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2026

Iran Conflict & Fertiliser Crisis

The supply chain risk due to a lack of fertiliser

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The 2026 Fertiliser Crisis: Briefing for Procurement

The global fertiliser supply disruption of 2026 will directly impact the cost and availability of a wide range of agricultural commodities including wheat, maize, cotton and sugar. Organisations with procurement exposure to these markets should treat this as a Category 1 supply chain risk.

This is not a price inflation event driven by market sentiment. The Strait of Hormuz closure, China's export restrictions, and Russia's quota regime have together physically removed approximately 35% of global seaborne fertiliser from the supply chain. The product does not exist in the trade corridors that growing regions depend upon. Where fertiliser cannot be sourced, it cannot be applied - and where it cannot be applied, crop yields fall.

The scale of that yield risk is material. Wheat provides the clearest illustration: fertiliser accounts for 34–45% of wheat operating costs, EU nitrogen imports collapsed 85% in January 2026, and Ukraine (one of the world's largest exporters) faces an estimated **30% yield reduction against trend**. These are not modelled risks, but reflect conditions already present in the market.

Unfortunately, the risk for procurement teams is not just that costs have risen - it is that supply itself may not materialise. For the first time in a decade, the mechanism that has historically protected crop yields from fertiliser market volatility has broken down. That mechanism relied on one condition: that fertiliser, however expensive, could still be sourced, that is no longer the case.

The Strait of Hormuz closure has physically removed **approximately 35%** of global seaborne fertiliser **from the supply chain,** and with China simultaneously restricting exports, there is no alternative source of scale to compensate.

Where fertiliser cannot be sourced, it cannot be applied. We have looked at over a decade of data confirming that price spikes in fertilizer alone do not reduce yields, however this offers no comfort when the fertilizer simply does not exist.

The consequence is two simultaneous impacts arriving at different times: a cost impact now, as commodity prices re-rate upward in response to supply uncertainty; and then another cost and yield impact in Q3–Q4 2026, as reduced applications and abandoned acreage flow through to reduced harvest volumes.

+40% Urea Price Surge since Feb 2026	**~35%** Global Seaborne Trade Disrupted	**+87%** Shipping Cost Increase (Hormuz)	**5-8%** Crop Yield Drop per 10% input cut

Commercial Risks and Actions

Organisations that treat this as a routine commodity price cycle are likely to be be under-hedged and under-prepared when supply data confirms what input data already shows. The risks are both immediate and structural.

The immediate commercial exposure is straightforward: commodity prices for fertiliser-intensive crops are already re-rating upward and will continue to do so while supply constraints persist. Procurement teams that have not moved to lock in forward positions are effectively carrying an open cost exposure against a market that has one direction of travel in the near term.

The structural risk is less visible but more consequential. Supply contracts written against normal market assumptions — standard availability, normal lead times, typical force majeure thresholds — are unlikely to reflect conditions in which producing regions genuinely cannot source inputs. Suppliers in Gulf-dependent markets including India, Pakistan and parts of East Africa are already reporting plant shutdowns. Force majeure claims from agricultural suppliers are a foreseeable consequence, and organisations without contingency sourcing arrangements will have limited recourse.

Three actions are both available and time critical.

- First, forward purchasing and hedging positions for exposed commodities should be reviewed and extended now, before Q2 planting outcomes become visible in market pricing.

- Second, supplier concentration risk should be assessed and where dependencies are high in vulnerable sourcing regions, alternative supply should be actively identified rather than reactively sought.

- Third, existing supply contracts should be reviewed for force majeure exposure and pricing mechanisms that may not reflect the current input cost environment.

The window to act closes with the spring planting season. That window is open now.

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1. Executive Summary

Global fertiliser markets have entered their most severe crisis since 2022. The convergence of three simultaneous shocks - the strategic closure of the Strait of Hormuz following Operation Epic Fury on 28 February 2026, China's near-total export ban on key fertiliser categories, and Russia's active export quota regime - has created a physical availability crisis that has decoupled fertiliser prices from historical norms. For corporate procurement teams sourcing agricultural commodities, or managing supply chains dependent on crop inputs, this represents a material and urgent business risk.

KEY FINDINGS

1. Urea prices have surged ~40% to approximately $700/t since late February 2026. World Bank benchmark (E. Europe) rose from $394/mt in October 2025 to $472/mt in February 2026, with further spikes since the Hormuz closure.
2. Approximately 35% of global seaborne fertiliser trade has been severed. Every additional week of Hormuz closure removes ~375,000 tonnes of urea and 80,000 tonnes of ammonia from global markets with no readily available substitutes.
3. China has restricted 50-80% of its fertiliser exports (up to 40 million metric tonnes), removing the traditional 'swing supplier' that has historically stabilised regional markets.
4. A 10% reduction in nutrient application translates to a 5-8% drop in global corn and wheat yields. Fertiliser already constitutes 33-44% of corn and 34-45% of wheat operating costs.
5. The era of 'cheap food' propped up by stable fertiliser flows is ending. The r = 0.91 correlation between fertiliser prices and crop prices (vs. r = 0.04 for short-term yield impact) means commodity costs will rise before yields fall — a direct procurement margin risk.

2. The Crisis in Context

Global fertiliser use reached a record 206 million tonnes of nutrients ($N+P_2O_5+K_2O$) in 2024, surpassing the previous high of 202 Mt set in 2020. Ammonia output hit 190.5 Mt, urea production reached 201 Mt, and MOP (potash) production surged 10% to a record 76.6 Mt. Despite this supply growth, structural vulnerabilities had been building throughout 2025 before the current crisis erupted.

The World Bank's fertiliser price index had already risen over 20% in 2025, with urea up 30%, DAP up 26%, and MOP up 19%. Several forces were converging: China's nitrogen fertiliser exports collapsed over 90% year-on-year in 2024 as Beijing prioritised domestic price stability; Chinese phosphate exports fell roughly 60% in the first half of 2024; EU tariffs on Russian and Belarusian fertilisers took effect from July 2025; and sulphur prices nearly tripled since end-2024, pushing phosphate production costs sharply higher.

The March 2026 Hormuz crisis then superimposed a catastrophic supply shock onto these already-stressed markets. The Middle East supplies approximately 34-35% of world urea, ~25% of ammonia, ~18% of DAP/MAP, and ~45% of global sulphur. The combination of the maritime blockade, China's export restrictions, and Russia's quota regime has created what analysts are calling a 'polycrisis' — the most severe structural disruption to fertiliser supply chains since 2022, with potentially more far-reaching consequences for the 2026-2027 harvest.

> **A critical systemic vulnerability has been exposed: no G7 country maintains strategic fertiliser reserves comparable to petroleum stockpiles. Unlike oil, fertiliser has no internationally coordinated buffer stock, leaving the entire global food system exposed to chokepoint disruptions with no shock absorber.**

3. The Strait of Hormuz: The Primary Shock Vector

The primary catalyst for the current crisis is the escalation of military hostilities in the Persian Gulf. Following Operation Epic Fury on 28 February 2026 - a US-led military action against Iranian infrastructure - Iran retaliated with the strategic closure of the Strait of Hormuz, effectively paralyzing one of the world's most vital maritime chokepoints.

The significance of this closure for the fertiliser market cannot be overstated. The Gulf region accounts for 35% of global urea supply and 28% of global ammonia. UNCTAD estimates that approximately one-third of global seaborne fertiliser trade (16 million tonnes annually) transits the Strait, with the composition of Gulf-origin seaborne exports being: urea 67%, DAP 20%, MAP 9%, and other 4%.

Maritime Disruption Metrics

Metric	Pre-Conflict Level	March 2026
Seaborne Fertiliser Trade via Hormuz	16 million Tonnes/Year	**~0 (Stalled)**
Urea Prices (E. Europe FOB)	$394/mt (Oct 2025)	**~$700/mt (+40%)**
Shipping Container Rate (Middle East)	$3,400	**$15,000+**
War-Risk Insurance Premium (per container)	Standard rates	+$2,000 to $4,000
Overall Shipping Cost Increase	Baseline	**+87%**
European TTF Natural Gas	~€28/MWh (Dec 2025)	~€59/MWh (+55%)
Vessel Transits (daily)	Standard commercial flow	3 vessels (armed escort only)

By mid-March 2026, over 150 tankers and bulk carriers are anchored outside the Persian Gulf, unable to secure war-risk insurance or naval escorts. The disruption extends beyond logistics to physical production: Qatar's QAFCO - one of the world's largest urea plants at 5.6 Mt/year — has shut down after Iranian strikes on the Mesaieed and Ras Laffan facilities. This has removed an estimated 4.2 Mt/year of ammonia exports and over 1.5 Mt/month of urea exports from the global supply chain.

A critical second-order risk is the technical rigidity of fertiliser production. Nitrogen production via the Haber-Bosch process involves highly complex, integrated chemical facilities requiring high pressure and temperature, utilising natural gas as both a hydrogen feedstock and energy source. Many Gulf production sites have been 'shut in' as storage facilities reach capacity. Experts warn that these refineries cannot be restarted overnight; it may take weeks or months to return to full capacity even after geopolitical stabilisation — a delay that could cause farmers to miss the 2026 planting window entirely.

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4. Nutrient-Specific Risk Assessment

4.1 Nitrogen (Urea/Ammonia): CRITICAL Risk

Nitrogen fertilisers represent the most acute supply risk of the three major nutrient groups. Natural gas accounts for 50-80% of the operating expenditure for nitrogen plants, making this sector doubly exposed: both to energy price spikes and to the physical blockade of the Gulf corridor.

European producers are facing structural collapse: natural gas constitutes 60-80% of nitrogen fertiliser production costs, and European TTF gas has surged to ~€59/MWh following the Hormuz crisis. Yara International, Europe's largest ammonia producer, has already announced a 1 Mt/year capacity reduction. SKW Piesteritz, Germany's largest ammonia and urea producer, shut one of two ammonia lines indefinitely in January 2025. CF Industries permanently closed its Billingham ammonia plant. Approximately 25% of EU ammonia capacity and 20% of urea capacity were in shutdown or curtailment as of early 2025, a figure that has worsened materially since.

The seaborne supply picture is equally dire. Approximately 49% of global seaborne urea exports and ~30% of ammonia exports have been blocked by the Hormuz closure. China's March 2026 ban on nitrogen-potassium blends and reinforcement of urea restrictions removes the traditional 'swing supplier'. China historically exported ~11 Mt of phosphate alone in 2015 versus an expected ~4.5 Mt in 2025. Russia's export quota (Decree/Resolution No. 1610, 1 December 2025 to 31 May 2026) caps aggregate exports at 18,690,257 tonnes.

4.2 Phosphates (DAP/MAP/TSP): HIGH Risk

Phosphate markets face a dual constraint that makes them particularly vulnerable to cascading effects. First, the Gulf accounts for ~18-20% of global DAP/MAP trade, meaning Hormuz disruption directly impacts phosphate availability. Secondly, and more insidiously, the Middle East supplies 44% to 50% of the world's seaborne sulphur, the critical input for sulphuric acid used in converting phosphate rock into finished fertilisers.

Sulphur prices have nearly tripled since end-2024. Port prices for sulphur in Asia have exceeded 4,500 yuan/ton, a three-year high. This has pushed the price of Monoammonium Phosphate (MAP) up by 15% in a single month. Major producers including Morocco's OCP Group, who depend on 3.7 million metric tonnes of Gulf sulphur annually - re finding output constrained despite possessing vast phosphate rock reserves.

This 'cascading effect' means a disruption in the energy-rich Gulf creates a production bottleneck in the phosphate-rich Atlantic Basin.

China's role compounds this risk further. Beijing has restricted phosphate mining to 140 Mt (down from 150 Mt), partly driven by the LFP battery sector's growing demand for phosphate rock (each tonne of battery-grade material consumes ~3.5 tonnes of phosphate rock). Industry consensus effectively suspended Chinese phosphate exports until at least August 2026. The combined Gulf-China disruption to phosphate supply is without modern precedent.

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4.3 Potash (MOP/KCl): MEDIUM Risk

Potash presents the most stable picture of the three nutrients, largely due to increased production in Canada and Laos. Canadian potash output is projected to exceed 20 million tonnes in 2026. Belarus potash exports have recovered to ~12 million tonnes despite EU sanctions, routing via Russian Baltic ports and rail to China. The US lifted Belarus potash sanctions in December 2025 under OFAC General License 13.

Nevertheless, potash is not without risk. Supply remains geopolitically concentrated: EU sanctions on Belarus restrict potash for European buyers, and the overall affordability index for farmers is poor because potash is typically applied alongside more expensive phosphates. Where farms are cutting total input budgets, all three nutrients tend to be reduced together.

5. Benchmark Price Movements

World Bank Pink Sheet monthly averages provide the most consistent public benchmark. The data below tracks the trajectory from September 2025 through February 2026, noting that post-Hormuz spikes (from late February 2026) are likely understated in the latest monthly averages due to data lag.

Fertiliser (Benchmark)	Sep 2025	Dec 2025	Feb 2026	~Mar 2026*	Trend
Urea (E. Europe, US$/mt)	$370	$427	$472	**~$700**	↑↑ SHARP
DAP (US$/mt)	$781	$628	$627	>$700+	→ VOLATILE
MOP / Potash (US$/mt)	$353	$366	$373	~$380+	↑ FIRM
Ammonia NW Europe (US$/mt)	~$400	~$430	~$470	**$750 CFR**	↑↑ CRITICAL

** March 2026 estimates based on post-Hormuz crisis reports; World Bank monthly averages lag real-time spot pricing.*

The correlation data from CropGPT's analysis is particularly instructive for procurement strategists: the correlation between fertiliser prices and crop prices is r = 0.91, whereas the short-term correlation between fertiliser prices and yield is only r = 0.04. This means procurement teams will feel the cost impact in commodity prices well before any yield reduction manifests in supply. Cost transmission to food prices is rapid and near-certain; yield impacts take one full growing season to materialise.

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6. Geopolitical Drivers and Export Policy

Four major geopolitical disruptions now overlap simultaneously, creating a compound risk environment that is without modern precedent in global fertiliser markets.

Actor	Policy Action (2025-26)	Risk Level	Impact on Markets
Middle East / Gulf	Strait of Hormuz closure (28 Feb 2026). Force majeure declared by QAFCO and SABIC. Ras Laffan complex damaged.	CRITICAL	16 Mt/year seaborne trade stalled. 3-4 Mt/month removed from global supply. 49% of seaborne urea exports blocked.
China	Near-total ban on DAP/NPK exports (Mar 2026). Phosphate mining capped at 140 Mt. Urea export restrictions effectively since late 2024. Battery sector competing for phosphate rock.	CRITICAL	50-80% of China's exports restricted. Up to 40 Mt removed from global market. India, Brazil, Thailand, Malaysia most affected (16-33% China-sourced).
Russia	Export quota regime (Dec 2025 - May 2026): 18.69 Mt aggregate cap (Decree No. 1610). Technical sulphur export ban (Nov 2025). Banking sanctions, port restrictions.	HIGH	Russia holds ~25% global fertiliser market share. Quota reduces swing supply. Sulphur ban pressures phosphate production costs globally.
European Union	Tariffs on Russian/Belarus fertilisers from July 2025 (escalating to €315-430/t by 2028). Anti-dumping duties on UAN blends (Reg. EU 2026/65). CBAM definitive phase from 1 Jan 2026.	HIGH	EU nitrogen imports crashed 85% in January 2026 (from 1.18 Mt to 179,877 tonnes). 50% of EU supplies now third-country sourced. Trading paralysis in spring 2026.
Belarus	EU potash sanctions maintained. US OFAC General License 13 (Dec 2025) partially eased transactions. Exports re-routing via Russian Baltic ports.	MEDIUM	Belarus potash exports reached ~12 Mt in 2025 via alternative routing. EU buyers remain constrained. Partial supply normalisation possible.

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The Russian Sanctions Paradox

One of the most consequential and underappreciated dynamics is the asymmetric sanctions architecture. Russia holds approximately 25% of global fertiliser market share, with 45 Mt exported in 2025. US OFAC General License 6B explicitly authorises transactions in Russian fertiliser, and the Trump administration's April 2025 'Liberation Day' tariffs effectively exempted Russian goods while imposing 10-15% duties on competitors from Saudi Arabia, Morocco, and Nigeria. This has inadvertently concentrated market power with Russia in the US market, where Russian fertiliser imports rose ~30% in 2025.

EU tariffs are more aggressive but phased: at €40/t in 2025-26, they escalate to a prohibitive €315/t by 2028. The result is a bifurcated Western market: Russian fertiliser is favoured in the US, penalised in the EU. This fragmentation creates regional price dislocations rather than solving the global availability problem and may worsen affordability in Europe during the most critical procurement window.

7. Impact on Crop Production and Food Costs

Commercial fertilisers contribute an estimated 30-50% of global crop yields. The OECD-FAO Agricultural Outlook 2025-2034 modelled that simultaneous shocks to all three synthetic fertiliser types could raise the FAO food price index by up to 13% over 2025-2028. The World Bank estimates that every 1% increase in fertiliser prices can push global food prices up by 0.45%.

Agronomists warn that a 10% reduction in nutrient application leads to a 5-8% drop in global corn and wheat yields. In the American Midwest and the Brazilian Cerrado, farmers are already making decisions to shift acreage away from fertiliser-intensive corn toward legumes. This acreage shift could generate a global grain deficit by year-end, further driving up livestock feed costs, and subsequently meat and dairy prices.

7.1 Commodity-Specific Risk Matrix

Commodity	Risk	Fertiliser Exposure	Key Watch Points for Procurement
Wheat	CRITICAL	Fertiliser = 34-45% of operating costs. Highly sensitive to urea/ammonium nitrate prices. European production under dual stress from gas prices and CBAM.	Monitor EU wheat planted acreage (spring 2026). US winter wheat yield estimates. Ukraine supply disruptions.
Corn / Maize	CRITICAL	Fertiliser = 33-44% of operating costs. Farmers shifting to soybeans to avoid input costs. US Midwest and Brazil Cerrado most exposed.	USDA planting intentions report. Brazilian Cerrado rainfall. Chinese corn import volumes as signal of domestic shortfall.
Cotton	HIGH	US growers already below breakeven. 2026 planted acreage projected at 9.0M acres (down from 11.2M in 2024). Pakistan supply under severe risk from Hormuz disruption.	USDA planting intentions. OBBBA payment timing. Pakistan domestic production.
Sugar	MEDIUM	Brazil dominates global production; 85% fertiliser import dependency. 41% of urea imports transit Hormuz. Indian cane season fertiliser access also at risk.	Brazil domestic nitrogen production ramp-up (Petrobras). Indian cane season fertiliser access.
Coffee	MEDIUM	Fertiliser = 14-32% of production costs by origin. Vietnam's 2025/26 crop recovery to 30.8M bags demonstrates that high crop prices can catalyse fertiliser investment.	Vietnam crop season. Brazil fertiliser cost pass-through. 2026/27 pre-estimates.
Cocoa	MEDIUM	Access rather than cost is the primary challenge in West Africa. Ghana cocoa yields at 450-541 kg/ha vs. 1,400-3,000 kg/ha achievable with adequate fertilisation.	Ghana free fertiliser programme continuation. Ivory Coast soil health investment.
Cashew	LOW-MED	Traditionally low-input crop; least direct fertiliser exposure. West African yields of 0.4-0.5 t/ha could triple with proper fertilisation but current crisis unlikely to increase input use.	West Africa adoption programmes. Ivory Coast soil health investment.

7.2 The European Paradox: CBAM Implementation Shock

Europe faces a unique regulatory challenge compounding the global supply crisis. The Carbon Border Adjustment Mechanism (CBAM) entered its definitive phase on 1 January 2026, covering nitrogen fertilisers and ammonia. The result was an immediate market distortion: nitrogen fertiliser imports surged 140% in December 2025 as traders frontloaded shipments ahead of the new carbon tariff, then crashed 85% in January 2026 — falling from 1.18 million tonnes to just 179,877 tonnes.

This has created a state of 'trading paralysis' in the European market: buyers and suppliers are unable to finalise contracts for the spring planting season. France and Italy have demanded exemptions under a proposed Article 27a 'emergency brake.' The European Commission's own ammonia capacity continues to shrink, with roughly 50% of EU fertiliser supplies now sourced from third countries — precisely when global supply is most constrained. European wheat yields are at significant risk if the CBAM impasse is not resolved by late March 2026.

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8. Scenario Analysis: Key Variables

Three critical variables will determine whether 2026 becomes a managed disruption or a systemic food crisis. Procurement teams should monitor these variables as leading indicators for sourcing and hedging decisions.

Variable	Bull Case (Best Outcome)	Bear Case (Worst Outcome)	Direction
Strait of Hormuz Duration	Diplomatic breakthrough within 4-6 weeks; partial reopening by May. Farmers can still plant with emergency procurement. Urea stabilises below $700/t.	Closure persists through Q3. Gulf plants remain shut-in. 2026 harvest seriously compromised. Urea approaches 2022 highs (~$900/t). Food price index rises 10-13%.	**WORSENING**
China Export Policy	China partially reopens DAP/phosphate exports for humanitarian corridors. Quota introduced rather than outright ban. Prices moderate by Q3 2026.	China further tightens restrictions. Combined Gulf + China loss removes 60-80% of global export supply. Unprecedented price spike — no historical comparator.	**TIGHTENING**
EU CBAM Resolution	Article 27a suspension agreed by April. EU imports normalise. European spring fertilisation achievable at near-normal rates. Wheat yields protected.	Political deadlock persists. EU nitrogen market critically undersupplied. European wheat yields significantly below trend. Food inflation accelerates across EU.	**UNCERTAIN**
Russian Supply Flows	Russia fills partial Gulf vacuum for BRICS/Global South markets. Prices moderate slightly outside Western markets. India and Brazil secure supply.	Further Ukrainian drone strikes on production facilities (cf. Dorogobuzh, Feb 2026) and banking/payment frictions limit actual export volumes below quota.	**MIXED**
Weather / La Nina	Weak, short-lived La Niña. Adequate rainfall supports yields despite input shortfall. Southern Hemisphere crop volumes partially offset Northern deficits.	Strong La Niña compounds fertiliser shortage with crop stress in Australia, Southeast Asia, and Southern Africa. Simultaneous multi-region shortfall.	**MONITORING**

BASE CASE (Most Likely, Q2 2026)

Partial logistics normalisation as diplomatic pressure mounts, but persistent war-risk premia on Gulf routes. China maintains tight export controls through spring planting season. Russia keeps quotas through May 2026. Result: elevated nitrogen and phosphate prices through mid-2026; uneven regional availability; persistent affordability pressure. Urea remains in the $500-700/t range. Crop planted areas shift toward lower-input varieties. Food price index rises 5-8%.

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9. Strategic Recommendations for Procurement Teams

The following recommendations are structured across three-time horizons, reflecting the layered nature of the current risk environment. Corporate procurement teams with exposure to wheat, corn, cotton, sugar, or other fertiliser-intensive commodities should treat this as a Category 1 supply chain risk.

9.1 Immediate Actions (0-3 Months)

1. Conduct a full fertiliser exposure audit of your agricultural supply chain. Map which commodities you source, from which regions, and identify the percentage of those regions' fertiliser that transits the Strait of Hormuz or originates from China or Russia.
2. Accelerate forward purchasing and hedging for fertiliser-intensive commodities — particularly wheat, corn, and cotton — as the r = 0.91 price correlation means commodity costs will rise before yield data confirms supply shortfall. Lock in pricing where possible before Q2 2026 planting outcomes are known.
3. Assess supplier concentration risk. If key agricultural suppliers are located in Gulf-dependent import regions (India, Pakistan, East Africa), initiate contingency supplier identification now. Sudan (54% Gulf dependency), Somalia (30%), Pakistan (27%), and Kenya (26%) face the highest immediate risk.
4. Review force majeure clauses in existing supply contracts. The current crisis is likely to trigger force majeure claims from agricultural suppliers, particularly those in India (where urea plants are shutting due to LNG loss) and Pakistan (total plant shutdown).
5. Monitor the EU CBAM Article 27a emergency brake vote. Procurement teams sourcing from European agricultural suppliers should model both scenarios: suspension (near-normal spring fertilisation) vs. deadlock (significant wheat yield underperformance).

9.2 Short-Term Actions (3-6 Months)

6. Establish or increase strategic inventory buffers for fertiliser-intensive agricultural inputs. The absence of any public strategic fertiliser reserve (unlike petroleum) means private stock-building provides one of the few available shock absorbers.
7. Diversify sourcing toward producers in supply-resilient regions: Morocco (OCP Group, expanding to 20 Mt by 2027), Canada (potash output exceeding 20 Mt), and the US Gulf (new Beaumont New Ammonia and Gulf Coast Ammonia capacity adding ~2 Mt/year).
8. Engage with suppliers on precision agriculture adoption — technologies such as Variable Rate Application can reduce input waste by up to 30%, providing a cost mitigation lever even if prices remain elevated. This is particularly relevant for large-scale corn and wheat supply chains.
9. Model the acreage shift scenario: if farmers in key growing regions shift from corn to soybeans/legumes due to fertiliser cost pressure, anticipate both a potential corn deficit and a soybean/legume surplus in Q3-Q4 2026. Adjust commodity procurement strategy accordingly.

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9.3 Medium-Term Strategic Positioning (6-24 Months)

10. Integrate fertiliser supply risk into standard procurement risk frameworks. The current crisis has demonstrated that fertiliser supply risk is a systemic, Category 1 input risk for any corporation dependent on agricultural commodities — equivalent in strategic importance to energy supply risk.
11. Monitor green ammonia development as a structural hedge. While current green ammonia costs (~$720/t) need to fall to ~$480/t by 2030 to be competitive, investments by NEOM (Saudi Arabia, 1.2-1.3 Mt/yr) and Reliance Industries (India) represent future alternative supply nodes that reduce Gulf dependency.
12. Track the EU CBAM phasing schedule (escalating to €315-430/t by 2028). European agricultural suppliers will face structurally higher input costs through the decade; this should inform medium-term supplier pricing expectations and contract structures.
13. Consider advocacy with industry bodies for the creation of strategic fertiliser reserves analogous to petroleum stockpiles. The absence of any such reserve has been identified as the single greatest structural vulnerability in global food systems by the Carnegie Endowment and the GFCRG.

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10. Key Watch Points and Early Warning Indicators

Procurement teams should monitor the following as leading indicators of scenario crystallisation. These are the data points most likely to move markets before consensus forecasts shift.

Indicator	Source / Frequency	What to Watch For
Strait of Hormuz vessel transits (daily)	Lloyd's / CRU Group / shipping trackers	Any increase above 3 vessels/day signals de-escalation. <3 signals deepening blockade.
China General Administration of Customs — fertiliser export data	Monthly (lag ~3-4 weeks)	Any official quota announcement vs. informal ban signals scope and duration of restrictions.
World Bank Pink Sheet — urea and DAP prices	Monthly	Urea >$700/t confirms crisis-level pricing. Approaching $900/t = 2022 crisis equivalence.
EU Parliament vote on CBAM Article 27a (emergency brake)	Expected April 2026	Suspension = bullish for EU wheat production. Rejection = European yield downside and continued trading paralysis.
USDA Planting Intentions Report	End March / Late June 2026	Large shift from corn to soybeans signals farmer response to input costs. Bearish for corn supply, bearish for fertiliser demand (partial offset).
Russia Decree No. 1610 extension decision (May 2026)	Russian Government gazette	Extension beyond 31 May 2026 = prolonged nitrogen tightness. Expiry = modest relief.
IFA / Fertecon spring demand estimates	Quarterly	Downward revisions to applied nutrient rates signal yield risk and demand destruction.
Sulphur port prices (Asia, yuan/ton)	Weekly (industry sources)	Above 4,500 yuan/ton = continued phosphate cost pressure. Decline signals Gulf sulphur resumption.

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11. Regional Vulnerability Assessment

UNCTAD's mapping of Persian Gulf-origin seaborne fertiliser import dependency reveals the regions most exposed to supply disruption. Corporate supply chain teams sourcing agricultural commodities from these regions should assume elevated risk of production disruption and cost pass-through.

Country/Region	Gulf Dependency	Risk Level	Key Supply Implications for Procurement
Sudan	**54%**	CRITICAL	Highest Gulf dependency globally. No mitigation policy. Immediate food security crisis. Source alternative supply from North African origins where possible.
Sri Lanka	36%	HIGH	Historically limited FX reserves. History of abrupt fertiliser withdrawal causing 32% rice yield decline in 2021. High vulnerability to repeat disruption.
Tanzania	31%	HIGH	Gulf dependence and logistics vulnerability. Significant pass-through to domestic food prices expected Q2-Q3 2026.
Somalia	30%	CRITICAL	Very high import dependence, low resilience. WFP already flagged as acute hunger hotspot. No meaningful mitigation capacity.
Pakistan	27%	HIGH	Hormuz closure has cut LNG supply (sourced 100% from Qatar/UAE), shutting domestic fertiliser plants. Total plant shutdown reported. Cotton and wheat production at severe risk.
Kenya	26%	HIGH	Government distributing 3M bags under Long Rains National Fertiliser Subsidy Programme (Jan 2026), but subsidy strains fiscal position. Coffee and tea sectors at risk.
India	>40% (urea from Gulf)	HIGH	Despite ₹1.84 trillion fertiliser subsidy (FY25-26), LNG dependency (44% from Qatar) is forcing domestic plant shutdowns. India has diversified toward Morocco and Saudi Arabia for long-term supply.
Brazil	41% urea via Hormuz	HIGH	85% fertiliser import dependency overall; 97% for nitrogen. Petrobras reactivating domestic plants but only targeting 20% domestic nitrogen by end-2026. Soybean and sugar sectors exposed.
European Union	50% third-country sourced	HIGH	CBAM implementation creating trading paralysis. 25% ammonia and 20% urea capacity shut/curtailed. Wheat yield at risk if spring fertilisation is missed.

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12. Conclusion

The 2026 fertiliser crisis marks a major, and structural, turning point for global agriculture.

The simultaneous closure of the world's most critical maritime chokepoint, the withdrawal of the world's largest swing exporter, and a decade-long structural decline in European production capacity have combined to create conditions that could not have been adequately stress-tested under pre-2026 risk frameworks.

Three structural insights stand out as novel and consequential for long-term procurement strategy.

First, the absence of any strategic international fertiliser reserve — unlike petroleum — leaves the entire global food system exposed to chokepoint disruptions with no buffer. This is not a theoretical risk; it is a live crisis. Second, the emerging competition between the fertiliser industry and the battery industry for phosphate rock represents a new structural demand driver that will permanently constrain phosphate supply even as mining capacity grows. Third, the paradox of Russian fertiliser sanctions — where EU tariffs are driving European farm costs higher while US exemptions have effectively increased Russian market share — illustrates how uncoordinated Western policy can compound the problem it aims to solve.

For corporate procurement teams, the critical takeaway is this: the r = 0.91 correlation between fertiliser prices and crop prices means the cost impact is coming regardless of whether the current crisis results in yield losses. The question is not whether agricultural input costs will rise in the procurement pipeline — they already have — but whether your organisation is positioned to absorb, hedge, or pass through those costs more effectively than competitors.

> **Action is required now, during the spring planting window, not after harvest data confirms supply disruption.**