstream effects, we asked millers where they were buying paddy and selling rice in November 2020 and asked them to recall the same period in 2019.

There were large declines in the share of millers buying paddy from traders and farmers in 2020 (Figure 4). In November 2020, 59 and 57 percent of millers bought paddy from traders and farmers respectively, down from 89 and 90 percent in 2019. Overall, millers were purchasing paddy from fewer types of sellers in November 2020 (1.2 on average) compared to November 2019 (1.8). Credit offered out to farmers also declined. Among the millers buying from farmers in November 2020, only 16 percent offered credit, compared to 23 percent that offered credit at the same time in 2019.

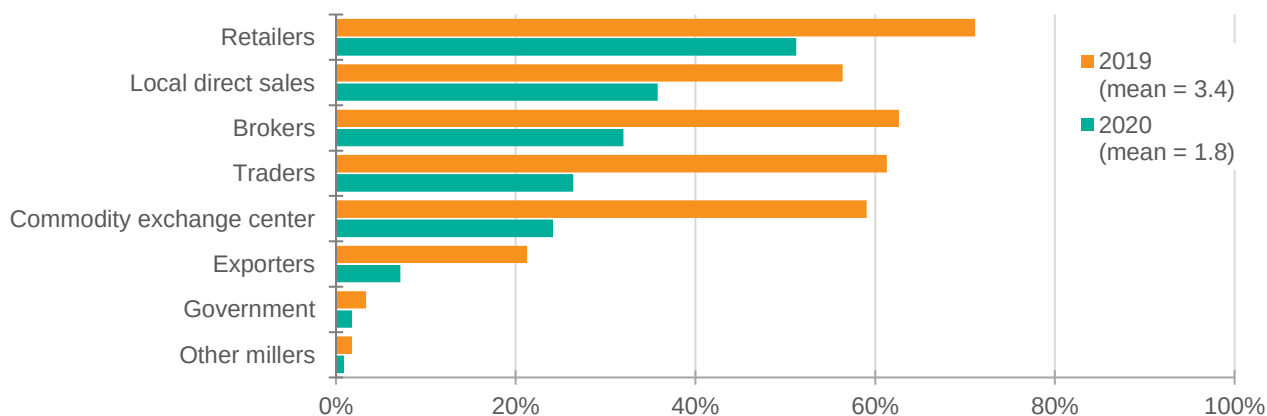
Figure 4. Paddy sources November 2020 and November 2019, percentage share of millers buying from each source



Source: Rice millers phone survey–November 2020 survey round

Aligning well with the disruptions in Figure 1, downstream effects were even more pronounced. The share of millers selling rice to retailers, local direct sales, brokers, traders, and commodity exchange centers each declined by at least 20 percentage points in November 2020 compared to 2019 (Figure 5). Overall, millers were much less diversified in their sales channels in 2020. Exporters show the largest change in percentage terms with a 66 percent decline year-on-year—21 percent of millers sold rice directly to exporters in November 2019, while just 7 percent did so in 2020.

Figure 5. Rice sales sources November 2020 and November 2019, percentage share of millers selling to each source

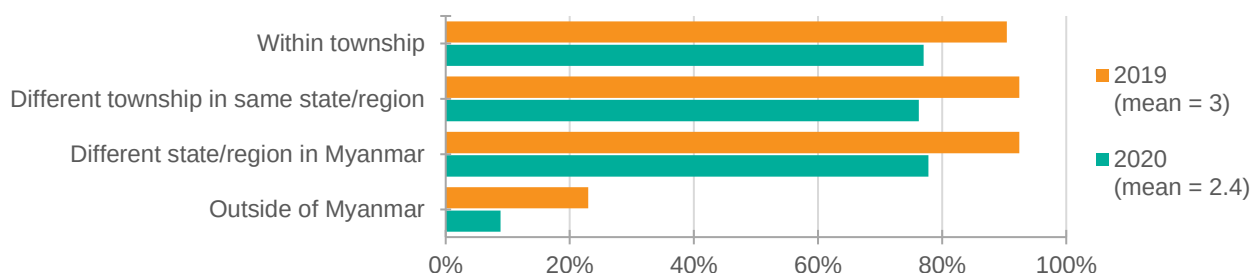


Source: Rice millers phone survey–November 2020 survey round

We also asked millers where they believed the final consumers or end users of their milled rice were located this year and last year. Overall, there were perceived declines in each location of end users. The shares and relative declines for each type of location within Myanmar were similar, but

final consumers outside of Myanmar show the largest decline in percentage terms (Figure 6). Twenty-three percent of millers thought some of their milled rice was exported in 2019, but only 9 percent thought so in 2020.

Figure 6. Perceived location of final consumers for rice sold November 2020 and November 2019, percentage share of millers



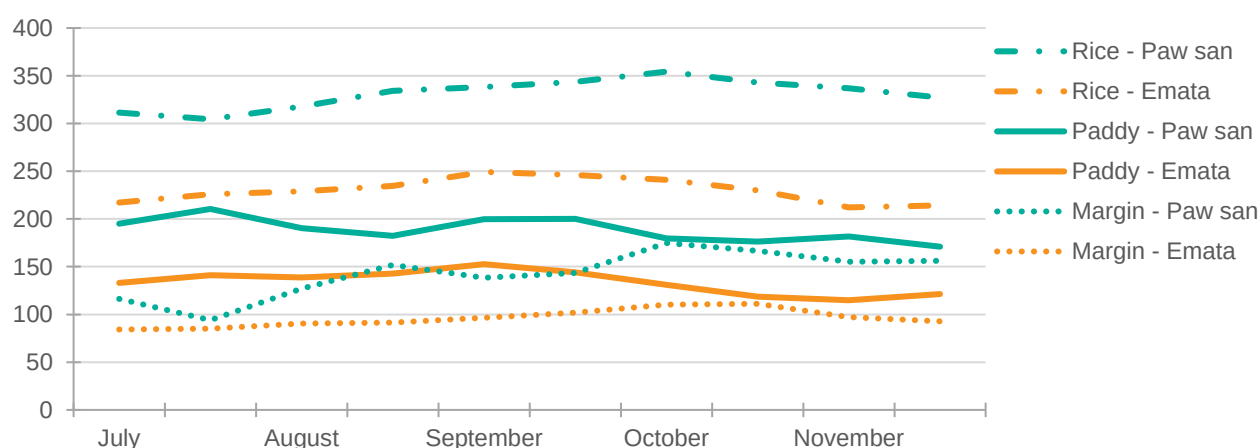
Source: Rice millers phone survey–November 2020 survey round

Rice exports for fiscal year 2019-20 (ending September 2020) were reportedly greater in value than in FY2018-19, though our survey raises clear concerns about exports early in FY2020-21.¹ The decline in exports for some millers is likely related to land border closures, although overland exports accounted for just 18 percent of all exports in FY2019-20.² Late in November after our interviews were conducted, there were encouraging reports that border trade with China had restarted in a limited capacity.³

Prices of paddy, rice, and byproducts

One objective of our phone surveys has been to track price changes over time. Figure 7 displays average paddy and rice prices, and miller margins since July for the two main groups of rice varieties processed by our sample of millers–Paw San and Emata.

Figure 7. Paddy and rice prices, and miller margins for Paw San and Emata varieties, July–November 2020 (MMK per pound)



Source: Rice millers phone survey–July, August, September, October, and November 2020 survey rounds

Both paddy and rice prices continued downward trends in the November survey, likely reflecting the seasonal supply increase. Our data show that paddy prices fell faster than rice prices in October, leading to increased margins. However, the opposite is true in November, as rice prices had larger

¹ Ko, T., “Myanmar rice export levels to hit 2.5 million tonnes this year”, Myanmar Times, 2020.

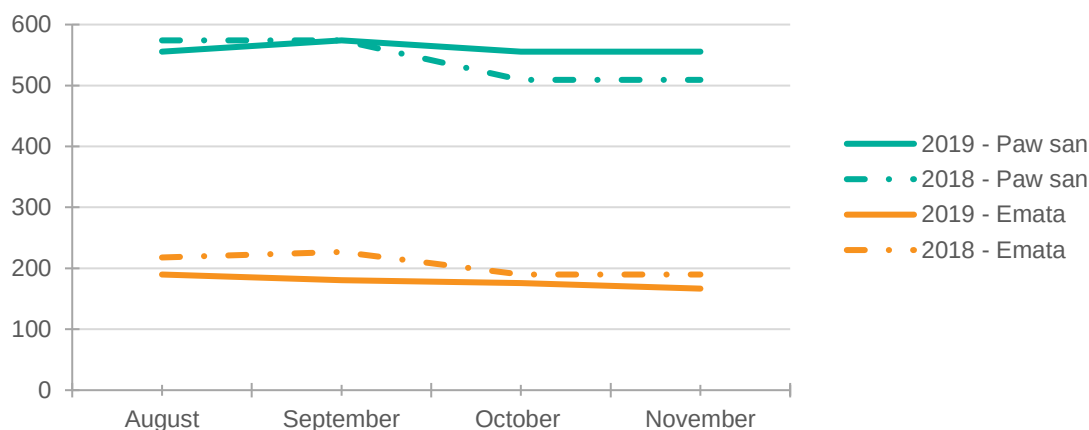
² Loon, A. and Thant, H., “Myanmar rice price spike on high local, foreign demand”, Myanmar Times, 2020.

³ Nyein, N., “MRF urges traders to sign contract, comply with regulations”, The Global New Light of Myanmar, 2020.

declines than paddy—average prices fell by 22 MMK per pound and 5 MMK per pound, respectively. As a result, average miller margins dropped to 104 MMK per pound, returning closer to the 106 MMK per pound average margins observed in the September interviews.

To help put the rice prices in context, Figure 8 shows monthly rice retail prices from August through November for 2018 and 2019. Note that these prices at the retail level are not directly comparable to our mill-level prices. However, the monthly changes may give us an idea of historic trends. In 2018 and 2019, retail rice prices peaked in September and declined slowly over October and November.

Figure 8. Yangon retail rice prices for Paw San and Emata varieties, August–November 2019 and 2018 (MMK per pound)



Source: Myanmar Rice Federation retail rice prices, Yangon

Emata varieties in our miller data appear to track the retail price changes in Emata rice. In our data, from September to November 2020, Emata rice prices fell by 35 MMK per pound (Figure 7). The retail price data shows that Emata prices fell by 37 MMK per pound between September and November in 2018 and by 20 MMK per pound over the same months in 2019. However, in our miller data the October price spike for Paw San varieties in Figure 7 is a departure from the seasonal pattern in Paw San retail prices which declined slightly in October 2019, and more severely in October 2018. Yet this aberration in 2020 may have less to do with COVID-19 policies and more to do with late monsoon rains and later than normal harvests in some regions, leading to a lower supply of Paw San rice in early October. More research is needed to better understand the impacts of COVID-19 policies on prices and margins at the miller level, but rice prices in November 2020 on average appear to have largely followed typical seasonal trends.

Lastly, byproduct prices increased in November 2020 relative to October, but remained lower than their September values. Rice bran and broken rice were sold by more than 90 percent of interviewed mills, while just 10 percent sold rice husks. The prices for bran and broken rice were similar to the same time last year, as were the month-on-month price changes from October to November.

Table 5. Average byproduct prices by survey round and compared to 2019 (MMK per pyi)

	2020				2019	
	August	September	October	November	October	November
Husks	16	0	15	26	75	26
Rice bran	335	379	315	321	305	330
Broken rice	847	801	722	748	707	748

Source: Rice millers phone survey—August, September, October, and November 2020 survey rounds

Recommendations

The above analysis documents disruptions in the rice marketing chain during the 2020 monsoon rice harvest season due primarily to restrictions put in place to reduce transmission of the COVID-19 virus. Our results highlight the need to ease transportation restrictions that have hindered the purchase of paddy and sale of rice. Data obtained from telephone interviews with 396 active rice mills in Yangon, Ayeyarwady, and Bago in November 2020 shows that, although there were some month-on-month improvements from October, there were still large disruptions to both paddy buying and rice selling caused by transportation restrictions at the township, state/region, and village levels. Further, millers reported large changes in the types of suppliers from whom they buy paddy and the types of buyers to whom they sold rice in November 2020 compared to 2019.

We recommend the three following policy actions:

- Government should work to eliminate transportation restrictions at all administrative levels. Where deemed necessary, government should be decisive and transparent about what the restrictions are and when and how they will be enforced. Transit crops and other essential goods and services should be given exemptions to allow more unrestricted movement, possibly through a special permitting system.
- Government should facilitate a safe escalation of international trade of rice and other agricultural commodities through formal trade agreements. There was some reported progress in increasing border trade in late November at the Muse crossing to China. These efforts should be expanded to other land borders. Safety is crucial and may require infrastructure investments in some areas. Agreements should include clearly defined COVID-19 related safety processes and procedures.
- Government should consider expanding and extending the COVID-19 relief loans program to agrifood system firms under Action 2.1.1 under the COVID 19 Economic Relief Plan (CERP) of the Government of Myanmar. There was a clear demand for loans under the first tranche of funds that was made available to mills in August. Among our sample, however, only 47 percent of applicants for these loans were successful.

ACKNOWLEDGMENTS

The authors thank the Innovations for Poverty Action (IPA) Myanmar office for implementing the survey, particularly Zin Nwe Win, Afke Jager, Ricardo Morel, and the survey enumeration team.

This work was undertaken as part of the Myanmar Agricultural Policy Support Activity (MAPSA), which is led by the International Food Policy Research Institute in partnership with Michigan State University. Funding support for this study was provided by the CGIAR Research Program on Policies, Institutions, and Markets; the United States Agency of International Development; the Livelihoods and Food Security Fund; and the International Growth Centre.

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The Myanmar Strategy Support Program (Myanmar SSP) is led by the International Food Policy Research Institute (IFPRI) in partnership with Michigan State University (MSU). Funding support for Myanmar SSP is provided by the CGIAR Research Program on Policies, Institutions, and Markets; the Livelihoods and Food Security Fund (LIFT); and the United States Agency for International Development (USAID). Additional funding for the study reported on in this document was provided by the International Growth Centre (IGC). This publication has been prepared as an output of Myanmar SSP. It has not been independently peer reviewed. Any opinions expressed here belong to the author(s) and do not necessarily reflect those of IFPRI, MSU, LIFT, USAID, IGC, or CGIAR.

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