

# Monitoring the Agri-food System in Myanmar

## Food vendors – September 2021 survey round

### Key findings

- Most food retail prices in September 2021 were higher than in September 2020. Retail prices of the cheapest variety of rice—by far the most important staple in Myanmar—have risen by 8 percent, on average. The relatively more expensive but widely locally consumed rice (Pawsan) increased by 17 percent.
- Relative to September 2020, national-level food price inflation in September 2021 stood at 11 percent. Inflation was highest in the Hills and Mountains areas (15 percent). Households in the poorest quintile were affected by food price inflation more than those in the richest while rural areas (12 percent) were exposed to almost twice the level of food inflation compared to urban areas (6 percent).
- Food availability is seemingly not a challenge at the national level in September 2021. Food vendors report that availability of most commodities is comparable to the same period in a normal year. However, there are increasing trade frictions with higher transportation costs and more frequent mobility issues due to lockdowns and insecurity problems.
- COVID-19 prevention measures were widely practiced by market vendors in 2020. While they had been abandoned by a substantial share of vendors surveyed in the middle of the year, these prevention measures were again widely adhered to in September 2021.

### Recommended actions

- It is important that vendors and their suppliers are allowed to continue to trade and that the smooth functioning of the food trading sector is prioritized during this difficult period. There should be few or no restrictions on national and international food transport flows and access for vendors to banking services should be maintained.
- Continued attention should be paid to ensure that all vendors follow COVID-19 prevention measures.
- Further close monitoring of food markets is needed.

## Introduction

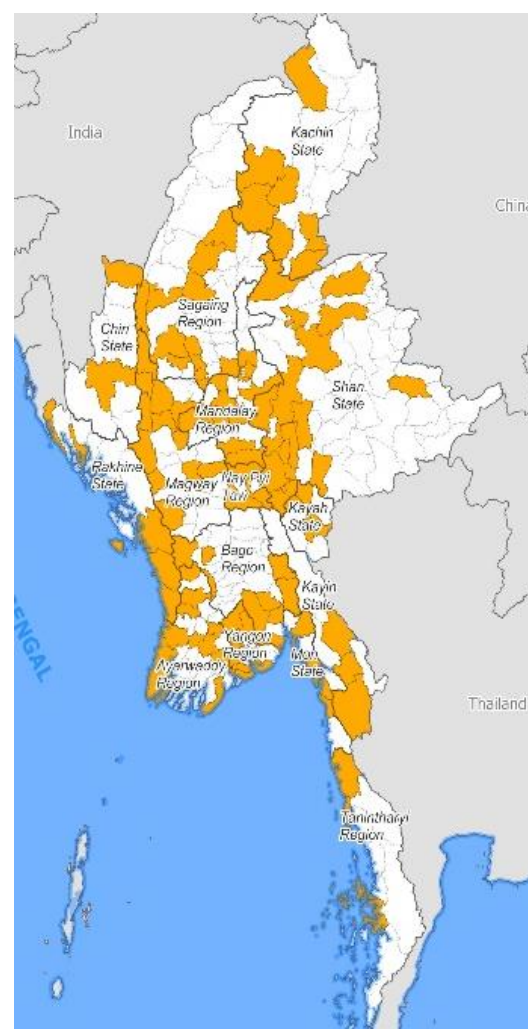
This Research Note presents the results from nine rounds of a telephone survey with food vendors conducted in rural and urban zones throughout Myanmar and focuses on the results from the latest round completed in September 2021. The purpose of the survey is to provide data and insights to interested stakeholders in order that they better understand the effects of shocks related to COVID-19 and the ongoing political crisis on Myanmar's food markets. In particular, the note explores COVID-19 prevention measures, changes in shopping behavior, difficulties in food vendor operations due to the COVID-19 and political crises, changes in availability and prices of foods, and perceived changes in consumption.

## Data and descriptive statistics

We conducted nine rounds of food vendor phone surveys between June/July 2020 and September 2021. The areas in which the surveyed food vendors operate are shown in Figure 1. The sample has changed slightly over survey rounds. In the most recent round, almost 200 food vendors were interviewed (Table 1). Food vendors in urban areas make up 15 percent of the sample, with the remaining 85 percent in rural areas.

The vendors selected for the survey sample were those that are well informed on food markets overall; they deal regularly with food traders such as suppliers and wholesalers, are highly numerate, and are knowledgeable about food prices. Table 1 shows the basic characteristics of the food vendors in our sample. More than half of the vendors are women, their average age is 42 years, and almost all vendors operate out of their own general stores.

**Figure 1: Location of surveyed food vendors**



Source: Food vendor survey (July 2021)

**Table 1: Profile of food vendors in the September 2021 survey sample, by location**

	Delta	Dry Zone	Hills and Mountains	Coastal	Total
Female (%)	57	52	65	37	55
Age (years)	43	43	38	46	42
General store owner (%)	86	95	100	97	94
Observations	49	74	26	42	191

Source: Food vendor survey (September 2021)

## COVID-19 prevention measures in food retail

We asked food vendors about the COVID-19 prevention measures that had been implemented in the village or township wet market where the vendor operated and compared their responses to the situations in December 2020 and other periods in 2021 (Table 2).

**Table 2: COVID-19 prevention measures in wet markets, December 2020, May 2021, July 2021, and September 2021, percentage of food vendors reporting**

	Dec 2020	May 2021	Jul 2021	Sep 2021
Handwashing stations with soap/disinfectant are operational	92	46	76	81
Disinfection of the market with chemical spray	87	34	56	75
Mandating vendors to wear masks	100	58	90	95
Mandating customers to wear masks	99	55	88	95
Ensuring proper distancing between vendors	85	15	34	55

Source: Food vendor survey (December 2020–September 2021)

We draw the following takeaways:

- Mask wearing was universally mandated and widely practiced at the end of 2020. However, by May 2021 a substantial share of vendors and customers in wet markets had abandoned these practices. Food vendors stated that only 58 and 55 percent of vendors and customers, respectively, were mandated to wear masks in May 2021. Yet, in the last two months, we note a significant improvement in these practices with 95 percent of both vendors and customers mandated to wear masks.
- Additional efforts—spraying chemicals throughout wet markets, operating handwashing stations, and proper distancing between vendors—were implemented by 87, 92, and 85 percent of vendors, respectively, in December 2020. These shares had declined to 34, 46, and 15 percent, respectively, in May 2021 but then increased to 75, 81, and 55 percent, respectively, in September 2021, likely driven by high recent incident rates of COVID-19 and the fear of being infected. Despite the recent increases, these shares are still below 2020 levels.

## Changes in business and consumer behavior

We asked a series of high-level questions about factors that may have affected food vendors' businesses in the last month (Table 3).

**Table 3: Adverse changes in the business operations of food vendors in the last month, percentage of vendors reporting**

	Urban (%)	Rural (%)	Total (%)
No effects on business	0	1	1
Prices I pay for some foods are higher	58	67	65
My profits have declined	15	33	30
Suppliers from outside the village having difficulties supplying me with products	31	29	29
My clients are visiting my shop less often	31	25	26
Local farmers are having difficulties supplying me with some products	15	18	17
My clients have less money	4	6	6
I have fewer selling hours or days	19	2	5
I had to close for most days	8	2	3
Curfew affects availability of foods that I can sell, as suppliers face challenges	4	2	2
I had to close completely	0	1	1
I have lost or let go employees	0	0	0
I was the victim of theft in my retail shop	0	0	0

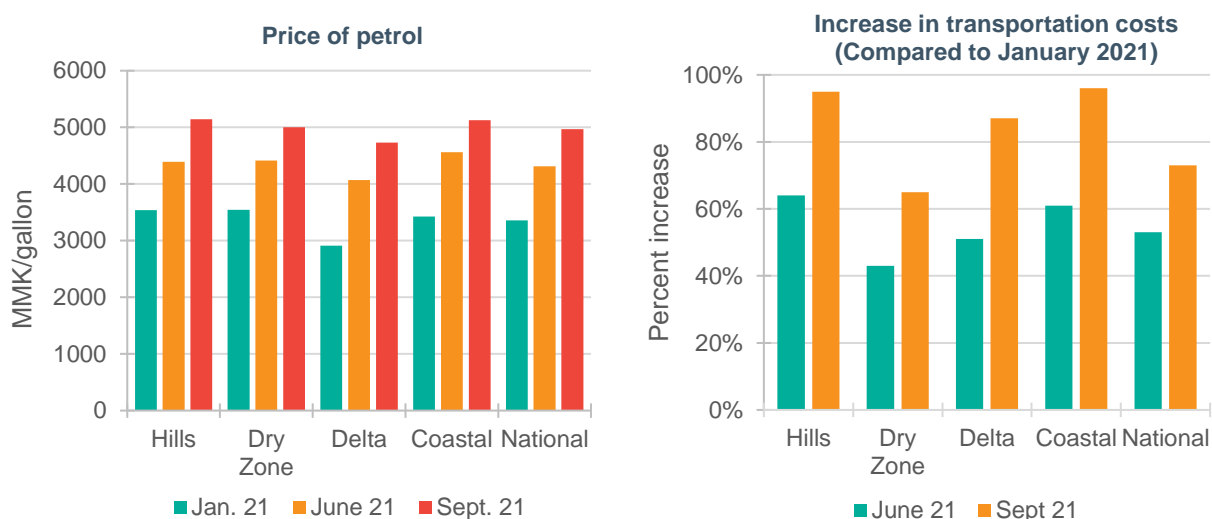
Source: Food vendor survey (September 2021)

Only 1 percent of food vendors indicated that recent events had not affected their business. Two-thirds of vendors reported that they had to pay higher prices than normal, and 17 percent reported

that suppliers from outside the village had difficulties supplying them with products while almost 30 percent indicated problems with supply from outside the village. Supply challenges may be a result of lockdowns and increased transportation costs. Additionally, almost 26 percent reported that clients were visiting their shop less often.

To investigate the important changes in fuel and transportation costs over the last nine months, food vendors were further asked about fuel costs as well as transportation costs for people traveling from their locality to Yangon at the time of the survey in September 2021. Recall questions were also asked about the situation in June 2021 and January 2021. Respondents report substantial increases across the board in both fuel and transportation costs. As displayed in the left panel of Figure 2, the average price of petrol at the national level increased by 50 percent between January 2021 and September 2021, and price increases were similar in all agri-ecological regions. For transportation costs (shown on the right panel), we note an average increase of 72 percent, comparing September 2021 to January 2021, at the national level. Increases are particularly high for the more remote regions (i.e., the Hills and Mountains zone and the Coastal zone). Compared to nine months earlier, prices in these zones increased by 95 percent and 96 percent, respectively.

**Figure 2: Changes in fuel and transportation costs (per person, to Yangon)**



Source: Food vendor survey (September 2021)

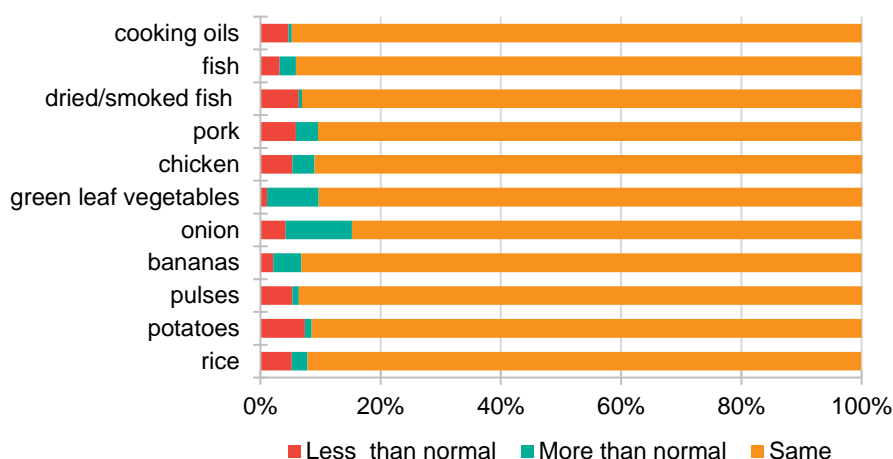
Note: Delta (Ayeyawaddy, Bago, Mon, Yangon); Coastal (Rakhine, Tanintharyi); Central Dry (Mandalay, Magwe, Nay Pyi Taw, Sagaing); Hills and Mountains (Chin, Kachin, Kayah, Kayin, Shan).

## Changes in food availability and purchases

Major food security concerns among Myanmar households include adverse changes in the availability and prices of products, possibly linked to more limited mobility in the country due to COVID-19 measures and the political crisis. We therefore asked food vendors for their perceptions of changes in the availability of different food products compared to similar periods in previous years.

In the September 2021 survey round, there were no major issues with the availability of food products in most markets. Most vendors reported that availability of food products in their village or township was the same as normal (Figure 3). However, there is variation by food group. For onions, 11 percent of vendors reported even greater availability now compared to the same period in a typical year. This suggests that food supply systems have generally been resilient in the current crises.

**Figure 3: Availability of food products in July 2021 compared to normal periods, percentage of food vendors reporting, by food type**

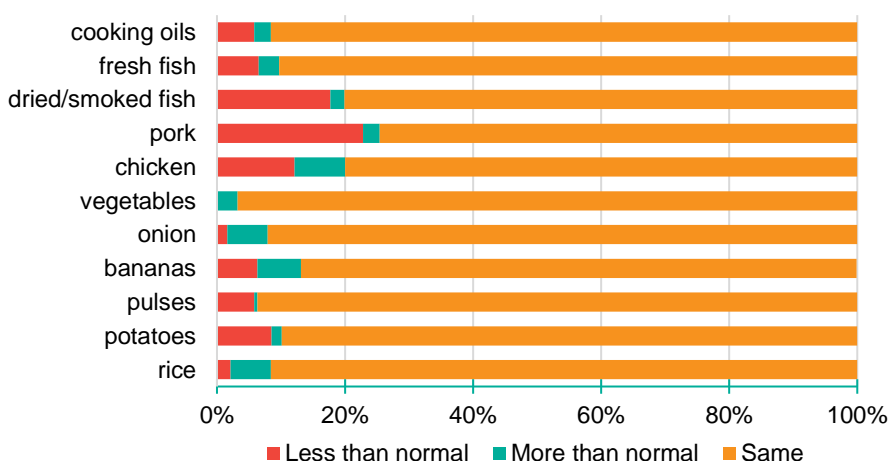


Source: Food vendor survey (September 2021)

### Changes in purchases by food vendors' clients

We further asked food vendors to assess how quantities purchased by their consumers in September 2021 had changed compared to normal periods. They reported that the quantities purchased are at normal levels for most food products. The “same” category varied between 97 percent for vegetables and 75 percent for pork (Figure 4). The latter products—and animal-sourced products in general—seem to have taken the biggest hit since the start of the COVID-19 pandemic and the political crisis. This result is consistent with the high-income elasticities of animal-source foods; when incomes decline, these products are consumed less frequently (proportionally more so than the decline in income). This is due in part to animal-source foods being relatively expensive calorie sources despite their high density of micronutrients and high-quality protein.

**Figure 4: Changes in quantities of food products purchased in September 2021 compared to normal, percentage of food vendors reporting, by food type**

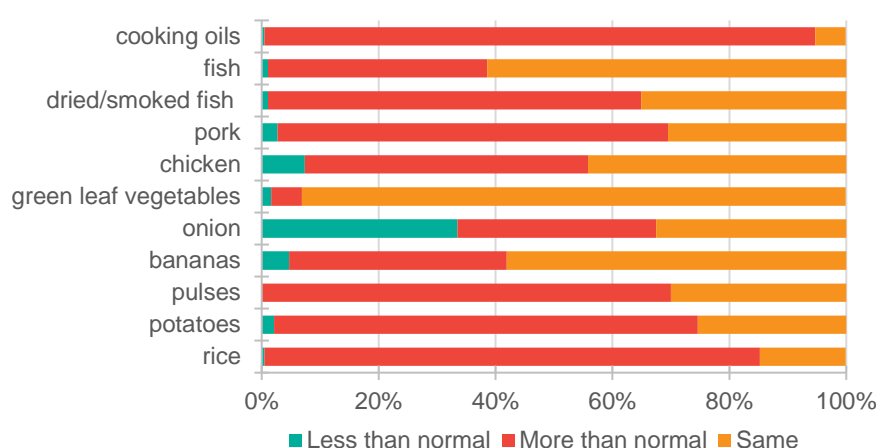


Source: Food vendor survey (September 2021)

### Changes in prices and price inflation

While availability may not have significantly changed, changes in prices may indicate other signs of stress in the food marketing system. In a similar manner as for the availability questions, we asked food vendors to compare prices at the time of the survey to similar periods in a normal year. Overall, a large share of food vendors report increases in the retail prices of most foods, with the largest share indicating increases for rice, chicken, pork, dried fish, and cooking oil (Figure 5).

**Figure 5: Retail prices of food products in September 2021 compared to normal periods, percentage of food vendors reporting, by food type**



Source: Food vendor survey (September 2021)

To compare price differences between different periods, we present average and median prices for major foods in September 2020, July 2021, and September 2021 (Table 4). This analysis indicates overall significant food price increases in September 2021 compared to the situation almost one year earlier. Prices of the cheapest available rice and cooking oil increased by 8 percent and 64 percent, respectively, in September 2021 compared to September 2020. The price of the more expensive and locally preferred rice (Pawsan) increased by 17 percent compared to the same period last year. On the other hand, onions showed an 11 percent price decreases compared to September 2020. Yet, in the short run, price increases between July and September 2021 were most severe for potatoes (17 percent), pulses (13 percent), onions (18 percent) and cooking oil (11 percent).

**Table 4: Average and median reported food prices for September 2020, July 2021, and September 2021, by food type**

	Sep 2020 (MMK/kg)		Jul 2021 (MMK/kg)		Sep 2021 (MMK/kg)		% Difference (Compared to Sep 2021)	
	Average	Median	Average	Median	Average	Median	Sep 2020	July 2021
Rice (cheapest)	630	611	681	705	681	705	8.04	-0.07
Rice (pawsan)	958	940	1094	1128	1121	1175	16.99	2.48
Potatoes	659	614	697	675	818	736	24.11	17.28
Pulses	1394	1372	1583	1534	1788	1840	28.27	12.97
Bananas	660	706	619	565	655	706	-0.72	5.87
Onions	523	491	391	368	463	399	-11.40	18.47
Green leafy vegetables	266	267	283	294	295	294	10.80	4.05
Chicken	4105	3988	4222	4294	4182	4294	1.87	-0.96
Pork	5030	4908	5679	6134	5848	6135	16.25	2.98
Dried fish	5076	4908	5779	4908	5759	5521	13.46	-0.33
Fresh fish	2928	3067	2896	2761	3045	3067	3.97	5.13
Cooking oil	1668	1534	2481	2331	2743	2577	64.41	10.56

Source: Food vendor survey (September 2020–September 2021)

Finally, we calculate overall food price inflation in September 2021 and compare price levels to those gathered from food vendors in the third food vendor survey round conducted in September 2020, in December 2020, the last round before the military takeover, and in the previous survey round in July 2021. To give different weights to these prices to allow an estimate to be made of food price inflation overall, we use average consumption levels from the Myanmar Poverty and



Living Condition Survey (MPLCS), a nationally representative sample of households conducted in 2015, for the different food groups listed in Table 4. On top of the national food price inflation levels, we also calculate inflation levels faced by subgroups (urban/rural, four agro-ecological zones, and poverty quintiles), relying on data on their different food consumption patterns from the MPLCS. The estimates of food price inflation are reported in Table 5. These results are imperfect and approximate, since we only use one representative price per food group. We also have no data on processed foods and food consumed away from home.

**Table 5: Food price inflation, September 2021 relative to September 2020, December 2020, and July 2021**

	% Difference (Compared to Sep 2021)		
	Sep 2020	Dec 2020	Jul 2021
Overall	10.9	10.0	3.0
Urban	6.2	6.0	-1.2
Rural	12.0	10.9	3.6
Hills and Mountains	14.9	13.6	5.4
Dry Zone	10.5	8.4	0.2
Delta	10.8	11.2	6.2
Coastal	8.0	11.4	0.7
Poverty quintile 1 (poorest)	12.5	11.1	2.9
Poverty quintile 2	11.9	10.6	2.9
Poverty quintile 3	11.4	10.3	3.0
Poverty quintile 4	10.6	9.8	3.0
Poverty quintile 5 (richest)	9.5	9.1	2.8

Source: Food vendor survey (September 2020–September 2021)

Note: Delta (Ayeyawaddy, Bago, Mon, Yangon); Coastal (Rakhine, Tanintharyi); Central Dry (Mandalay, Magwe, Nay Pyi Taw, Sagaing); Hills and Mountains (Chin, Kachin, Kayah, Kayin, Shan).

Food price inflation over the 12-month period from September 2020 to September 2021 amounted to 10.9 percent. Urban areas had significantly lower inflation rates than rural areas (6.2 vs. 12.0 percent). The Hills and Mountains areas (14.9 percent) showed substantially higher food inflation than other agri-ecological zones. We further find that food price inflation was higher for households in the poorest quintile (12.5 percent) than for richer households (9.5 percent) indicating that foods eaten by the poor were more affected by price inflation than those eaten by better-off households. Table 5 also illustrates that most food inflation occurred over the last 9 months (i.e., between December 2020 and September 2021) as shown by the relatively high price increases over that period.<sup>1</sup> At the national level, the cost of a food basket increased by 10.0 percent between December 2020 and September 2021. The increase was highest between December 2020 and July 2021 but has leveled off since.

<sup>1</sup> However, note that we are unable to control for normal seasonality in food prices in making these price comparisons.

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