

FERTILIZER SECTOR UPDATE

APRIL 2026

The fertilizer sector remains one of the most concentrated and strategically critical segments of the agricultural input system. Modern agriculture depends on three primary nutrients—nitrogen, phosphorus, and potassium—whose production requires control over raw materials, industrial processing, and specialized logistics infrastructure. Today, dominant firms control each step of this process—from mining and production to distribution, storage, and export—making the sector especially vulnerable to corporate capture.

Unlike many other agricultural inputs, fertilizer markets are defined less by product differentiation and more by control over capacity, logistics, and access to inputs. This structure leaves farmers highly exposed to price volatility, supply disruptions, and the market power of a small number of firms.

Over the past year, fertilizer markets have been shaped by both entrenched concentration and acute external shocks. The escalation of war in Iran—particularly disruptions to the Strait of Hormuz, a critical chokepoint for global fertilizer and energy trade—has emerged as the defining market shock of this update cycle, driving supply constraints and significant price increases at a moment of already heightened concern over input costs.

At the same time, rising prices and supply instability have drawn increased scrutiny from policymakers and regulators. However, this scrutiny has not resulted in meaningful structural deconsolidation. Instead, dominant firms continue to operate within—and benefit from—a highly concentrated system.

Market Structure and Concentration

Concentration in fertilizer markets remains extreme across all major nutrients. In North America, four firms—CF Industries, Nutrien, Koch Industries, and Yara—control roughly 84% of nitrogen production capacity, while just two firms—Mosaic and Nutrien—dominate both phosphate (~86%) and potash (~89%) markets.¹

¹ Nutrien. (2024). *2024 Fact Book*.

<https://cdn.sanity.io/files/ixv7naln/production/ec6bd3da8ad9ffc6146dce3fb8aa8bdc0fd92e9.pdf>

This concentration is not limited to production. Distribution and retail markets are also highly consolidated, with seven firms controlling approximately 71% of crop input sales and services.²

The physical characteristics of fertilizer further strengthen incumbent power. As a high-weight, logistics-intensive commodity, fertilizer is costly to transport and store, limiting farmers' ability to source from alternative suppliers and reinforcing regional dependence on dominant firms. Control over storage, rail access, port infrastructure, and distribution channels creates significant barriers to entry, even where production capacity could theoretically expand.

Together, these dynamics reinforce the dominance of a small group of companies—particularly Nutrien, Mosaic, and CF Industries—which function as price leaders across fertilizer markets. Their control over production, distribution networks, and logistics infrastructure allows them to influence supply, shape pricing, and limit competitive entry.

Historically, this level of concentration is not new. The fertilizer industry has experienced cycles of consolidation and antitrust intervention, including the breakup of the pre–World War II “Fertilizer Trust.” However, consolidation resumed in the late twentieth century, culminating in today’s highly concentrated market structure dominated by a small number of firms.³

Regulatory, Legal, and Policy Environment

Over the past year, fertilizer markets have come under heightened scrutiny from federal agencies and policymakers, driven by concerns over rising input costs, supply chain vulnerability, and potential anti-competitive conduct.

In March 2026, the Department of Justice opened an investigation into potential price coordination among major fertilizer producers, signaling renewed focus on competition in agricultural input markets.⁴

² Matt Hopkins, *Top 10 U.S. Ag Retailers That Led the Fertilizer Market in 2025*, CropLife (Feb. 2, 2026), <https://www.croplife.com/croplife-top-100/top-10-u-s-ag-retailers-that-lead-the-fertilizer-market-in-2025/>

³ Farm Action. (2024, September). *Kings Over the Necessaries of Life: Monopolization and the Elimination of Competition in America’s Agricultural System*. https://farmaction.us/wp-content/uploads/2024/09/Kings-Over-the-Necessaries-of-Life-Monopolization-and-the-Elimination-of-Competition-in-Americas-Agriculture-System_Farm-Action.pdf

⁴ Josh Sisco & Ilena Peng, *DOJ Probes U.S. Fertilizer Market for Possible Price Fixing*, Farm Progress (Mar. 4, 2026). <https://www.farmprogress.com/farm-business/doj-probes-u-s-fertilizer-market-for-possible-price-fixing>

At the same time, U.S. Department of Agriculture (USDA) leadership has publicly raised concerns about possible price collusion among dominant firms,⁵ further elevating political pressure for investigation and oversight.

This scrutiny is reinforced by broader institutional developments. A formal Memorandum of Understanding between USDA and the Department of Justice (DOJ)⁶ has strengthened coordination on competition issues in agricultural inputs, while the Senate Judiciary Committee has examined consolidation in fertilizer and seed markets through dedicated hearings.⁷

Legislative and executive actions have also signaled growing concern with fertilizer markets. Proposed legislation, such as the Fertilizer Research Act of 2025, would increase transparency into industry structure and pricing,⁸ while a December 2025 executive order targeting price fixing and anti-competitive behavior in the food supply chain expands the policy framework for monitoring input markets.⁹

At the same time, federal policy has increasingly framed fertilizer as a matter of national and economic security. The designation of elemental potash as a critical mineral and federal support for domestic production projects reflect growing concern over supply chain resilience and import dependence.

These developments have been accelerated by the war in Iran, which has exposed the fragility of global fertilizer supply chains and intensified pressure on policymakers to respond to rising prices and supply disruptions.

⁵ Tom Polansek, *USDA's Vaden Accuses Nutrien, Mosaic of Fertilizer Price Collusion*, Agriculture.com (Jan. 24, 2026). <https://www.agriculture.com/partners-usda-s-vaden-accuses-nutrien-mosaic-of-fertilizer-price-collusion-1189227>

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⁶ Press Release, U.S. Dep't of Justice, *Justice Department and USDA Coordinate to Protect Competition in Agricultural Inputs* (Sept. 29, 2025). <https://www.justice.gov/opa/pr/justice-department-and-usda-coordinate-protect-competition-agricultural-inputs>

⁷ *Pressure Cooker: Competition Issues in the Seed and Fertilizer Industries*: Hearing Before the S. Comm. on the Judiciary, 118th Cong. (2024). <https://www.judiciary.senate.gov/committee-activity/hearings/pressure-cooker-competition-issues-in-the-seed-and-fertilizer-industries>

⁸ Fertilizer Research Act of 2025, S. 2808, 119th Cong. (2025). <https://www.congress.gov/bill/119th-congress/senate-bill/2808>

⁹ Exec. Order No. 14,364, *Addressing Security Risks from Price Fixing and Anti-Competitive Behavior in the Food Supply Chain*, 90 Fed. Reg. 57,349 (Dec. 10, 2025). <https://www.whitehouse.gov/presidential-actions/2025/12/addressing-security-risks-from-price-fixing-and-anti-competitive-behavior-in-the-food-supply-chain/>

Structural Developments

Recent structural change in fertilizer markets has been driven less by large-scale horizontal mergers and more by portfolio concentration, capacity rationalization, strategic asset acquisitions, and control over logistics infrastructure. Rather than pursuing major consolidation transactions, dominant firms are tightening control over the most profitable parts of the value chain while reducing exposure to lower-margin operations.

Nutrien

Nutrien has focused on portfolio concentration rather than expansion through major acquisitions. The company divested non-core assets, including its equity interests in Profertil and Sinofert, initiated a strategic review of its phosphate business, and reduced exposure in Trinidad operations through shutdowns and operational restructuring.

These moves reflect a broader strategy of concentrating capital around its highest-return assets—particularly potash, nitrogen, and retail distribution. Nutrien explicitly describes its competitive advantage as its “leading position across the ag value chain,” emphasizing control over upstream production, midstream logistics, and downstream retail access. At the same time, the company continues to invest in midstream distribution assets and strengthen port access through evaluation of additional west coast facility capacity, further reinforcing control over market access rather than expanding broad production capacity.¹⁰

Mosaic

Mosaic’s April 2026 decision to idle its Araxá Mining and Chemical Complex and related mining activities at the Patrocínio Complex in Brazil represents one of the clearest structural developments in the sector. The move will reduce annual phosphate production by approximately 1 million tonnes while the company pursues a sale of Araxá assets. Notably, this decision came as the war in Iran disrupted global fertilizer markets and drove prices upward.

Rather than increasing output in response to tightening supply, Mosaic emphasized that the move would have limited impact on adjusted EBITDA and framed the decision around “discipline around capital allocation and returns.”¹¹

¹⁰ Nutrien. (2025). *2025 Annual Report*.

<https://cdn.sanity.io/files/ixv7nalm/production/316f7c925cbaee5b88ca199f30a6ead9c3858a50.pdf>

¹¹ Mosaic. (2026, April 8). *Mosaic Announces Idling of Araxá and Patrocínio Facilities and Pursuit of Sale of Araxá Assets*.

<https://investors.mosaicco.com/press-releases/news-details/2026/Mosaic-Announces-Idling-Of-Arax-And-Patrocinio-Facilities-And-Pursuit-Of-Sale-Of-Arax-Assets/default.aspx>

In a highly concentrated market, reducing capacity during a supply shock can reinforce pricing power. The decision reflects a broader industry pattern in which dominant firms prioritize margin protection and portfolio optimization over maximizing supply.

CF Industries

CF Industries' recent structural developments have centered on strategic expansion in already concentrated nitrogen markets and the strengthening of its logistics footprint. The company acquired the Waggaman ammonia facility for approximately \$1.675 billion, adding significant ammonia production capacity within North America.¹² CF also formed the Blue Point joint venture with JERA and Mitsui to develop a major low-carbon ammonia facility, expanding its role in both fertilizer and adjacent industrial ammonia markets.¹³

CF's competitive advantage is also rooted in its access to low-cost North American natural gas and its position in an import-dependent market where prices are often set by the "last, high-cost marginal ton" required to meet demand. This allows low-cost domestic producers to benefit from elevated global pricing during periods of supply disruption.

Major Trends in the Fertilizer Sector over the Past Year

Over the past year, fertilizer sector dynamics have been shaped by the interaction of entrenched concentration, geopolitical shocks, and corporate strategies centered on margin protection and supply discipline. Several interrelated trends stand out:

Geopolitical Shock from the Iran War Accelerated Seasonal Price Increases

Fertilizer prices often rise heading into spring planting as demand increases, particularly for nitrogen products. However, the escalation of war in Iran transformed what would normally be seasonal price firming into a much sharper market shock.

The conflict disrupted trade through the Strait of Hormuz, a critical chokepoint through which a significant share of global fertilizer exports and key fertilizer inputs move. It also drove volatility in natural gas markets, a major input for nitrogen fertilizer production. Together, these disruptions immediately tightened global nitrogen supply and increased production costs across fertilizer markets.

¹² CF Industries. (2025) *2025 Annual Report*.

https://s203.q4cdn.com/145805377/files/doc_financials/2025/ar/CF-Industries-2025-Annual-Report.pdf

¹³ Ibid.

As a result, nitrogen fertilizer prices escalated rapidly. At the Port of New Orleans, prices jumped from roughly \$516 per metric ton before the conflict to \$683 within a week—a 32% increase.¹⁴ Urea prices rose more than 28% by mid-March, while phosphate products increased more modestly and potash remained relatively stable in the immediate aftermath.¹⁵ By April, the effects were still distorting global trade flows. U.S. nitrogen prices remained well below overseas prices, creating incentives to redirect imported fertilizer out of the United States and raising concerns about domestic shortages during peak planting season. USDA reported being in daily contact with the White House as fertilizer costs continued to rise.

The war did not create fertilizer market dysfunction—it exposed and intensified existing structural vulnerabilities. In a highly concentrated market, global supply shocks do not simply pass through as higher costs; they create opportunities for dominant firms to preserve or expand margins.

Firms across the sector have emphasized strategies centered on “value over volume,” capital discipline, and margin protection rather than maximizing supply. Mosaic’s decision to idle phosphate capacity during rising prices is a clear example. In this environment, it becomes difficult to distinguish where legitimate supply-driven price increases end and where concentrated market power begins to push prices even higher. The result is a system in which farmers bear the immediate cost of global disruption, while dominant firms are structurally positioned to benefit from the volatility.

Dominant Firms Concentrated Around Higher-Return Assets

Across the sector, dominant firms are concentrating around higher-return assets through selective asset sales, capacity reductions, targeted acquisitions, and tighter control over logistics and distribution.

Nutrien’s divestitures and phosphate review, Mosaic’s capacity reductions and asset sale, and CF Industries’ targeted ammonia expansion reflect this broader strategy: reducing exposure to lower-return operations while deepening control over core fertilizer, retail, and logistics assets.

¹⁴ Ken Foster & Bernhard Dalheimer, *The Iran Conflict, Energy Prices, and U.S. Farm Profitability: A Balanced Assessment*, Purdue University. (2026, March 31). <https://ag.purdue.edu/commercialag/home/paer-article/the-iran-conflict-energy-prices-and-u-s-farm-profitability-a-balanced-assessment/#:~:text=The%20result:%20nitrogen%20fertilizer%20prices,years%27%20crop%20in%20the%20U.S>

¹⁵ Arita, S., R. Chakravorty, J. Kim, W. Y. Lwin and S. Steinbach, *Strait of Hormuz Closure and Fertilizer Supply Risks for U.S. Agriculture*, University of Illinois at Urbana-Champaign. (2026, March 23). [https://farmdocdaily.illinois.edu/2026/03/strait-of-hormuz-closure-and-fertilizer-supply-risks-for-us-agriculture.htm](https://farmdocdaily.illinois.edu/2026/03/strait-of-hormuz-closure-and-fertilizer-supply-risks-for-us-agriculture.html)

This pattern matters because it strengthens incumbent power without requiring headline merger activity.

Infrastructure and Export Control Continue to Reinforce Market Power

In fertilizer markets, control over logistics can matter as much as control over production. Mosaic states directly that “the most important competitive factor” for its products is delivered price,¹⁶ underscoring the importance of transportation, storage, and distribution infrastructure. Nutrien similarly describes its advantage as its “leading position across the ag value chain,” including upstream production, midstream logistics, and downstream retail distribution.¹⁷

Firms continue to invest heavily in these assets because they function as strategic barriers to entry. Nutrien is expanding midstream distribution assets and evaluating additional port infrastructure, while CF Industries maintains a vast network of distribution facilities with access to pipeline, barge, rail, truck, and ocean shipping.

Potash markets provide a particularly strong example. Together, Mosaic and Nutrien control Canpotex, the joint export and logistics platform through which Canadian producers market potash outside North America. With Canada accounting for roughly 40% of global potash capacity, control over export channels strengthens pricing power and raises barriers to competitive entry.

This helps explain why increasing domestic production alone may not create meaningful competition if the same firms continue to control access to markets, transportation, and customers.

Conclusion

The fertilizer sector remains defined by extreme concentration, high barriers to entry, and deep dependence on global supply chains. A small number of dominant firms control not only production capacity, but also the logistics, storage, and export infrastructure that determine access to the market itself.

Recent geopolitical disruptions and rising policy attention have brought renewed scrutiny to these dynamics, but they have not fundamentally altered them.

¹⁶ Mosaic. (2024). *2024 Annual Report*.

https://s1.q4cdn.com/823038994/files/doc_financials/2024/ar/FINAL-2024_Annual_Report.pdf

¹⁷ Nutrien. (2025). *2025 Annual Report*.

<https://cdn.sanity.io/files/ixv7nalm/production/316f7c925cbaee5b88ca199f30a6ead9c3858a50.pdf>

The recent price spike tied to the war in Iran made clear how quickly supply shocks move through a concentrated system: farmers face immediate increases in input costs, while dominant firms are positioned to maintain elevated pricing and protect profitability.

Recent corporate decisions across the sector reinforce that pattern. Federal efforts to increase domestic fertilizer production may improve supply resilience, but production expansion alone does not guarantee more competitive markets. If new capacity remains in the hands of the same dominant firms—or if access to transportation, storage, and export channels remains concentrated—the underlying drivers of market power remain largely unchanged.

Absent structural reforms that address concentration in production, distribution, and market access—not simply supply expansion—fertilizer markets are likely to remain vulnerable to future disruptions, with continued consequences for farmers, food production, and the broader agricultural economy.