



## The Iran War and Rising Fuel and Fertilizer Prices: Implications for Myanmar's Rice Value Chain

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### Key Findings

- The Iran War has driven up fuel and fertilizer prices in Myanmar and created the risk of shortages in some parts of the country. At the end of June, diesel prices were 34 percent higher and petrol prices 57 percent higher than at the end of February, while reference prices for urea in mid- and late June were 49 and 28 percent higher, respectively, than last monsoon season.
- Myanmar's rice value chain depends heavily on fertilizer for paddy production and on fuel for land preparation, irrigation, harvesting, transport, and processing.
- Alongside an expected El Niño, these higher costs of fuel and fertilizer are likely to lower yields and rice production in the 2026 monsoon season.
- Higher costs are likely to reach consumers, raising the price of rice, the country's main staple, and worsening food security at a time of already high humanitarian need.

### Recommended Actions

- Ease forex restrictions and import licensing on fertilizer imports, which raise input prices above those of regional competitors.
- Promote more efficient use of chemical fertilizer, since prices are likely to stay elevated even after the crisis eases.
- Support the local production of organic fertilizer and educate farmers on its effective use, to reduce reliance on imported chemical fertilizer.
- Expand alternative and more reliable energy sources, addressing a constraint that predates the shock.
- Improve farmers' access to credit, so higher input costs do not force cuts to input use and cultivated areas.



### Livelihoods and Food Security Fund



## Introduction

Myanmar's agrifood systems have faced a wide range of challenges in recent years, including disruptions in banking and financial services, constraints in accessing foreign exchange, reduced public service delivery, widening conflict and insecurity, increasing displacement and migration, climate shocks, and a major earthquake. The Iran War introduces a new layer of risk. In 2024, 27 percent of globally traded oil, 20 percent of liquefied natural gas (a key fertilizer feedstock), and up to 30 percent of global fertilizer trade passed through the Strait of Hormuz (Glauber 2026). Disruption of this trade has increased prices and raised the risk of shortages of these essential inputs.

These effects are particularly acute for Myanmar's rice value chain, which depend heavily on fuel for mechanization, irrigation, harvesting, transport, and processing. Rice is a fertilizer-intensive crop, much of the country's urea is imported from the Middle East, and the timing of the disruption coincides with the monsoon planting season. These pressures may be further compounded by an expected El Niño event, which increases the risk of agricultural drought in Myanmar during the coming growing season (FAO 2026). Disruptions to rice value chain affect both rural rice-producing households and urban consumers. Rice is central to both food security and farmer livelihoods: it is the main staple, providing 51 percent of calories in urban areas and 62 percent in rural areas (Mahrt et al. 2024). It is also the main crop for many farmers, particularly during the monsoon season, and an important export commodity.

This research note examines the implications of the Iran War for Myanmar's rice value chain, drawing on the Myanmar Agricultural Performance Survey (MAPS), key informant interviews, and secondary data on fuel and fertilizer prices.

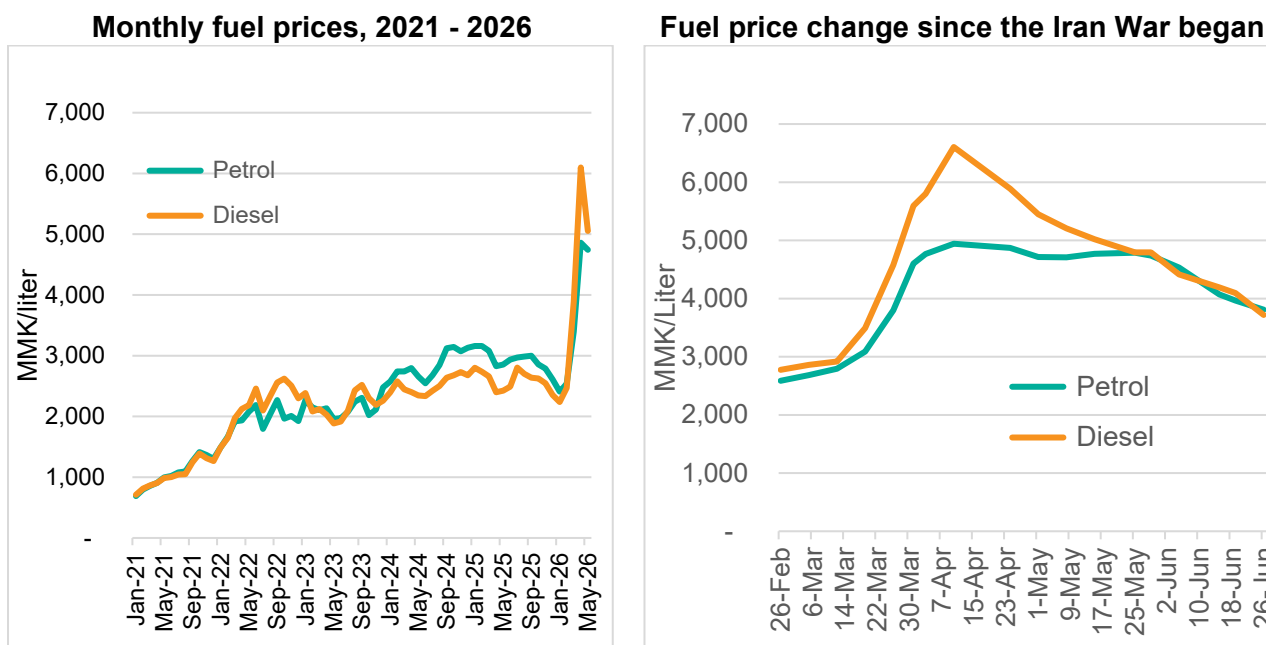
## Fuel and Fertilizer Shocks in Myanmar

The Iran War affects Myanmar's agrifood system through two channels, fuel and fertilizer, both inputs the country largely imports. The disruption to trade through the Strait of Hormuz has raised the price and tightened the supply of each.

### *Fuel*

Myanmar imports most of its refined fuel and has limited domestic refining capacity. As global crude oil prices have increased significantly, these increases have quickly been transmitted to the domestic market. Foreign exchange constraints have also contributed to fuel shortages (World Bank 2026). Figure 1 shows how fuel prices in Myanmar have risen sharply since the war began on February 28, 2026. Diesel and petrol spiked over the following weeks, peaking in April at 112 and 88 percent above their pre-war levels, respectively. Prices have since come down from that peak. Even so, diesel at the end of June were 34 percent more and petrol 57 percent more than at the end of February.

**Figure 1. Fuel Prices in Myanmar**



Source: Myanmar Department of Consumer Affairs

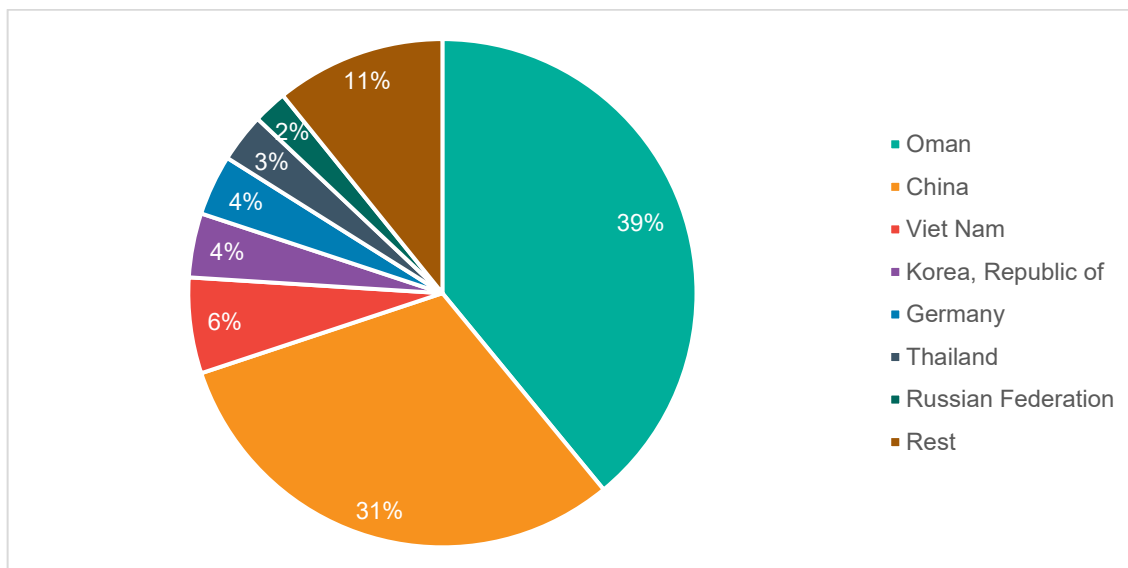
To address rising fuel prices, the authorities introduced fuel-rationing measures in early March, including an even-odd license plate system, QR code-verified purchase quotas, and work-from-home mandates for public sector employees. Outside the major cities, informal cash-value limits are being applied (e.g., 5,000-kyat maximum purchase for motorcycles). Farmers face their own restrictions, with allocations tied to cultivated areas at around one to two gallons per acre and conditional on recommendation letters from local authorities. These measures have curbed fuel demand but created shortages and parallel markets (World Bank 2026), where fuel can sell at up to twice the official rate.

### Fertilizer

Myanmar imports most of its fertilizer by sea. Figure 2 shows fertilizer imports to Myanmar by country of origin in 2024. Most of these imports are urea, the fertilizer most used in rice production, which came in 2024 mainly from Oman<sup>1</sup> and China, with a smaller share produced domestically. Compound fertilizer and its elements are imported from various countries, and some are blended in Myanmar. The disruption to trade through the Strait of Hormuz has reduced global supply and raised prices. Meanwhile, China has restricted exports of fertilizer to protect its domestic market.

<sup>1</sup> Oman's ports lie outside the Strait of Hormuz, so its exports have not been directly disrupted. But with global supply tightened, demand has turned to available sources, and it's unclear how much Myanmar will be able to access.

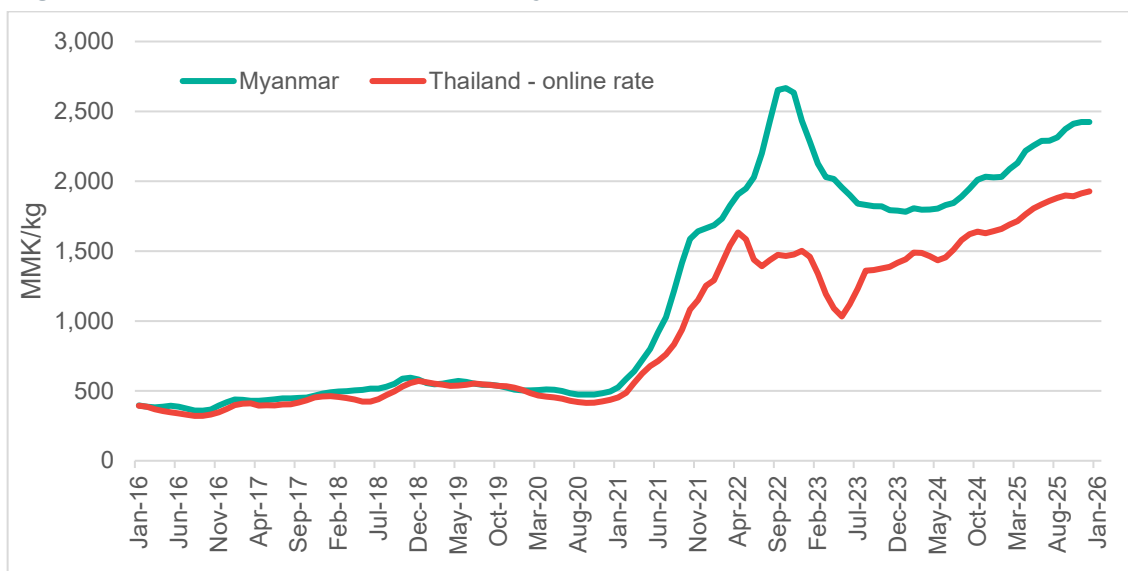
**Figure 2. Fertilizer Imports by Country of Origin, 2024**



Source: International Trade Centre (ITC)

These pressures fall on a fertilizer market where prices were already elevated due to existing distortions. Myanmar restricts fertilizer imports through a licensing system that also limits importers' access to foreign exchange, thereby increasing the cost of imported inputs. As a result, urea prices in Myanmar sat about a quarter above those in Thailand, based on the preferential online rates (MAPSA 2024). Figure 3 shows how prices in Myanmar and Thailand moved together until early 2022, when the forex restrictions tightened, and how a gap has opened between them since.

**Figure 3. Wholesale Urea Prices for Myanmar and Thailand, 2016 – 2026**



Source: MOALI, CBM and TOAE

Myanmar implements reference prices to regulate domestic fertilizer markets. These prices have changed markedly since the onset of the Iran War and the subsequent global rise in fertilizer prices. In May 2026, the reference price for a bag of urea was set at 157,000 MMK (GNLM 2026a), before being reduced to 140,000 MMK in mid-June and further to 120,000 MMK at the end of June (GNLM 2026b). These levels remain well above those observed during the previous monsoon season, when the reference price was 94,000 MMK per bag, representing increases of 67, 49, and 28 percent, respectively.

This increase comes at the start of the monsoon, the main production season, meaning farmers are likely to face higher input costs as demand peaks in July and August. Fertilizer imports typically peak in May and June, implying that Myanmar is sourcing much of this season's supply amid ongoing global market disruption. Key informants nonetheless expect fertilizer to remain available in major production regions, suggesting that cost, rather than physical availability, is the primary binding constraint for most farmers. Remote and conflict-affected areas are a likely exception, where access constraints remain more severe.

## Pressures on Myanmar's Rice Value Chain

### *Production*

The cost of growing paddy is rising as fuel and fertilizer prices increase. At the same time, paddy prices remain low, and returns to paddy farming have fallen to their lowest in six years (Aung and Minten 2026). With potentially thin margins,<sup>2</sup> farmers have a strong incentive to reduce the area they cultivate and the quantity of inputs they use, which threatens overall production for the 2026 monsoon season.

Land preparation is now largely mechanized, with 88 percent of rice farmers using tractors to plow in the 2025 monsoon season (Aung and Minten 2026). Fuel is the largest operating cost for tractor service providers, so the rise in fuel prices will push up service fees (Masias et al. 2025). As the cost of mechanized land preparation rises, alternatives such as draught animals are limited and mostly concentrated in the Dry Zone. Farmers may therefore cut back on land preparation, plowing fewer times, switching from four-wheel tractors to lighter two-wheel ones that work the soil less deeply, and relying more on herbicides. The rising cost may also increase the adoption of dry seeding, which requires less land preparation and is already spreading because of labor shortages (Goeb et al. 2026). These adaptations tend to lower yields, with dry seeding reducing them by about 15 percent relative to transplanting (Goeb et al. 2026).

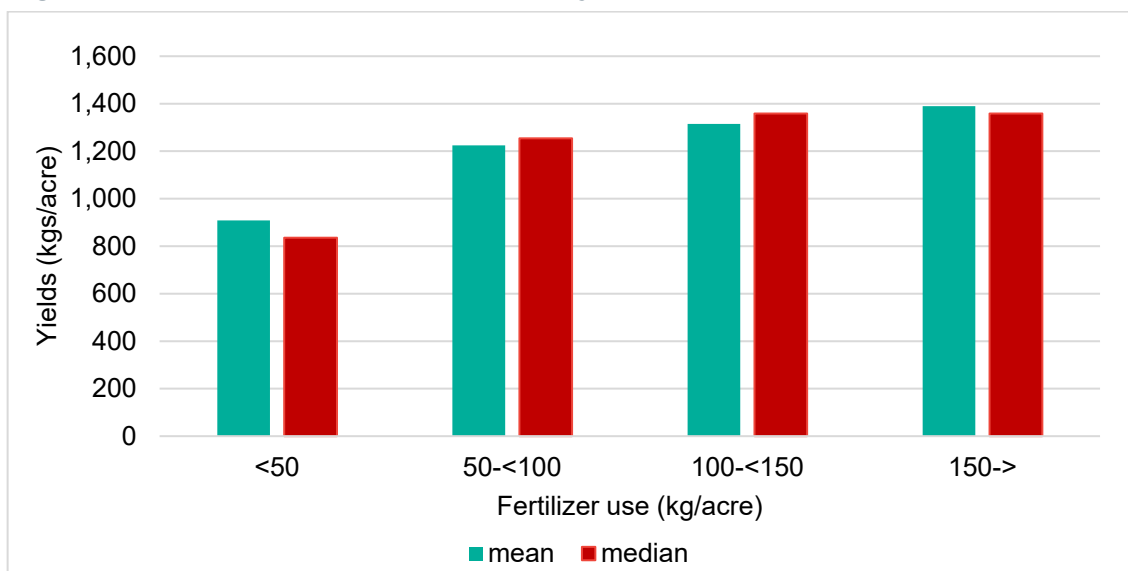
Chemical fertilizer use is widespread. In the 2025 monsoon season, 82 percent of rice farmers used urea, the most important chemical fertilizer for rice, and 39 percent used compound fertilizer, mostly 15-15-15. Organic fertilizer, largely manure from livestock, is used by 46 percent of farmers, with use concentrated in the Dry Zone and Coastal areas. Use of homemade and purchased compost is growing but still relatively small (Aung and Minten 2026).

As fertilizer prices rise, farmers are likely to reduce their application rates. During the 2025 monsoon season, farmers applied an average of 80 kilograms of chemical fertilizer per acre (Aung and Minten 2026). Figure 4 illustrates the relationship between chemical fertilizer use and rice yields using MAPS data from the 2025 monsoon season. It shows that greater use of chemical fertilizer is associated with substantially higher paddy yields. Estimated yields are 35 percent higher for farmers applying 50–100 kilograms of fertilizer per acre than for those applying less than 50 kilograms. However, Figure 4 also indicates that the marginal returns to fertilizer diminish at higher application rates. While organic fertilizer can offset part of the resulting nutrient shortfall, its lower nutrient density means that it cannot fully replace chemical fertilizer. A substantial reduction in chemical fertilizer use is therefore likely to result in significantly lower paddy yields this monsoon season. In addition, the expected El Niño increases the risk of drought, creating further uncertainty for monsoon paddy production (FAO 2026).

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<sup>2</sup> Margins will depend on the global price of rice at harvest, as Myanmar's markets are closely integrated with international markets. Arita and Glauber (2026) show that the war's disruption is a fertilizer and energy shock and the conditions behind past food price spikes are largely absent, suggesting that rice prices are unlikely to surge in the short term.

**Figure 4. Chemical fertilizer use and rice yields, monsoon 2025**

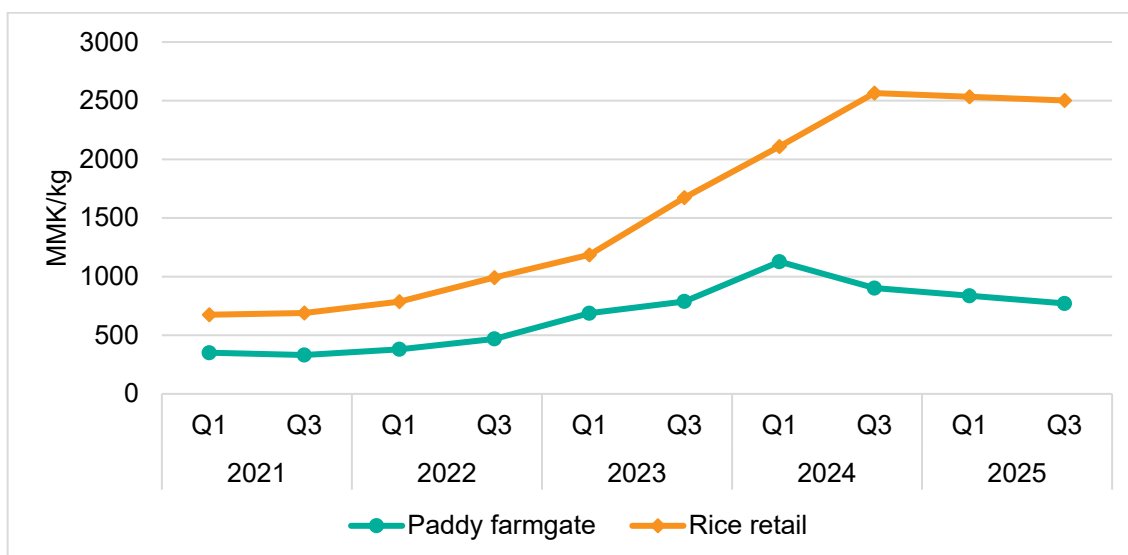


Source: Myanmar Agricultural Performance Survey

### Marketing and processing

The fuel shock has increased the cost of transporting agricultural inputs, paddy, and rice. This is particularly important because most paddy produced by farmers is marketed. In 2025, paddy farmers sold 56 percent of their production in the monsoon season and 83 percent in the dry season. Moreover, the majority of rice consumed by households is purchased: approximately three-quarters of households' rice consumption is obtained from the market (Minten et al. 2026). A concerning development in Myanmar has been the sharp increase in marketing margins. Even before the 2026 fuel crisis, transportation costs had risen because of the growing number of roadblocks, while labor shortages and energy constraints had increased processing costs. As a result, the gap between producer and consumer prices has widened substantially (Figure 5). With fuel and transportation costs increasing further following the outbreak of the Iran War, this gap is likely to remain elevated or widen further.

**Figure 5. Paddy farmgate and rice retail prices**



Source: Myanmar Agricultural Performance Surveys

The fuel shock is also expected to raise the cost of running rice mills. Table 1 shows the share of mills using each power source. Grid electricity is the main source for larger mills, at 70 percent, while smaller mills run mostly on diesel, at 69 percent, and husk or gas is an additional source for 31 percent of larger mills and 11 percent of smaller ones (MAPSA 2023). The higher diesel price reaches smaller mills directly, and larger ones through the generators they increasingly fall back on when the grid fails. Husk-fired mills are the exception, since husk is a byproduct of milling, a fuel the mill produces itself.

**Table 1. Share of mills using different power sources, August 2023**

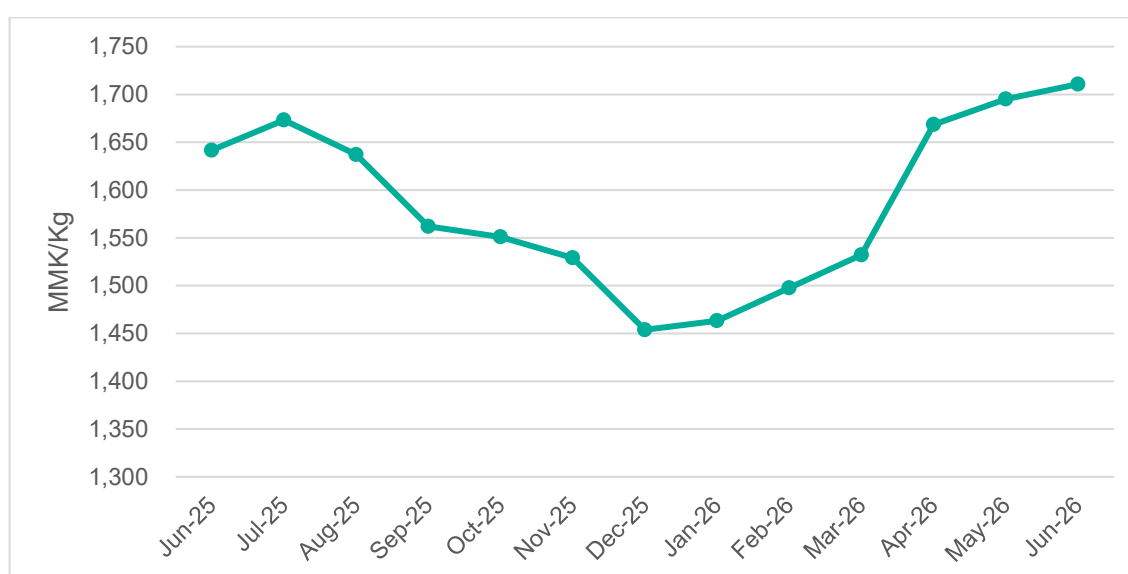
(%)	Small/Micro	Medium/Large
<b>Electricity Grid</b>	31	70
<b>Diesel</b>	69	26
<b>Husk/Gas</b>	11	31

Source: Miller Survey, August 2023 Survey Round

### Consumption

Figure 6 shows that national average retail rice prices for the Emata variety, based on data from the Department of Consumer Affairs, increased modestly by 0.9 percent month-on-month in June and by 4.2 percent year-on-year, suggesting relatively stable rice market conditions. However, compared with February, retail rice prices were 14 percent higher. This increase partly reflects rising transportation costs but also reflects changes in international rice prices and normal seasonal price movements. The higher rice prices since the beginning of the year have contributed to a substantial increase in food costs across the country. In early June, WFP (2026) estimated that the average cost of a standard food basket had risen by 19 percent compared with the last week of February, with the increase driven largely by higher prices for rice and salt.

**Figure 6. Rice retail prices (Emata)**



Source: Department of Consumer Affairs

### Discussion

The Iran War has resulted in higher costs for fuel and fertilizer in Myanmar, and the risk of shortages in certain parts of the country. The timing and magnitude of these shocks will likely lower

yields and overall rice production in the 2026 monsoon season, a risk compounded by an expected El Niño and the threat of drought. Global rice prices are unlikely to surge in the near term, as ample stocks and favorable crop conditions limit the risk of broad commodity price spikes (Arita and Glauber 2026). Regardless of near-term effects, higher costs are likely to reach Myanmar consumers, raising the price of rice, the country's main staple, and worsening food security at a time of already high humanitarian need.

The disruption to fuel and fertilizer supply is global, and other rice-exporting countries are likely to face similar challenges. Myanmar's rice sector has proven resilient through the disruptions of recent years, and several of the pressures the Iran War has intensified were present before it. Possible actions to address them directly include:

- Ease forex restrictions and import licensing on fertilizer imports, which raise input prices above those of regional competitors.
- Promote more efficient use of chemical fertilizer, since prices are likely to stay elevated even after the crisis eases.
- Support the local production of organic fertilizer and educate farmers on its effective use, to reduce reliance on imported chemical fertilizer.
- Expand alternative and more reliable energy sources for mills, addressing a constraint that predates the shock.
- Improve farmers' access to credit, so higher input costs do not force cuts to input use and cultivated areas.

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