Marubeni
Marubeni Washington Report
May 22, 2026

Fertilizer Inflation in the U.S. and Its Short-, Medium-, and Long-Term Drivers

Marubeni America Corporation Washington Office
Masaki Sakamoto, Senior Policy and Economic Research Manager
sakamoto-masaki@marubeni.com

- Concerns over rising fertilizer prices have intensified in the United States in the wake of the Iran War. This issue cannot be ignored politically, as it not only affects the protection of the agricultural sector but may also indirectly impact food affordability.
- It is important to understand the challenges facing the U.S. agricultural sector not only in the context of the Middle East conflict but across multiple time horizons. Specifically, it is necessary to organize the accumulated issues along short-term (Middle East conflict), medium-term (Russia–Ukraine war, Trump tariffs), and long-term (structural issues in the agricultural sector) timelines.

1. Introduction

Concerns over rising fertilizer prices have intensified within the United States in the wake of the Middle East crisis. The U.S. is one of the world's leading agricultural nations and is estimated to account for approximately 10–15% of global fertilizer consumption. Fertilizers represent about 7–8% of total U.S. agricultural production expenditures and, excluding labor costs, constitute one of the largest expense items. Trends in fertilizer prices, together with commodity crop markets, are a key factor influencing the profitability of agricultural production. If rising fertilizer costs squeeze farm income or lead to a decline in output, this could indirectly exert upward pressure on downstream food prices. In this sense, the issue cannot be ignored by an administration that is already struggling with measures to ensure affordability ahead of the midterm elections.

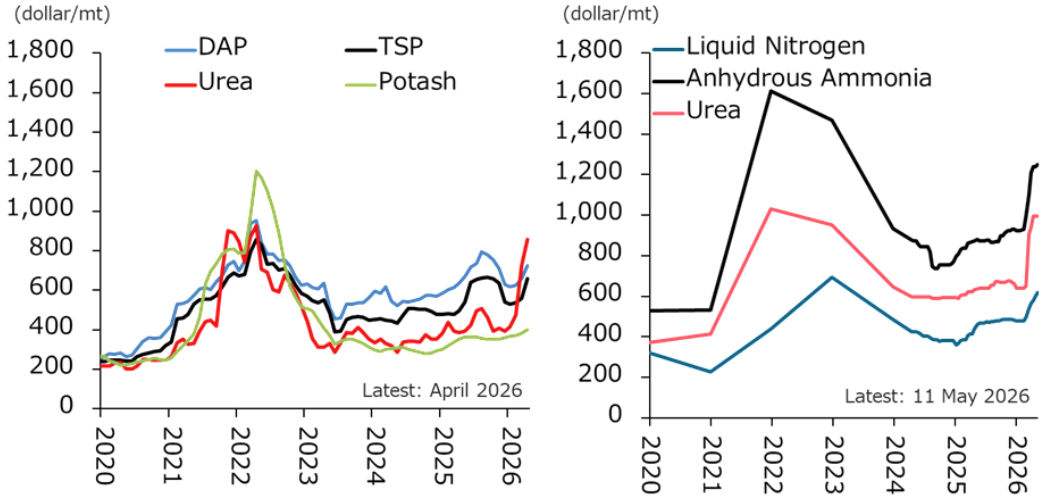
That said, the surge in fertilizer prices is not solely a short-term issue attributable to the Middle East crisis. Russia's full-scale invasion of Ukraine in February 2022 and the subsequent sanctions imposed on Russia led to a reduction in global supply of Russian fertilizers. Although the United States continued importing Russian fertilizers from the perspective of food security, even under extensive sanctions, it could not avoid the impact of rising global fertilizer prices. Furthermore, tariff measures under the second Trump administration beginning in 2025 have contributed to concerns about higher prices for imported fertilizers. Even with tariff exemptions for Canadian potash and the comprehensive tariff exemption for fertilizers introduced in November 2025, upward pressure on domestic fertilizer input costs has persisted due to ongoing tariffs on chemical inputs and transportation materials. From a longer-term perspective, structural features of the U.S. agricultural sector—such as its heavy reliance on large-scale fertilizer use—should also be reconsidered.

The following sections explains the situation surrounding U.S. agriculture and fertilizer issues along short-, medium-, and long-term time horizons, and then examine the direction of policy responses and analytical perspectives for assessing them.

2. Fertilizer Prices

Rising concerns over supply disruptions caused by the Middle East war have put upward pressure not only on international fertilizer prices but also on prices within the United States. The international price of urea, which has been particularly affected by supply disruptions related to the conflict, had more than doubled by April compared to pre-war levels. While U.S. domestic urea prices have not increased to the same extent as international prices, they have nonetheless risen by more than 50% since before the war. In addition, products such as liquid nitrogen and ammonia, which rely heavily on natural gas as a key input, have also experienced price surges in the U.S., driven by increases in global natural gas prices.

Figure 1: Fertilizer Price（Left: Global, Right: United States）

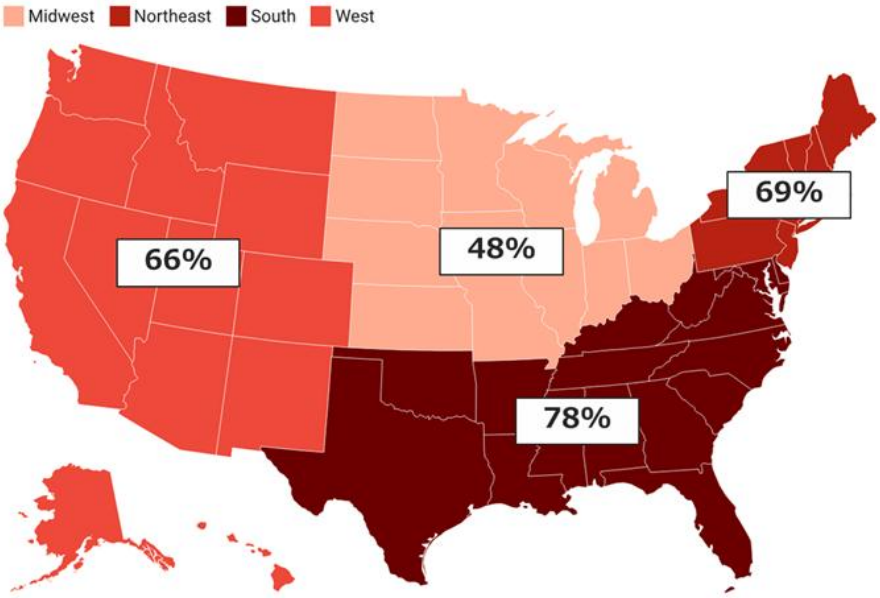


DAP: Diammonium phosphate. A compound fertilizer containing phosphorus and nitrogen as its primary components (P, N). **TSP:** Triple superphosphate. A fertilizer with a high concentration of phosphorus (P). **Urea:** A widely used fertilizer with a high nitrogen content (N). **Potash:** Potash fertilizer (K). **Liquid nitrogen:** Liquid nitrogen fertilizer (N). **Anhydrous ammonia:** A high-concentration nitrogen fertilizer (N). U.S. data through 2023 are shown as year-end values, and daily data are used thereafter. Original data are converted using 1 short ton = 0.907185 metric tons. Note that global prices refer to international benchmark prices (e.g., port-of-delivery prices), whereas U.S. prices reflect farmgate purchase prices (including domestic transportation, wholesale, and retail margins), and therefore are not directly comparable.

Source: World Bank, USDA

These rising fertilizer prices have become a serious issue for American farmers. According to a survey by the American Farm Bureau Federation (AFBF), as of early April, 70% of U.S. farmers reported that obtaining the fertilizer they need is financially difficult. By region, 78% of farmers in the South, 69% in the Northeast, 66% in the West, and 48% in the Midwest indicated financial difficulty in securing necessary fertilizer. Producers in the South cultivate crops such as cotton, rice, soybeans, corn, and peanuts, which are particularly sensitive to fluctuations in fertilizer prices. In contrast, in the Midwest—where crop rotation centered on corn and soybeans is common—the impact of price changes is considered relatively limited, as farmers in the region tend to secure fertilizer in advance at high rates.

Figure 2: (Share of Farmers Unable to Purchase the Full Amount of Fertilizer Needed for 2026



Survey period: April 3–11, 2026; Respondents: U.S. farmers nationwide (approx. 5,700 responses)

Source: American Farm Bureau Federation (AFBF)

3. Key Drivers

(1) Iran War

The Gulf Cooperation Council (GCC) countries, which have been particularly hard hit by the blockade of the Strait of Hormuz, hold a significant presence in the global fertilizer market. In 2025, their share of global exports is estimated at approximately 43% for urea, about 44% for sulfur, and roughly 25% for ammonia. Meanwhile, a look at U.S. fertilizer imports shows that dependence on GCC countries for major nutrients such as nitrogen, phosphate, and potash is not particularly high. The primary sources of nitrogen and potash imports are Canada and Russia, while phosphate imports rely almost entirely on Peru.

Despite the relatively low level of direct dependence on the Middle East, fertilizer prices have risen within the United States. This is thought to reflect not only upward pressure driven by international prices but also broader cost increases, including those for raw materials and transportation. For nitrogen and phosphate in particular, domestic production accounts for more than 80% of domestic demand; however, Producer Price Index (PPI) for April shows that factory-gate prices for fertilizer manufacturers rose sharply, up 17.7% year-on-year.

Figure 3: U.S. Fertilizer (N, P, K) Import Dependence (Imports / Domestic Consumption, %)

Products	% Imported (2025)	Import Sources (2021-2024)
Nitrogen (N)	13%	Canada (49%), Trinidad & Tobago (47%), Other (4%)
Phosphate (P)	16%	Peru (99%), Other (1%)
Potash (K)	95%	Canada (79%), Russia (12%), Israel (3%), Other (6%)

Source: Purdue University

According to an April report by the Center for Agricultural Policy and Trade Studies at North Dakota State University (NDSU), the impact of the Strait of Hormuz blockade on fertilizer prices is analyzed based on three scenarios: "rapid reopening," "continued transit restrictions," and "prolonged conflict." For urea in particular, which has experienced the largest price increases, even the most optimistic "rapid reopening" scenario projects a price of $636 per short ton during the autumn prepayment period (October–December 2026), representing a 35% increase over the pre-crisis level of $470 per short ton. Under the "prolonged conflict" scenario, the price is expected to exceed double that level, reaching $989 during the same period. These findings suggest that the outlook for the Middle East situation could significantly affect input costs faced by U.S. farmers.

(2) Trump Tariffs

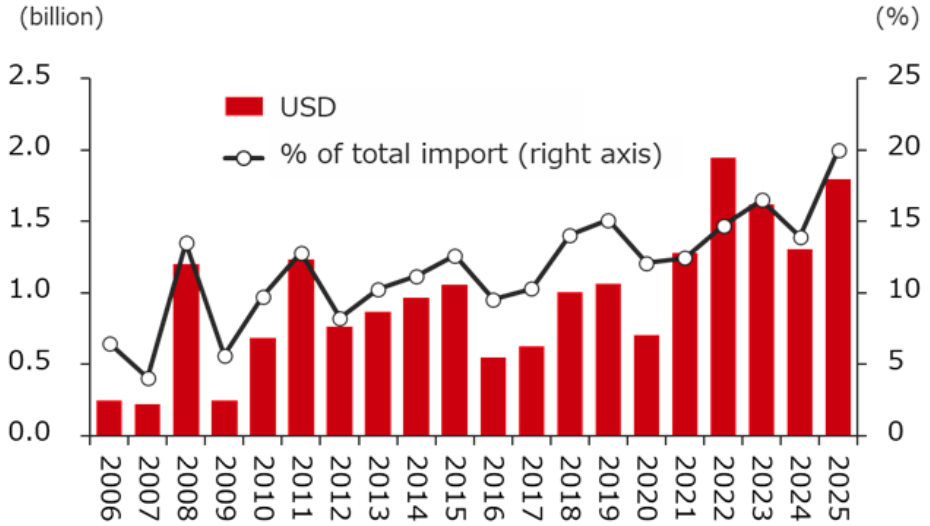
Tariff measures implemented by the second Trump administration beginning in 2025 heightened concerns about rising prices for imported fertilizers. In particular, potash from Canada—on which the United States is highly dependent—was explicitly exempted from tariffs from the outset of the reciprocal tariff announcement in April. However, other imported fertilizers became subject to direct tariffs. In the November 2025 revision, tariff exemptions for agricultural products and related goods were announced, and most fertilizer products were exempted; nevertheless, certain items such as ammonia were not clearly included on the exemption list. Unlike potash fertilizers, which depend almost entirely on imports, ammonia has diverse uses beyond fertilizers (including energy and explosives) and is produced domestically by a significant number of firms, which likely influenced this decision.

In addition, tariffs on chemical inputs and transportation materials have exerted upward pressure on the cost of domestic fertilizer production. Not only have the raw materials for phosphate fertilizers—many of which are heavily imported—been affected, but surging diesel prices and rising costs for maintenance materials used in manufacturing facilities have also pushed up production costs.

(3) Russia-Ukraine War

In response to Russia's full-scale invasion of Ukraine that began in February 2022, the United States, together with the European Union (EU), led the imposition of large-scale sanctions against Russia. However, from the perspective of food security, the United States continued to import Russian fertilizers. In fact, even after the sanctions were introduced in 2022, the share of fertilizer imports from Russia remained high. Notably, in 2025, amid disruptions to trade with countries other than Russia caused by tariff policies, the proportion of fertilizer imports from Russia rose to over 20%.

Figure 4: U.S. Imports of Fertilizers from Russia



Source: ITC

At the same time, the imposition of sanctions on Russia contributed to an increase in global fertilizer prices by reducing fertilizer supply from Russia, a major producing country. The United States was not immune to the effects of these global price increases, and domestic farmers faced rising fertilizer costs. Although the surge in fertilizer prices triggered by the worsening Russia–Ukraine situation began to stabilize to some extent around 2024, many fertilizer products continued to trade at higher levels than before the deterioration of the situation.

(4) Butz Reforms in the 1970s

Finally, as a longer-term issue, increasing attention has been drawn in recent years to structural problems faced by the U.S. agricultural sector, particularly its specialization in specific commodity crops.

In the 1970s, Earl Butz, who served as Secretary of Agriculture under the Nixon administration, scaled back acreage controls and price support policies that had been based on the "New Deal–type" policy orientation. Under the slogan "get big or get out," he promoted export-oriented growth and the large-scale consolidation of agriculture. Although subsidies were strengthened again following the agricultural crisis of the 1980s, market orientation advanced further with the farm legislation of the 1990s. Since then, a hybrid system combining price supports and direct payments has been in place, while in recent years, amid geopolitical risks and climate change, there has been a renewed emphasis on supply stability, domestic production support, and industrial policy.

Despite various twists and turns, it is undeniable that Secretary Butz's policy shift marked a major turning point in shaping the current structure of U.S. agriculture. Through these reforms, U.S. agriculture enhanced its competitiveness in specific crops through large-scale and intensive production and achieved greater operational resilience through expanded scale. At the same time, however, under a system characterized by monoculture-type production and large-scale adoption of agricultural machinery and chemical fertilizers, fluctuations in international markets—including

fertilizer and energy prices—as well as relationships with overseas markets, have come to exert a direct and significant impact on profitability. As a result, the sensitivity of agricultural business income to price fluctuations has increased. Moreover, the concentration of farmland in specific crops has been associated with rising input costs, such as the large-scale use of fertilizers needed to maintain soil nutrients, which in turn has been pointed out as a factor reducing profitability.

As discussed above, the surge in fertilizer prices faced by U.S. farmers is driven not only by the recent Middle East war, but also by a combination of factors including recent domestic and international developments, policy adjustments, and long-term structural issues. While disruptions to global supply chains caused by the blockade of the Strait of Hormuz are indeed a major factor behind the current spike in fertilizer prices, the hardships faced by farmers cannot be resolved solely by a de-escalation of tensions in the Middle East.

4. Policy Discussion

(1) Secretary Rollins' "All-of-Government" Approach

The Trump administration has also been compelled to recognize the current surge in fertilizer prices as a serious issue. Until early April, Secretary of Agriculture Rollins had expressed the view that approximately 80% of domestic farmers had already completed their fertilizer purchases for the year, and that price increases stemming from the Middle East conflict posed only a temporary threat to the agricultural economy. However, as surveys such as the aforementioned AFBF study were released, she acknowledged at a congressional hearing on April 16 that, while reiterating the administration's previous criticism of price increases by fertilizer companies, it could take several months for elevated fertilizer prices to stabilize.

Against this backdrop, on April 27, Secretary Rollins announced the need for an "All-of-Government" approach to address fertilizer price issues. Specific measures included both short- and medium-term actions such as: (1) extending the waiver of the Jones Act—which restricts domestic maritime shipping to U.S.-flagged vessels—by an additional 90 days beyond its original May 17 deadline; (2) permitting imports of petrochemical products, including fertilizers, from Venezuela; (3) reviewing regulations related to diesel exhaust fluid (DEF), which is used for emissions control; and (4) requesting major fertilizer companies to expand domestic supply. In addition, she outlined longer-term measures such as (5) a $900 million program aimed at expanding domestic production capacity. Although no concrete policy steps were presented, concerns regarding the oligopolistic structure of the fertilizer market were also reiterated.

Furthermore, at a press conference on May 19, additional measures were announced, including: (1) accelerating permitting for fertilizer plants (such as a large-scale ammonia facility in Louisiana); (2) reviving, revising, and expanding the Fertilizer Production Expansion Program (FPEP) initiated during the Biden administration; (3) easing import restrictions and tariff measures such as countervailing duties (CVDs) on fertilizer-related products; and (4) establishing a new "Agricultural Inputs Economist" position within the Department of Agriculture. Secretary Rollins has also continued regular meetings

with fertilizer companies and emphasized that the administration is doing everything possible to bring down fertilizer prices, highlighting its commitment to addressing the issue to the fullest extent.

(2) Policy Evaluation and Industry Response

Opinions are currently divided on how effectively the series of measures will curb the surge in fertilizer prices. For example, government officials argue that if urea imports from Venezuela proceed smoothly, they could offset roughly half of the supply shortfall through around June. On the other hand, while the extension of the Jones Act waiver may help ease domestic logistics constraints, it is merely an extension of an existing measure and does not constitute a new factor for price suppression. The $900 million production expansion program, financed through the U.S. Department of Agriculture's Commodity Credit Corporation (CCC), is considered relatively flexible in execution; however, even when combined with other measures, expanding production capacity is not something that can be achieved overnight.

Reactions from the agricultural sector have generally been severe. At a Senate Agriculture Committee hearing on May 12, Eddie Melton, President of the Kentucky Farm Bureau, emphasized that the current rise in fertilizer prices is not solely attributable to the situation in the Middle East, but rather reflects a crisis that has built up over many years, and he called for both short- and long-term policy responses. At the same hearing, Trent Kubik, President of the South Dakota Corn Growers Association, expressed concerns regarding market concentration in the fertilizer industry and the vertical integration among major manufacturers and distributors. Despite various government measures, there has been no significant decline in prices, and economic relief for farmers remains limited. As a result, such dissatisfaction is increasingly directed toward the government, which continues its involvement in the Middle East conflict—one of the key drivers of the current price surge.

According to a recent poll conducted by *Farm Journal* targeting farm households (published May 18), 55% of respondents stated that federal policies over the past year have had a negative impact on their operations, while only 19% said they had been helpful. In addition, 78% of respondents cited rising machinery and input costs as one of the top three challenges facing their operations, and 94% indicated that the war with Iran has affected their businesses by increasing fertilizer costs, energy costs, or both.

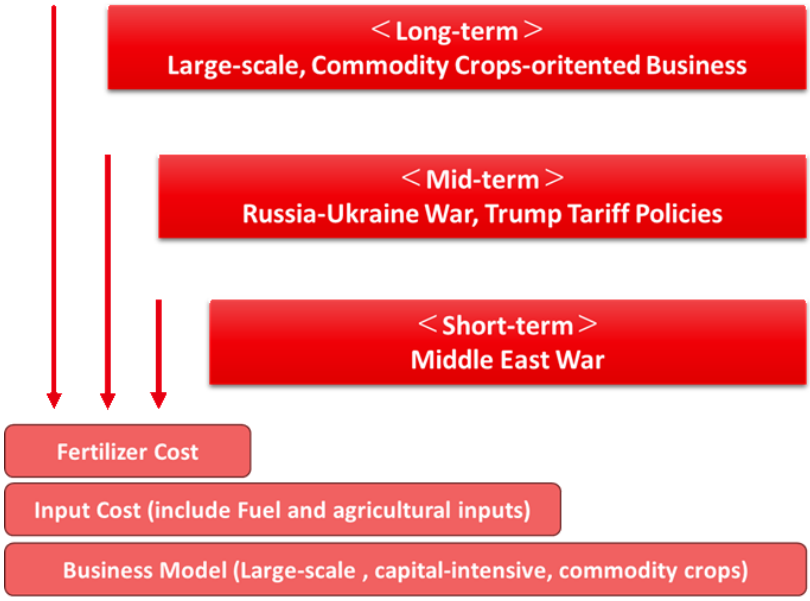
Meanwhile, the fertilizer industry has generally welcomed policies aimed at expanding domestic production. There is particularly strong support for subsidies intended to boost long-term production capacity, as well as for regulatory reforms to accelerate permitting processes. However, the industry remains reluctant to comply with the administration's requests for price reductions or short-term increases in output. As the gap between domestic and international fertilizer prices widens—amid more severe fertilizer shortages overseas—there are also reports of companies shifting supply toward more profitable export markets. Overall, while the fertilizer industry is receptive to government support measures, it continues to make business decisions based on market principles.

5. Conclusion

As discussed above, while the surge in fertilizer prices is an urgent issue for the U.S. agricultural sector at present, it is also necessary to view this problem—and the direction of policy responses—through a broader time horizon that extends beyond the Middle East conflict. Specifically, it is important to understand the accumulated challenges across short-term (Middle East war), medium-term (the Russia–Ukraine war and Trump-era tariffs), and long-term (structural issues in the agricultural sector) time frames. When considering future policy prospects, it is essential to analyze developments with these factors in mind. From this perspective, a key point is that the issue of rising fertilizer prices is unlikely to dissipate simply with a de-escalation of the Middle East situation; rather, it is highly likely to persist as a policy challenge so long as the aforementioned medium- and long-term factors remain.

Furthermore, as is evident from the nature of these factors, policy responses to rising fertilizer prices now span a wide range of areas—not only agriculture, but also energy, logistics, tariffs, national security, and sanctions—adding to the uncertainty surrounding policy direction. For example, efforts to promote fertilizer imports from Venezuela through the easing of sanctions are a typical case. Moreover, the Middle East conflict itself, a short-term factor, originated as a matter of foreign and security policy. Conversely, this also implies that government responses initially triggered by fertilizer price increases could spill over into broader policy shifts affecting other areas, such as tariffs and sanctions.

Figure 5: Challenges Facing U.S. Agriculture (Time and Structural Framework)



Source: Marubeni Washington Office

Finally, with regard to the structural issues of the U.S. agricultural sector noted earlier in this paper, it should be recognized that calls for reform have grown significantly in recent years. Such arguments extend beyond the issue of fertilizer price increases alone, highlighting challenges on both the demand and supply sides of the agricultural sector, including its overall business model, market concentration, and resilience in the face of changes in the international environment. This issue represents a crucial theme in considering the future of U.S. agriculture and is also related to ongoing

discussions surrounding the 2026 Farm Bill currently under deliberation in Congress. However, this topic will be addressed in detail in a separate paper.

Marubeni America Corporation Washington Office

1717 Pennsylvania Ave., N.W., Suite 375, Washington, DC 20006
https://www.marubeni.com/jp/research/