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Strait of Hormuz Closure and Global Fertilizer Trade Disruptions

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>>> Highlights

- **Strait of Hormuz closure.** Operation Epic Fury triggered Iranian retaliation, including drone strikes on Gulf shipping. Major P&I clubs canceled war-risk insurance, halting virtually all commercial shipping through the world's most critical energy and fertilizer corridor.
- **Substantial portion of globally traded fertilizer is now physically blocked.** The Gulf accounts for roughly 43% of seaborne urea exports, approximately 44% of seaborne sulfur, over a quarter of traded ammonia, and significant phosphate volumes via Saudi Arabia. Unlike 2022, when Russian fertilizers were rerouted, the Gulf product behind a closed Strait has limited alternative routes.
- **The U.S. has exposure risks to urea, MAP, and DAP fertilizers.** Domestic production provides a meaningful nitrogen buffer: the U.S. produces approximately 94% of its ammonia needs domestically, and domestic nitrogen alternatives partially offset urea import exposure. On the phosphate side, CVD duties blocking Moroccan supply and China's export restrictions have amplified U.S. dependence on Saudi Arabia, whose shipments are currently blocked.
- **Brazil and other major importers face greater exposure.** Brazil imports over 80% of its fertilizers, with high dependence on nitrogen and phosphate. The Hormuz closure simultaneously removes direct Gulf supply to Brazil and constrains Morocco's ability to substitute for it.
- **Blocking Gulf sulfur amplifies global phosphate supply pressures beyond direct Gulf exports.** Approximately 44% of seaborne sulfur originates from the Gulf. A prolonged closure would tighten global sulfur supply, raising costs for phosphate producers in China, Morocco, and Indonesia, countries that depend on Gulf sulfur as feedstock, and constraining global phosphate supply at a time when alternative sources are already limited.
- **Different agricultural supply chain risk factors than in 2022.** The Persian Gulf accounts for a larger share of global fertilizer trade than Russia and Belarus, but unlike 2022, the Gulf is not a major grain exporter. The Black Sea grain disruptions that drove crop prices sharply higher in 2022 have no parallel here, meaning there is no corresponding revenue offset for farmers facing rising input costs. The key uncertainty in 2026 is how long the Strait will remain closed. A prolonged closure could push fertilizer prices toward or beyond 2022 peaks, compressing farm income margins in ways that 2022 did not.

>>> Fertilizer Market Disruptions due to the Strait of Hormuz Closure

On February 28, 2026, the United States and Israel launched Operation Epic Fury, a large-scale military operation targeting Iranian nuclear and military infrastructure. Within hours, the Islamic Revolutionary Guard Corps (IRGC) retaliated with drone strikes on Gulf shipping and declared the Strait of Hormuz closed on March 2. By March 4, tanker traffic through the Strait, the world's most critical maritime choke-point, had dropped to near zero. Major container lines, including Maersk, Hapag-Lloyd, CMA CGM, MSC, and COSCO, suspended all Hormuz transits. Major P&I clubs issued cancellation notices on war-risk insurance effective March 5, making commercial transit no longer viable.

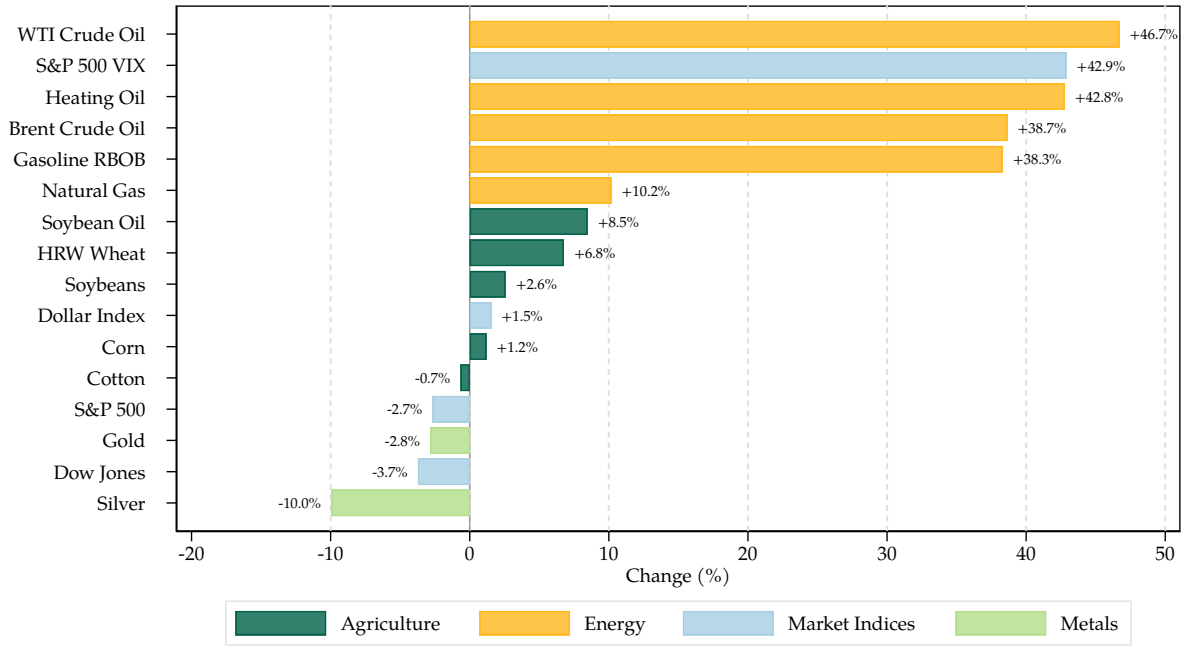


Exhibit 1: *Market Response to Operation Epic Fury (Changes Between February 27 and March 9, 2026).*

Source: NDSU using data from Bloomberg.

Exhibit 1 looks at the immediate market reaction in the first week of the crisis. Energy markets bore the initial shock, with WTI crude oil rising 46.7% and European natural gas spiking sharply. Agricultural commodities registered more modest but meaningful gains, with soybean oil up 8.5%, wheat up 6.8%, corn up 1.2%, and soybeans up 2.6%. Market volatility, as measured by the S&P 500 VIX, surged 42.9%.

The Strait of Hormuz has been effectively closed to commercial shipping since March 2, 2026, following the launch of Operation Epic Fury and Iranian retaliation against commercial shipping. The scale of fertilizer supply at risk is concerning. During 2020–2025, about 2.1 to 3.2 million metric tons (MMT) of fertilizer exits the Persian Gulf monthly through Hormuz, broken down as sulfur (1.0–1.2 MMT), urea (0.9–1.7 MMT), and anhydrous ammonia (0.2–0.5 MMT). In 2024, the Gulf region accounted for 43% of global urea (21 of 48 MMT), 44% of sulfur, and 27% of global ammonia exports. Unlike during the 2022 Ukraine shock, where Russian products were redirected, Gulf production behind a closed Strait has no viable alternative routing for large vessels.

Exhibit 2 maps the countries directly and secondarily affected, with the key exposure shares annotated. There is also an additional choke-point risk. Houthi forces announced on February 28 their intent to resume Red Sea attacks, meaning Saudi Arabia may not reliably bypass the Hormuz Strait via its Red Sea ports.

39 MMT of Fertilizer and Fertilizer Feedstock Disrupted at the Strait of Hormuz.

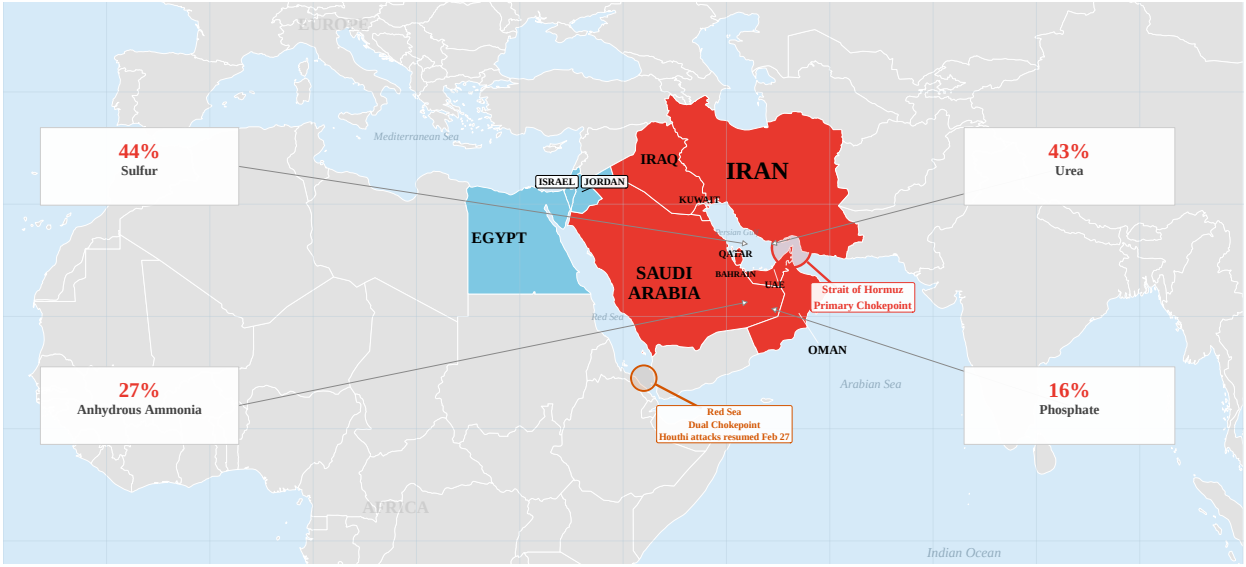


Exhibit 2: *Share of Global Fertilizer Trade Disruption at the Strait of Hormuz.*

Note: Red indicates directly affected Persian Gulf exporters (Iran, Iraq, Saudi Arabia, Qatar, UAE, Oman, Kuwait, and Bahrain). Blue indicates secondarily affected regional producers/exporters exposed to spillover disruption, including Egypt (gas cutoff risk), Jordan, and Israel. Percentages in the call-out boxes show the share of global exports of sulfur, urea, phosphate, and anhydrous ammonia supplied by neighboring Persian Gulf countries.

Source: NDSU using 2024 export data from the S&P Global Trade Atlas.

Exhibit 3 maps destination-level fertilizer and feedstock trade flows totaling roughly 39 MMT in 2024 and highlights the global reach of a Hormuz disruption. In 2024, India received 9.7 MMT, Brazil 4.4 MMT, and China 3.9 MMT, while the United States received 2.0 MMT directly. Particularly important are the sulfur flows to Morocco (about 3.6 MMT) and China (3.9 MMT), which show how a disruption at Hormuz can shut down fertilizer production in countries far removed from the Iran conflict.

When export channels close, storage capacity fills rapidly, forcing producers to curtail operations. Gulf storage and terminal capacity is limited, measured in days, not weeks, and once export channels close, producers have no choice but to reduce output. Within the first week of the crisis, major Gulf producers began declaring force majeure and reducing operations across urea, ammonia, and sulfur. Even Egypt's urea plants, thousands of miles from Iran, went offline after Israel shut down offshore gas fields as a precautionary measure, cutting the natural gas supply on which Egyptian fertilizer production depends.

Sulfur Feedstock Dependence and the Global Phosphate Supply Response

Beyond the direct disruption to urea, ammonia, and phosphate exports, there is also the risk of indirect effects through sulfur. Sulfuric acid is the essential input for producing all phosphate fertilizer, DAP, MAP, TSP, and phosphoric acid. The Gulf produces approximately 44% of the world's seaborne sulfur, almost entirely as a byproduct of oil and gas refining. When the Strait is shut down, it does not merely block Gulf-produced fertilizers; it cuts off the sulfur feedstock that producers far from the conflict zone need to manufacture their own phosphate products. Sulfur prices had already more than doubled during 2025 before the Hormuz closure.

Exhibit 4 illustrates the cascade mechanism. China is the world's largest sulfur importer, with 46% sourced from the Middle East and approximately 1.8 MMT of port inventory as of late February, roughly one to one-and-a-half months at spring consumption rates. Without Gulf sulfur, Chinese phosphate production gets squeezed, reinforcing Beijing's existing export suspension through August 2026. Morocco's OCP Group, the world's single largest phosphate exporter, depends on roughly 3.7 MMT of Gulf sulfur. Indonesia, which sources 60% of its sulfur from the Middle East, faces similar constraints.

The Strait of Hormuz Is a Global Fertilizer Choke-point Whose Disruption Would Hit Some Countries Far Harder Than the United States.

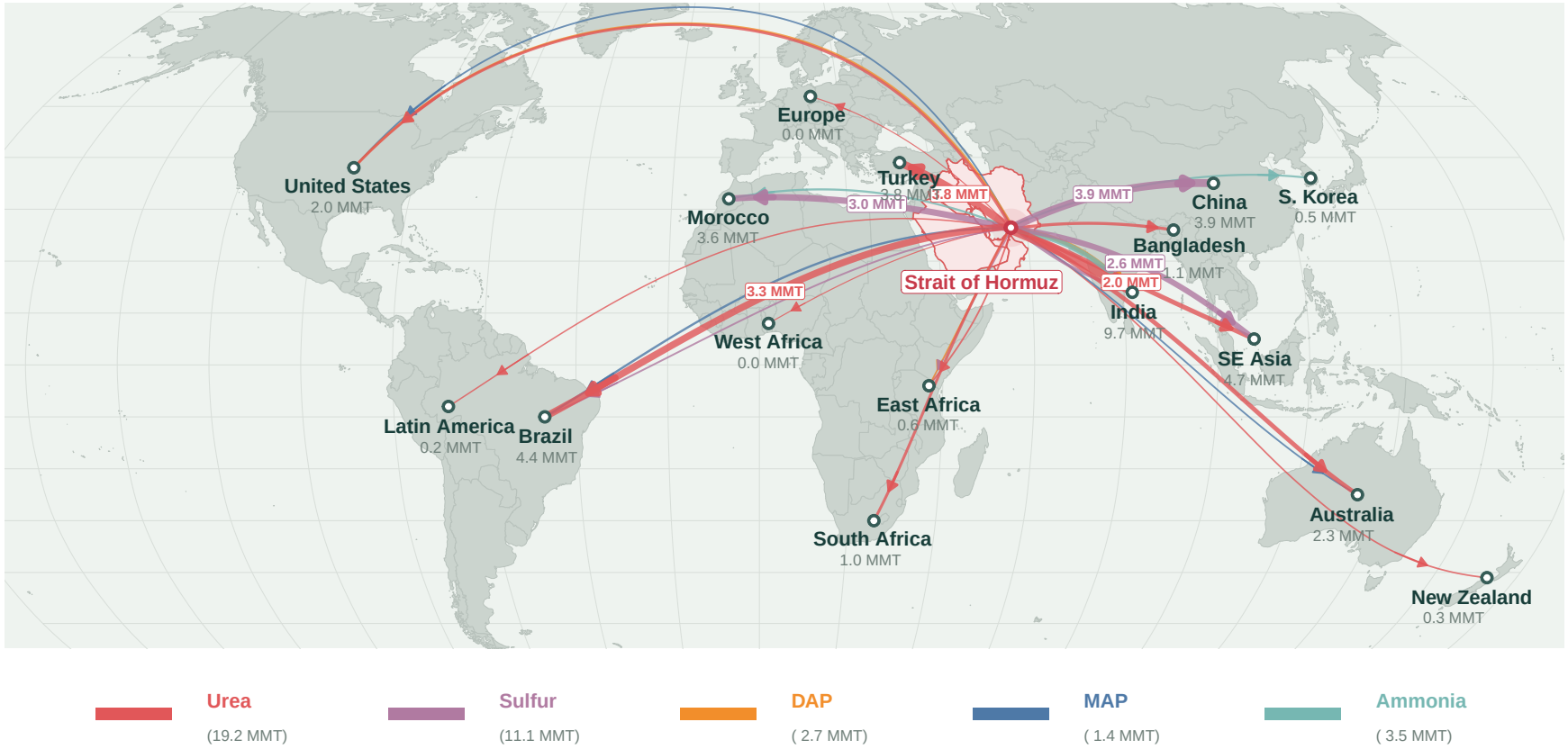


Exhibit 3: *Global Fertilizer Exports Through the Strait of Hormuz: Major Trade Flows (39 MMTs in 2024).*

Note: Arrow width indicates the export volume. Fertilizer includes anhydrous ammonia, DAP, MAP, sulfur, and urea.

Source: NDSU using 2024 export data from the S&P Global Trade Atlas.

An Extended Hormuz Closure Would Trigger a Sulfur Shock That Cascades Through Global Phosphate Production.

Why Sulfur Matters

Sulfuric acid is required for all phosphate fertilizer production, including DAP, MAP, TSP, and phosphoric acid.

Persian Gulf countries account for 44% of global sulfur trade, 14.0 of 32.0 MMT, produced as a byproduct of oil and gas refining.

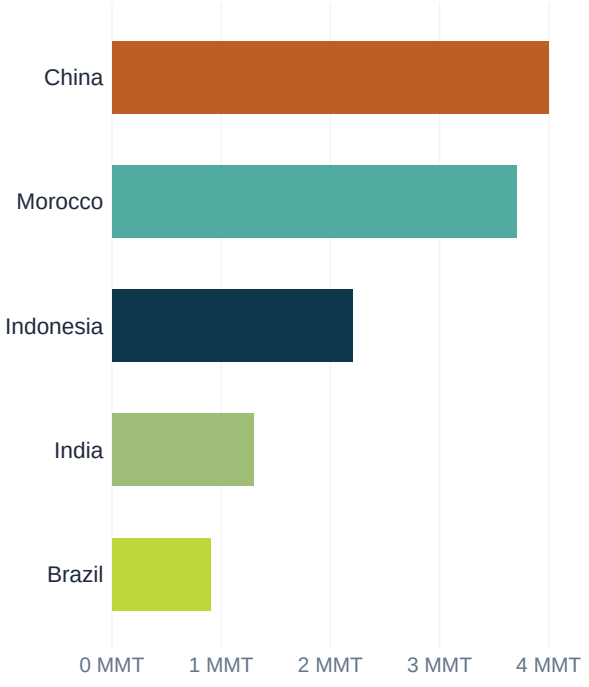
A Hormuz closure cuts the sulfur feedstock that Morocco, China, and Indonesia need to produce their own phosphate fertilizers.

44%
OF GLOBAL SULFUR TRADE
14.0 of 32.0 MMT traded

14.6 MMT
THROUGH HORMUZ
Annual sulfur transit

Gulf Sulfur Imports by Destination

MMT per year via the Strait of Hormuz



China
4.0 MMT per year from Gulf
46% of sulfur imports

Morocco, OCP
3.7 MMT per year from Gulf
World's #1 phosphate exporter

Indonesia
2.2 MMT per year from Gulf
60% of sulfur imports from M.E.

Transmission Channel

1. Strait of Hormuz closes, 14.6 MMT per year of sulfur supply is disrupted
2. China loses about 4.0 MMT per year of sulfur impo constraining domestic phosphate production
3. China phosphate export restrictions tighten
4. Morocco, OCP, loses about 3.7 MMT of Gulf sulfur constraining DAP and MAP output
5. Saudi phosphate exports require Hormuz transit

Multiple major phosphate sources are constrained at the same time

Exhibit 4: *The Sulfur Cascade: How the Hormuz Strait Closure Disrupts Phosphate Production Worldwide.*

Source: NDSU using 2024 trade data from the S&P Global Trade Atlas, Argus Media, CRU Group, and The Fertilizer Institute.

The result is that three of the five major global phosphate sources face simultaneous supply pressure, for three different reasons that all trace back to the same event: China's export ban (reinforced by sulfur shortage), Saudi Ma'aden's DAP production physically blocked behind the Strait, and Morocco's output constrained by sulfur supply. It is important to note that a Hormuz shutdown would not necessarily halt phosphate production outright in these countries. China, Morocco, and Indonesia all have some domestic sulfur capacity from oil and gas refining, and producers hold varying levels of inventory. However, domestic sources are insufficient to replace Gulf volumes at current consumption rates, and the adjustment would come through sharply higher sulfur prices and reduced phosphate operating rates rather than immediate plant shutdowns. The net effect is a significant tightening of global phosphate supply at a time when alternative sources are already constrained.

It is also important to note that the Hormuz crisis struck at a time when global fertilizer supply chains were already running with limited flexibility. European nitrogen production has operated at an estimated 75% of capacity since the 2022 energy crisis; those plants exist, but the gas economics do not work at current prices. Russia's ammonia exports collapsed approximately 85% after the Togliatti-Odesa pipeline was idled in 2022 and physically destroyed in 2023; despite a roughly 35–40% increase in Russian urea shipments, the ammonia deficit was never recovered. Chinese phosphate exports declined from 8 to 10 MMT annually to an estimated 4 to 5 MMT in 2025, following China's National Development and Reform Commission suspension of all exports through August 2026. While nominal global nitrogen capacity exceeds current production by a substantial margin, much of that surplus sits in high-cost European plants that cannot operate profitably at prevailing energy prices. The economically available spare capacity is far smaller than the theoretical total, leaving little room to offset a major supply disruption.

How Vulnerable Is U.S. Fertilizer Supply to a Strait Hormuz Disruption?

A critical question for U.S. producers is: how much of our fertilizer actually comes through the Strait? The answer depends sharply on which product you are asking about. Exhibit 5 breaks down 2023 U.S. fertilizer consumption by source on a nutrient basis: domestic production, non-Gulf imports, and Persian Gulf imports requiring Hormuz transit. For ammonia and potash, the U.S. has effectively zero direct Gulf exposure. Domestic production accounts for nearly 90% of ammonia consumption, with Canada and Trinidad filling the import gap. Potash is over 90% imported, with roughly 80% from Canada under USMCA, and no Gulf dependency.

The picture is more concerning for urea and phosphate. An estimated 12% of U.S. urea consumption transits Hormuz, sourced primarily from Qatar and Saudi Arabia. However, any disruption to urea supply would likely be partly mitigated by the availability of substitute nitrogen products such as anhydrous ammonia and UAN, which are well supplied domestically. For phosphate (MAP and DAP), roughly 17% of U.S. consumption comes from the Gulf, with Saudi Arabia providing over half of U.S. ammonium phosphate imports in recent periods. With Moroccan and Russian phosphate subject to countervailing duties of up to 47% (imposed 2021) and Chinese exports suspended, the concentration risk on Saudi supply is acute. The bottom line: the Strait of Hormuz accounts for a meaningful share of both U.S. urea and phosphate consumption, and the greater risk is price transmission from global markets, where the disruption is far more severe.

U.S. Fertilizer Exposure Is Concentrated in Urea and Phosphates.

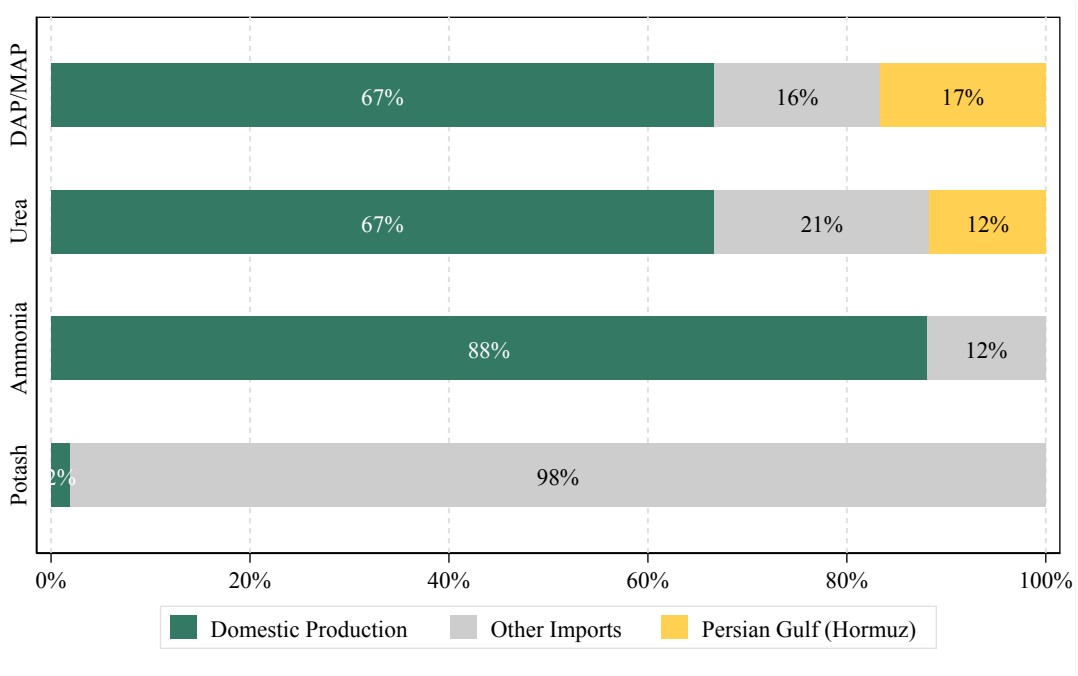


Exhibit 5: *U.S. Fertilizer Supply by Source in 2023 (Nutrient Basis).*

Note: Persian Gulf exporters include Iran, Iraq, Saudi Arabia, Qatar, UAE, Oman, Kuwait, and Bahrain.

Source: NDSU using data from The Fertilizer Institute.

How does U.S. exposure compare to other major agricultural economies? Exhibit 6 provides a comparative perspective, showing the percentage of total supply (foreign and domestic) from the Gulf. India is the most dependent, with almost 10 MMT of fertilizer coming from the Gulf in 2024. This accounts for about 54% of India's total fertilizer imports in 2024 and is driven largely by its heavy

reliance on Persian Gulf ammonia and urea. Brazil and Australia have the highest overall dependence on Urea, measured as a percentage share. During the same period, Brazil sourced about 40% of its urea imports from the Gulf, while Australia sourced approximately 68%.

U.S. Exposure Is Meaningful, but Other Major Agricultural Producers Are More Vulnerable.

	United States	Brazil	India	Australia	EU-27
Urea	17%	45%	9%	72%	2%
DAP/MAP	20%	15%	17%	22%	0%
Potash	0%	0%	0%	0%	0%
Ammonia	0%	0%	9%	2%	5%
Total volume	**2.0 MMT**	**4.5 MMT**	**9.8 MMT**	**2.3 MMT**	**0.1 MMT**

Exhibit 6: *Share of National Fertilizer Consumption Transiting Through the Strait of Hormuz.*

Note: Vulnerability defined as imports from the Middle East divided by domestic consumption (production+total imports−total exports), based on physical product tons. Total volume reflects 2024 export volume from the Middle East for urea, DAP/MAP, potash, anhydrous ammonia, and sulfur.
Source: NDSU using 2023 data from FATOSTAT (2022 data for U.S. production), IFASTAT, and the S&P Global Trade Atlas.

Exhibit 7 shows the historical trend of fertilizer prices at the U.S. Gulf Coast (NOLA). As seen in the trend, the highest price peak since 2017 occurred in early 2022 when Russia invaded Ukraine. There was an increasing price trend, especially for DAP and MAP, in 2025, and after Operation Epic Fury on February 28, 2026, fertilizer prices have been on an upward trend again.

The tariff landscape adds another layer. In February 2026, the Supreme Court ruled that IEEPA does not authorize presidential tariff authority, and the administration pivoted to a global tariff under Section 122 of the Trade Act of 1974, initially set at 10% and subsequently raised to the statutory maximum of 15%. Most finished fertilizers, like urea, DAP, MAP, potash, and UAN, are exempt from the Section 122 tariff. Meanwhile, the USMCA's mandatory six-year review, launching July 1, could affect the duty-free flow of potash and ammonia from Canada, which currently underpins U.S. insulation on those two products. As we documented in the January 2026 Trade Monitor, IEEPA tariff pass-through on fertilizers exceeded the tariff rate itself during 2025; the Hormuz disruption now compounds that cost burden from the supply side.

The Strait of Hormuz Shock Hits a U.S. Fertilizer Market Already Under Price Pressure.

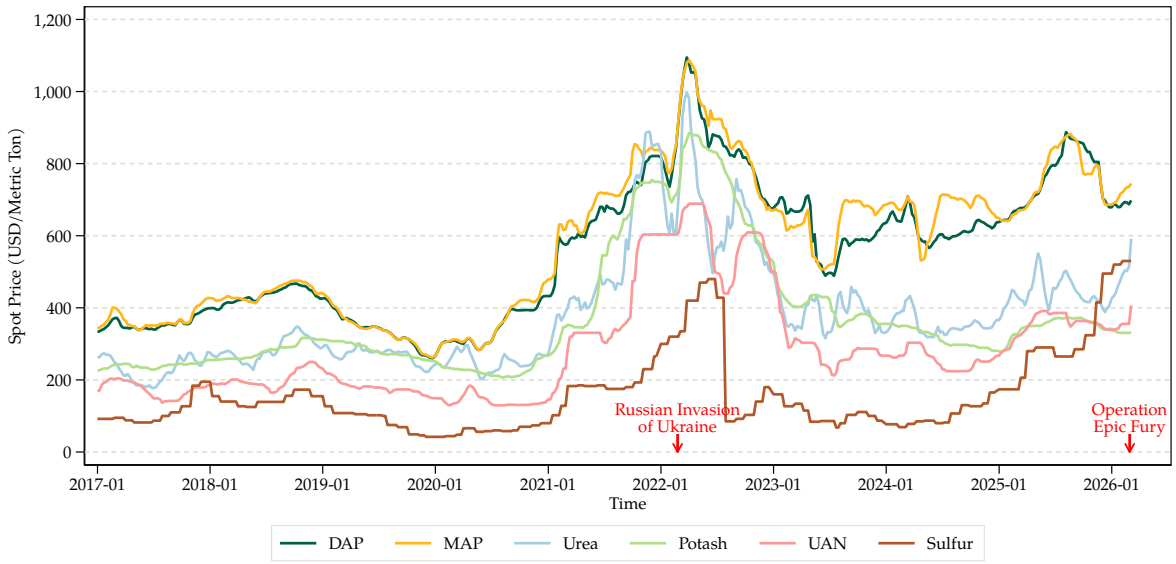


Exhibit 7: *Fertilizer Spot Prices on the U.S. Gulf Coast.*

Source: NDSU using data from Bloomberg.

Comparing the 2022 Black Sea Disruptions with the 2026 Strait of Hormuz Closure

A comparison may be drawn to the 2022 Russia–Ukraine fertilizer crisis, which remains the benchmark in recent memory. The war sent urea to $925/MT, anhydrous ammonia above $1,635/ton at retail, and DAP above $1,000/ton. The two crises share some similarities: in both cases, a major global fertilizer supplier was abruptly removed from the market. But they differ in several significant ways in terms of their impacts on the agricultural supply chain. Exhibit 8 compares the two disruptions across key dimensions, including the mechanism of disruption, the products and volumes at risk, the grain market context, and the affordability environment facing producers.

The overriding uncertainty in 2026 is duration. The administration has suggested the conflict could be resolved shortly, and there is strong pressure from many sides to reopen the Strait. However, even after hostilities subside, restoring P&I club war-risk coverage could take an extended period of time. The price trajectory for fertilizers and the downstream impact on planting decisions depend almost entirely on how long the Strait remains closed to commercial shipping.

Both Russia and Belarus and the Persian Gulf are major fertilizer-exporting regions, but the Persian Gulf's exposure is substantially larger. Russia and Belarus accounted for roughly 40% of global potash trade and meaningful shares of nitrogen and NPK fertilizers. The Gulf countries behind the Strait of Hormuz account for 35–40% of seaborne urea, roughly half of seaborne sulfur, and over a quarter of traded ammonia, and critically, through the sulfur cascade described above, the Gulf's influence on phosphate supply extends far beyond its own direct exports. The 2022 disruption was concentrated on the potash and nitrogen side. The 2026 disruption hits nitrogen, phosphate, and sulfur simultaneously, with the sulfur channel amplifying the shock into phosphate production in countries that have no direct connection to the conflict.

The mechanism of disruption also differs fundamentally. In 2022, Russian fertilizer was not physically removed from the global market; it was rerouted. Sanctions and self-sanctioning redirected trade flows, but the product eventually found alternative buyers. By 2023, Russian urea shipments had increased 35–40% above pre-war levels. In 2026, Gulf product is physically trapped behind a closed Strait with no viable exit. Storage fills, plants shut down, and the product simply does not reach the global market. This is a harder form of supply disruption with no workaround.

Another critical difference is on the farm revenue side. In 2022, Russia and Ukraine together accounted for roughly 30% of global wheat exports and 20% of corn exports. The disruption to grain trade sent crop prices sharply higher, wheat surged over 50%, corn rose 20%, and those elevated crop prices partially offset the pain of rising input costs. Farm revenues in 2022 reached record levels in many regions, even as fertilizer bills climbed. The Persian Gulf, by contrast, is not a significant food exporter. The Hormuz closure will not trigger a comparable surge in grain prices. Agricultural commodity prices have registered only modest gains in the first week of the crisis: corn up 1.2%, soybeans up 2.6%, wheat up 6.8%. Some of the wheat price movement reflects energy-cost pass-through and a general risk premium rather than a fundamental supply shock in grain markets.

This asymmetry could create a fundamentally different economic environment for farmers. In 2022, the pain of $1,000+ DAP was cushioned by $6–7 corn. In 2026, if the Strait remains closed for two to four months, farmers could face fertilizer prices approaching 2022 peaks, while corn is at $4.00–4.50/bushel and soybean margins are already negative before the crisis began. The fertilizer-to-crop price ratio, which measures how many bushels a farmer must sell to buy a ton of fertilizer, was already at elevated levels before the Hormuz closure. A prolonged disruption could push that ratio higher still, compressing margins in ways that 2022 did not.

Compared with 2022, the Hormuz Strait Closure Is More of a Fertilizer than a Grain Shock, with Bigger Input-Cost Risks for Farmers.

	2022 Russian Invasion of Ukraine	2026 Hormuz Strait Closure
Mechanism	Sanctions & self−sanctioning; trade rerouted to new buyers	Physical chokepoint blockage; no exit from the Persian Gulf
Grain Export Share	Wheat: ~29% global exports (Russia+Ukraine); corn: ~19% (Ukraine ~16%); sunflower oil: ~50% (Ukraine)	Near zero. Persian Gulf is not a grain corridor. Crop impact is indirect − via energy & fertilizer
Products Affected	Potash (Russia+Belarus = ~40% of global trade), N fertilizers (~9% of trade), NPK (~12%)	Urea (~35% seaborne), sulfur (~50%), ammonia (~20−25%), phosphate/DAP (~20%)
Affordability	Corn $6−7/bu absorbed costs; fert−to−crop ratios painful but manageable; farm revenues at record highs	Corn $4.00−4.25/bu; fert−to−crop ratios 2nd−worst on record before crisis; DAP unaffordability worse than 2022
Compounding Factors	COVID, EU energy crisis, Belarus potash sanctions, China export curbs; accumulated over 2 years	China export ban thru August 2026, EU at 75%, dual chokepoint (Hormuz Strait+Red Sea), 12/12 P&I clubs canceled, Egypt offline
Duration	~18 months elevated; wholesale peaked March 2022, retail ammonia peaked June 2022; normalized by late 2023	Ongoing. Length of closure uncertain.

Price Effects of 2022 Russian Invasion of Ukraine

	Baseline (January 2022)	2022 Peak	% Change
Crop Prices (CBOT)			
Wheat (HRW)	$7.87/bu	$13.68/bu	**73.75%**
Corn	$6.09/bu	$8.18/bu	**34.41%**
Soybeans	$13.98/bu	$17.69/bu	**26.53%**
Soybean Oil	60.50¢/lb	90.60¢/lb	**49.79%**
Fertilizer Prices			
Urea	$713/MT	$1,003/MT	**40.77%**
DAP	$786/MT	$1,097/MT	**39.49%**
MAP	$814/MT	$1,089/MT	**33.66%**
Potash	$741/MT	$885/MT	**19.37%**

Price Effects of 2026 Hormuz Strait Closure

	Pre−Closure (February 27, 2026)	Post−Closure (March 9, 2026)	% Change
Crop Prices (CBOT)			
Wheat (HRW)	$5.73/bu	$6.12/bu	**6.77%**
Corn	$4.39/bu	$4.44/bu	**1.20%**
Soybeans	$11.57/bu	$11.87/bu	**2.57%**
Soybean Oil	61.30¢/lb	66.50¢/lb	**8.47%**
Fertilizer Prices			
Urea	$518/MT	$628/MT	**21.28%**
DAP	$686/MT	$704/MT	**2.57%**
MAP	$736/MT	$750/MT	**1.87%**
Potash	$331/MT	$331/MT	–

Exhibit 8: *How the Hormuz Strait Closure Differs From the 2022 Russia–Ukraine Shock in Grain Markets, Fertilizer Trade, and Farm Input Costs.*

Source: NDSU using data from Bloomberg, the S&P Global Trade Atlas, and Argus Media.

This *NDSU Agricultural Trade Monitor* reflects market conditions and data as of March 11, 2026.

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Commodity	Feb-25	Feb-26	YoY change	Jan–Feb 2025	Jan–Feb 2026	YTD change
All Rice	283,733	159,979	-44%	525,749	432,825	-18%
All Wheat	1,568,872	1,791,511	14%	3,200,127	3,421,772	7%
Beef	57,042	53,254	-7%	125,511	119,273	-5%
Corn	5,532,760	6,802,812	23%	12,069,895	14,006,622	16%
Pork	127,367	151,578	19%	279,240	331,162	19%
Sorghum	7,691	779,241	10032%	87,016	1,575,475	1711%
Soybean Cake & Meal	1,094,899	1,460,830	33%	2,473,719	3,390,443	37%
Soybeans	3,477,946	4,407,526	27%	9,177,072	11,365,117	24%
Upland Cotton (in bale)	1,160,756	836,372	-28%	2,174,426	1,826,637	-16%
Wheat - HRS	563,404	382,271	-32%	1,034,626	862,520	-17%
Wheat - HRW	293,857	472,838	61%	702,885	968,059	38%
Wheat - SRW	248,974	260,553	5%	483,025	452,045	-6%
Wheat - White	439,997	622,655	42%	917,172	1,014,371	11%

Exhibit 13: *U.S. Export Shipments to World, in Metric Tons.*

Source: NDSU using data from the USDA Foreign Agricultural Service.

Commodity	Feb-25	Feb-26	YoY change	Jan–Feb 2025	Jan–Feb 2026	YTD change
All Wheat	-	102	0%	-	102	0%
Beef	8,682	-	-100%	20,440	-	-100%
Corn	4,000	-	-100%	16,000	-	-100%
Pork	12,784	13,228	3%	27,869	28,750	3%
Sorghum	2,876	771,984	26742%	82,159	1,295,523	1477%
Soybeans	1,597,185	2,506,239	57%	3,657,110	6,035,405	65%
Upland Cotton (in bale)	72,288	48,714	-33%	210,834	110,463	-48%
Wheat - HRS	-	-	0%	-	-	0%
Wheat - HRW	-	-	0%	-	-	0%
Wheat - SRW	-	-	0%	-	-	0%
Wheat - White	-	102	0%	-	102	0%

Exhibit 14: *U.S. Export Shipments to China, in Metric Tons.*

Source: NDSU using data from the USDA Foreign Agricultural Service.

Commodity	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
All Rice	2025	-11%	-22%	-30%	-28%	-14%	-24%	-24%	-31%	-23%	-31%	-26%	-55%
All Wheat	2025	15%	-3%	-9%	-18%	31%	18%	60%	31%	21%	45%	13%	45%
Beef	2025	14%	-11%	4%	-1%	-17%	-16%	1%	-20%	-20%	-20%	-11%	-7%
Corn	2025	68%	41%	24%	12%	31%	33%	58%	20%	56%	70%	100%	46%
Pork	2025	28%	-15%	-4%	-26%	-22%	12%	9%	-10%	-4%	-4%	2%	3%
Sorghum	2025	-88%	-99%	-82%	-77%	-75%	-18%	-61%	-61%	-85%	33%	-55%	-14%
Soybean Cake & Meal	2025	29%	-8%	10%	16%	13%	12%	93%	39%	19%	12%	3%	6%
Soybeans	2025	24%	-31%	10%	50%	-9%	28%	78%	24%	23%	-47%	-58%	-42%
Upland Cotton (in bale)	2025	-1%	11%	9%	39%	53%	26%	86%	-56%	16%	46%	-10%	0%
Wheat - HRS	2025	3%	-5%	7%	-46%	18%	9%	30%	5%	-28%	53%	-23%	-5%
Wheat - HRW	2025	18%	39%	9%	61%	69%	142%	166%	86%	173%	96%	65%	107%
Wheat - SRW	2025	-12%	-39%	-55%	-43%	-44%	12%	54%	24%	-4%	1%	40%	44%
Wheat - White	2025	36%	26%	98%	-15%	111%	-54%	-24%	29%	12%	7%	2%	50%
All Rice	2026	13%	-44%										
All Wheat	2026	0%	14%										
Beef	2026	-4%	-7%										
Corn	2026	10%	23%										
Pork	2026	18%	19%										
Sorghum	2026	904%	10032%										
Soybean Cake & Meal	2026	40%	33%										
Soybeans	2026	22%	27%										
Upland Cotton (in bale)	2026	-2%	-28%										
Wheat - HRS	2026	2%	-32%										
Wheat - HRW	2026	21%	61%										
Wheat - SRW	2026	-18%	5%										
Wheat - White	2026	-18%	42%										

Exhibit 9: *U.S. Export Shipments to World, Year-Over-Year Change.*
Source: NDSU using data from the USDA Foreign Agricultural Service.

Commodity	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
All Rice	2025	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
All Wheat	2025	-100%	-100%	-100%	-100%	-100%	0%	-100%	-100%	-100%	0%	0%	0%
Beef	2025	39%	-18%	3%	-63%	-96%	-83%	-96%	-100%	-100%	-100%	-100%	-98%
Corn	2025	-91%	86%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	0%
Pork	2025	34%	-37%	-9%	-56%	-85%	39%	-3%	-11%	-23%	-1%	-5%	4%
Sorghum	2025	-88%	-100%	-100%	-99%	-100%	-64%	-100%	-100%	-100%	-100%	-100%	-40%
Soybean Cake & Meal	2025	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Soybeans	2025	-12%	-53%	3%	25%	-62%	-100%	-100%	-100%	-86%	-100%	-100%	-76%
Upland Cotton (in bale)	2025	-74%	-83%	-92%	-92%	-96%	-94%	-100%	-100%	-84%	122%	-37%	-74%
Wheat - HRS	2025	-100%	0%	0%	0%	0%	0%	-100%	-100%	0%	0%	0%	0%
Wheat - HRW	2025	-100%	0%	-100%	-100%	0%	0%	0%	0%	0%	0%	0%	0%
Wheat - SRW	2025	-100%	-100%	-100%	-100%	-100%	0%	-100%	-100%	-100%	0%	0%	0%
Wheat - White	2025	-100%	0%	-100%	-100%	0%	0%	0%	0%	0%	0%	0%	0%
All Wheat	2026	0%	0%										
Beef	2026	-100%	-100%										
Corn	2026	-100%	-100%										
Pork	2026	3%	3%										
Sorghum	2026	560%	26742%										
Soybeans	2026	71%	57%										
Upland Cotton (in bale)	2026	-55%	-33%										
Wheat - HRS	2026	0%	0%										
Wheat - HRW	2026	0%	0%										
Wheat - SRW	2026	0%	0%										
Wheat - White	2026	0%	0%										

Exhibit 10: *U.S. Exports Shipments to China, Year-Over-Year Change.*
Source: NDSU using data from the USDA Foreign Agricultural Service.

Commodity	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
All Rice	2025	-14%	5%	-52%	-33%	13%	-61%	5%	-9%	-47%	-27%	-21%	-53%
All Wheat	2025	6%	41%	41%	-17%	80%	-19%	126%	33%	18%	26%	28%	-26%
Beef	2025	-16%	7%	-22%	-24%	-27%	-11%	12%	-37%	-14%	-8%	-8%	-21%
Corn	2025	48%	11%	3%	54%	38%	41%	176%	90%	31%	-15%	23%	34%
Pork	2025	200%	-16%	-14%	-36%	5%	-22%	15%	-10%	-11%	19%	10%	36%
Sorghum	2025	-98%	-77%	-12%	16%	-38%	38%	-75%	-26%	65%	223%	-2%	-2687%
Soybean Cake & Meal	2025	24%	-8%	-34%	11%	31%	24%	29%	-24%	15%	87%	-23%	20%
Soybeans	2025	60%	135%	28%	-12%	11%	24%	28%	-42%	-53%	-39%	-45%	48%
Upland Cotton (in bale)	2025	8%	59%	37%	-5%	-53%	-31%	-33%	-157%	36%	-4%	-12%	-1%
Wheat - HRS	2025	-27%	4%	6%	-51%	12%	-22%	50%	-18%	-18%	-5%	21%	-38%
Wheat - HRW	2025	37%	92%	59%	49%	180%	7%	316%	181%	184%	79%	0%	-1%
Wheat - SRW	2025	76%	72%	-166%	200%	68%	-34%	77%	-45%	50%	-25%	68%	31%
Wheat - White	2025	26%	51%	-23%	-64%	96%	-45%	63%	12%	6%	47%	36%	-40%
All Rice	2026	9%	-16%										
All Wheat	2026	6%	-27%										
Beef	2026	23%	-18%										
Corn	2026	36%	23%										
Pork	2026	-7%	19%										
Sorghum	2026	24951%	238%										
Soybean Cake & Meal	2026	22%	31%										
Soybeans	2026	140%	42%										
Upland Cotton (in bale)	2026	6%	10%										
Wheat - HRS	2026	9%	-18%										
Wheat - HRW	2026	32%	-42%										
Wheat - SRW	2026	-43%	-29%										
Wheat - White	2026	-14%	-25%										

Exhibit 11: *U.S. Net Contract Export Sales to World, Year-Over-Year Change.*

Source: NDSU using data from the USDA Foreign Agricultural Service.

Commodity	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
All Rice	2025	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
All Wheat	2025	-100%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	0%	0%	0%
Beef	2025	-29%	-25%	-51%	-94%	-146%	-117%	-103%	-100%	-100%	-100%	-98%	-100%
Corn	2025	-92%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	0%
Pork	2025	3%	21%	67%	-191%	0%	-44%	151%	-87%	0%	-13%	-2%	56%
Sorghum	2025	-98%	-99%	-98%	-100%	-100%	-77%	-100%	-100%	-100%	-100%	-67%	2878%
Soybean Cake & Meal	2025	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Soybeans	2025	25%	-42%	-9%	-3%	-99%	-100%	-100%	-100%	-98%	-95%	-33%	46%
Upland Cotton (in bale)	2025	-92%	-27%	-276%	-107%	-100%	-102%	-99%	-104%	-658%	-8%	-84%	1853%
Wheat - HRS	2025	-100%	0%	0%	0%	-100%	-100%	-100%	-100%	0%	0%	0%	0%
Wheat - HRW	2025	-100%	-100%	-100%	-100%	0%	0%	0%	0%	0%	0%	0%	0%
Wheat - SRW	2025	-100%	-100%	-100%	-100%	-100%	0%	-100%	-100%	-100%	0%	0%	0%
Wheat - White	2025	-100%	-100%	-100%	-100%	0%	0%	0%	0%	0%	0%	0%	0%
All Wheat	2026	0%	0%										
Beef	2026	-100%	-100%										
Corn	2026	-100%	0%										
Pork	2026	82%	-83%										
Sorghum	2026	15434%	22839%										
Soybeans	2026	118%	27%										
Upland Cotton (in bale)	2026	224%	-119%										
Wheat - HRS	2026	0%	0%										
Wheat - HRW	2026	0%	0%										
Wheat - SRW	2026	0%	0%										
Wheat - White	2026	0%	0%										

Exhibit 12: *U.S. Net Contract Export Sales to China, Year-Over-Year Change.*

Source: NDSU using data from the USDA Foreign Agricultural Service.

Commodity	Feb-25	Feb-26	YoY change	Jan–Feb 2025	Jan–Feb 2026	YTD change
All Rice	368,921	311,231	-16%	570,527	530,996	-7%
All Wheat	1,927,277	1,416,466	-27%	3,707,732	3,308,603	-11%
Beef	66,197	54,419	-18%	136,849	141,154	3%
Corn	5,320,129	6,538,908	23%	11,391,232	14,818,361	30%
Pork	112,813	134,612	19%	333,595	340,835	2%
Sorghum	105,657	357,265	238%	112,138	1,980,804	1666%
Soybean Cake & Meal	1,066,992	1,393,277	31%	2,511,617	3,155,902	26%
Soybeans	1,402,615	1,994,976	42%	4,262,733	8,871,791	108%
Upland Cotton (in bale)	1,157,166	1,269,168	10%	2,563,283	2,761,276	8%
Wheat - HRS	576,765	472,736	-18%	1,076,193	1,015,507	-6%
Wheat - HRW	644,251	374,126	-42%	1,046,369	903,055	-14%
Wheat - SRW	326,855	231,167	-29%	606,034	390,959	-35%
Wheat - White	391,567	292,533	-25%	968,710	790,825	-18%

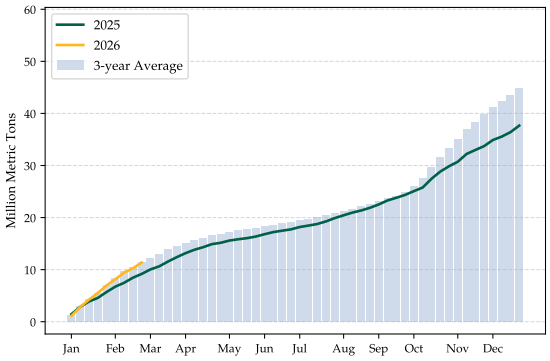
Exhibit 15: *U.S. Net Contract Export Sales to World, in Metric Tons.*

Source: NDSU using data from the USDA Foreign Agricultural Service.

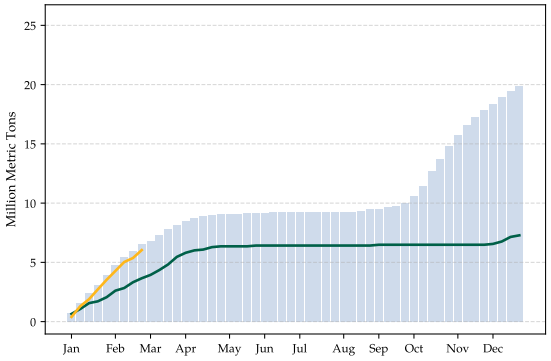
Commodity	Feb-25	Feb-26	YoY change	Jan–Feb 2025	Jan–Feb 2026	YTD change
All Wheat	-	102	0%	-	65,102	0%
Beef	6,482	-	-100%	17,937	-	-100%
Corn	-	-	0%	6,400	-	-100%
Pork	15,395	2,573	-83%	29,716	28,655	-4%
Sorghum	2,357	540,663	22839%	8,593	1,509,392	17465%
Soybeans	731,195	930,240	27%	2,291,681	4,328,406	89%
Upland Cotton (in bale)	136,081	-25,716	-119%	184,595	131,512	-29%
Wheat - HRS	-	-	0%	-	-	0%
Wheat - HRW	-	-	0%	-	-	0%
Wheat - SRW	-	-	0%	-	-	0%
Wheat - White	-	102	0%	-	65,102	0%

Exhibit 16: *U.S. Net Contract Export Sales to China, in Metric Tons.*

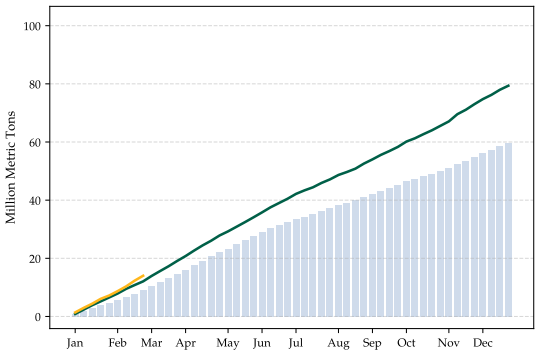
Source: NDSU using data from the USDA Foreign Agricultural Service.



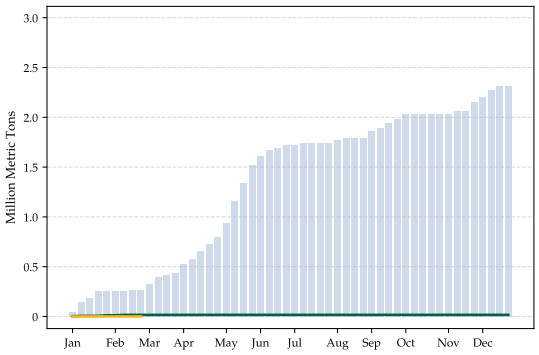
Accumulated Export Shipments – Soybeans to World



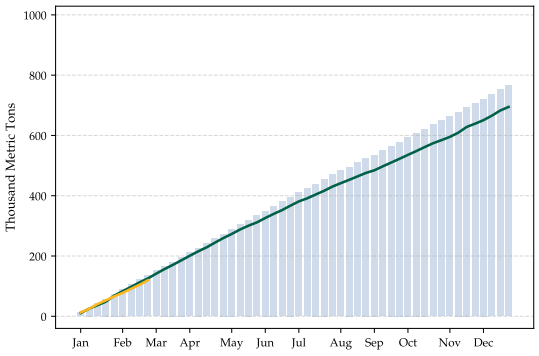
Accumulated Export Shipments – Soybeans to China



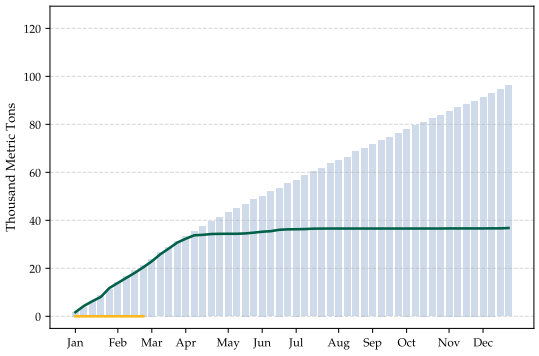
Accumulated Export Shipments – Corn to World



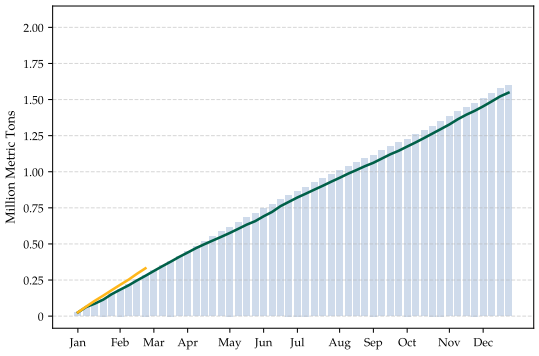
Accumulated Export Shipments – Corn to China



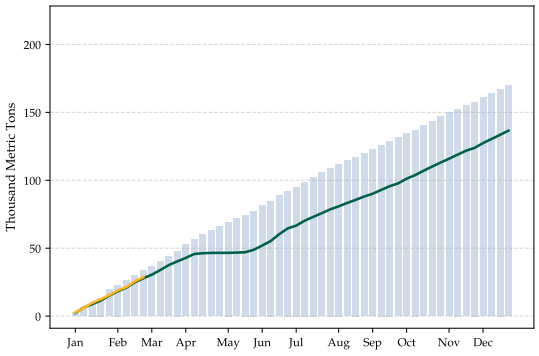
Accumulated Export Shipments – Beef to World



Accumulated Export Shipments – Beef to China



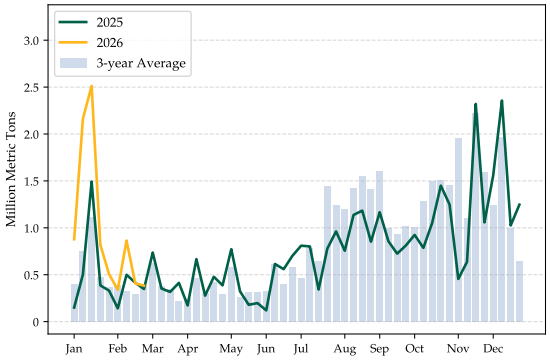
Accumulated Export Shipments – Pork to World



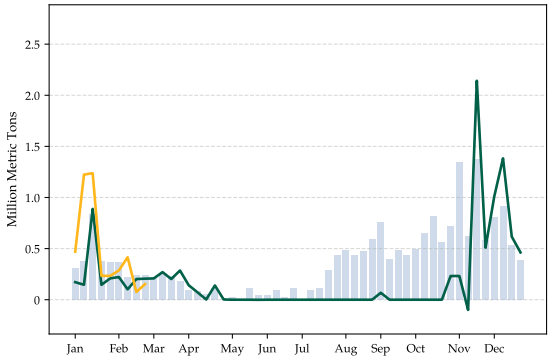
Accumulated Export Shipments – Pork to China

Exhibit 17: *Accumulated Export Shipments.*

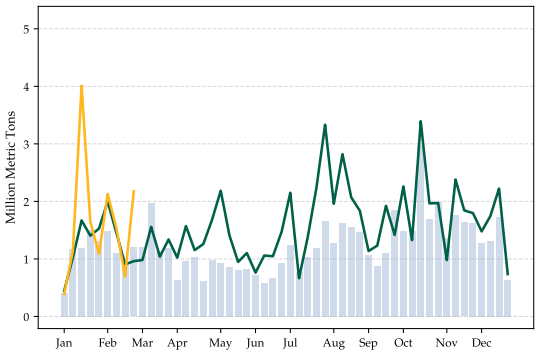
Source: NDSU using data from the USDA Foreign Agricultural Service.



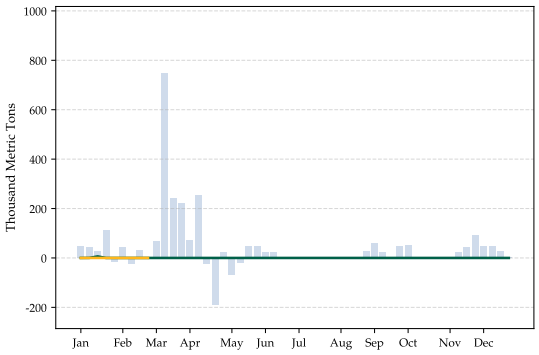
Weekly Net Contract Export Sales – Soybeans to World



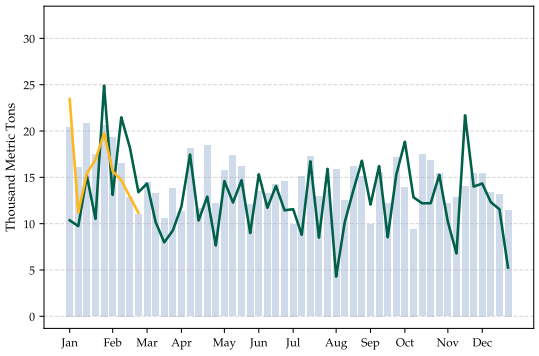
Weekly Net Contract Export Sales – Soybeans to China



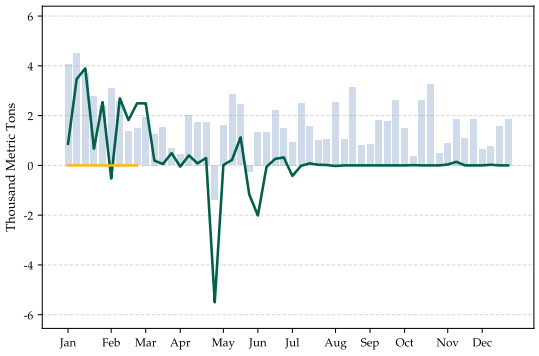
Weekly Net Contract Export Sales – Corn to World



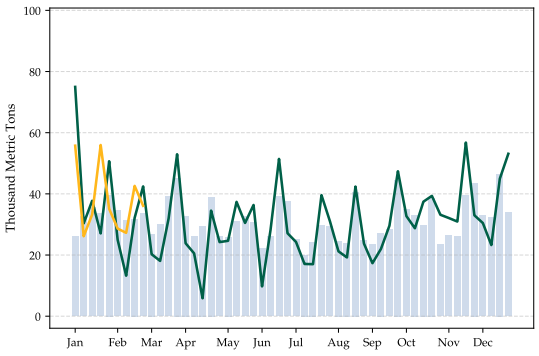
Weekly Net Contract Export Sales – Corn to China



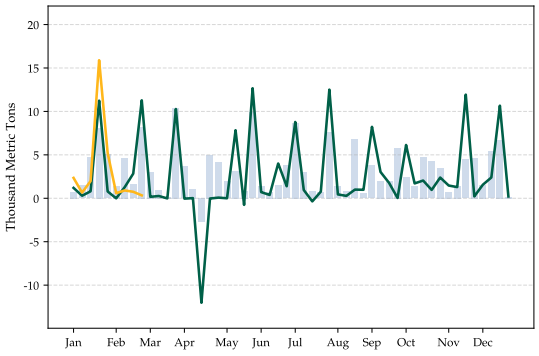
Weekly Net Contract Export Sales – Beef to World



Weekly Net Contract Export Sales – Beef to China



Weekly Net Contract Export Sales – Pork to World



Weekly Net Contract Export Sales – Pork to China

Exhibit 18: *Weekly Net Contracted Export Sales.*

Source: NDSU using data from the USDA Foreign Agricultural Service.

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NDSU Agricultural Trade Monitor

About the Center for Agricultural Policy and Trade Studies

The Center for Agricultural Policy and Trade Studies at North Dakota State University is the premier hub for applied economic research on agricultural trade, policy, and risk management in North Dakota and the Upper Midwest. Through its flagship products like the *NDSU Agricultural Trade Monitor*, the Center provides timely insights for producers, agribusinesses, and policymakers on evolving agricultural trade and policy developments.

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