Market overview

The world's mineral fertilizer market responds to dynamic shifts in global politics and economics, with market conditions determined by the interplay of international and regional factors, industry trends, supply chain stability, and other key elements.

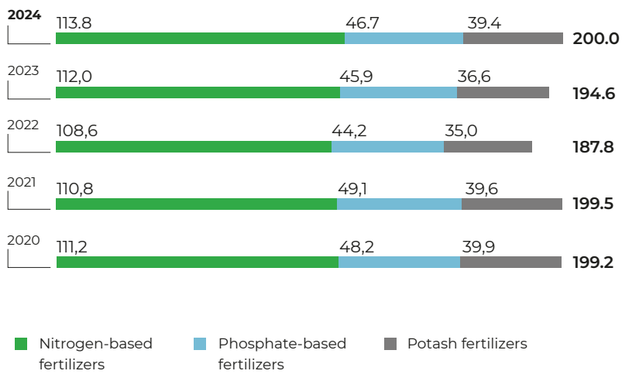
In 2024, fertilizer demand demonstrated a strong recovery, bolstered by improved availability and normalised trade flows. This positive trend persisted despite ongoing and tightening sanctions, protectionist measures by several global exporters, and various disruptions to production and trade.

The global mineral fertilizer industry and related sectors face significant headwinds, including rising operational costs, higher interest rates, and working capital constraints. These financial pressures are delaying investment projects across numerous countries, creating additional challenges for industry development.

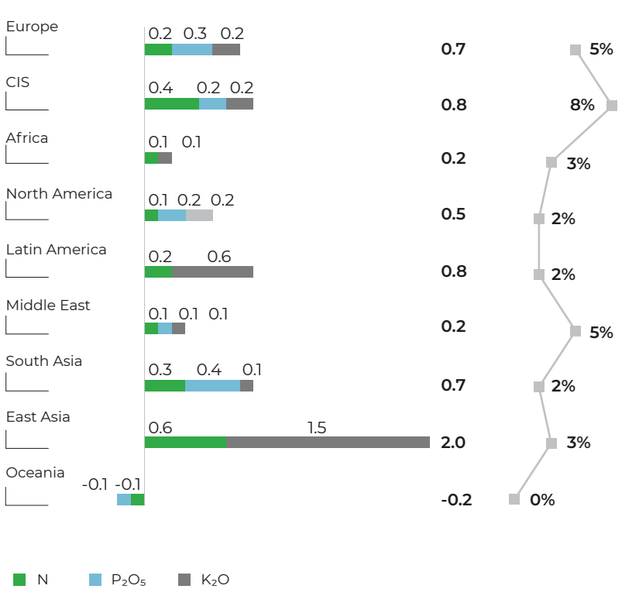
Despite these obstacles and geopolitical tensions, most governments maintained strong support for the agricultural sector throughout 2024, helping maintain supply chains stability and contributing to fertilizer demand recovery. In the reporting year, price volatility in mineral fertilizer markets decreased compared to previous periods, positively influencing crop planning and supporting overall fertilizer consumption.

Fluctuations in fertilizer affordability were a key factor in the initial decline and subsequent recovery of global consumption. From mid-2021 to mid-2022, fertilizer prices outpaced agricultural prices, reducing affordability and curtailing purchases.

Global fertilizer consumption estimates, mt nutrient



Estimate of changes in consumption by region in 2024, mt nutrient



This dynamic reversed between mid-2022 and mid-2023, when fertilizer prices declined more rapidly than crop prices, enhancing affordability and stimulating consumption.

From mid-2023 to late 2024, affordability fluctuations moderated. However, distinct differences between nutrients became apparent. Potash and nitrogen-based fertilizers remained more attractive with respect to crops (potash for oilseeds and nitrogen for rice) while phosphate fertilizer affordability remained lower, partly due to price recovery.

Preliminary estimates by consulting agencies and industry analysts[1] suggest that in 2024, global consumption of mineral fertilizes stood at 200.0 mt nutrient, up 2.8%, or 5.4 mt nutrient, against 2023.

For instance, consumption of nitrogen-based fertilizers was up by 1.8 mt of N (+1.6%) to 113.8 mt, while for phosphate fertilizers, it increased by 0.8 mt of P_2O_5 (+1.8%) to 46.7 mt. The most robust growth was projected for potash fertilizer consumption, which climbed by 2.8 mt of K_2O (+7.7%) to reach 39.4 mt.

In 2024, fertilizer consumption continued to recover across all key regions. The strongest growth rates (up to 5+% y-o-y) were observed in former Soviet Union countries (excluding Ukraine and the Baltic states), the Middle East (primarily driven by Turkey), and Europe, where a low base effect followed three years of sustained decline. Africa, North and South America, along with Asian countries recorded more moderate growth rates of 2–3%.

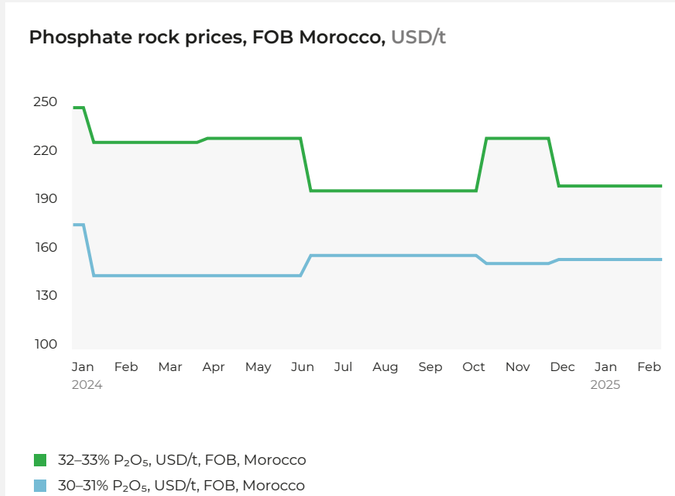
PHOSPHATE ROCK AND PHOSPHATE-BASED FERTILIZER MARKET

According to preliminary estimates, global production of phosphate rock in 2024 stood at 209 mt, which is 1.5 mt, or 2%, above the 2023 level. Production growth in North Africa, predominantly Morocco, amounted to 2.5 mt, but was offset by a production decrease in the Middle East (–0.8 mt). Other regions maintained production at 2023 levels or experienced slight declines.

The global phosphate rock market's price environment features a widening price gap between high and low nutrient content (P_2O_5) grades. This reflects the growing deficit of high-grade materials, which drives elevated prices for these resources while low-grade rock prices remain comparatively modest.

According to preliminary estimates, global production of complex phosphate-based fertilizers (DAP + MAP) in 2024 reached 61.2 mt, a 0.8 mt (–1%) decline compared to 2021. Increased production in North Africa and Russia (totalling 1.0 mt) was offset by reduced output due to process-related stoppages in North America and the Middle East, export restrictions in China, and weakening domestic market conditions in India.

Phosphate rock prices, FOB Morocco, USD/t

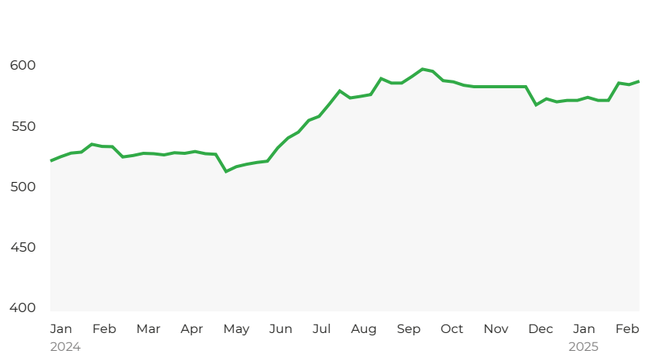


[1] Hereinafter based on data by the International Fertilizer Association (IFA), CRU, Argusmedia, and Profercy consulting agencies; expert estimates of industry analysts in Russian and international media.

Global trade in DAP/MAP in 2024 was 29.4 mt, down by 0.4 mt, or 1%, y-o-y. India recorded a significant drop in DAP/MAP imports (–2.0 mt) on the back of reduced subsidies for phosphate and potash fertilizers, following a period of record-high government support in previous years. Brazil's MAP imports went down by 1.0 mt to 4.4 mt, driven by MAP's relatively low affordability compared to alternative phosphate-based fertilizers such as superphosphates and NPK. Meanwhile, Europe, Southeast Asia, and Australia increased their phosphate-based fertilizer imports in the reporting year.

In 2024, the supply-demand balance strongly influenced phosphate-based fertilizer market pricing. Prices began climbing in 2H 2024, propelled by Chinese export restrictions and reduced output from a number of key manufacturers, partly due to technical issues. The 2024 average DAP/MAP price was USD 558/t (FOB Baltic) as compared to USD 521/t in 2023.

Global DAP/MAP prices, FOB Baltic, USD/t



NITROGEN-BASED FERTILIZER MARKET

The global nitrogen-based fertilizer market demonstrated high price volatility driven by seasonal factors and significant trade flow shifts across Asia. This volatility stemmed primarily from China's near-complete export withdrawal as it redirected resources to domestic markets. The average urea price settled at USD 304/t (FOB Baltic), slightly below the 2023 level of USD 310/t. However, the spread between minimum and maximum quotes remained substantial throughout the year, fluctuating at USD 100–150/t.

Preliminary estimates indicate a 3.6%, or 6.8 mt, growth in global urea production in 2024, reaching a total of 194 mt. China and Russia experienced the strongest production growth, leveraging increased utilisation of new capacities commissioned in 2022–2023. European domestic urea production also expanded, benefiting from more favourable gas market pricing.

Global urea prices, FOB Baltic, USD/t

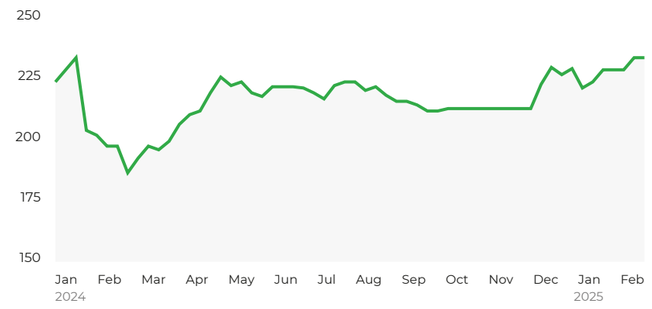
Global urea trade volume was almost flat compared to 2023 and amounted to 54.5 mt. China's dramatic pullback from the export market (–4.0 mt) was counterbalanced by increased exports from Russia and the CIS (+1.5 mt in total), the Middle East (+1.8 mt), and growth in Western European and Southeast Asian intra-regional trade.

POTASH FERTILIZER MARKET

The global potash fertilizer market exhibited stable production and export volumes in 2024, following a nearly complete recovery in 2H 2023. Relatively low potash fertilizer prices enhanced their affordability compared to the key agricultural products, spurring significant import growth across major markets including Brazil, the USA, China, and Southeast Asia.

According to preliminary estimates, global trade volumes for potassium chloride amounted to 58.8 mt in 2024, which is 4.5 mt, or 8%, more than in 2023. Global potassium chloride production hit a record high of 72.3 mt in the reporting year, surpassing last year's output by 4.2 mt.

Global potassium chloride prices, standard, FOB Baltic, USD/t



Top 5 global phosphate fertilizer and feed phosphate production capacities in 2024[1]

1	2	3	4	5
OCP	MOSAIC	PHOSAGRO GROUP	MAADEN/SABIC	YARA
Morocco	USA/Brazil	Russia	Saudi Arabia	Norway
17.1 mt	13.9 mt	8.9 mt	7.7 mt	7.0 mt

Top 5 global phosphate rock production capacities in 2024[1]

1	2	3	4	5
OCP	MOSAIC	PHOSAGRO GROUP	JPMC	MAADEN/SABIC
Morocco	USA/Brazil	Russia	Jordan	Saudi Arabia
47.5 mt	20.6 mt	11.4 mt	11.3 mt	10.3 mt

[1] Sources: CRU Group, publicly available company data.