Global fertilizer markets feel impact of conflict in the Middle East

Contents

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Summary

The current conflict in the Middle East, and its effects on shipping and access to the Strait of Hormuz, is disrupting global fertilizer markets, raising prices and tightening supply across global agriculture. About 25%-30% of the world's nitrogen fertilizer exports pass through the Strait of Hormuz and vessel traffic through the Strait is now reduced to a trickle, with further disruptions across the Gulf, North Africa, and the Eastern Mediterranean. Within 48 hours of the first strike on Iran, North African urea prices surged by nearly 20% and EU natural gas jumped by ~45%, underscoring the region's critical role in global fertilizer flows. The shock is already both deeper and more complex than disruptions seen in the Strait and broader region following the 12-day Israel-Iran war in 2025.

The key uncertainty now is whether the impact remains transitory or becomes structural – which will hinge on the duration and potential escalation of the conflict. A rapid de-escalation would contain the damage to short-term volatility. But there is the risk of more lasting tightening: A ~30% rise in ammonia prices or ~20% rise in sulphur prices would push phosphate producers into severe margin pressure, while a persistent 20%-30% premium of global urea over Chinese prices could further delay Chinese exports. At the very least, a war-risk premium seems inevitable.

Fertilizers often account for 40%-50% of grain variable cost, making price shocks immediately visible in farm budgets and profitability calculations. So, with fertilizer prices rising faster than agricultural commodity prices as a result of the conflict, the cost-price gap for farmers is widening globally, increasing margin pressure, especially in markets where cost pass-through is limited.

Impact more severe than previous conflict in the region

The current conflict in the Middle East once again highlights the severe bottlenecks that define the global fertilizer supply chain. Only eight months after we flagged the risks of a potential conflict around the Strait of Hormuz, the world finds itself confronting an acute situation. The Strait's strategic importance remains unchanged as it is vital for global fertilizer and oil and gas flows, but the scale and intensity of today's events are notably more dramatic than those seen in the 12-day Israel-Iran war in June 2025. Last June's conflict and resulting impact in the region now serve more as a reference point than a parallel.

The impact last year was meaningful but ultimately contained. North African nitrogen production was curtailed, which contributed to a sustained urea price premium throughout the year. The conflict also played a role in elevating global sulphur prices – these were also affected by

production issues in Kazakhstan and the Middle East and by export constraints from Russia. Still, because the Strait never fully closed, the most severe scenarios were avoided in 2025.

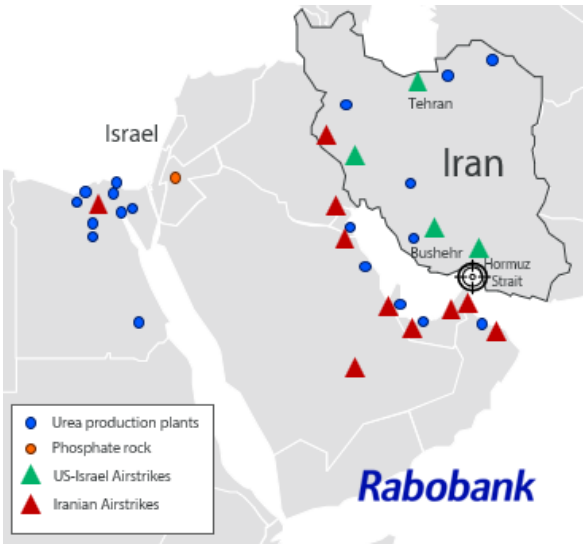
This time, however, the situation is fundamentally different. The Strait is effectively closed – with vessel movements reduced to a trickle – and shippers are rerouting to avoid the Persian Gulf and surrounding waters.. Insurance premiums have surged, LNG facilities have been damaged, downstream production (including urea) has been curtailed, refineries in Saudi Arabia are reducing runs, gas supply to Egypt is under force majeure, and European gas inventories are being reassessed. Taken together with current market pricing and fundamentals, these developments raise the risk that a prolonged conflict – especially one involving damage to infrastructure – could push nitrogen and phosphate markets toward a pricing paradigm distinct from that seen in the second half of 2025. This is not yet a forecast, but it is a very real risk.

A more immediate concern is the potential invocation of force majeure clauses to cancel delivery commitments. The most closely watched case is India's recently awarded March-delivery urea tender, with suppliers now potentially unable to fulfil obligations. Similar force majeure claims could arise across the entire value chain, from national buyers to distributors and even at the farm level.

Broader regional reality of this conflict

Above we have mainly focused on the Strait of Hormuz but a much wider regional landscape is also exposed to the direct and collateral impact of the current conflict. Beyond the Persian Gulf itself, fertilizer-related assets in Egypt, Algeria, Israel, and Jordan face varying degrees of operational risk (see Figure 1).

Figure 1: Regional fertilizer production facilities and airstrikes



Source: RaboResearch, 2026

A notable parallel with last year's events is Israel's decision to halt gas exports to Egypt, citing force majeure, – gas that is essential for Egypt's domestic nitrogen production. However, the scale and breadth of impacts in the current conflict are already far more pronounced. As a result, the volume of nutrients exposed to disruption extends well beyond those merely transiting the Strait of Hormuz.

When factoring in a regional dynamic, the 'at risk' volumes look closer to:

- ~44% of global urea exports
- ~27% of global ammonia exports
- ~25% of global phosphate fertilizer exports
- ~36% of global phosphate rock exports
- ~47% of global sulphur exports
- ~9% of global potash exports

These figures account only for primary fertilizer products. A closer examination of intermediates reveals the potential for even more extensive downstream disruptions.

Figure 2: Middle East exports by country

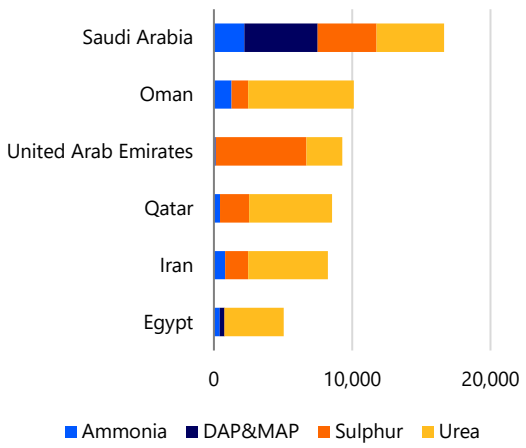
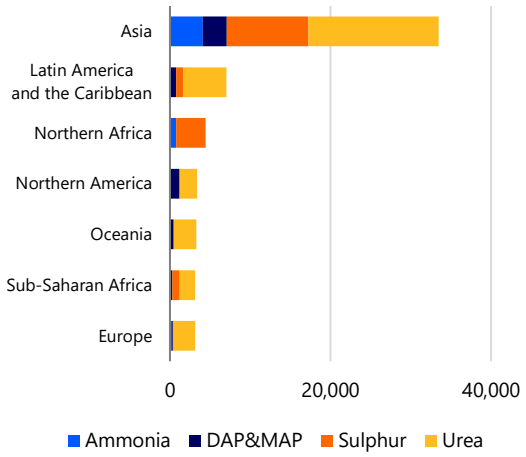


Figure 3: Middle East exports by destination



Note: 2024 data for selected products, in thousand metric tons
Source: CRU, RaboResearch

Losing access to volumes of this magnitude is nearly impossible to offset, and certainly not without significant market consequences (see Figure 2). While much of this trade is oriented toward countries east of Suez, Western markets also rely heavily on these flows (see Figure 3). Importers across the Americas, North Africa, and Europe are therefore exposed, making this a truly global issue, where responses protecting national interests at the expense of those of neighbors are likely to intensify.

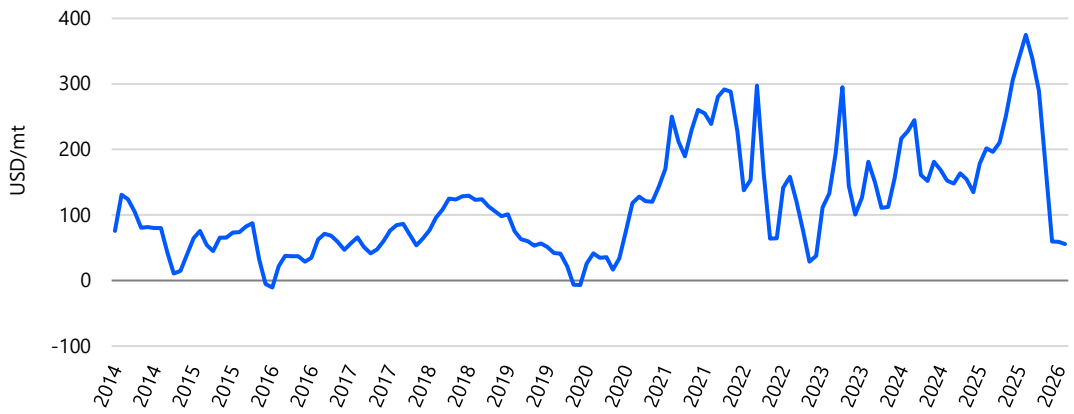
Phosphates producers to face added costs

The prices of sulphur, a key input for phosphate fertilizer production, surged in the second half of 2025, surpassing even 2022 levels, and have continued to pressure phosphate producers. Smaller, sub-scale facilities in Brazil have already been forced offline, and more could follow if prices fail to ease. With around 50% of global sulphur trade now at risk due to the conflict in the Middle East, sustained or higher prices would have significant consequences. Ammonia adds another layer of pressure for phosphate producers, as prices jumped 15%-28% in recent days, following market liquidity and benchmarks.

Higher sulphur prices have already driven phosphate stripping margins sharply lower. Our calculations, which account for rock, sulphur, ammonia, and other gross costs, show margins falling by nearly USD 300/mt over the past six months. With sulphur now fully reflected in current margins, producers are turning their attention to ammonia. Unfortunately, ammonia has an even stronger influence on DAP pricing than sulphur: DAP shows ~0.65 R^2 correlation with ammonia versus ~0.45 with sulphur. A meaningful rise in ammonia prices is therefore likely to either push phosphate prices higher or force additional production cuts.

Based on our modelling, a roughly 33% increase in current ammonia prices would push many phosphate producers into negative stripping margin territory (see Figure 4).

Figure 4: Indicative phosphate stripping margins

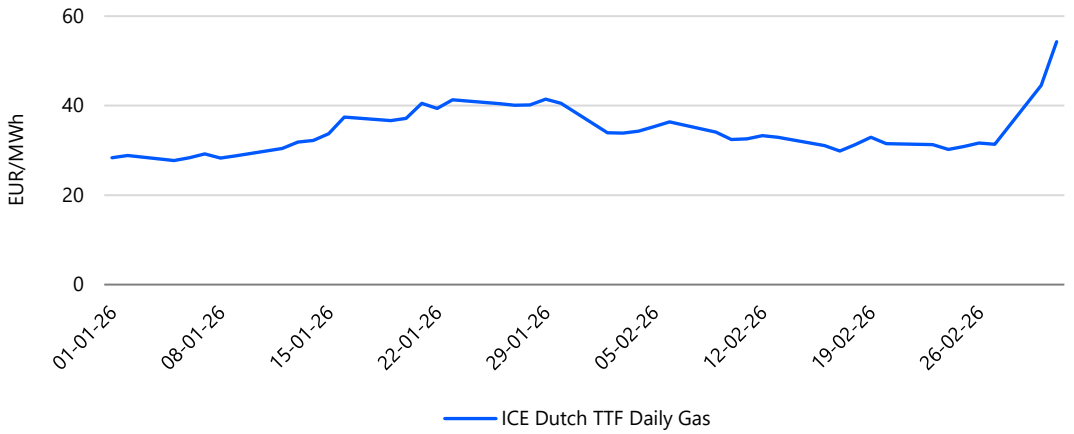


Note: Indicative phosphate stripping margins reflect an approximate gross margin, comparing DAP/MAP prices with the combined cost of key inputs: rock, sulphur, ammonia.
Source: CRU, ICE, Bloomberg, Rabobank 2026

Another blow for Europe's already costly fertilizer market

Although the Persian Gulf's direct role in Europe's fertilizer supply is relatively small, accounting for only 1%-2% of EU nitrogen and ammonia imports, the indirect impact of the US-Iran conflict is already clearly visible. The disruption in the Strait of Hormuz has triggered immediate price reactions in Egypt and Algeria, Europe's two major suppliers, which together represent more than 30% of Europe's imported nitrogen and ammonia. In Egypt, granular urea prices jumped from USD 495-505/mt FOB to USD 610-625/mt in the first trading days after the escalation. Algerian producers, suddenly overwhelmed by buyers seeking safer and more reliable supply routes, saw prices surge to USD 631/mt, a sharp and rapid increase compared to earlier levels.

Figure 5: TTF Natural gas surged by 45% within 48 hours of the first strike on Iran



Source: ICE, RaboResearch 2026

Beyond these immediate spikes, secondary, yet potentially more persistent, price shocks are likely to emerge. Disturbed energy supplies to Egypt could impair fertilizer production capacity over the longer term, while growing uncertainty around sulphur availability threatens phosphate fertilizer production in Morocco – the EU's main source of phosphate imports. Both developments could tighten global supply chains further as the conflict continues.

The domestic EU fertilizer industry is also beginning to feel the tremors of Middle Eastern instability. Natural gas at the Dutch TTF saw a dramatic 45% one-day surge, jumping from EUR 31/MWh to EUR 45/MWh after news of Qatar halting LNG production (see Figure 5). This spike

directly increases the cost of European nitrogen manufacturing, where natural gas is the fundamental feedstock for ammonia production. Producers reacted within hours: Several European plants withdrew their offers for CAN, AN, and UAN, unable to provide price quotations for more than a brief two-hour window as gas markets fluctuated wildly. This episode echoes the vulnerability seen during the 2021-2022 energy crisis, when elevated gas prices rapidly forced production curtailments and exposed the fragility of Europe's nitrogen supply chain.

There is, however, a temporary cushion softening the immediate impact. Record pre-CBAM urea imports in late 2025 created a strategic buffer, helping shield the domestic market from the first wave of price shocks. Additionally, by late February, most European farmers and cooperatives are typically well-stocked for the spring application season, meaning much of the fertilizer required for early 2026 had already been purchased at earlier price points.

Yet affordability remains a pressing concern. Even before the conflict, European farmers were already paying around 25% more for nitrogen fertilizers in early 2026 compared with the same period in 2025. Part of this increase stems from rising compliance costs associated with the EU ETS and CBAM, while another factor is the higher EU import tariffs on Russian and Belarusian fertilizers, introduced in mid-2025. These measures sharply reduced Russian nitrogen's share of EU imports – from 27% in 2024 to just 3% in the first two months of 2026.

Looking ahead, there are strong reasons to expect fertilizer prices in Europe to remain persistently elevated, with a continued decline in affordability for farmers. Sustained price pressure on urea and nitrate fertilizers may encourage a broader shift toward urease and nitrification inhibitors, as farmers try to reduce application rates without compromising yield. But even with such adaptations, the cost burden will remain heavy if geopolitical instability and energy volatility continue to reinforce each other.

Europe entered 2026 with fertilizer affordability already at historically challenging levels. The conflict in the Middle East now adds yet another dark cloud to an already troubled horizon. The instant ~50% increase in TTF natural gas prices speaks to the need for the European ammonia price to increase to offset the changing cost curve.

How do Chinese exports play into the global dynamics?

China's periodic export quotas, heightened inspections, and occasional restrictions on phosphate fertilizers and urea are not primarily commercial trade measures. They are policy tools aimed at maintaining domestic macro-stability and managing critical resources. These measures are designed to ensure domestic fertilizer affordability, protect upstream inputs such as energy and minerals, control inflation, advance environmental and industrial policy goals, and support China's broader strategic positioning.

Current market expectations suggest that China will resume urea exports sometime in Q2, with phosphate exports likely delayed until August or later. However, these timelines reflect political assumptions rather than structural certainty.

A sharp rise in global fertilizer prices can quickly alter China's policy incentives. In an open market, surging international prices would create immediate export arbitrage opportunities and lift domestic prices – precisely the outcomes China seeks to avoid. While authorities will prioritize availability for the domestic spring planting season, further market volatility could prompt tighter inspections or renewed restrictions.

Potential divergence between ag-commodities and fertilizers

The wider Middle East conflict has added a geopolitical risk premium to global ag-commodity markets. Most of the added costs will be indirect and experienced through higher energy prices and rising freight costs. Because there is currently no meaningful supply disruption in grains, oilseeds, or sugar, recent price gains look fragile. Fertilizers, by contrast, face far more structural pressure: A prolonged Middle East conflict would materially tighten supply and provide more durable price pressure.

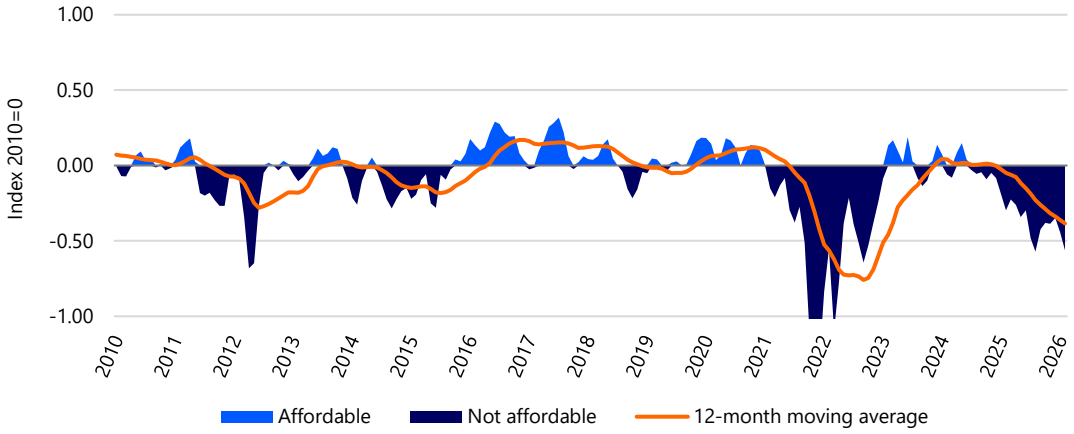
In ag-commodities, freight is the most immediate stress point. Shipping through the Red Sea and into Asian markets has become significantly more expensive as freight and insurance rates spike, and as shipowners withdraw offers or reroute vessels. This has lifted wheat and corn prices despite the lack of a physical supply shortage.

With regard to energy markets, rising crude oil prices – driven by concerns over maritime chokepoints – have supported biofuel-linked commodities such as soybean oil and canola. Soybean oil futures have moved higher with crude, while canola has followed broader energy correlations but remains capped by comfortable Canadian stocks.

Despite these pressures, global supplies across major ag-commodities remain ample, limiting sustained upside. Fertilizers, however, operate under a fundamentally different dynamic. The Middle East is not just a transit route, it is central to nitrogen and ammonia production, and fertilizer markets are deeply tied to gas-linked production costs and regional energy prices. As a result, fertilizers are likely to absorb a far more persistent geopolitical risk premium.

Rabobank's urea affordability index already indicated poor affordability before the conflict. The 12-month moving average is at its second-lowest level since 2010 and is expected to fall further as conflict-driven urea price increases continue to pressure farmers (see Figure 6).

Figure 6: Fertilizer affordability chart



Source: CRU, Bloomberg, CME, Rabobank 2026

Our expectations

We expect the current Middle East conflict to have a deeper and more prolonged impact on global fertilizer markets than the events of June 2025. The effective closure of the Strait of Hormuz – combined with wider regional disruptions and simultaneous constraints across key producing regions in the Gulf, North Africa, and the Eastern Mediterranean – is generating a more severe and sustained supply shock.

Although the disruption is global, its effects will be uneven. Nitrogen, ammonia, and sulphur markets, all heavily reliant on Middle Eastern supply, will face the sharpest tightening. By contrast, global ag-commodity markets, supported by comfortable inventories, have so far absorbed the conflict largely through secondary channels such as higher freight and energy costs. This divergence signals a period in which fertilizer prices remain elevated while crop prices stay comparatively stable, compressing farmer margins worldwide. The pressure will be especially acute in the US, where nutrient costs are rising without corresponding gains in grain and oilseed prices.

Cost pressures are also set to intensify for fertilizer producers outside of the Middle East region. Tightening supply of ammonia, phosphate rock, and sulphur, paired with higher global energy prices, will push production costs higher, particularly in North Africa and Europe, where natural-gas price spikes quickly translate into more expensive ammonia and urea. A further near-term risk is the potential invocation of force majeure across the value chain, from upstream suppliers to national buyers.

If the conflict continues to escalate, fertilizer affordability is likely to deteriorate further, increasing the risk of reduced application rates and demand rationing through 2026.

Imprint

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