MYANMAR

IFPRI

STRATEGY SUPPORT PROGRAM RESEARCH NOTE 107 APRIL 2024

Monitoring the Agri-food System in Myanmar

The rising costs of diets – March 2024 survey round

We assess changes in food prices and diet costs based on large-scale surveys of food vendors (fielded from June 2020 until March 2024) and households (fielded in six periods in 2022 and 2023) in rural and urban areas and in all states/regions of Myanmar.

Key Findings

- Between early 2023 and early 2024, the cost of a healthy and commonly consumed diet increased by 29 and 37 percent respectively.
- Prices of rice – the major staple – were more than two and a half times higher in early 2024 compared to two years prior. Prices rose by 62 percent between February 2023 and March 2024.
- Between early 2022 and early 2024, the price of onions tripled; the price of pulses, leafy greens, bananas, and sugar doubled or nearly doubled; the price of most animal source foods increased by 60–75 percent; and the price of oil declined slightly.
- The highest costs of common and healthy diets are seen in conflict-affected Rakhine, Chin, Kayah, and Shan states. In March 2024, the costs of the healthy and common diets in Rakhine were 60 and 31 percent higher, respectively, than the national average, while common diet costs were 11 percent higher in Chin and healthy diet costs were 9 percent higher in Shan.
- Diet costs spatially adjusted for differences in casual wage rates are highest in Rakhine and Kayah, indicating that diet costs are least affordable for wage earners in these states.
- The highest rate of food price inflation over the last 13 months was noted in Rakhine State. The costs of a common diet in March 2024 increased there worryingly by 89 percent compared to February 2023, seemingly linked to increased movement restrictions and the recent high conflict intensity.

Recommended Actions

- Food should be available at low costs to avoid food security and nutrition problems in the country; assuring a well-functioning agri-food system should therefore be a priority for all stakeholders.
- The food price situation in Rakhine State is most worrisome of all states and regions and the state should best be targeted – to the extent that this possible – for assistance.

USAID FROM THE AMERICAN PEOPLE

FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

Introduction

This research note presents the results of 26 rounds of interviews with food vendors in rural and urban areas throughout Myanmar conducted between June 2020 and March 2024. The purpose of the surveys is to provide data and insights on Myanmar's food markets to interested stakeholders to foster better understanding of the effects of shocks related to COVID-19 and the ongoing political crisis. The focus of this research note is on changes in food prices and the cost of common and healthy diets.

Data

MAPSA collects food prices in Myanmar using three sets of ongoing phone surveys. First, the COVID-19 food vendor survey (C19-FV) is MAPSA's longest running food vendor survey in Myanmar. Fifteen rounds of the C19-FV have been completed between June 2020 and August 2023.[1] Second, the Myanmar Household Welfare Survey (MHWS) is a large panel survey conducted by phone (minimum 12,000 households per round). To date, six rounds have been completed covering the period from December 2021 to November 2023.[2] MHWS respondents who report operating household businesses that sell food (mobile or fixed food vendors and food traders, brokers, or wholesalers) are selected to participate in a food vendor module. Finally, for more frequent and detailed food price monitoring, IFPRI conducts a survey of MHWS food vendors between MHWS survey rounds (MHWS-FV). Five rounds have been completed between March 2022 and March 2024. None of the food vendor surveys are nationally representative. Furthermore, the C19-FV has a greater focus on rural areas compared to the MHWS and the MHWS-FV.[3]

In all surveys, vendors are asked to report prices for the cheapest common or available variety of ten types of foods (basic food list): rice, potatoes, pulses, chicken, fresh fish, dried fish, green leafy vegetables, onions, bananas, and oils.[4] Additionally, the C19-FV and MHWS-FV surveys collect pork prices in all rounds; egg, tomato, salt, and sugar prices beginning in 2022; and, garlic, ngapi, and dried chili prices beginning in July/August 2023. In this report, the expanded food list refers to the basic food list plus eggs, pork, and tomatoes. Unless noted, diet costs are estimated using the expanded food list.

Food prices between June 2020 and March 2024

Table 1 presents changes in median food prices.[5] Between February 2023 and March 2024, the price of most foods increased by a similar or lower rate compared to the previous year (March 2022–February 2023). Median rice prices continue to increase rapidly, posing an important threat to food security. **In March 2024, rice prices were more than two and a half times higher compared to**

[1] For more information on the C19-FV refer to the following reference: Minten, Bart; Oo, Than Zaw; Headey, Derek D.; Lambrecht, Isabel; and Goudet, Sophie. 2020. Monitoring the impacts of COVID-19 in Myanmar: Food vendors - June and July 2020 survey round. Myanmar SSP Policy Note 30. Washington, DC: International Food Policy Research Institute (IFPRI). https://doi.org/10.2499/p15738coll2.134015

[2] For more information on the MHWS refer to the following reference: Myanmar Agriculture Policy Support Activity (MAPSA). 2022. Phone surveillance, from scratch: Novel sample design features of the nationally representative Myanmar Household Welfare Survey (MHWS). Myanmar SSP Working Paper 16. Washington, DC: International Food Policy Research Institute (IFPRI). https://doi.org/10.2499/p15738coll2.135837

[3] The most recent survey rounds have sample sizes of 160 in the C19_FV, 601 in the round 6 MHWS, and 702 in round 5 MHWS-FV. Eighty-four percent of C19-FV vendors are located in rural areas compared to 62 and 66 percent in the MHWS and MHWS-FV. Furthermore, the C19-FV sample only includes vendors who sell from a fixed location, whereas about 20 and 25 percent of MHWS and MHWS-FV respondents are mobile vendors.

[4] In the MHWS-FV survey and beginning in 2022 for the C19-FV survey, vendors are asked to report up to 5 common varieties of rice and 6 pulses. For this analysis, we use the price of the cheapest variety reported.

[5] Differences in food and diet costs reported in this research note compared to values reported by the World Food Programme can be attributed to differences in time periods, geographical coverage, and food basket composition. The World Food Programme's basic household food basket consists of rice, oil, chickpeas, and salt and is thus more heavily influenced by rice prices than the healthy and common diet baskets reported in this research note. Furthermore, the World Food Programme's coverage excludes Bago, Ayeyarwady, and Nay Pyi Taw, areas with relatively lower food costs and lower food inflation over the past year. https://analytics.wfp.org/t/Public/views/MarketMonitoringDashboardv2/Overview

two years prior. Prices rose by more than 60 percent in both 2022 (March 2022–February 2023) and in 2023 (February 2023–March 2024). Though prices of many foods increased little or declined between the later part of 2023 and early 2024, rice prices increased by 20 percent and this despite the new monsoon harvest coming in at the end of 2023. Pulses follow a similar pattern with relatively small changes in median prices between June 2020 and July 2022, followed by a 40 and 44 percent increase in 2022 and 2023, respectively.

Median oil prices rose by 65 percent between June 2020 and July 2021 and by 263 percent between July 2021 and August 2022. Subsequently, oil prices have fluctuated but remain high. **In March 2024, oil prices were 32 percent lower than the peak in the third quarter of 2022 but 226 percent higher than in June 2020 when MAPSA's food vendor surveys began.**

Median prices of most animal source foods increased by at least 60 percent over the past two years, banana prices increased by 88 percent, and vegetable prices increased by 40–200 percent. More of this change occurred in 2022 (March 2022–February 2023) than in 2023 (February 2023–March 2024). Since July/August 2023, egg prices declined by 17 percent while chicken prices rose by 13 percent.

Banana and vegetable prices exhibit a greater degree of variability. Notably, after increasing by 186 percent in 2022, tomato prices plummeted by 60 percent in early 2024 compared to July/August 2023 and 50 percent compared to early 2023. Banana prices nearly doubled between early 2022 and early 2023 but leveled off in 2023 with median prices unchanged between early 2023 and early 2024. The evolution of seasoning costs is discussed in the appendix.

Table 1: Percentage changes in median food prices, June 2020–March 2024

	Past half year Jul/Aug 23–Mar 24	Past year Feb 23–Mar 24	Previous year Mar 22–Feb 23	Past 2 years Mar 22–Mar 24	Survey period Jun 20–Mar 24
Rice	20	68	62	173	250
Potatoes	9	25	27	59	250
Oil	-12	1	-7	-6	226
Pulses	17	44	40	101	101
Eggs	-17	0	67	67	-
Chicken	13	13	50	69	93
Pork	-6	13	25	42	113
Fresh Fish	0	33	20	60	60
Dried Fish	14	25	41	76	87
Leafy Greens	33	10	81	100	121
Onions	11	20	150	200	275
Tomatoes	-60	-50	186	43	-
Bananas	0	0	88	88	88
Salt	-11	23	30	60	-
Sugar	25	56	28	100	-
Ngapi*	20	-	-	-	-
Dried Chili*	-12	-	-	-	-
Garlic*	75	-	-	-	-

Source: C19-FV (Round 1–15) and MHWS-FV (Round 1–5) phone surveys.
Note: Collection of ngapi, dried chili, and garlic prices began in July/August 2023. Collection of egg, tomato, salt, and sugar prices began in February 2022. Changes over a half year period or the full survey period include the influence of seasonality on prices.

Costs of healthy and common diet food baskets between June 2020 and March 2024

Prices of individual foods move in different directions over time and space. Furthermore, foods are not consumed in equal proportions which gives individual foods varying degrees of importance in overall diet costs. Therefore, changing prices of individual foods do not provide a clear picture of how diet costs faced by households are changing. Analysis of a fixed food basket provides a means for understanding the impact of food prices on diets costs. In this section, we compare the costs of two food baskets to better understand the evolving costs faced by households with typical consumption patterns as well as the costs of acquiring a balanced and healthy diet.[6]

Nutrient-dense fruits, vegetables, pulses and animal sourced foods comprise a larger share of dietary energy in the healthy diet basket compared to the common basket and thus have a greater influence on the costs of healthy diets compared to common diets (Figure 1). Details on the construction and the composition of the two food baskets are presented in Table 2 in the appendix.

Figure 1: Healthy and common diet food baskets by food group, calories

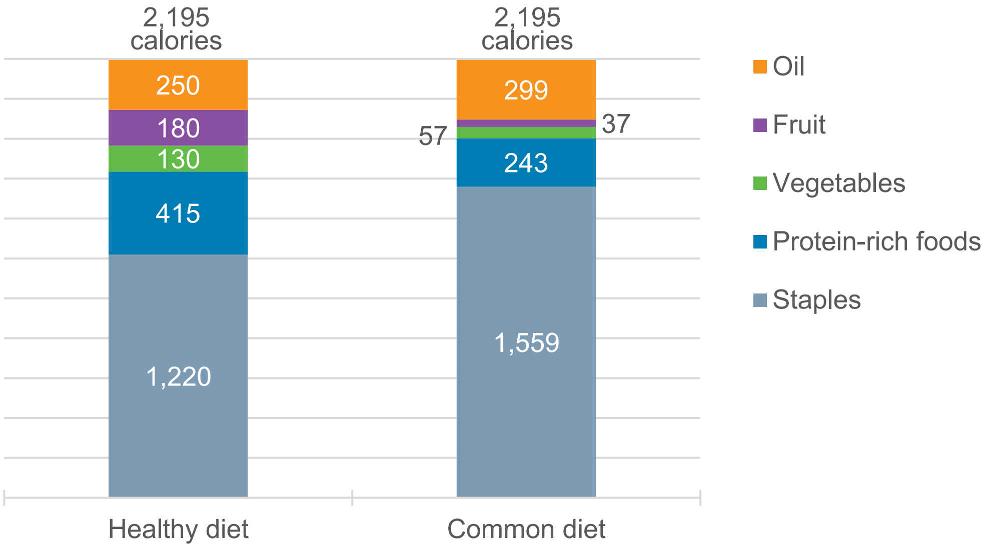
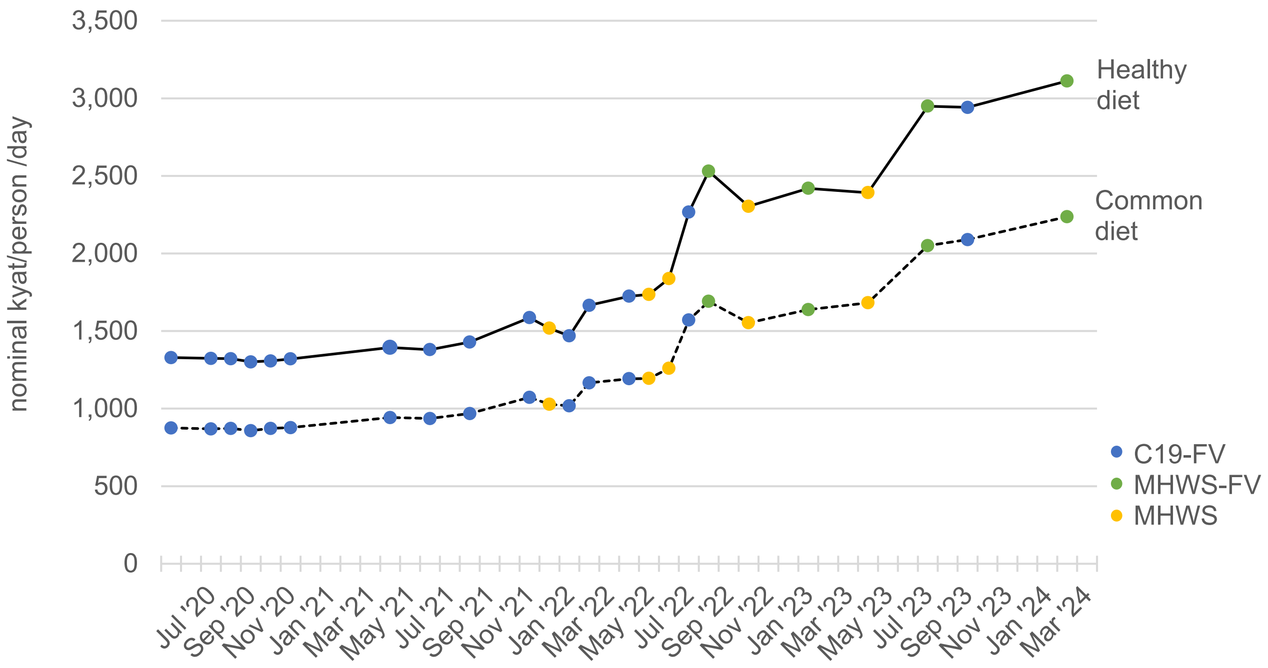


Figure 2 presents dietary costs of the common diet alongside the healthy diet. In the two-year period prior to March 2024, diet costs nearly doubled. Over the full survey period (June 2020–March 2024), the cost of the basic healthy diet rose by 139 percent and the basic common diet by 160 percent. Diet costs began to rise sharply in the year following the onset of political turmoil, peaking in the third quarter of 2022. The costs of diets began rising again in the second quarter of 2023. **Between early 2023 and early 2024, the cost of healthy and common diets increased by 29 and 37 percent, respectively. However, food inflation fell to 6 percent for the healthy diet and 9 percent for the common diet in the second half of this period compared to 23 and 25 percent in the in the first half of the period.**

The common diet increased by a similar or greater degree than the healthy diet throughout the survey periods. Though the percentage difference between the two diets narrowed, the cost of the healthy diet remained significantly higher than the common diet—52 percent higher in June 2020 (1,329 kyat versus 875 kyat) compared to 40 percent higher in March 2024 (3,182 kyat versus 2,280 kyat).

[6] We evaluate the cost of these two stylized diets using the limited items in the vendor surveys with the aim of tracking changes in healthy diet costs, rather than providing a nuanced estimate of costs faced by households of varying compositions.

Figure 2: National trends in the cost of healthy and common diets, June 2020–March 2024

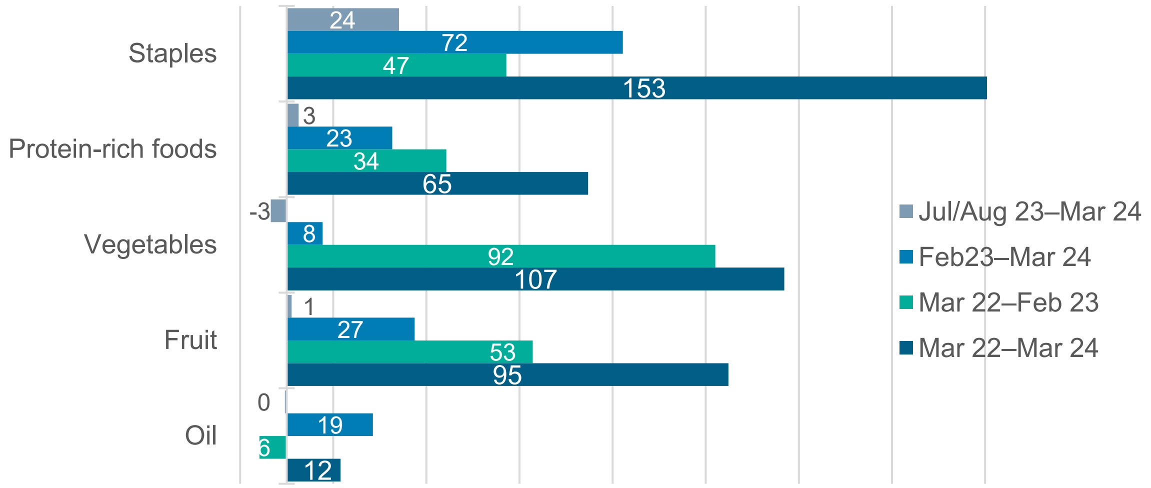


Source: C19-FV (Round 1–15), MHWS-FV (Round 1–5), MHWS (Round 1–6) phone surveys.
Note: C19-FV diet costs prior to March 2022 and all MHWS diet costs exclude eggs, pork, and chicken.

Due to their different compositions (Figure 1), changes in food group costs impact the two diets differently. Rice and oils have a relatively larger impact on the common diet while protein-rich foods, vegetables, and fruits have a relatively larger impact on the healthy diet. The larger increase in the cost of the common diet over time is due to the greater influence of price increases in staple foods (particularly rice) and oils in the common diet compared to the healthy diet (i.e. rice quantities are larger in the common diet than in the more diversified healthy diet).

Between early 2022 and early 2023 (teal bar in Figure 3), the cost of the staple food group increased by nearly 50 percent but to a lesser degree than the vegetable and fruit food groups. However, between early 2023 and early 2024 (bright blue bar in Figure 3) staple foods increased by 72 percent which is nearly triple or more the rate of other food groups. Figure 4 shows how these relative differences in changing food group costs together with diet composition influence how each food group contributes to rising diet costs.

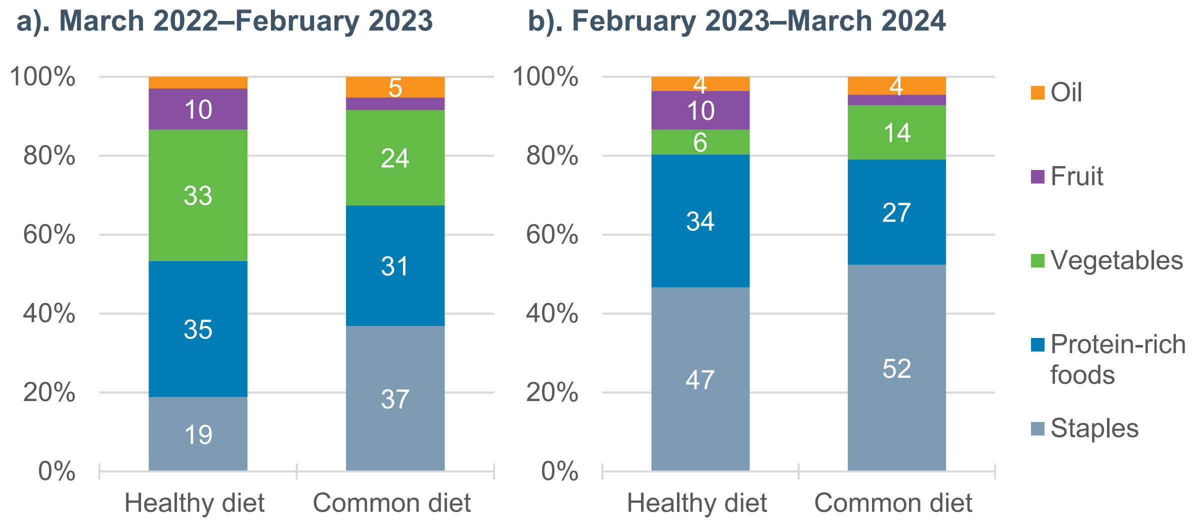
Figure 3: Changes in food group costs (%), March 2022 to March 2024



Source: MHWS-FV (Round 1–5).

Between early 2022 and early 2023, the rising cost of healthy diets was dominated by increasing costs of vegetables and protein-rich foods, whereas vegetables, protein-rich foods, and staples were all significant contributors to rising common diet costs. **Between early 2023 and early 2024, rising rice prices led to the staple food group dominating increased diet costs, impacting both the costs of healthy and common diets more severely compared to previous periods.**

Figure 4: Food group contributions to changing in diet costs (%)



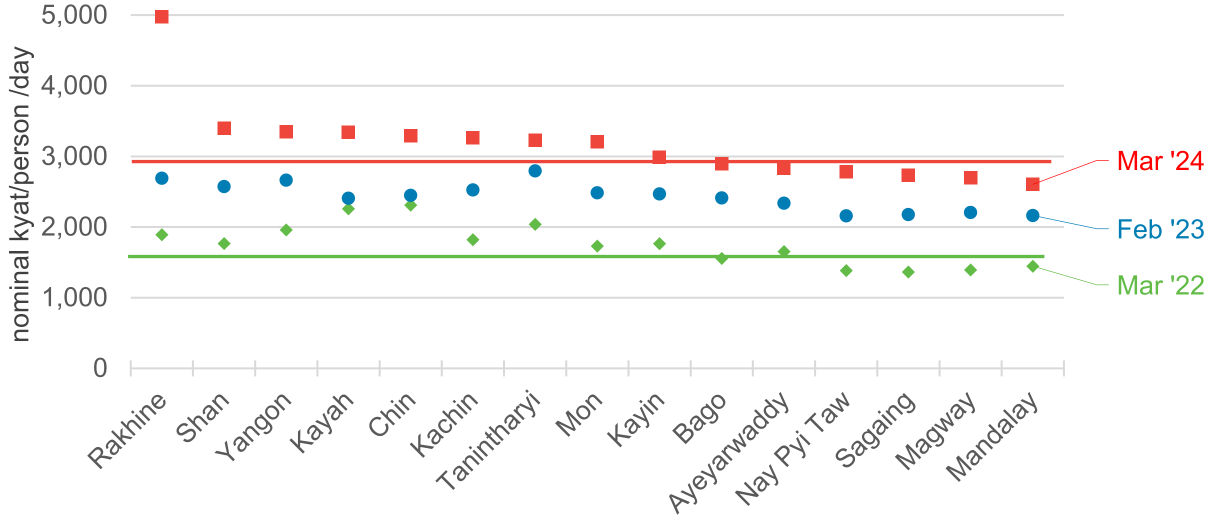
Source: MHWS-FV (Round 1–5).

Regional trends in diet costs

Figures 5 and 6 present the nominal costs of healthy and common diets, respectively, over the last 2 years. We note striking differences between states and regions. **The highest costs of common and healthy diets are seen in conflict-affected Rakhine, Chin, Kayah, and Shan states**. In March 2024, the costs of the healthy and common diets in Rakhine were 60 and 31 percent higher, respectively, than the national average, while common diet costs were 11 percent higher in Chin and healthy diet costs were 9 percent higher in Shan. We also see a high cost in the Yangon region, home to the largest city in the country. The lowest costs of common diets are noted in Mandalay, Nay Pyi Taw, and Magway, with similar patterns for the healthy diet.

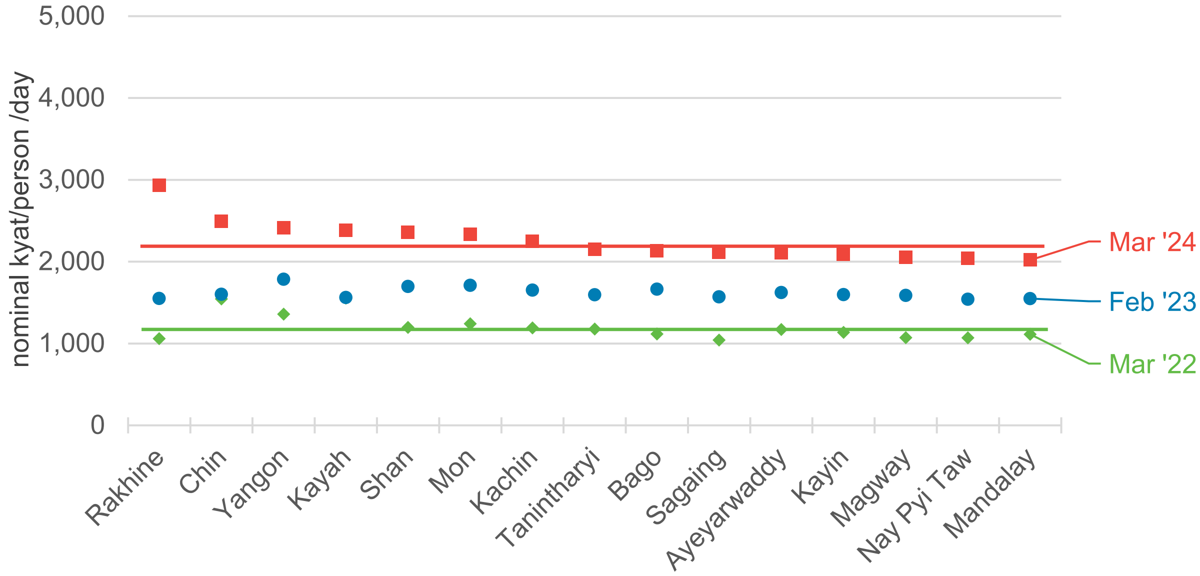
The highest rate of food price inflation over the last year is seen in Rakhine. The costs of the healthy and common diets in March 2024 increased worryingly by 85 and 89 percent respectively compared to February 2023. We also see large increases in Chin where the cost of a common diet increased by 55 percent and in Kayah where it increased by 53 percent over the last 13 months.

Figure 5: State/region costs of the healthy diet, March 2022–March 2024



Source: MHWS-FV (Round 1–5).
Note: Solid bars refer to national averages for March 2022 (green) and March 2024 (red). Diet costs are estimated using the expanded food list which includes eggs, pork, and tomatoes.

Figure 6: State/region costs of the common diet, March 2022–March 2024

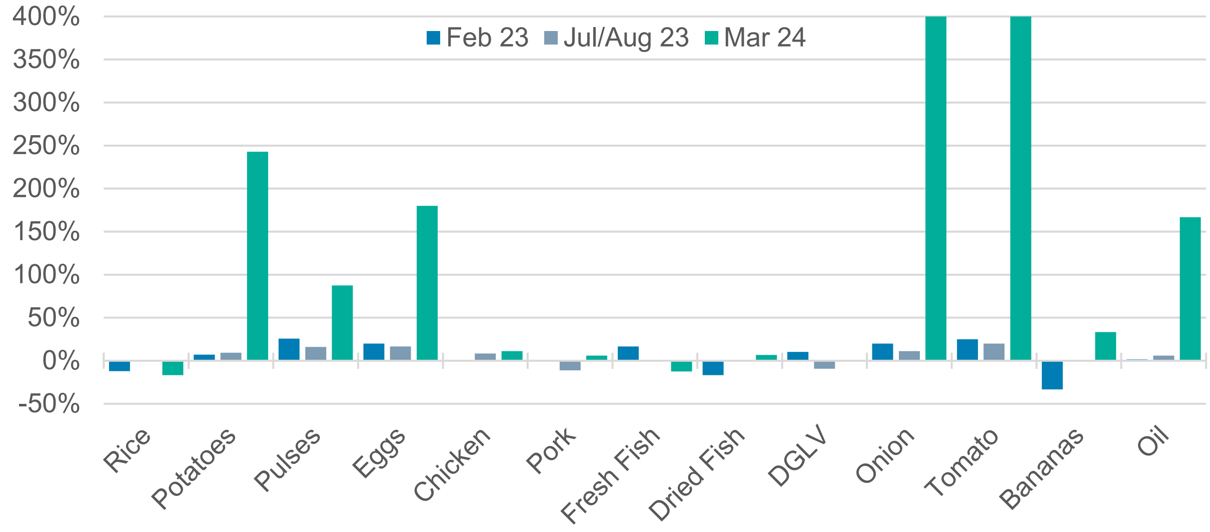


Source: MHWS-FV (Round 1–5).
Note: Diet costs are estimated using the expanded food list which includes eggs, pork, and tomatoes. Solid bars refer to national averages for March 2022 (green) and March 2024 (red).

The concerning situation in Rakhine is further illustrated in Figure 7 which compares prices of different commodities to the national average over 3 periods in the last 13 months. The figure shows that in February and July/August of 2023, prices in Rakhine were not considerably different from the national average. However, the situation has become more worrisome for a number of commodities in March 2024. The biggest differences compared to the national average are seen in the prices of onion (4 times higher), tomato (4 times higher), potatoes (2.4 times higher), eggs (1.8 times higher), and vegetable oil (1.7 times higher).[7]

Large price increases in Rakhine are seemingly linked to increased movement restrictions as well as violence in the state (MSF 2024).[8] We find corresponding evidence indicating that food vendors in Rakhine are increasingly experiencing business disruptions. In March 2024, at least two-thirds of vendors in Rakhine reported disruptions in the past 30 days related to each of the following: supply, demand, transportation costs, access to credit/loans, communication with sellers, and insecurity. In most cases, the share of vendors in Rakhine reporting these problems doubled compared to seven months earlier and were 1.5 to 3 times higher than the national average.

Figure 7: Percentage difference between prices in Rakhine and national average prices, February 2023–March 2024



Source: MHWS-FV (Round 3-5).

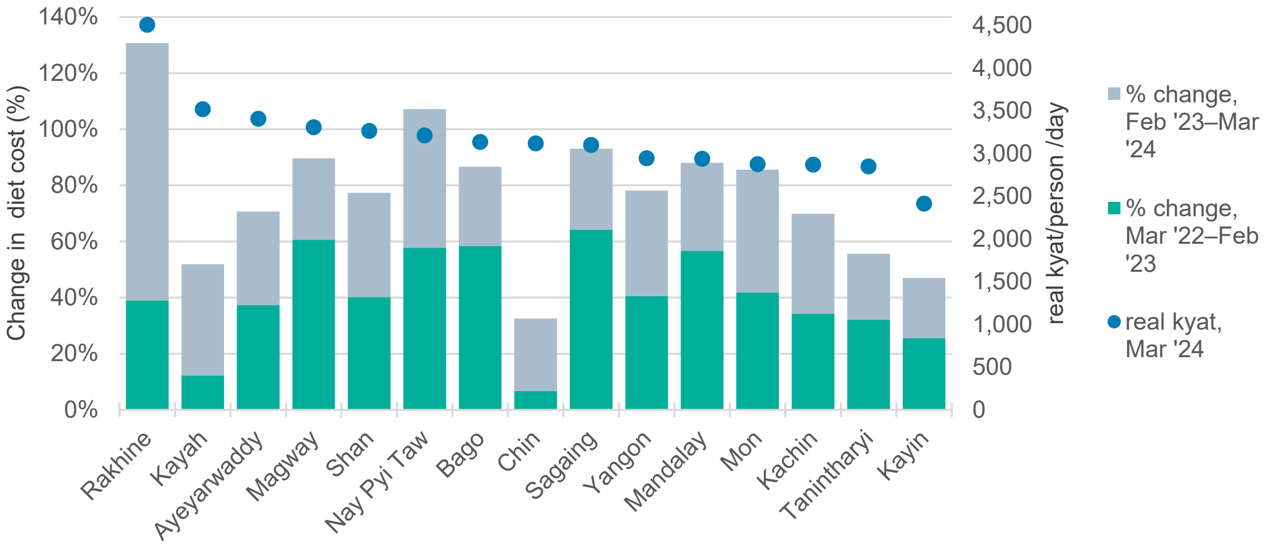
Diet costs reported in Figures 5 and 6 do not take into account spatial differences in living costs. In the absence of appropriate nationally representative price deflators, we spatially deflate the costs of a healthy and common diet with wages of casual laborers reported in the MHWS. **Using this measure as a deflator, the spatially deflated costs of the healthy and common diet are highest in Rakhine and Kayah, two heavily conflict-affected states, indicating that diet costs are least affordable for wage earners in these states** (Figure 9). These two states also showed high income poverty rates—87 percent in Kayah and 80 percent in Rakhine in the most recent welfare monitoring survey of MAPSA.[9] Real food costs are relatively lower in the eastern part of the country, possibly because easier migration possibilities lead to relatively higher wages.

[7] The World Food Programme and the Market Analysis Unit show similar trends for Rakhine in the past year. https://analytics.wfp.org/t/Public/views/MarketMonitoringDashboardv2/Overview_ http://themimu.info/sites/themimu.info/files/mau_public/Bulletin_MAU_-_Rakhine_-_February_2024_-_Market_Price_Report.pdf

[8] MSF. 2024. How a near-total absence of humanitarian access is impacting lives in Myanmar. April 17th, 2024. Downloaded from https /www.doctorswithoutborders.org/latest/how-near-total-absence-humanitarian-access-impacting-lives-myanmar.

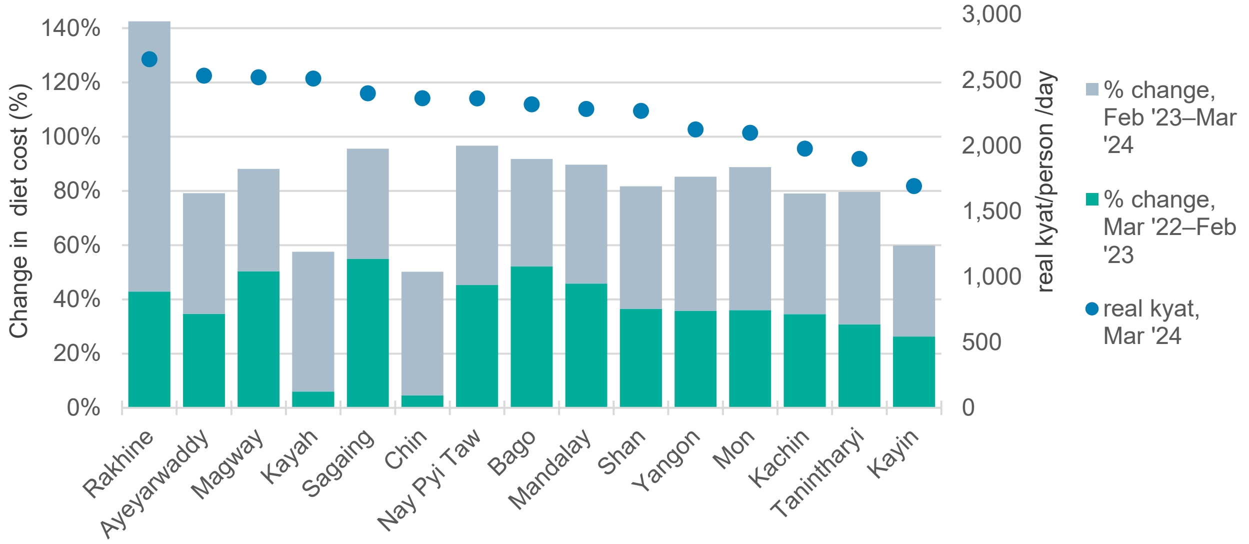
[9] MAPSA (Myanmar Agriculture Policy Support Activity). 2024. Livelihoods and welfare: Findings from the sixth round of the Myanmar Household Welfare Survey (June – November 2023) Myanmar SSP Working Paper 53. Washington, DC: International Food Policy Research Institute.

Figure 8: State/region healthy diet costs in March 2024 (real kyat) and percentage changes (March 2022–March 2024)



Source: C19-FV (Round 1–15), MHWS-FV (Round 1–5), MHWS (Round 1–6) phone surveys.
Note: Percentage change in diet costs captures the total percentage change between March 2022 and March 2024 and the portion of this change attributable to changes in diet costs between March 2022 and February 2023 and between February 2023 and March 2024. Diet costs are spatially deflated using wages of casual laborers reported in the nearest MHWS round.

Figure 9: State/region common diet costs in March 2024 (real kyat) and percentage changes (March 2022–March 2024)



Source: C19-FV (Round 1–15), MHWS-FV (Round 1–5), MHWS (Round 1–6) phone surveys.
Note: Percentage change in diet costs captures the total percentage change between March 2022 and March 2024 and the portion of this change attributable to changes in diet costs between March 2022 and February 2023 and between February 2023 and March 2024. Diet costs are spatially deflated using wages of casual laborers reported in the nearest MHWS round.

Policy implications

Myanmar has experienced one of the highest inflation rates in the world, principally due to domestic economic problems such as the depreciation of the kyat, disruptions to the supply of key agricultural inputs, and the ongoing conflict and economic uncertainty in the country. International price increases have exacerbated these problems but are not the principal driver, as inflation rates in neighboring countries are far lower than Myanmar's.

The results in this note point to the need to improve broader macroeconomic stability as well as the function of the agri-food system, and to address rising poverty through targeted social protection efforts, particularly to households primarily dependent on casual wages to earn a living.

Resolving ongoing conflicts in the country, returning to a more market-oriented economic strategy that prioritizes market-friendly agri-food system policies, and a transparent and accountable rule of law will be key to strengthening the kyat and improving the functioning of the agri-food system. Such steps will, in turn, reduce inflation and also improve the functioning of labor markets.

A second urgent set of actions involves targeting social protection interventions towards vulnerable groups, especially households dependent on casual wages for their livelihoods. Wage-dependent households were the poorest economic group even prior to the present crisis and have gotten even poorer since the cost of living has far outpaced growth in nominal wages. Development partners and NGOs should explore interventions for improving the economic stability and resilience of wage-dependent households.

Assistance should best be targeted to Rakhine State which has been especially hard hit in recent months by conflict and severe mobility restrictions limiting access to food as well as other essential supplies.

Appendix

1. Common and healthy diet food baskets

We define two sets of food baskets to monitor how evolving food prices impact household diet costs. The common diet basket reflects typical dietary patterns while the healthy diet basket aligns typical dietary patterns with requirements for a nutritious diet. The food baskets are defined in terms of diet energy (calories). The total cost of the common basket equals the sum of average calories time the price per calorie of each food.

1. **Common diet basket**: this basket uses the average regional dietary energy consumed of foods representative of foods in the vendor surveys, as reported by households surveyed in the 2015 Myanmar Poverty and Living Conditions Survey (MPLCS).
2. **Healthy diet basket**: this basket aligns food groups with a healthy diet recommended by nutritionists. This is achieved by rescaling the common diet basket so that total dietary energy in each food group adheres to nutrition guidelines while maintaining the within food group shares of the common diet.[10]

Table 2: Common and healthy diet food baskets

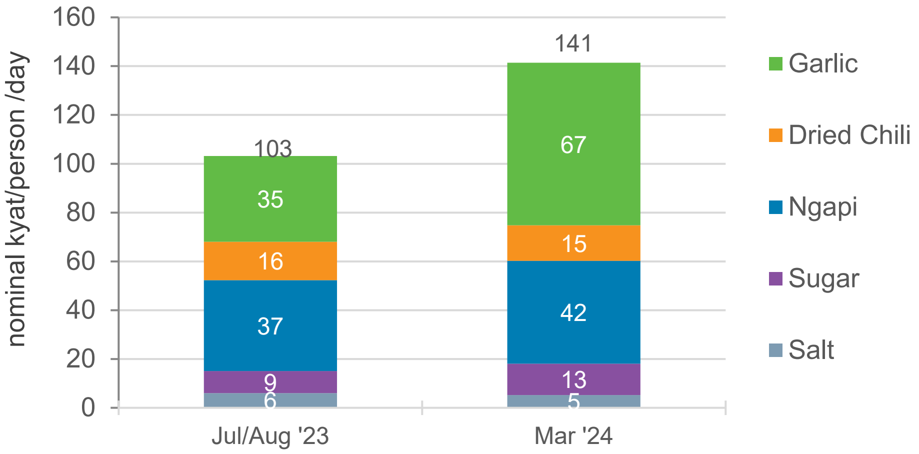
Food group	Sub-food group	Common diet (calories)	Healthy diet (calories)	Sub food group calorie shares (%)
Staples		1,559	1,220	
	Rice	1,536	1,202	98
	Potato	23	18	2
Protein-rich foods		243	415	
	Pulses	85	144	35
	Eggs	23	40	9
	Chicken	53	90	22
	Pork	33	57	14
	Fish	32	55	13
	Dried fish	17	29	7
Vegetables		57	130	
	Dark leafy greens	21	47	37
	Onions	22	51	39
	Tomatoes	14	32	24
Fruit (Bananas)		37	180	
Oils		299	250	
Total		2,195	2,195	

[10] Healthy diet guidelines are adapted for an adult woman from the Myanmar food based dietary guidelines for pregnant and lactating women applied to the foods in the vendor surveys in proportions reported in the 2015 MPLCS. Zaw, H.M.M., C.M Thar, and W.T.K. Lee. 2022. Myanmar food-based dietary guidelines for pregnant and lactating women. Nay Pi Taw, Myanmar: FAO.

2. The cost of seasonings in the diet

Seasonings are an important part of food culture and everyday diets in Myanmar. Therefore, in the July/August 2023 round of the MHWS–FV, we began collecting prices of common seasonings (garlic, dried chili, ngapi, sugar and salt). Rather than adding seasonings to the healthy and common diets, we monitor seasonings separately. As with the common diet, we aggregate the costs of the six seasonings into a basket using average consumption quantities observed in the 2015 MPLCS. **In early 2024, the typical cost of seasonings in the Myanmar diet was 141 kyat per person per day. An increase of 37 percent compared to July/August 2023 (Figure 4), which was driven by a 90 percent increase in the cost of garlic.** The rise in seasoning costs over this period is much higher than the 14 percent increase in the cost of the common diet.

Figure 10: Seasoning costs, July/August 2023 and March 2024



Source: MHWS-FV (Round 1–5).

ACKNOWLEDGMENTS

This work was undertaken as part of the Feed the Future Myanmar Agricultural Policy Support Activity (MAPSA) led by the International Food Policy Research Institute (IFPRI) in partnership with Michigan State University (MSU). This study was made possible by the support of the American people through the United States Agency of International Development (USAID), under the terms of Award No. AID-482-IO-21-000x. 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 USAID, 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.