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Public Summary Short-Term Fertilizer Outlook 2022 – 2023

IFA Market Intelligence Service



This report is a summary of IFA's Short-Term Outlook, prepared by the Market Intelligence Service to accompany IFA's Short-Term Outlook Presentation, which is available to IFA members.

This report is authored by:

- ✓ Laura Cross, Director
- ✓ Armelle Gruère, Program Manager - Demand

With contributions from:

- ✓ José de Sousa, Program Manager - Supply
- ✓ Olivier Rousseau, Senior Market Analyst - Potash & NPK
- ✓ Etienne Achard, Phosphate Analyst
- ✓ Grace Chilande, Fertilizer Demand Analyst
- ✓ Sylvie Marcel-Monnier, Project Coordinator

Notes and definitions:

- ✓ All volume data presented in this report is expressed in nutrient metric tonnes, unless stated otherwise. Nutrient tonnes reflect the N, P₂O₅ and K₂O content of nitrogen, phosphate and potash fertilizers respectively, rather than the physical weight of the product being used (product tonnes).
- ✓ The terms nitrogen, phosphate and potash are used to denote groups of nutrient-bearing fertilizers which are produced and traded globally. The terms nitrogen, phosphorous and potassium refer to the nutrients required by plants.
- ✓ Annual periods refer to the calendar year unless stated otherwise, and when FY precedes a year, it refers to the Fertilizer Year. A detailed definition of IFA's Fertilizer Year can be found at the end of this report.

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BACKDROP TO THE FERTILIZER OUTLOOK

This Short-Term Fertilizer Outlook was prepared in October 2022, following six months of turmoil in the fertilizer market since Russia's invasion of Ukraine in February 2022. It builds on IFA's [Medium-Term Outlook](#), published in July 2022, and provides an updated two-year forecast for fertilizer supply and consumption. Beyond the severe humanitarian impacts in Ukraine, there has been significant volatility in global commodity markets driven by a triple threat of disruption in energy, fertilizers and food.

In the initial aftermath of the war in Ukraine, the fertilizer market faced uncertainty over the ability of Russian exports to interact with the international market, due to sanctions on Russian individuals, entities and the country's banking sector. This was exacerbated by a lack of Belarusian potash following sanctions implemented in H2 2021, by China's export restrictions on nitrogen and phosphate and by unprecedented natural gas price increases in Europe, impacting nitrogen production costs.

The threat of severely reduced global supply led to a rapid increase in fertilizer prices, peaking in May 2022 which coincided with the typical seasonal upswing in demand for the Northern Hemisphere spring. This level of price inflation

has not been seen since 2008, but it is not solely as a result of the war in Ukraine. Fertilizer markets have been in a tightened state since the onset of Covid-19, when a renewed emphasis on food security globally and strong agricultural fundamentals led to record fertilizer use. Supply disruptions also occurred in this period, with unplanned plant outages, rising raw material costs and sanctions on Belarus.

Since May, international benchmark prices of phosphate and potash fertilizers have declined, and while nitrogen prices have been more volatile, they fell overall between May and October 2022. There were weakening price drivers during this period, but prices remain above their pre-2020 levels due to a set of overarching market tightening factors.

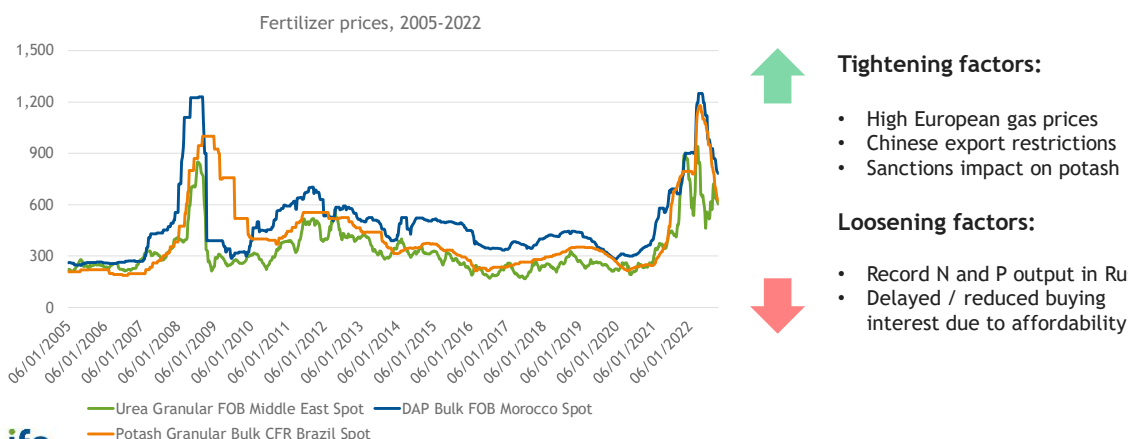
Market loosening factors since May 2022:

- Record nitrogen and phosphate output in Russia, exceeding initial expectations.
- Delayed and reduced buying interest for phosphate and potash due to affordability.

Market tightening factors remaining in place:

- Record high European gas prices, passing through to the global marginal cost of nitrogen production.
- Chinese export restrictions on nitrogen and phosphate fertilizers.
- Two-fold sanctions impact on potash.

Fertilizer prices have returned to 2021 levels, but remain inflated by high production costs and tight supply



The importance of European gas prices

Europe has experienced record high natural gas prices due to the region's reliance on energy imports from Russia. At the most severe point in Q3 2022, the Dutch TTF gas price benchmark exceeded US\$100/MMBtu, and as a result, IFA estimated that 70% of European ammonia capacity had been shut down for economic reasons in August. By October, the situation had improved, with gas prices declining to below US\$30/MMBtu, but it was still estimated that 40% of regional capacity was not operational.

Natural gas price forecasts from sources such as the World Bank expect European gas prices to stay well above \$25/MMBtu until 2024 at least, highlighting that the future of Europe's energy market remains uncertain beyond 2022. This puts European nitrogen production at risk of being uneconomic for multiple years.

European farmers are better leveraged than elsewhere, and the region is therefore likely to switch from domestically produced fertilizers to imported product if the need arises. This could tighten the global market further and make it harder for vulnerable markets to access their import requirements.

Sanctions, protectionist measures and the role of fertilizers in food security

Sanctions on Russia and Belarus continue to impact the fertilizer market. In the case of Russia, several jurisdictions including the US and the European Union have clarified that sanctions should not interrupt the flow of food and fertilizer products to the global markets, in the name of food security. However, in practice, logistical and financial barriers as well as sanctions interpretations still exist.

Russian supply from the Black Sea has been subject to UN-brokered negotiations, with the goal of restarting grain and fertilizer trade from the region. The Black Sea grain deal has paved the way for fertilizers to flow from Ukrainian ports, however the crucial ammonia pipeline which brings product from inland Russia via the Black Sea, had not restarted as of November 2022.

These and other interventions have put Russian urea and ammoniated phosphate exports on course to reach record levels in 2022, far higher than initially thought, which has somewhat alleviated pressure on the global market.

Sanctions continue to impact individual fertilizer product markets across the board in various ways, however potash remains by far the most exposed product. This is due to the combined impact of sanctions on Russia and Belarus, which together accounted for more than 40% of the globally traded potash market before the sanctions were implemented.

In times of global market uncertainty, nations with a strong focus on self-sufficiency often turn inwards and implement export restrictions in order to boost domestic supply. This has been the case in China, where longer export inspections were imposed in 2022, which in effect act as export controls, designed to support the domestic supply of nitrogen and phosphates. As a result, Chinese exports are forecast to be around 50% of normal levels in 2022. This has exacerbated already reduced global availability.

Moving from fertilizer availability to affordability drivers

A newly emerging trend since the middle of 2022, is a shift from availability concerns to affordability-driven themes. In light of rapidly increasing prices in H1 2022, fertilizer consumers adjusted their buying patterns, delaying, reducing and in some cases skipping application on affordability grounds. This has been especially the case for phosphate and potash fertilizers.

The following sections outline IFA's supply and consumption forecasts. Three scenarios have been developed for supply, based on different assumptions for five key criteria, outlined in Appendix I. A single scenario is presented for fertilizer consumption, as a result of IFA's forecast survey being mostly qualitative, and the harder-to-quantify nature of fertilizer consumption. This makes it harder to implement structured short-term scenarios for consumption.

SHORT-TERM FERTILIZER SUPPLY FORECAST

As a trade association, IFA is prohibited from forecasting future output levels of the industry. However, we produce a full year 2022 estimate of global production, based on close to full year data and a confidential survey of IFA member forecasts. Our supply forecasts include all uses, combining both fertilizer and technical uses.

Supply in 2022

The nitrogen market has seen diverging fortunes in 2022. Ammonia production, which can be taken as a proxy for all nitrogen products as the first form of nitrogen produced, is forecast to decline by 3% in 2022 compared to 2021. This is expected to be driven by lower output in China, Russia and West and Central Europe (WCE).

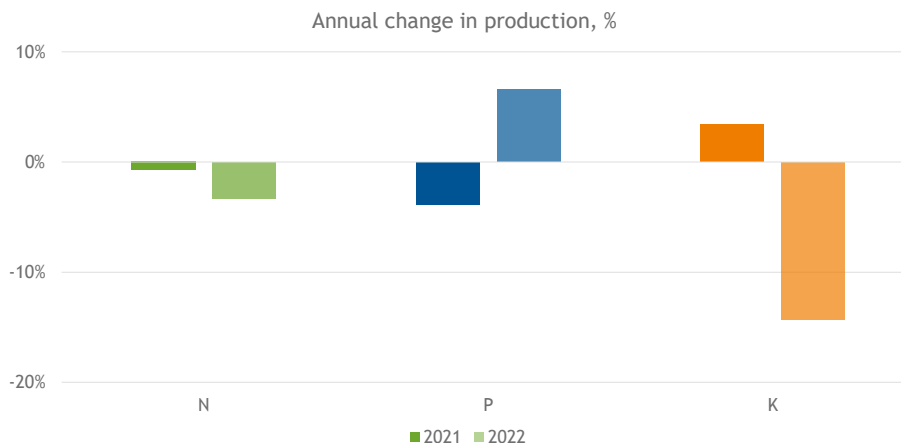
By contrast, global urea production (the most commonly consumed nitrogen fertilizer) is forecast to increase by 2% year-on-year. This primarily stems from higher urea output in low-cost export-oriented producers with new

capacity in countries such as Nigeria and Brunei, as well as higher production in countries with an import requirement, namely India and Brazil.

In the phosphate market, following lower production in 2021, global phosphoric acid production is forecast to increase by 7% in 2022. This stems from rebounding production in the US and Brazil, after supply issues in 2021 and better-than-expected production in Russia this year. However, the traded volume of ammoniated phosphates (MAP + DAP) in 2022 is forecast to fall by 5% year-on-year, as a direct result of reduced and delayed purchasing due to poor affordability.

Potash supply continues to be the most heavily impacted fertilizer. Global production in 2022 is forecast to be 14% lower year-on-year, driven by significantly lower output in Belarus, followed by Russia. This has been somewhat offset by higher production in Canada and Laos, but it is not enough to fully offset the loss of supply from the two sanctioned countries. Potash trade has been impacted this year by affordability and inventory carryover from 2021.

Fertilizer production is forecast to decline overall, with higher phosphate production but lower nitrogen and potash output year-on-year in 2022



Supply in 2023

For 2023 onwards, the Market Intelligence Service forecasts a supply measure known as capability, which combines announced capacity developments and an adjusted effective operating rate based on historical trends. This results in a forecast designed to reflect potential supply based on fixed assumptions. The supply forecast starts by considering projects to build new capacity or expansions at existing sites, collected by surveying IFA members on their capacity investment plans. The three scenarios presented below are detailed in Appendix I.

Nitrogen capability was adjusted in Russia, Ukraine and Belarus, based on the ability of these countries to export amid international sanctions on Russia and Belarus, and logistics issues from Ukraine. WCE capability was also adjusted based on disrupted natural gas supply from Russia.

In the optimistic scenario, an increase in nitrogen capability of 1.1 Mt N is forecast for 2023, while the pessimistic scenario forecasts a 5.8 Mt N decline. The middle ground scenario forecasts a 1.8 Mt N decline in nitrogen capability. The pessimistic and middle ground scenarios reflect a short-term situation where European gas economics and the ability of Russian exports to reach the international

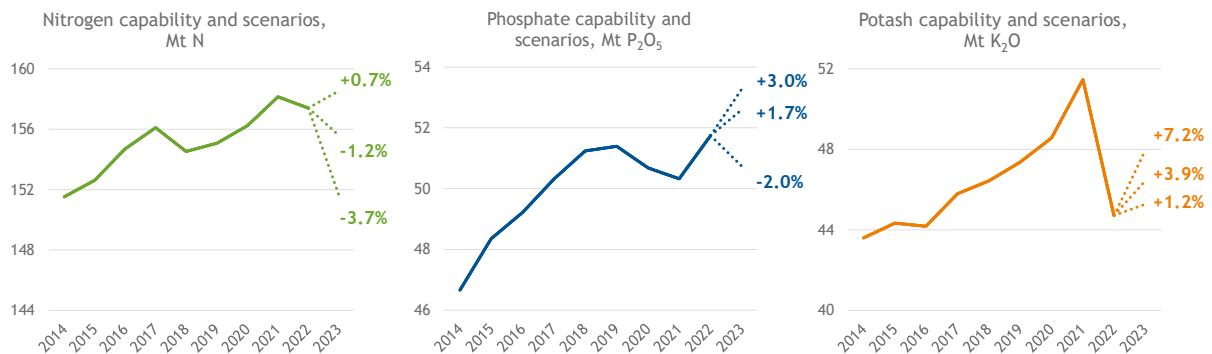
market either stay constant or deteriorate from the situation in Q4 2022.

Phosphate capability was adjusted based on Russia’s ability to export, and in WCE based on ammonia raw material costs. In the optimistic scenario, global phosphate capability is forecast to increase by 1.5 Mt P₂O₅, and in the middle ground scenario, capability is forecast to increase by 0.9 Mt P₂O₅. These two scenarios reflect the upside in the phosphate market stemming from capacity expansions. In the pessimistic scenario, underpinned by high raw material costs and a worsening situation for phosphate exports, a 1.0 Mt P₂O₅ decline in phosphate capability is forecast in 2023.

Potash capability was adjusted in Russia and Belarus based on ability to export, including a view on overland trade from Belarus to China and via Russia. Given the severity of the situation in 2022, all three of the capability forecast scenarios show an increase year-on-year in 2023.

In the optimistic scenario, potash capability is forecast to increase by 3.2 Mt K₂O, compared to a 1.7 Mt K₂O increase in the middle ground scenario, and a 0.6 Mt K₂O increase in the pessimistic scenario. The optimistic scenario accounts for the role of two new mines expected to start up in 2023, in Russia and Laos.

Fertilizer capability outlook scenarios for 2023



SHORT-TERM FERTILIZER CONSUMPTION FORECAST

IFA maintains a network of ~50 country experts, representing ~90% of global fertilizer use. This group is made up of market analysts, regional fertilizer associations, producers, consultants and university professors. These experts respond to IFA surveys on consumption and their views contribute to IFA's short-term consumption forecast, outlined below.

Poor fertilizer affordability

A survey of IFA's country experts, conducted in September and October 2022, ranked fertilizer prices and crop prices as the most important drivers of fertilizer consumption over the three-year period from FY 2021 to FY 2023, in every region of the world.

Until their peak, fertilizer prices overall had increased faster than crop prices since mid-2021. As a result, fertilizer affordability, measured by the ratio between fertilizer prices and crop prices, decreased in 2021 and then again in 2022. This trend occurred for the main cereal consuming crops (maize, rice, wheat) but also for soybeans, sugar and palm oil.

However, due to the price volatility over this period, the overarching decline in fertilizer affordability has not been experienced uniformly and is heavily dependent on the timing of fertilizer purchases and crop sales. Price volatility has also influenced farmers' purchasing behavior. For example, many farmers are reported to have bought fertilizers ahead of time (in late 2021) to protect themselves against an expected worsening in affordability. On the other hand, many farmers are reported to have postponed their fertilizer purchases in 2022, either because they lacked financing, or because they hoped for a decline in prices. These advanced or delayed purchases mean that a country's imports may not always reflect its actual fertilizer use. Farmers' behavior changes mostly impacted phosphate and potash demand.

In addition to fertilizer affordability, other factors influencing fertilizer consumption were reported as important in the survey of country experts for the period from FY 2021 to FY 2022:

- **Government support to farmers** was ranked high mostly in Sub-Saharan Africa (SSA), South Asia and East Asia. In these regions, smallholder farmers have a greater dependency on government support for input purchases. Faced with much higher fertilizer prices, government support has been either maintained or decreased and has rarely increased.
- **Weather** was mentioned more often in Latin America, West and Central Europe (WCE) and Oceania. In 2022, extreme drought affected both the southern part of Latin America and WCE. In contrast, Australia received heavy rains, which overall benefited agricultural production. Individual countries in other regions have also experienced extreme weather events in 2022: this is the case in Pakistan, which suffered from catastrophic floods. A third consecutive La Niña year was responsible for many of these extreme weather events.
- **Energy prices** (outside of their role in fertilizer costs) were mentioned mostly in WCE, Ukraine and Oceania, but have been influential globally in the overall running costs of farming.
- **Fertilizer availability**, despite not being the highest ranked factor this year, had a significant influence in some regions, in particular SSA.
- **Exchange rates** have weakened against the USD in many countries. The most heavily affected countries have been in Latin America and West Asia (particularly in Turkey).
- The **economic situation** of individual countries was a significant factor in Latin America, SSA and Sri Lanka, where governments lack foreign exchange to import fertilizers.
- **Geopolitical disruption**, namely the war in Ukraine, was cited as a major cause of lower fertilizer consumption in Ukraine itself. Political issues were mentioned by other countries, but mostly in relation to the global impact of the war in Ukraine.

- Finally, **environmental regulations** were less frequently mentioned in this survey on the short-term outlook than in past medium-term outlook surveys. Indeed, these regulations have a medium to long-term influence on fertilizer consumption. For the outlook period FY 2021 - FY 2023, environmental regulations were considered important in New Zealand (where new regulation limits the use of nitrogen by farmers), in East Asia and in a few countries in WCE.

Country-specific factors were also mentioned, such as farm labor issues in Malaysia, which affected palm oil production and insecurity in Nigeria.

Regional trends

As early as FY 2021, fertilizer use declined significantly in some regions. As fertilizer prices started climbing in the second half of 2021, the regions reporting their fertilizer use from mid-2021 to mid-2022 experienced significant reductions. This was the case for South Asia, in which countries started their fertilizer year in April or July 2021, and WCE and North America, which started their fertilizer year in July 2021. Each of these three regions lost over 2 Mt of nutrients. The reduction in South Asia was driven by India, where despite favorable weather, higher fertilizer prices resulted in reduced imports and availability issues, particularly for P₂O₅ and K₂O. In WCE, the reduction in fertilizer consumption was caused by several factors: reduced cereal area, severe drought and high fertilizer prices. European farmers prioritized N applications over P₂O₅ and K₂O applications. Lower fertilizer affordability was also the main factor affecting fertilizer consumption in North America. The impact was heightened in the United States by a contraction in cereal area and dryness.

The largest regional declines in fertilizer consumption are expected to occur in FY 2022. East Asia, Latin America and Eastern Europe and Central Asia (EECA) are forecast to drive this contraction, with a combined reduction of 8.3 Mt of N, P₂O₅ and K₂O. In East Asia, rice and palm oil producing countries in Southeast Asia specifically are expected to experience the

sharpest drops. Oceania is the exception, with no decline in fertilizer use expected in FY 2022 despite lower affordability: the impact was offset by heavy rains in Australia. In relative terms, EECA, Africa, West Asia and Latin America are expected to experience the largest cuts in FY 2022, ranging from 10% to 15%.

Eastern Europe and Central Asia (EECA)

Ukraine's fertilizer use is expected to plummet by 70-80% in FY 2022 due to the war. Consumption is expected to drop for all three nutrients: N, P₂O₅ and K₂O. This is explained by a smaller planted area but also lower application rates. Fertilizer availability and affordability is low and Ukrainian farmers face economic difficulties related to the war and to problems exporting their crops. In contrast, Russia is expected to continue increasing its fertilizer consumption in FY 2022, with an expected record wheat crop and the role of capped domestic fertilizer prices since Q4 2021. While Russia accounts for half of EECA fertilizer consumption and Ukraine for only 20% (FY 2021 figures), the expected fall in Ukraine is so large in FY 2022 that it drives down regional consumption.

Sub-Saharan Africa (SSA)

As of September 2022, fertilizer requirements for the SSA region were at various stages of being fulfilled. The International Fertilizer Development Center (IFDC) reported relatively good product coverage in West Africa, but much lower coverage in East, particularly in southern countries outside of South Africa. These countries had less than half of their annual fertilizer needs covered as of September 2022, and not much prospect of filling these gaps in the last quarter of the year. These shortages are caused by both low affordability and low availability of fertilizers in the region. A decline of almost 25% in fertilizer consumption is expected in FY 2022 in SSA (minus South Africa). This would be the largest decline since at least the 1960s. Consumption of all three nutrients is expected to fall, with K₂O comparatively more affected than N and P₂O₅. Such a contraction would bring fertilizer use in SSA back to its mid-

2010s levels. This has prompted several interventions in bringing fertilizers to the region, aimed at mitigating the risk of a widespread food security crisis.

West Asia

Turkey accounts for almost 60% of fertilizer consumption in West Asia and is responsible for most of the contraction in the region in FY 2021 and FY 2022. Since mid-2021, Turkey has experienced a significant weakening of its currency, which has led to disproportionate inflation in fertilizer prices relative to global levels. Turkey is a net importer of fertilizers, but Turkish farmers sell most of their crops in lira in the domestic market and are therefore not able to balance the higher costs of imported fertilizers with higher revenues. This has caused a severe decline in fertilizer consumption in both FY 2021 and FY 2022, with use of all three nutrients falling.

Latin America

Fertilizer consumption in Latin America is expected to fall by 10% in FY 2022, more than initially expected. Brazil, which accounts for almost 70% of regional consumption (FY 2021 figures), is forecast to reduce consumption by 6%. An 18% decline in fertilizer use is expected in smaller countries. In addition to lower fertilizer affordability, extremely dry conditions in Argentina resulting from a third consecutive La Niña event are expected to play an important role in this sharp drop. Despite relatively good market fundamentals in Brazil, with only slightly lower N and P₂O₅ imports and sharply higher K₂O imports until September 2022, fertilizer consumption for FY 2022 is expected to suffer from difficulties in deliveries as well as a reluctance from farmers to buy high-priced fertilizers. P₂O₅ consumption was reported as likely to contract more significantly than consumption of N and K₂O.

Global fertilizer consumption is expected to drop by 5% in FY 2022

A 5% decline in global fertilizer consumption is forecast in FY 2022, after a 2.4% decline in FY

2021 (from a higher base given strong demand in FY 2020). In two years, the combined drop would amount to 7%, close to the 8% fall experienced in FY 2008. This reflects a drop of 4.9 Mt in total nutrients, followed by a drop of 9.5 Mt, bringing global fertilizer consumption to 188 Mt, back to its FY 2018 level.

In absolute terms, the decline in global fertilizer use is driven by N, which represents half of the decline in both years. In relative terms, N consumption is not expected to decline as much as consumption of P₂O₅ and K₂O, as farmers prioritize N to preserve their crop yields. Potash consumption declined only slightly in FY21 (-1%): large drops in WCE, North America and South Asia were offset by a strong increase in Latin America, where farmers made advance purchases for fear of shortages. But in FY 2022, consumption of K₂O is expected to fall by 7%, driven by East Asia and Latin America (and to a lesser degree by South Asia and EECA).

Between FY 2020 and FY 2022, the largest regional declines are expected to take place in East Asia (-4,6 Mt) and South Asia (-3,5 Mt). In relative terms, the regions expected to experience the sharpest declines are Africa (-19%, driven by SSA) and West Asia (-18%).

The expected declines in global fertilizer consumption in FY 2021 and FY 2022 are explained by both a contraction in cereal area and a reduction in fertilizer application rates. Farmers have reduced the area planted to fertilizer intensive crops (in particular cereals) and expanded the area planted to less fertilizer intensive crops (in particular soybeans). Worldwide, the International Grain Council expects cereals area to contract by 10.8 million ha in the 2022/23 crop marketing year, while soybean area is expected to expand by 6.8 million ha. Farmers have also reduced their application rates, for example giving priority to N over P₂O₅ and K₂O or skipping second applications. In many parts of the world, farmers have no choice as they are limited by their finances or impacted by reduced government support.

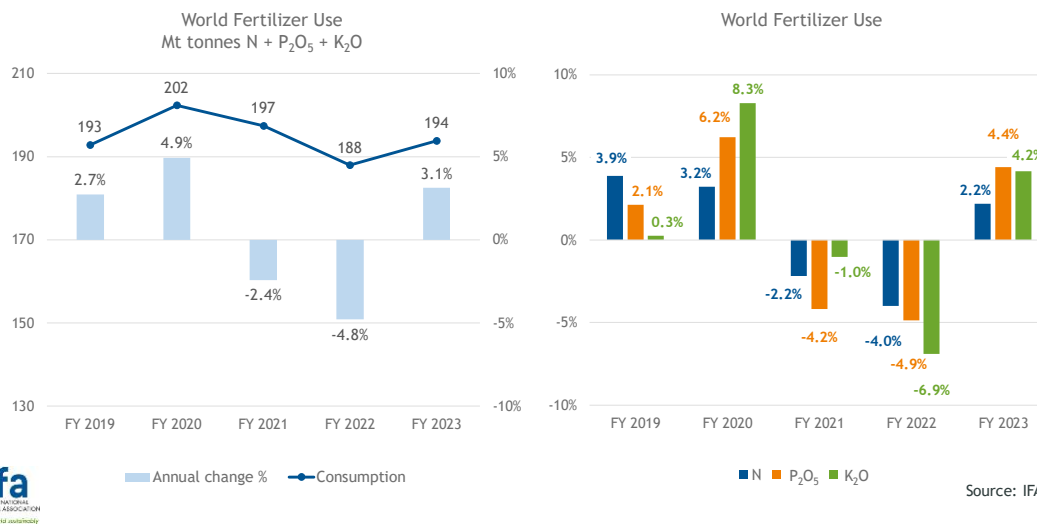
A partial recovery in global fertilizer consumption is forecast in FY 2023

After declining by 2% in FY 2021 and 5% in FY 2022, a 3% recovery in global fertilizer consumption is anticipated in FY 2023 to 194 Mt of nutrients (+5.9 Mt), returning consumption to just above the FY 2019 level. Consumption of N is expected to grow by 2%, and that of P₂O₅ and K₂O by 4% each.

Latin America is forecast to lead the partial recovery in global fertilizer consumption for all

three nutrients in FY 2023, more visibly for P₂O₅ and K₂O. South Asia is forecast to be the second largest contributor to the recovery in consumption of N and P₂O₅, with significant increases expected in both India and Pakistan. East Asia is forecast to be the second largest contributor to growth in K₂O consumption, driven by palm oil producing countries. It is noteworthy that Africa, with a 9% expected rebound from a heavily reduced base, would be the fourth largest contributor to growth in global N consumption.

A partial recovery in global fertilizer use is tentatively forecast in FY 2023



October 2022 consumption outlook compared to previous forecasts

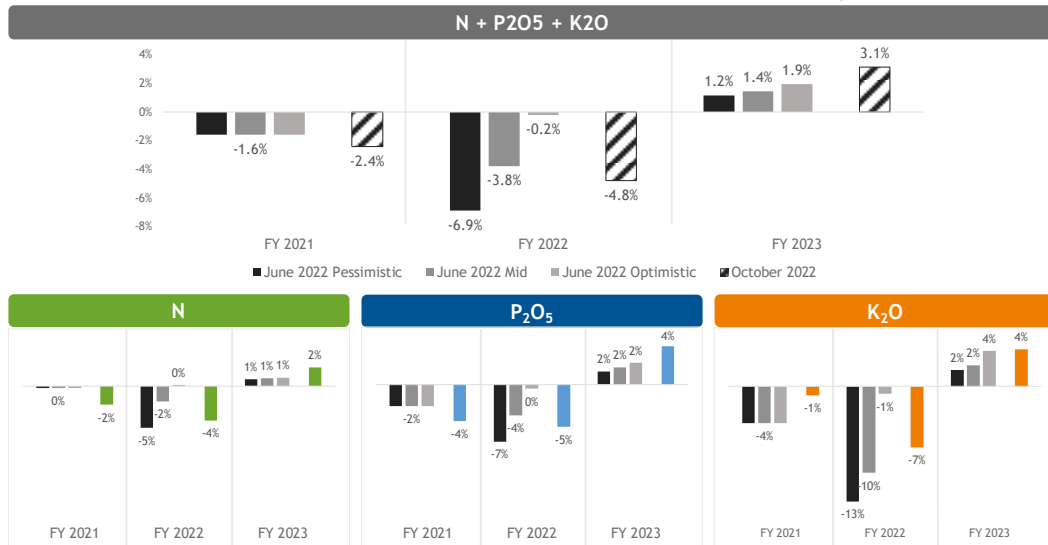
Comparing this November 2022 short-term demand outlook to the June 2022 medium-term demand outlook, global fertilizer consumption is estimated to have declined more than expected in FY 2021 (2.4% vs. 1.6%). This stronger decline is driven by WCE, North America and South Asia.

Current expectations for FY 2022 global fertilizer consumption fall between the middle ground scenario and the pessimistic scenario that were initially prepared in June. For FY 2023, the 3% recovery in global fertilizer

consumption is faster than previously expected across all three scenarios.

Similar observations are made for the separate nutrients N and P₂O₅. However, for K₂O current expectations are overall more optimistic than expected a few months ago. K₂O consumption is estimated to have declined by only 1% in FY 2021, whereas the June expectation was minus 4%. The expected 7% decline in FY 2022 is large, but not as large as expected in the June 2022 middle ground and pessimistic scenarios. The expected K₂O consumption recovery in FY 2023 is close to the optimistic scenario.

IFA's October consumption outlook compared to June outlook: earlier decline and faster recovery



Source: IFA

IMPLICATIONS FOR FOOD SECURITY

The most concerning short-term impact of reduced fertilizer use is the threat of a significant reduction in crop yields in the next harvest, prompting lower food production and ultimately increasing the number of people at risk of hunger. Global efforts to mitigate the impact of reduced supply have already achieved successes, but fertilizer consumption is still on course to be lower year-on-year in FY 2022 on affordability grounds.

Updated modelling by Gro Intelligence conducted in November 2022 implies that in IFA's consumption forecast for the calendar year 2022, reduced nitrogen fertilizer application would result in a 2.3% decline in global maize production, a 2.3% reduction in rice production and a 3.4% reduction in wheat production. The yield impact of reduced application of phosphorous and potassium is also likely to be significant, especially if sustained in the medium-term.

APPENDIX I: SCENARIO ASSUMPTIONS

Scenario overview



	Scenario criteria					
	1. Evolution of conflict in Ukraine	2. Sanctions on Russia and Belarus	3. Logistical ability to export to "friendly" countries	4. Protectionist policies in other fertilizer exporters	5. Agricultural backdrop including fertilizer affordability	
Optimistic	Resolution in 2022, no land-bridge between Russia and Crimea, Ukraine regains control of Black Sea ports.	Economic sanctions soften, Russian exports mostly recover, Belarusian exports partially recover	Short-term freight bottlenecks resolve, "friendly" countries import maximum volumes	Supply shortage fears ease, exporting countries stop stockpiling of food and fertilizer	Crop price growth outpaces fertilizer price growth, improving affordability	<i>Enough supply, affordability improves</i>
Pessimistic	Extended conflict, blocking food and fertilizer exports from Black Sea, Russia stops gas supply to Europe	Western sanctions grow, US\$ sanctions spread even to some "friendly" countries	Exports to "friendly" countries capped by secondary sanctions, seaborne exports from Belarus blocked	Key food and fertilizer exporters restrict exports on shortage fears, government tenders increase	Fertilizer price growth outpaces crop price growth, worsening affordability	<i>Severe global demand shortfall</i>
Middle Ground	Russia occupies large parts of Eastern Ukraine, exports resume from a shared Black Sea coast	All current sanctions stay in place, but some "friendly" countries restart / continue partial trade with Russia	Partial volumes exported to "friendly" countries, but not enough to return to normal volumes	Key exporters hold back, some H2 2022 improvement, fragile regions hardest hit	Product-specific affordability vs availability squeeze	<i>Trade reroutes & affordability squeeze</i>

APPENDIX II: WHAT IS A “FERTILIZER YEAR”?

The reference period used to report fertilizer consumption varies depending on the country. Countries report fertilizer consumption statistics in 12-month periods that start either in January or in another month (most often April and July). In this report, “fertilizer year” (FY) refers to all 12-month periods. FY 2022 refers to the year starting in January 2022 for most countries in Latin America, Africa, East and Southeast Asia and EECA. For other regions

including North America, WCE and South Asia, FY 2022 started in Q2 or mid-2022 and will end in Q2 or mid-2023. Fertilizer years do not always match crop marketing years used to report statistics on crop area, yield and production.

Note: in this report and the related presentation, a simplified terminology is used: “FY 2022/23” is shortened to “FY 2022.”



ifa
INTERNATIONAL
FERTILIZER ASSOCIATION

Helping to feed the world sustainably

CONTACT INTERNATIONAL FERTILIZER ASSOCIATION



49 avenue d'léna,
75116 Paris, France



info@fertilizer.org
www.fertilizer.org



T: +33 1 53 93 05 00



international-fertilizer-association-ifa



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