



SECTOR RESEARCH

Fertilisers

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Fertiliser industry likely to witness healthy growth

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Executive Summary

India is the second largest consumer of fertilisers, behind China, and is one of the largest producers of fertilisers globally. Ironically, India is also one of the largest importers of fertilisers, to meet its high domestic demand. In FY21, India imported around 30% of urea and Di Ammonium Phosphate (DAP) of around 50% of its requirement. With low self-sufficiency on the production side, over the years, India's imports have been on the rise, except in FY22. The Indian fertiliser industry experienced supply-side volatility in FY22 due to global supply-chain disruptions caused by the Ukraine-Russia crisis. However, India made an arrangement with Russia to secure fertiliser supply at discounted prices. Brickwork Ratings (BWR) expects that in FY23, the fertiliser industry will be able to secure enough supply of fertiliser to fulfil growing domestic demand as demand for fertiliser will continue to increase on the back of normal monsoon and healthy demand.

In FY22, domestic fertiliser production increased marginally by 0.6%, and fertiliser imports decreased by 11% due to weak demand and supply-chain constraints in international markets. Following the geo-political crisis caused by Russia's invasion of Ukraine, fertiliser supply from Belarus and Russia got disrupted across the globe. Belarus and Russia both are the major suppliers of fertilisers and fertiliser inputs, and accounts for ~20% of the global fertiliser supply. However, BWR expects y-o-y growth of 2%-4% in domestic fertiliser production and 7%-9% growth in fertiliser imports during FY23 owing to an addition in production capacity (commissioning of Ramagundam, Sindri, Gorakhpur and Baruni plants), healthy demand backed by high sowing, and an expected increase in supply of fertiliser and fertiliser inputs, especially from Russia, Canada and Jordan. In fact, to ensure enough fertiliser supply from Russia, the Hon'ble Prime Minister of India Narendra Modi discussed the long-term fertiliser supply arrangement with the Hon'ble President of Russia Vladimir Putin, on the side-lines of the recently concluded Shanghai Cooperation Organisation (SCO) Summit 2022.

Fertiliser prices in the international market reached a record high in FY22, surpassing the previous high of 2008 as international sanctions on Russia and Belarus made it difficult to move fertilisers and their inputs, especially natural gas, out of these markets. The disruption in supply of fertilisers and their key inputs affected the EBITDA margins of the fertiliser industry in FY22. However, in Q1FY23, the fertiliser industry witnessed a significant improvement in financial performance due to a rise in subsidy allocation, prices and high demand. BWR expects that the fertiliser industry

will maintain its profitability momentum in the remaining period of FY23 due to a massive subsidy allocation and expected healthy demand led by surplus rainfall during June-September 2022.

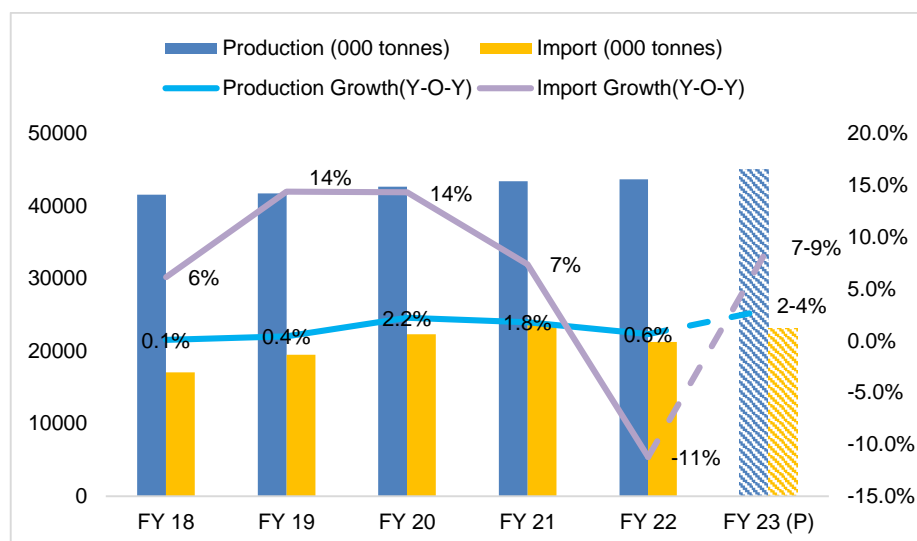
Domestic fertiliser production and import likely to be driven by high demand

In FY22, domestic fertiliser production slowed-down due to weak demand and constraints in supply of fertiliser inputs in the international markets, however, in FY23, production is likely to grow owing to high demand led by surplus rainfall and new projects completions.

India's domestic fertiliser production increased only marginally by 0.6% in FY22, and during the same period, fertiliser imports decreased by 11% due to weak demand and constraints in supply of fertiliser and fertiliser inputs in the international markets. Following the Ukraine-Russia crisis, fertiliser supply from Belarus and Russia was disrupted globally. Belarus and Russia both account for about 20% of the global fertiliser supply, and Russia is also one of the major suppliers of fertiliser to India.

However, in FY23, overall domestic fertiliser production is likely to grow by ~2-4% due to an addition in the domestic production capacity (~2.7 million tonnes), led by new project completions, expected high demand during the ongoing kharif season and the upcoming rabi season, backed by surplus rainfall and high sowing. Urea, which accounts for about 50% of the total fertiliser consumption, is expected to grow by ~4% and non-urea fertilisers by ~3%. Similarly, during FY23, fertiliser import is also expected to grow by ~7%-9% due to high domestic demand, and an expected increase in fertiliser supply, especially from Russia, Canada and Jordan.

Trend in domestic fertiliser production and import



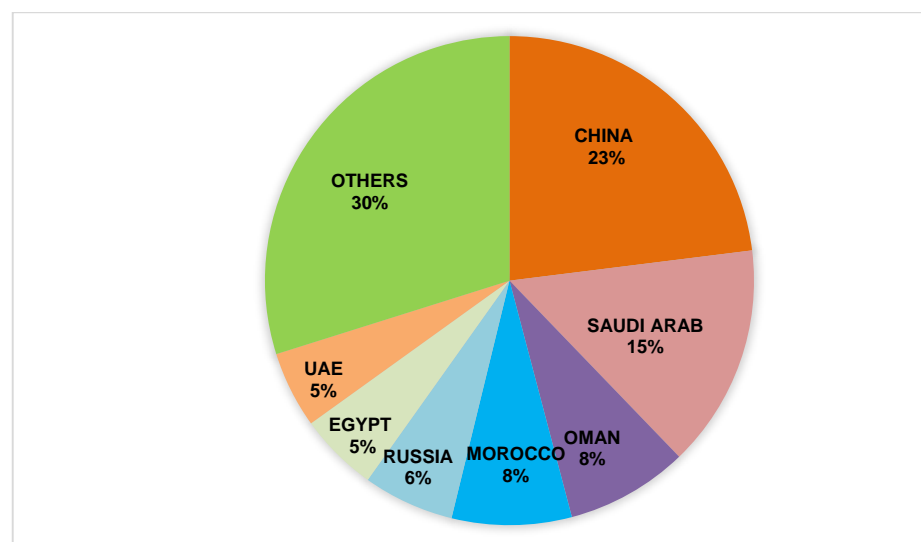
Note: P - Projected

Source: CMIE, BWR Research

While India is the world's second largest consumer of fertilisers, it is also one of the largest fertiliser importers. India is heavily dependent on fertiliser import to meet its domestic demand due to insufficient domestic production. Over the years, a continuous increase has been seen in fertiliser imports, except in FY22, and it is likely that momentum will maintain in FY23 owing to high domestic demand and increased

supply from Russia. India mainly imports fertilisers from seven countries (China, Saudi Arabia, Oman, Morocco, Russia, Egypt, and the UAE), and these countries have a share of around 70% (FY22) in India's total fertiliser imports. BWR expects that in FY23, Russia will become the major supplier of fertilisers as India has already received a major chunk of fertiliser supply from Russia at discounted prices till April-July 2022.

Countries percentage share in India's imports (FY22)



Source: Department of Commerce, BWR Research

Growth in fertiliser demand is led by non-urea fertilisers

In FY21, overall fertiliser demand was substantially higher than the previous year, demand for urea and non-urea fertilisers increased by 4% and 11%, respectively. However, in FY22, fertiliser demand witnessed some contraction due to global supply-chain disruptions and weak demand. With the expectation of high demand and a normal monsoon, overall fertiliser demand is expected to improve in FY23. Between 1 June 2022 and 15 September 2022, the country received about 6.8% of surplus rainfall. Due to surplus rainfall, reservoir levels have increased, which will thus, lead to an increase in sowing during the rabi season.

Currently, urea dominates the markets, especially among small, medium, and marginalised farmers, due to a high price difference between urea and non-urea fertilisers. However, increasing awareness about the benefits of complex fertilisers, rising disposable incomes, increased acreage and a rise in the minimum support price will aid faster growth in the non-urea fertilisers segment. In addition, initiatives taken by the government and training programmes conducted by companies to increase awareness among farmers about soil fertility will lead to more demand for complex fertilisers. The Soil Health Card (SHC) issued by the government provides information to farmers about the nutrient health status of their soil, and on the basis of this information, farmers need to apply appropriate dosage of nutrients to improve soil

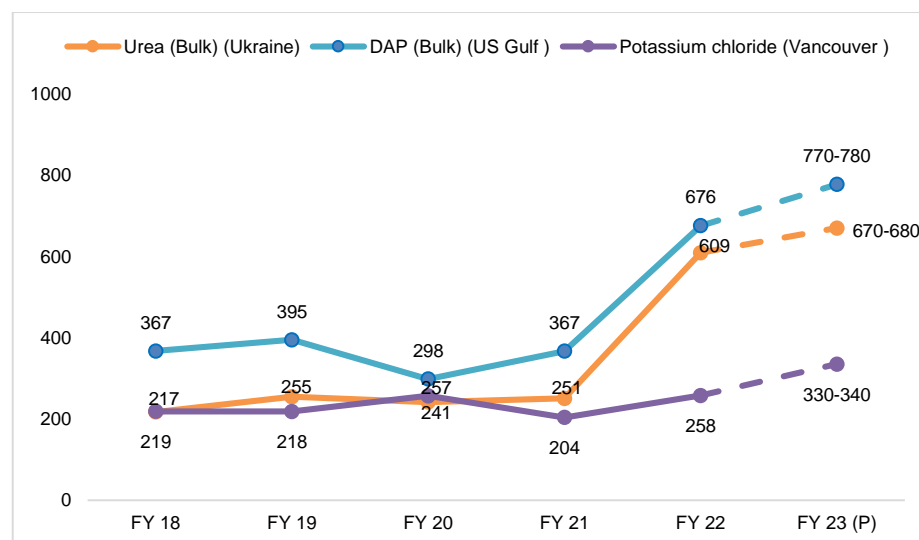
Currently, urea consumption is high compared to non-urea fertilisers, however, increasing awareness among farmers about the benefits of complex fertilisers, rising disposable incomes, increased acreage and a continuous rise in the minimum support price will aid faster growth in the non-urea fertilisers in the next five years.

quality. Moreover, given the under-penetration use of non-urea fertilisers among small and medium farmers, leave much scope for its further growth in the long run. In the last five years, the consumption of non-urea fertilisers, led by DAP, has increased significantly, and BWR expects that in the next five years, demand for non-urea fertilisers will increase further, backed by the government's push to reduce the consumption of urea and towards increasing awareness on soil health fertility.

Fertiliser prices expected to increase due to raw materials price rise and supply disruptions

Fertiliser prices in the international market reached a record high in FY22, surging by almost 80%. Urea prices surpassed their 2008 peak levels and increased by around 140% y-o-y to USD 609 per tonne in FY22. DAP in the international market witnessed a surge in prices and increased by 85% during the same period. The prices of other non-urea fertilisers such as potassium chloride and triple superphosphate also witnessed similar spikes in prices. Fertiliser prices in the international market have been on a continuous rise mainly due to the rise in energy and raw material prices and supply disruptions caused by Russia and Belarus. International sanctions on Russia and Belarus made it difficult to move fertilisers and their inputs, especially natural gas, out of these markets. According to the Food and Agriculture Organization, Belarus and Russia together supplied about 40% of the global Potassium chloride requirements.

Trend in fertiliser prices in international market (USD/Tonne)



Note: P - Projected

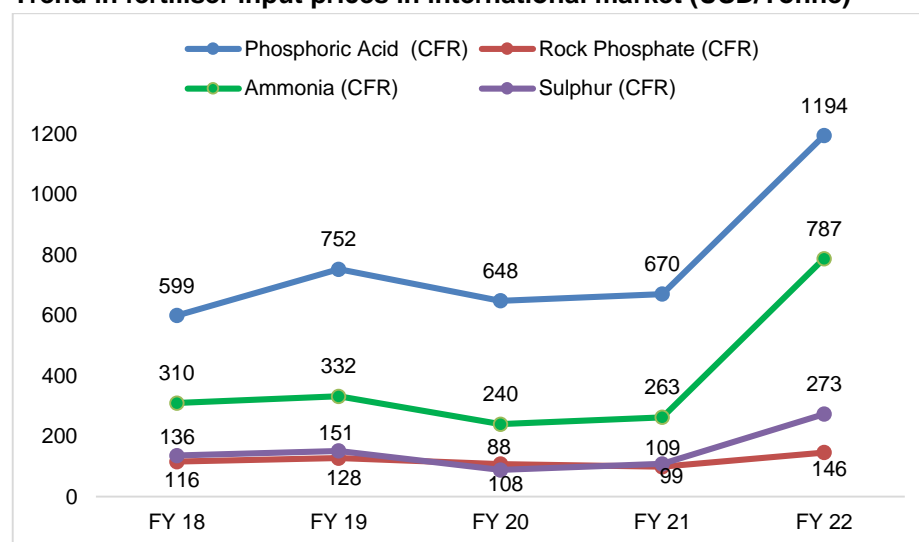
Source: CMIE, World Bank, BWR Research

In FY22, ammonia, a key raw material for the industry, witnessed an almost 200% y-o-y surge in prices in the international market. During the same period, phosphoric acid, rock phosphate and sulphur prices increased by 78%, 47% and 78%, respectively. Rising gas prices in Europe led to a decreased production of ammonia

BWR expects that the prices of urea and non-urea fertilisers will remain high until key raw materials prices do not ease.

as Russia has cut down natural gas supply. Similarly, in China, fertiliser manufacturers cut down production due to soaring coal prices. In response to lower fertiliser production, China has restricted its fertiliser export to meet domestic demand. BWR expects that the prices of urea fertilisers will remain historically high as long as natural gas and coal prices do not come down to comfortable levels. Similarly, the prices of non-urea fertilisers will remain high until phosphoric acid, rock phosphate and sulphur prices do not ease.

Trend in fertiliser input prices in international market (USD/Tonne)



Source: CMIE, Department of Fertilisers (DoF), BWR Research

Subsidy allocation likely to increase in FY23 due to pressure of rising fertiliser and input prices

In FY23, subsidy allocation is expected to touch a new high due to the rise in prices of fertilisers and their key raw materials, especially natural gas.

To increase agricultural production in the country, the Government of India (GOI) provides subsidised fertilisers to farmers by providing subsidy for urea and Nutrient-Based Subsidy (NBS) for non-urea fertilisers (phosphorus and potassium fertilisers) to manufacturers and importers. To secure farmers from price volatility and to provide fertilisers at affordable prices, the government absorbs any rise in the prices of fertilisers and their raw materials by providing additional subsidies from time to time. Over the years, the subsidy for urea fertilisers has increased significantly as compared to that of non-urea fertilisers, and this has created a price difference between urea and non-urea fertilisers. Hence, the consumption of urea has increased among the small, medium, and marginalised farmers.

Trend of nutrient based subsidy rates (Rs/kg)

Nutrient	FY 18	FY 19	FY 20	FY 21	FY 22		FY 23
					Kharif	Rabi	
N	19	19	19	19	19	19	92
P	12	15	15	15	45	64	73
K	12	11	11	10	10	10	25
S	2	3	4	2	2	2	7

Note: N- Nitrogen, P-Phosphate, K-Potash, S: Sulphur

Note: In FY 23 subsidy rates are applicable between 1st April 22 to 30th Sept 22.

Source: DoF, PIB, BWR Research

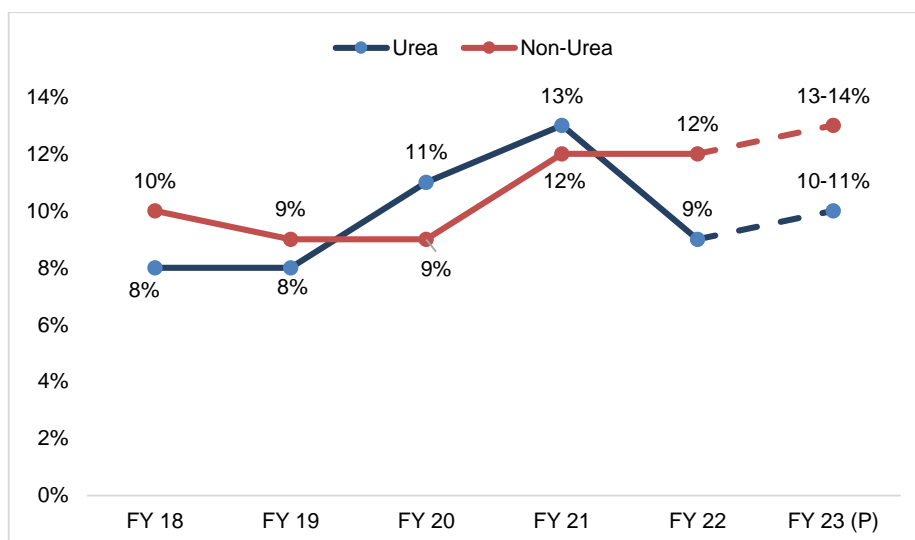
In FY22, the government allocated Rs. 58,768 crore to urea and Rs. 20,762 crore to non-urea fertilisers. With the increase in the international prices of fertilisers and fertiliser inputs, the GOI increased the additional subsidy of Rs. 60,593 crores in October 2021 to ensure the availability of fertilisers at affordable prices. For FY23, the GOI has allocated Rs. 1.09 lakh crore as the total fertiliser subsidy (Rs. 67,187 crore for urea and Rs. 42,000 crore for non-urea fertilisers), which is less than last year's subsidy allocation of Rs. 1.62 lakh crore. However, in May 2022, the government announced that it will provide an additional subsidy of Rs. 1.10 lakh crore to absorb any increase in fertiliser prices. The government, in April 2022, additionally allocated a subsidy of Rs. 60,939.23 crore for NBS Kharif-2022 and decided to provide a subsidy of Rs. 2501 per bag on DAP instead of Rs. 1605 per bag, which is 50% higher than last year's subsidy. BWR expects that subsidy allocation is likely to increase further in FY23 due to the rise in prices of fertilisers and their raw materials, especially natural gas, in the international markets.

Profitability of fertiliser industry expected to pick up pace in FY23

The profitability of urea manufacturers fell to around 9% in FY22, even though the GOI allocated sufficient subsidy due to a sudden surge in the prices of fertilisers and their key inputs and supply disruptions. Key inputs for urea production, natural gas and ammonia, witnessed a significant price rise; ammonia prices increased y-o-y by almost 200% in FY22. The profitability of non-urea manufacturers during the same period remained constant due to high demand and increased subsidy allocation of the nutrient-based subsidy. The fertiliser industry witnessed high demand for non-urea fertilisers owing to a normal monsoon, good acreage, and preference over urea, given its nutrient benefits.

To cope with high international fertiliser and raw material prices, the GOI has announced massive subsidy support of Rs. 2.15 trillion for FY23. In Q1FY23, fertiliser manufacturers witnessed significantly better financial performance owing to the rise in subsidy allocation, high prices and high demand. BWR expects that the fertiliser industry will maintain its profitability momentum in the remaining period of FY23 due to massive subsidy allocation and expected healthy demand, led by surplus rainfall and high sowing. In FY23, the EBITDA margins of the fertiliser industry are expected to improve to 10%-11% for the urea segment and 13%-14% for the non-urea segment.

Trend in EBITDA Margins



P-Projected

Note: 1. National Fertilizers Limited, Chambal Fertilisers and Chemicals Limited, and Rashtriya Chemicals & Fertilizers Ltd considered for urea margins.

2. Coromandel International Limited, Gujarat State Fertilizers & Chemicals Limited, and Mangalore Chemicals and Fertilizers Limited for non-urea margins.

Source: Company reports, BWR Research

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