MYANMAR

STRATEGY SUPPORT PROGRAM RESEARCH NOTE 120 DECEMBER 2024

Monitoring the Agri-food System in Myanmar

Rice Millers – September 2024 survey round

In September 2024, we surveyed 256 rice millers from 12 states and regions across Myanmar to assess the impacts of the monsoon floods and the political crisis and related disruptions. This report presents the key results and analysis from those interviews.

Key findings

- Flooding has significantly affected monsoon paddy production, with 74 percent of millers reporting flood-related impacts, particularly in the main rice-growing regions. Consequently, 63 percent of millers expect local production to decline compared to last year, with 73 percent of millers in flood-affected areas anticipating reduced output.
- Labor shortages have emerged as a critical challenge for milling businesses, with 53 percent of millers identifying it as a significant issue and 7 percent considering it the most severe disruption.
- Mills continue to face ongoing difficulties accessing electricity and fuel, alongside rising transportation costs. Moreover, reports about disruptions in banking and finance have doubled compared to last year, indicating increasingly widespread and persistent challenges.
- Mill-level paddy and rice prices continued to rise in September 2024. Rice prices increased by 17–19 percent compared to one year earlier, while paddy prices rose by a more modest 8 percent on average. This discrepancy suggests that higher milling margins account for a significant share of the price increases.

Looking forward

- There will be lower paddy production from the 2024 monsoon season due to floods and pests, which is expected to further drive-up rice prices for consumers. Rice prices have already risen rapidly over the past three years, raising serious concerns about affordability and food security.
- Labor availability is a rising concern and rising costs of labor and fuel together with volatile byproduct markets and other business disruptions have likely contributed to rising milling margins, with a smaller share of rice price increases passed through to producers. This trend underscores the impacts of business disruptions and the need for stability.

Livelihoods and Food Security Fund

managed by UNOPS

Introduction

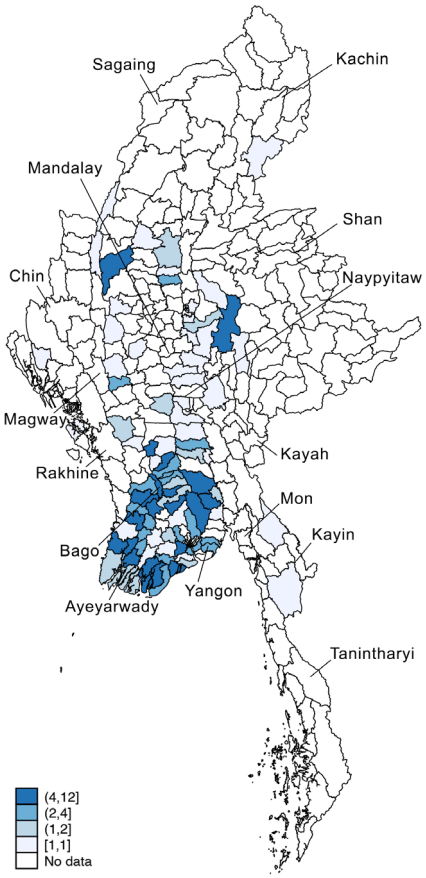
Rice mills are the most important link between farmers and consumers in Myanmar's rice value chain. Disruptions to rice milling affect both rural rice-producing households and urban consumers.

This is the 15th Research Note in our series monitoring the rice milling sector in Myanmar. In this Research Note, we present evidence from interviews conducted in September 2024 with 256 rice millers in 88 townships from 12 states and regions. As in previous survey rounds, we examine (i) disruptions caused by the current political crisis; (ii) changes in business operations including throughput, employment, paddy stocks, and credit offered/borrowed; and (iii) paddy, rice, and byproduct price changes relative to one year prior. In addition to these, we include a dedicated section to understand the expected impacts of flooding on monsoon paddy production.

Rice mill sample

From September 16 to October 1, 256 mills were interviewed via telephone, of which 205 (80 percent) were active in the 30 days prior to the interviews and 51 (20 percent) were inactive.[1] It was more difficult to reach millers by phone this round than in previous interviews largely due to network connectivity interruptions, and that is reflected in a smaller number of completed interviews. As is typical in the late monsoon surveys, mill repairs and seasonality were the main reasons for inactivity.

Figure 1. Miller sample by township



Source: Miller survey–September 2024 survey round.

[1] The sample of active millers reached for phone interviews changes across rounds. To ensure that patterns in the data are not driven by variations in the sample, we conducted a robustness check on all results using only the common sample of mills across relevant survey rounds. In all cases, the patterns with the common sample broadly reflect those observed in the full samples.

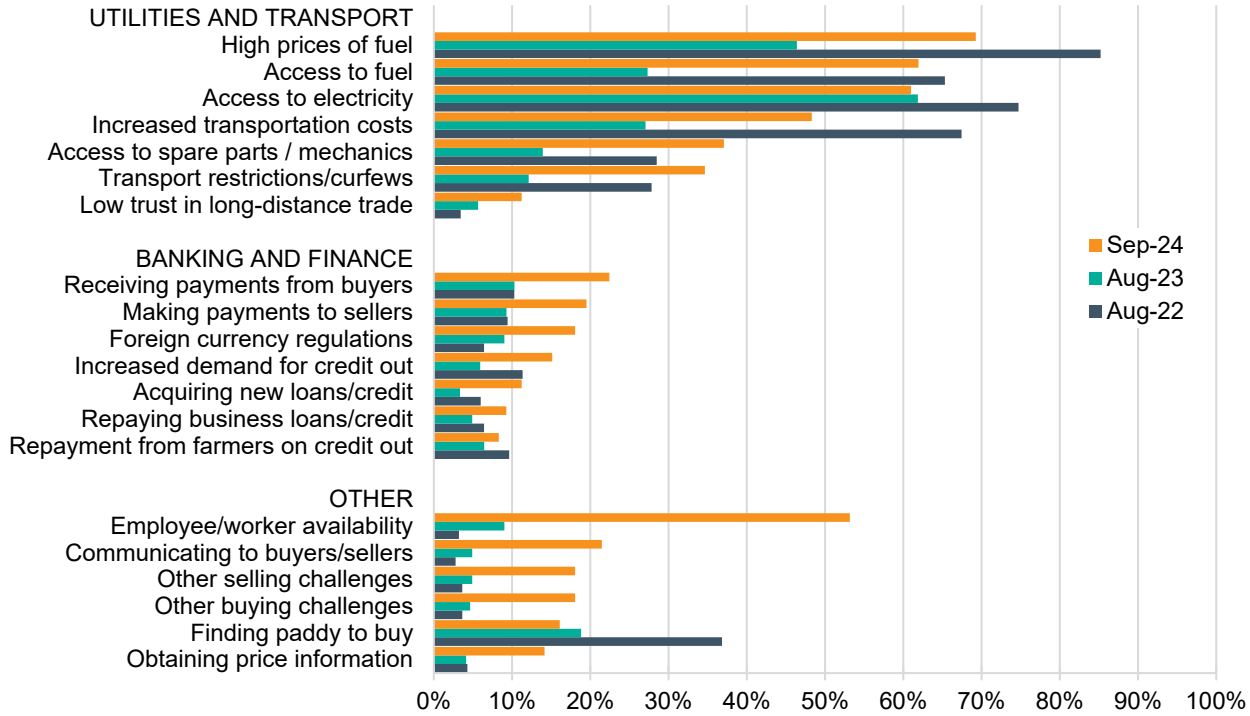
The sample is not representative and has better coverage in the delta than in other regions (Figure 1). The majority of sample is medium/large mills[2] (82 percent) that provide milled rice to markets throughout Myanmar. Traditional small and micro-mills locally known as *Halar Sat* and *Ngar Pone Sat* comprise 16 percent of the sample, and while they have lower milling capacity, they play an important role in remote rural communities providing milling services on commission.

Disruptions to rice milling

As in prior survey rounds, we asked rice millers what types of disruption they have experienced in the last 30 days. Reported disruptions in September 2024 show large increases in disruptions relative to one year prior (Figure 2). Utilities and transport disruptions remain the most prevalent category of challenges faced, with high fuel costs being the most common single disruption reported by 69 percent of the sample. Fuel access (62 percent), electricity access (61 percent), and transportation costs (48 percent) are also common disruptions. Other transport disruptions (restrictions and curfews, access to spare parts, and low trust) increased markedly from 2023. The transportation and fuel challenges are much more prevalent than in August 2023, but similar to the 2022 levels.

Banking and finance disruptions are much more frequent in 2024 than either 2023 or 2022. Rates more than doubled for most of these challenges, including difficulties receiving and making payments, challenges from foreign currency regulations, higher demand for credit, and acquiring new loans. Other disruptions also increased, especially employee availability, which affected 53 percent of millers in 2024, compared to less than 10 percent in 2023 or 2022. Communication challenges also increased markedly.

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

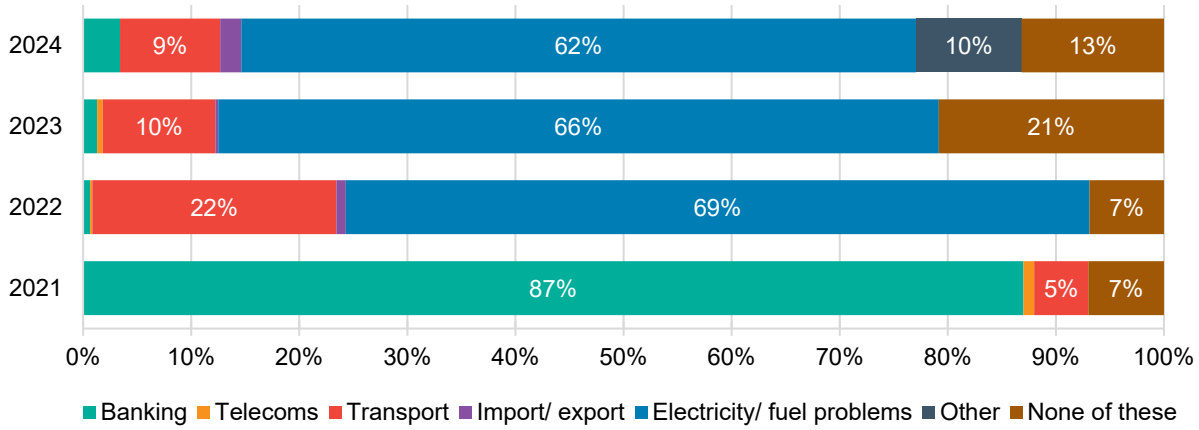


Source: Miller survey–August 2022, March 2023, and August 2023 survey rounds.

[2] Medium/large mills are characterized as having a daily throughput capacity of at least 15 Metric Ton (MT). Smaller mills are below that threshold.

To better understand the magnitude of disruptions, we asked millers which disruption had the greatest impact on their business. Here we see relative consistency, as the main disruption in each of the past three years has been electricity and fuel problems, which disproportionately affect modern mills who are more dependent on electricity grids. Unlike previous rounds, labor shortages were the third most prevalent major disruption, comprising 7 percent (within the 10 percent of 'other' responses). The share for transport disruptions has declined since 2022, but the issues have not lessened, rather millers feel that other issues are more pressing.

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



Source: Miller survey–August 2021, August 2022, August 2023, and September 2024 rounds.

Many of these disruptions are affected by insecurity in the mills' areas. More mills report violence nearby in September 2024 than in August 2023, and more mills feel they are physically insecure, particularly in the Hills region (Table 1). Fewer mills have enough savings to survive a sustained period of losses, down by nine percentage points since last year.

Table 1. Savings, violence, and insecurity

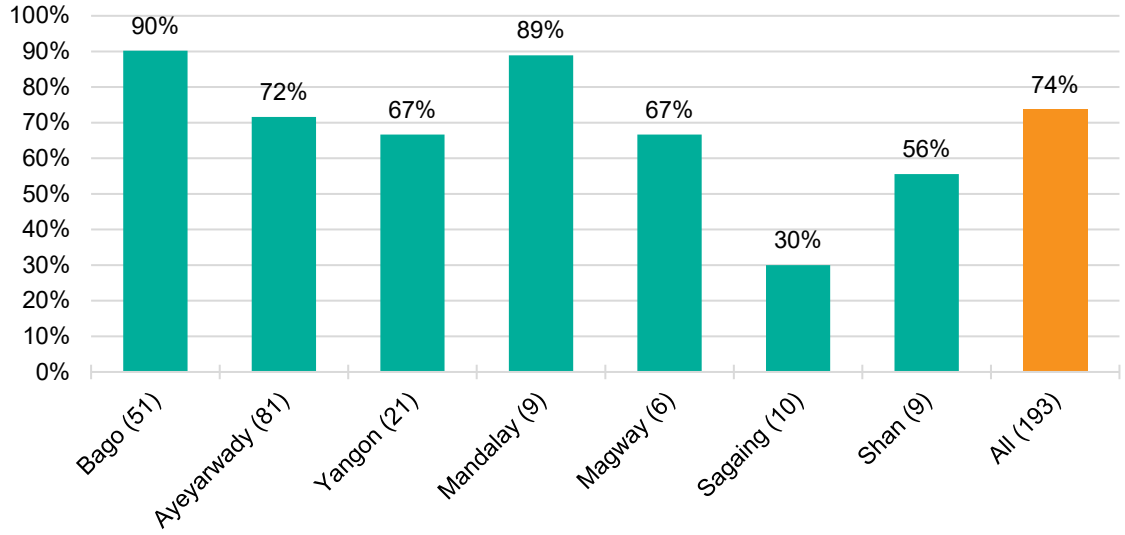
	Sep-24 (%)	Aug-23 (%)
Enough savings to survive a period of losses		
All	62	71
Micro/small	51	62
Medium/large	64	73
Violence near mills (last 30 days)		
All	13	8
Micro/small	18	9
Medium/large	12	7
Insecurity		
All	10	9
Hills	25	10
Dry Zone	14	16
Delta	8	8

Source: Miller survey– August 2023, and September 2024 rounds.

Floods and expected monsoon harvests

As an addition to the September 2024 survey, we asked specific questions about anticipated impacts of flooding on local paddy production. The results present a striking picture of impacts. Overall, nearly three quarters of millers reported that floods affected the monsoon paddy production in their areas. Major rice producing areas in the delta are among the most affected, including Bago (90 percent affected), Ayeyarwady (72 percent affected), and Yangon (67 percent affected). Mills in the Mandalay region also report very high impacts of the flooding.

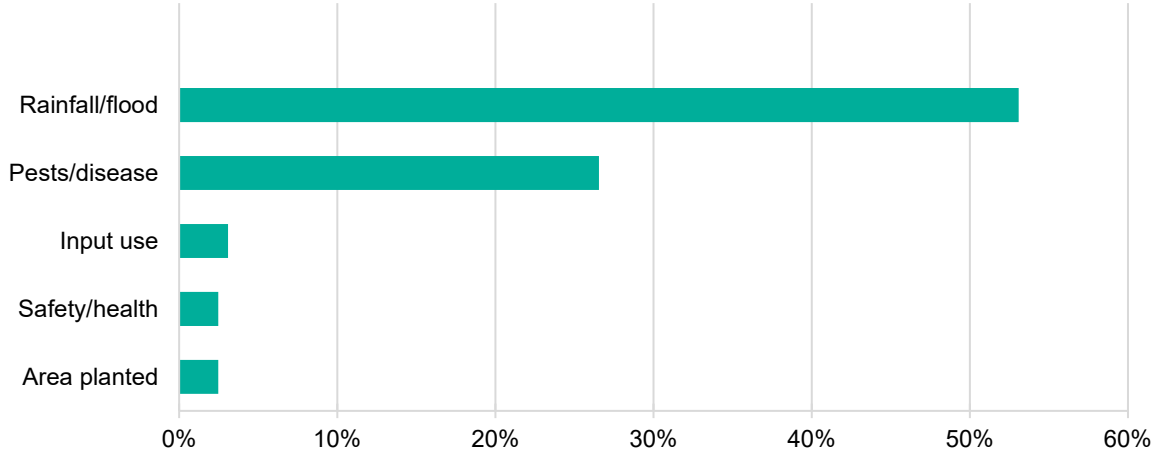
Figure 4. Floods affecting local 2024 monsoon paddy production, share of millers



Source: Miller survey–September 2024 survey round.

We also asked millers about expected monsoon paddy harvests in their townships relative to the 2023 season. Strikingly, 63 percent of millers expect a decline in paddy production while just 11 percent expect an increase. The dominant reason for expected declines was flooding or rainfall patterns (Figure 5), though pests and diseases were also a common reason given (27 percent). The two are likely related as increased moisture levels provide ideal conditions for fungal diseases and some pest populations.

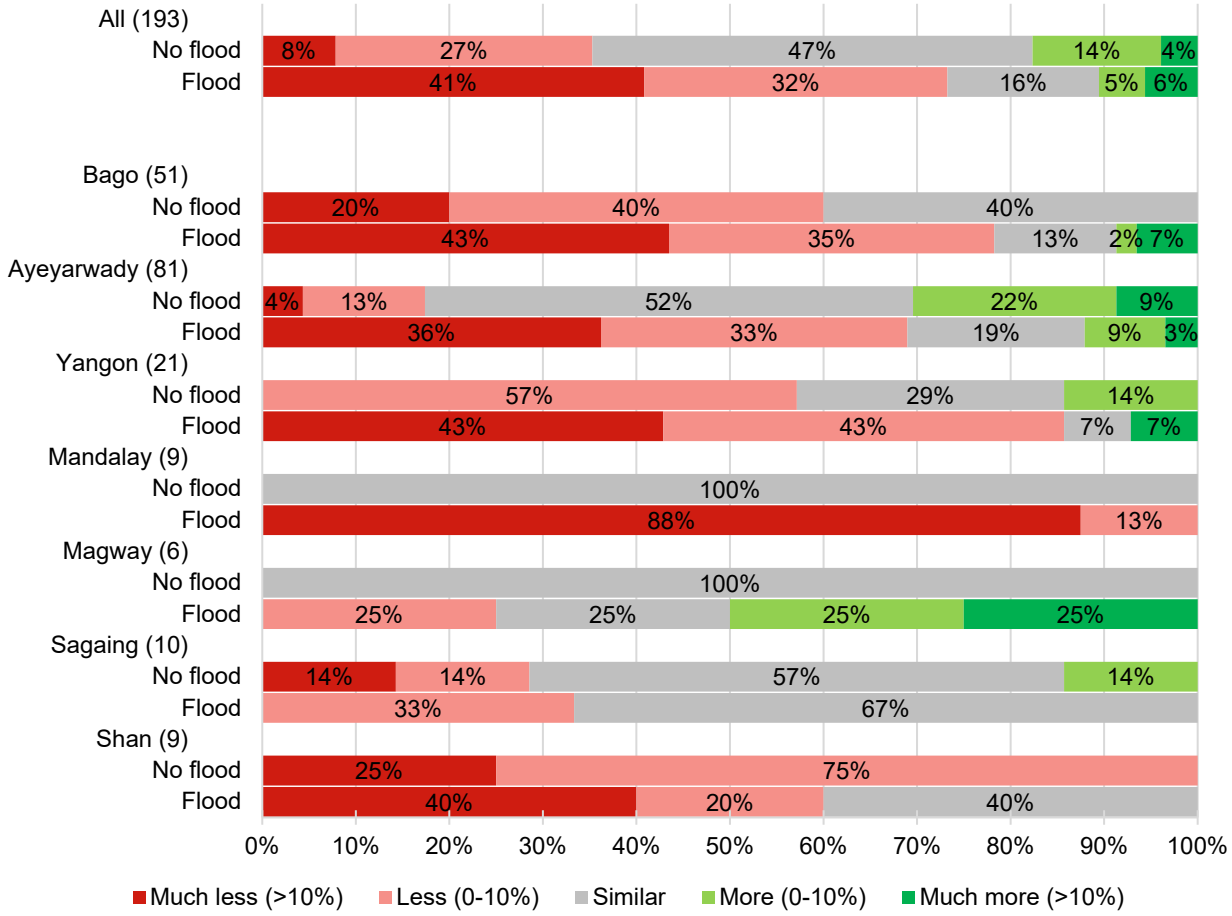
Figure 5. Main reason for decline in local paddy production



Source: Miller survey–September 2024.

Expected paddy changes are closely linked to reported flood incidence. Mills that said that flooding affected local paddy production expect much larger declines (Figure 6) – 41 percent expect declines of more than 10 percent and an additional 32 percent expect declines of less than 10 percent. Overall, very few millers expect increases in paddy production, even among those that do not report flood damage. The flood impacts on expected paddy production are most severe in the Delta (Bago, Ayeyarwady, and Yangon), where 69–86 percent of flood-affected mills expect less paddy production, and 36–43 percent of flood-affected millers expect large declines, compared to 0–20 percent for those not affected by floods. Mandalay and Shan also show high flood impacts, while Magway and Sagaing show relatively smaller impacts.

Figure 6. Expected changes in local paddy production relative to last year, by flood incidence



Source: Miller survey–September 2024.

Rice milling operations

A series of questions on milling operations were asked to understand how rice millers have responded to their many challenges. Milling throughput in the last 30 days, storage of paddy and rice, the number of daily workers, and weekly working capital all show increases relative to August 2023 (Table 2), but these likely reflect seasonal increases in milling activity in September and not broader growth of the milling sector. Milling commission fees have increased by approximately 37 percent compared to the previous year. There was a modest expansion of credit provided to farmers in the 2024 monsoon compared to previous years. The share of mills lending out increased by 2 percentage points and the conditional amount lent increased by 44 percent relative to August 2023. More strikingly, the share of millers borrowing money increased by 13 points relative to last year

(from just 7 percent to 20 percent of mills) though the conditional average amount decreased by 11 percent.

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

	Sep-24	Aug-23	Aug-22
Throughput			
Last 30 days (MT)	243	162	158
Monsoon growing season (Jun-Aug, MT)	683	657	505
Storage			
Paddy (# of bags)	10,982	7,357	10,434
Rice (# of bags)	471	400	470
Employees			
Daily workers (#)	16	12	11
Daily wage (MMK/day)	13,138	9,720	7,915
Working capital			
Weekly capital to buy paddy ('00,000 MMK)	1,415	390	576
Milling commission fees			
Fees for milling 108lb bag (MMK)	1,934	1,418	1,187
Credit lent out (monsoon season)			
Share lending out (%)	14	12	13
Conditional average amount ('00,000 MMK)	1,158	800	544
Credit borrowed in (monsoon season)			
Share borrowing (%)	20	7	8
Conditional average amount ('00,000 MMK)	2,123	2,395	2,090

Source: Miller survey–August 2022, August 2023, and September 2024 survey rounds.

Rice and byproduct prices and milling margins

An important part of each survey is to collect mill-level price data for paddy, rice, and byproducts. We report findings for two rice variety groups: Emata, the predominant variety for local consumption and exports, and Pawsan, a more expensive type preferred locally by affluent urban consumers but with negligible exports (Figure 7). Paddy and rice prices continued their upward trajectory in 2024. Rice prices were on average 17–19 percent higher in 2024 compared to one year earlier. However, paddy price increases were more modest at 8 percent on average. Milling margins then account for a large portion of price increases. Indeed, margins increased in levels by about 30 percent on average compared to one year earlier and, as a share of rice prices, margins exceeded their 2021 levels increasing from 41 to 46 percent for Emata and from 43 percent to 48 percent for Pawsan.

Figure 7. Paddy prices and milling margins in August 2021 through 2024

Source: Miller survey–August 2021, 2022, 2023, and 2024 survey rounds.

Byproduct sales – predominantly broken rice and rice bran – are important for mill profits, particularly for larger mills, and their ability to sustain small milling margins for rice. The shares of millers selling these byproducts have changed from previous years. The shares selling large broken rice pieces and rice bran fell to their lowest levels since 2021 (Table 3). We observe variation in price movements across these three byproducts since 2023, with small broken rice increasing modestly (4 percent), large broken rice increasing by 13 percent, and bran decreasing by 26 percent. Such a steep decline in the rice bran price seems to be due to the lower demand from local animal feed industries, and the transportation and fuel price challenges has led to a reduction in quantities for both export and local demand. Among the millers selling, majorities report similar sales quantities to last year though 20–28 percent report declines. Overall, price variations and fewer millers selling could contribute to the rise in milling margins as millers need to generate more revenue from the main rice product.

Table 3. Byproduct sales and prices in Augst/September 2021–2024, medium and large-scale mills

	Broken rice - small	Broken rice - large	Bran
Share selling byproducts			
September 2024 (%)	73	69	74
August 2023 (%)	73	77	78
August 2022 (%)	68	80	81
August 2021 (%)	74	86	87
Price (MMK/lb)			
September 2024	378	549	291
August 2023	364	486	395
August 2022	222	287	246
August 2021	145	209	146
Change in sales quantity among selling, year-on-year			
Increase (%)	22	29	18
Decrease (%)	27	20	28
Same (%)	50	51	55

Source: Miller survey–August ’21, August ’22, August ’23, and September ‘24 survey rounds.

Looking forward

There will be less paddy produced from the 2024 monsoon season as a result of widespread flooding and pests. This is expected to further drive-up rice prices, which have already risen rapidly over the past three years. Millers also face a number of policy obstacles – including government-set reference prices for paddy and rice and intranational restrictions on paddy and rice shipments – that will increase transaction costs and push prices upward. Higher rice prices raise serious concerns about affordability and food security for Myanmar’s consumers.

Labor availability is a rising concern and rising costs of labor and fuel together with volatile byproduct markets and other business disruptions have likely contributed to rising milling margins, with a smaller share of rice price increases passed through to producers. This trend underscores the impacts of business disruptions and the need for stability.

ACKNOWLEDGMENTS

This work was undertaken as part of the Agrifood Value Chain Development (AVCD) in Myanmar: Implication for Livelihoods of the Rural Poor program, led by Michigan State University (MSU), in partnership with the International Food Policy Research Institute (IFPRI). This study was funded by the Livelihoods and Food Security Food (LIFT). This publication has not gone through IFPRI's standard peer-review procedure. The opinions expressed here belong to the authors, and do not necessarily reflect the views of LIFT, IFPRI, MSU, or the CGIAR.

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
1201 Eye St, NW | Washington, DC 20005 USA
T. +1-202-862-5600 | F. +1-202-862-5606
ifpri@cgiar.org
www.ifpri.org | www.ifpri.info

IFPRI-MYANMAR
IFPRI-Myanmar@cgiar.org
www.myanmar.ifpri.info

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). 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, or CGIAR.