



# NEWSLETTER

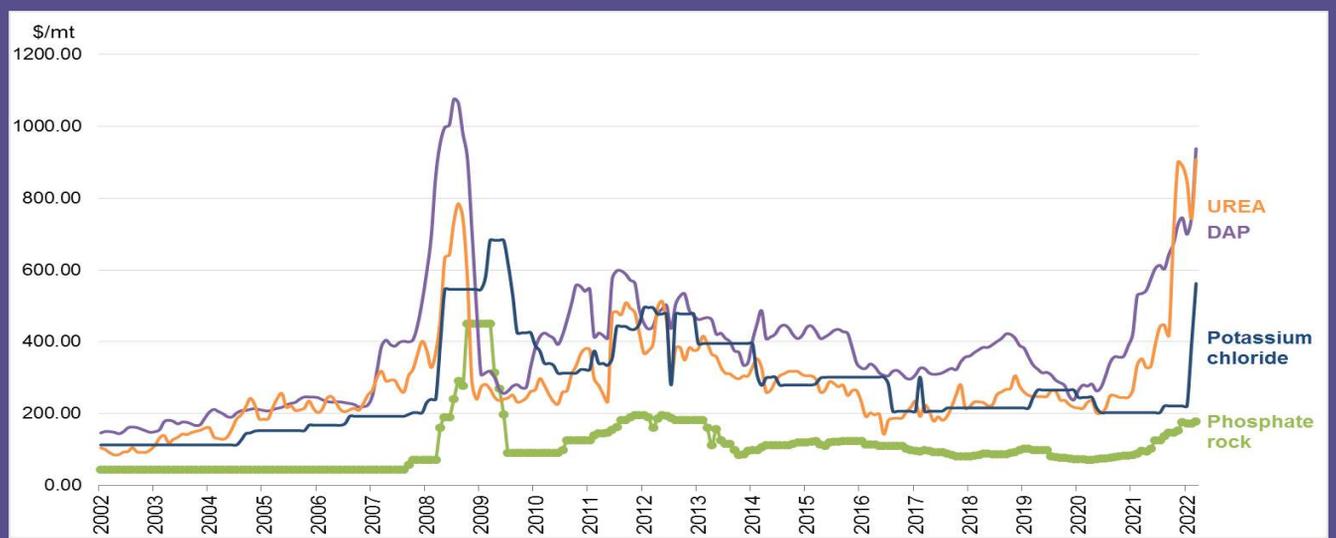
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## HOW FERTILISER PRICE WAS AFFECTED BY THE GLOBAL SITUATION

There has been two fertiliser price booms over two decades. First was in 2008 where price surge was due to strong domestic and global demand for fertilisers and low fertiliser inventories. Global financial crisis that happened during the time also significantly impacted commodity prices. The price of Brent crude oil reached \$133.87 per barrel during July 2008, while natural gas price soared to \$15.93 per mmbtu in October 2008. In 2021, most fertiliser prices increased sharply in the 3<sup>rd</sup> Quarter and continued rising in November 2021 with real prices of most fertiliser peaked at much higher values since the previous boom. In 2021, fertiliser prices have been driven by higher cost of natural gas which significantly raised the cost of nitrogen production. Demand for crop products were also high which made farmers using more fertiliser on their yields, causing pressure on price of fertiliser.

High fertiliser prices may hurt farmers' pockets especially for fertiliser-intensive crops such as maize/corn. It may also exert inflationary pressures on food prices, leading to concern on food security when access to food becomes more difficult due to COVID-19 pandemic and climate change.

Chart 1: Fertiliser Prices, 2002 - 2022



Last observation is March 2022  
Source: Bloomberg, World Bank

- Notes:
1. Urea contains 46.0 per cent of Nitrogen. Its main function is to provide the plants with nitrogen to promote green leafy growth and make the plants look lush. Urea also aids the photosynthesis process of plants.
  2. Di-Ammonium Phosphate (DAP) is a compound fertilizer with highest concentration of Nitrogen (18%) and Phosphorus (46%). DAP is water-soluble fertiliser and make it is easy for the roots to uptake and use the nutrients.
  3. Potassium chloride is commonly known as Muriate of Potash (MOP) and contains 60 per cent of Potash. It helps in improving colour, flavour and storing quality of fruit and vegetables.
  4. Phosphate rock is mined from clay deposits that contain phosphorus and is used to make organic phosphate fertilizers that make plants strong and healthy.

# HOW DOES RUSSIA – UKRAINE TENSIONS AFFECT FERTILISER PRICES

In 2019, Russia was the second-largest producer that produced 9.1 per cent of global fertiliser (23.7 million tonnes), 7.0 per cent of global nitrogen (N), 7.3 per cent of global phosphate (P<sub>2</sub>O<sub>5</sub>) and 17.4 per cent of global potash (K<sub>2</sub>O) (Table 1). Russia also accounted approximately 14.5 per cent of global fertiliser exports (16.6 million tonnes) and was the world's top exporter of nitrogen fertiliser (13.7%) or 7.2 million tonnes (Table 2).

Russia's decision to temporarily suspend outgoing trade is expected to have a strong ripple effect across global food markets. The FAO Food Price Index continued to record a new all-time high, averaged 159.3 points in March 2022, up 12.6 per cent from February 2022 and was 33.6 per cent higher than in March 2021, indicating food prices remained in an upward trend especially for cereals, dairy and vegetable oils commodities.

**Table 1: Top 10 Countries in Productions of Fertilisers (tonnes), 2019**

Countries	Total	Nitrogen (N)	Phosphate (P <sub>2</sub> O <sub>5</sub> )	Potash (K <sub>2</sub> O)
China	51,952,404.03	32,529,245.11	13,277,275.92	6,145,883.00
Russia	23,703,400.00	10,913,200.00	4,115,200.00	8,675,000.00
India	18,512,900.00	13,722,200.00	4,790,700.00	-
USA	18,231,745.13	13,261,506.63	4,600,400.00	369,838.50
Canada	16,348,900.00	3,927,800.00	241,700.00	12,179,400.00
Belarus	8,553,447.00	988,187.00	216,967.00	7,348,293.00
Morocco	4,850,500.00	1,135,100.00	3,715,400.00	-
Indonesia	4,796,729.24	4,137,667.66	659,061.58	-
Egypt	4,672,600.00	4,200,000.00	462,800.00	9,800.00
Saudi Arabia	4,237,300.00	2,760,800.00	1,476,500.00	-

Source: FAOSTATS



**Table 2: Top 10 Countries in Exports of Fertilisers (tonnes), 2019**

Countries	Total	Nitrogen (N)	Phosphate (P <sub>2</sub> O <sub>5</sub> )	Potash (K <sub>2</sub> O)
Russia	16,608,212.91	7,188,072.94	2,952,177.50	6,467,962.47
Canada	13,239,612.51	1,481,734.25	15,512.13	11,742,366.13
China	12,005,515.16	6,061,171.48	5,350,888.52	593,455.16
Belarus	6,940,318.16	476,251.21	145,248.57	6,318,818.38
Morocco	5,153,550.72	1,178,416.90	3,854,297.07	120,836.75
Saudi Arabia	4,215,981.80	2,146,451.60	2,058,112.73	11,417.47
USA	4,094,459.46	1,630,695.86	2,181,367.74	282,395.86
Germany	3,382,262.87	1,142,028.19	77,599.51	2,162,635.17
Belgium	2,794,740.16	1,664,493.69	454,105.50	676,140.97
Netherlands	2,695,733.93	2,088,769.17	260,755.75	346,209.01

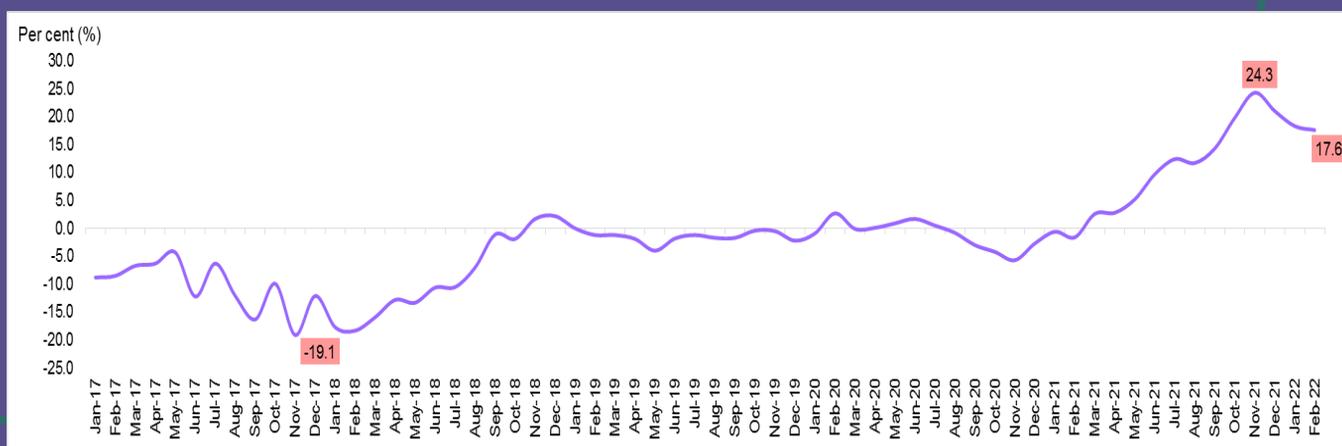
Source: FAOSTATS

# FERTILISER IN MALAYSIA'S SITUATION

Agricultural sectors in Malaysia especially farmers use a lot of fertilisers to harvest their crops. Malaysia is heavily dependent on imported fertilisers coming from neighboring countries such as China, USA, Indonesia, Canada and Russia. In 2021, Malaysia's total import value for nitrogen, phosphate and potassic was RM4.3 billion. China was the top importer for nitrogen with 54.2 per cent of total import value for nitrogen in Malaysia, while Egypt and Canada were the top importer for phosphate and potassic to Malaysia, respectively.

The issue of rising fertiliser prices in Malaysia has been a vital concern recently. It may cause prices of fresh produce to be higher, including Malaysia's primary commodity which is palm oil. Among the factors that contributed to the increase in fertiliser prices are reduced supply from producers' countries, increases in raw materials cost such as crude oil and natural gas that led to higher transportation costs as well as foreign exchange rates. Concomitantly, farmers and producers had to bear higher costs burden, resulting in rise of production cost, hence reducing farmers' income. Consumers on the other hand, need to pay even higher price for foods and fresh produces.

**Chart 2: Manufacture of Fertilisers, Year-on-Year, January 2017 – February 2022**



Source: Producer Price Index, DOSM

The producer price index for manufacture of fertilisers also showed an upward trend throughout the year of 2021 with the highest increase was in November 2021 (24.3%) as shown in Chart 2. In February 2022, the index increased moderately 17.6 per cent, with price of Urea rose 28.7 per cent, the highest increase since October 2011.

## OUTLOOK FOR 2022

Most fertiliser's prices are anticipated to increase in 2022 following global supplies that are hit by multiple factors such as reduced supplies from top exporter countries, primarily China and Russia that may cause disruptions to the supply chain. In addition, due to Russia invasion on Ukraine, fertiliser producers in Russia were recommended to temporarily halt their exports. Consequently, raw materials prices may continue to surge further, causing higher cost in manufacture of fertilisers and its end products especially foods.

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