

# Monitoring the Agri-food System in Myanmar

## Food vendors – December 2021 survey round

### Key findings

- Relative to December 2020, national-level food price inflation in December 2021 stood at 19 percent. Inflation was widespread in the country and affected urban and rural areas, all agro-ecological zones, and the poor and the rich to a similar extent.
- Most food retail prices in December 2021 were significantly higher than in December 2020. However, prices for rice—the most important staple in the country—have kept overall price inflation down, possibly linked to problems with rice exports to China, typically the largest importer of rice from Myanmar. Retail prices of rice still increased, but less so than most other food products. Prices of the cheapest variety of rice rose by 9 percent, on average, between December 2020 and December 2021.
- Food availability is seemingly not a challenge at the national level in December 2021, except for specific areas in the country where political insecurity is most severe. Food vendors report that availability of most commodities is comparable to the same period in a normal year. However, there have been large price increases over the last year in fuel (almost double) and transportation (almost 60 percent higher), leading to larger marketing costs and to an increasing wedge between producer and retail prices.
- While COVID-19 prevention measures were widely practiced during the previous wave of COVID-19 infections (i.e., September 2021), they have again been abandoned by a substantial share of vendors surveyed in December 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, especially with the expected surge in COVID-19 cases with the arrival of the omicron variant in Myanmar.
- Further close monitoring of food markets is needed.

## Introduction

This Research Note presents the results from 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 December 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 ten rounds of food vendor phone surveys between June/July 2020 and December 2021. The sample has changed slightly over survey rounds. In the most recent round, 187 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.

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

|                         | Hills | Dry Zone | Delta | Coastal | Total |
|-------------------------|-------|----------|-------|---------|-------|
| Female (%)              | 63    | 53       | 58    | 43      | 57    |
| Age (years)             | 40    | 43       | 43    | 48      | 42    |
| General store owner (%) | 98    | 93       | 87    | 100     | 93    |
| Observations            | 51    | 74       | 55    | 7       | 187   |

Source: Food vendor survey–December 2021.

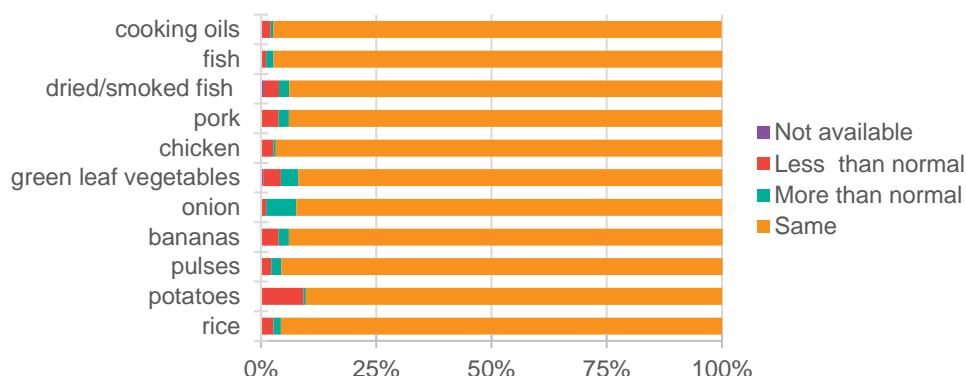
The vendors selected for the survey sample were those that are well informed on food markets overall; they deal regularly with food traders such as suppliers and wholesalers, are highly numerate, and are knowledgeable about food prices. Table 1 shows the basic characteristics of the food vendors in our 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.

## 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 December 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 1). This suggests that food supply systems have generally been resilient in the current crises. However, there is variation by food group. Potatoes were less available than normal, linked to lower imports from China as well as apparent lower production levels. For onions on the other hand, 7 percent of vendors reported even greater availability now compared to the same period in a typical year.

**Figure 1: Availability of food products in December 2021 compared to normal periods, percentage of food vendors reporting, by food type**

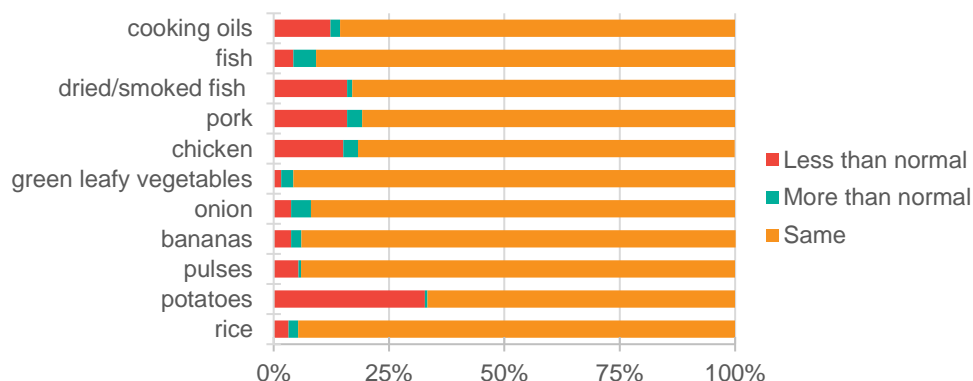


Source: Food vendor survey–December 2021.

### Changes in purchases by food vendors' clients

We further asked food vendors to assess how quantities purchased by their consumers in December 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 96 percent for green leafy vegetables and 67 percent for potatoes (Figure 2). Potato consumption has seemingly declined due to their lower availability and recent price increases. Animal-sourced products in general seem also to have taken a big 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 2: Changes in quantities of food products purchased in December 2021 compared to normal, percentage of food vendors reporting, by food type**

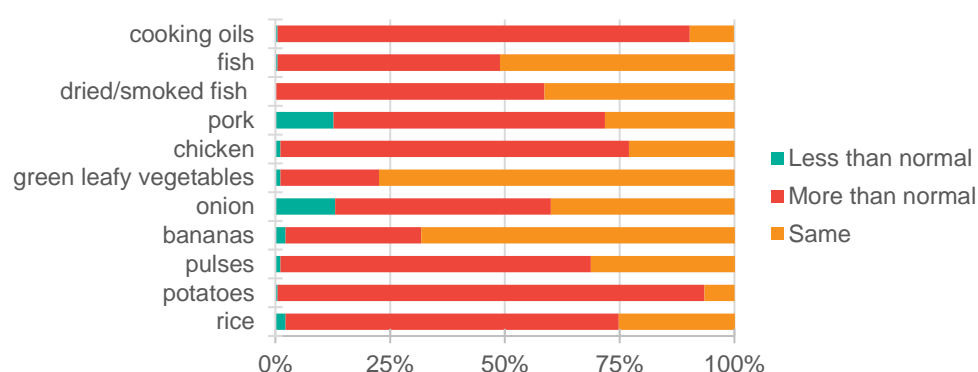


Source: Food vendor survey–December 2021.

### 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, potatoes, pulses, chicken, and cooking oil (Figure 3).

**Figure 3: Retail prices of food products in December 2021 compared to normal periods, percentage of food vendors reporting, by food type**



Source: Food vendor survey–December 2021.

To compare price differences between different periods, we present average and median prices for major foods in December 2020, September 2021, and December 2021 (Table 2). This analysis indicates overall significant food price increases in December 2021 compared to the situation one year earlier. Prices of the cheapest available rice and cooking oil increased by 9 percent and 95 percent, respectively, in December 2021 compared to December 2020. On the other hand, onions showed a 15 percent price decrease compared to December 2020. Yet, in the short run, price increases between September 2021 and December 2021 were most severe for potatoes (64 percent), onions (26 percent), green leafy vegetables (23 percent) and cooking oil (25 percent). The prices of cooking oil might however have come down since the last survey as the military government sold palm oil to eight importing companies at a low rate to allow them to distribute palm oil at a fixed price of 4,276 MMK per viss (1.6 kg).

**Table 2: Average and median reported food prices for December 2020, September 2021, and December 2021, by food type**

|                           | Dec 2020<br>(MMK/kg) |        | Sep 2021<br>(MMK/kg) |        | Dec 2021<br>(MMK/kg) |        | % difference<br>(compared to<br>Dec 2021) |          |
|---------------------------|----------------------|--------|----------------------|--------|----------------------|--------|---|----------|
|                           | Average              | Median | Average              | Median | Average              | Median | Dec 2020                                  | Sep 2021 |
| Rice (cheapest)           | 633                  | 611    | 681                  | 705    | 688                  | 705    | 8.69                                      | 1.03     |
| Rice (pawsan)             |                      |        | 1121                 | 1175   | 1156                 | 1175   |   | 3.12     |
| Potatoes                  | 723                  | 736    | 818                  | 736    | 1343                 | 1227   | 85.75                                     | 64.18    |
| Pulses                    | 1448                 | 1470   | 1788                 | 1840   | 1796                 | 1840   | 24.03                                     | 0.45     |
| Bananas                   | 608                  | 706    | 655                  | 706    | 700                  | 706    | 15.13                                     | 6.87     |
| Onions                    | 645                  | 614    | 434                  | 399    | 546                  | 491    | -15.35                                    | 25.81    |
| Green leafy<br>vegetables | 318                  | 267    | 295                  | 294    | 363                  | 294    | 14.15                                     | 23.05    |
| Chicken                   | 4080                 | 4294   | 4182                 | 4294   | 4651                 | 4908   | 14.00                                     | 11.21    |
| Pork                      | 5027                 | 4908   | 5848                 | 6135   | 5582                 | 5521   | 11.04                                     | -4.55    |
| Dried fish                | 4589                 | 4601   | 5759                 | 5521   | 6156                 | 5521   | 34.15                                     | 6.89     |
| Fresh fish                | 2861                 | 2761   | 3045                 | 3067   | 3220                 | 3067   | 12.55                                     | 5.75     |
| Cooking oil               | 1753                 | 1687   | 2743                 | 2577   | 3421                 | 3374   | 95.15                                     | 24.72    |

Source: Food vendor survey–December 2020–December 2021.

Finally, we calculate overall food price inflation in December 2021 and compare price levels to those gathered from food vendors in December 2020 and in the previous survey round in September 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 2. 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 3. 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 3: Food price inflation, December 2021 relative to December 2020 and July 2021**

|                              | % difference<br>(compared to Dec 2021) |          |
|------------------------------|--|----------|
|                              | Dec 2020                               | Sep 2021 |
| Overall                      | 18.9                                   | 8.0      |
| Urban                        | 19.5                                   | 12.8     |
| Rural                        | 18.9                                   | 7.3      |
| Hills and Mountains          | 20.2                                   | 5.8      |
| Dry Zone                     | 20.1                                   | 10.8     |
| Delta                        | 20.0                                   | 7.9      |
| Coastal                      | 18.5                                   | 6.4      |
| Poverty quintile 1 (poorest) | 18.8                                   | 6.9      |
| Poverty quintile 2           | 19.0                                   | 7.6      |
| Poverty quintile 3           | 19.3                                   | 8.1      |
| Poverty quintile 4           | 18.8                                   | 8.2      |
| Poverty quintile 5 (richest) | 18.6                                   | 8.7      |

Source: Food vendor survey–December 2020–December 2021.

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

Food price inflation over the 12-month period from December 2020 to December 2021 amounted to 18.9 percent. There are no major differences in inflation rates for urban versus rural areas, by agro-ecological zone, or by poverty quintile. Table 3 also illustrates that important food inflation occurred over the last three months (i.e., between September 2021 and December 2021) in particular as shown by the relatively high price increases over that period. At the national level, the cost of a food basket increased by 8.0 percent between September 2021 and December 2021. Note that the harvest of monsoon normally comes in the month of December and therefore typically leads to lower prices during this period of the year. This did not happen this year.

## 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 in other periods in 2021 (Table 4).

**Table 4: COVID-19 prevention measures in wet markets, December 2020 to December 2021, percentage of food vendors reporting**

|   | Dec 2020 | May 2021 | Jul 2021 | Sep 2021 | Dec 2021 |
|---|----------|----------|----------|----------|----------|
| Mandating vendors to wear masks                             | 100      | 58       | 90       | 95       | 70       |
| Mandating customers to wear masks                           | 99       | 55       | 88       | 95       | 70       |
| Handwashing stations with soap/disinfectant are operational | 92       | 46       | 76       | 81       | 60       |
| Disinfection of the market with chemical spray              | 87       | 34       | 56       | 75       | 54       |
| Ensuring proper distancing between vendors                  | 85       | 15       | 34       | 55       | 26       |

Source: Food vendor survey–December 2020–December 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. In the previous COVID-19 wave in September 2021, we noted a significant improvement in these practices with 95 percent of both vendors and customers mandated to wear masks. However, the share of markets mandating vendors and customers to wear masks declined again in the most recent survey round (December 2021).
- 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. The share of markets implementing these efforts in December 2021 are also significantly below their 2020 levels—54, 60, and 26 percent, respectively.

## 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 5).

**Table 5: Adverse changes in the business operations of food vendors in the last month, percentage of vendors reporting**

|  | Urban (%) | Rural (%) | Total (%) |
|--|-----------|-----------|-----------|
| My clients are visiting my shop less often   | 61        | 53        | 54        |
| Prices I pay for some foods are higher   | 57        | 52        | 52        |
| My profits have declined   | 61        | 50        | 51        |
| My clients have less money   | 7         | 24        | 21        |
| Local farmers are having difficulties supplying me with some products              | 4         | 16        | 14        |
| No effects on business   | 7         | 8         | 8         |
| Suppliers from outside village have difficulties supplying me with products        | 7         | 4         | 4         |
| I have fewer selling hours or days   | 0         | 3         | 3         |
| I had to close for most days   | 0         | 3         | 2         |
| I have lost or let go employees  | 0         | 3         | 2         |
| Curfew affects availability of foods that I can sell, as suppliers face challenges | 0         | 1         | 1         |
| I was the victim of theft in my retail shop  | 0         | 0         | 0         |
| I had to close completely  | 0         | 0         | 0         |

Source: Food vendor survey—December 2021.

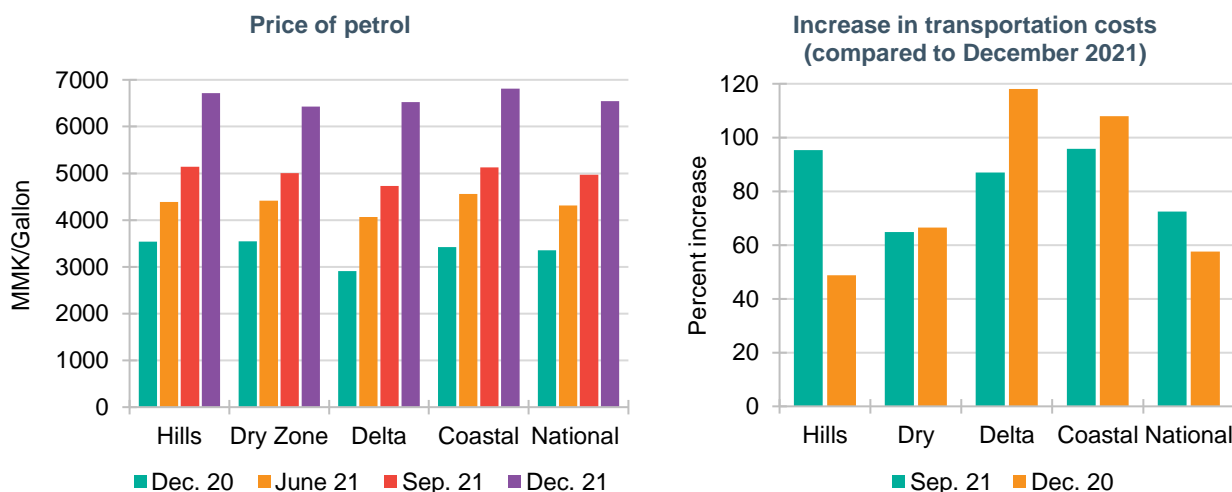
Only 8 percent of food vendors indicated that recent events in the country had not affected their business. More than half of the vendors reported that they had to pay higher prices than normal, and 14 percent reported that farmers from inside the village had difficulties supplying them with products while almost 4 percent indicated problems with suppliers from outside the village. Supply challenges may be a result of lockdowns and increased transportation costs. Additionally, 54 percent reported that clients were visiting their shop less often.

To investigate the important changes in fuel and transportation costs over the last year, food vendors were further asked about fuel and transportation costs for people traveling from their locality to Yangon at the time of the survey in December 2021. Recall questions were also asked about the situation in September 2021, June 2021, and December 2020. Respondents report substantial increases across the board in both fuel and transportation costs. As displayed in the left panel of Figure 4, the average price of petrol at the national level almost doubled between December 2020 and December 2021, and price increases were similar in all agri-ecological regions. For transportation costs (shown on the right panel of Figure 4), we note an average increase of



58 percent when comparing December 2021 to December 2020 at the national level. Increases are particularly high in the Delta and the Coastal Zone. Compared to almost a year ago, prices in these zones increased by 118 percent and 108 percent, respectively.

**Figure 4: Changes in fuel and transportation costs (per person, to Yangon)**



Source: Food vendor survey–December 2021.

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

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