



NAMMC
Promoting market access for South African agriculture



Input

Cost Monitoring

March 2022

An update on selected items



EXECUTIVE SUMMARY

❖ International and domestic price trends for selected fertilisers

From February 2016 to February 2022 the international prices (**Rand terms**) for Urea, Muriate of Potash (MOP) and Di-Ammonium Phosphate (DAP) increased by 158.2% (from R3 269.36/ton to R8 442.96/ton), 147.2% (from R3 853.74/ton to R9 525.00/ton) and 119.3% (R5 780.60/ton to R12 679.68/ton), respectively. During the depicted period, the Rand/US Dollar (R/\$) exchange rate appreciated by 3.5% (from R/\$15.79 to R/\$15.24).

From March 2021 to March 2022, domestic fertilizer prices for KCL, Urea and MAP increased by 134.6% (from R6 821/ton to R16 001/ton), 129.5% (from R8 123/ton to R18 644/ton) and 73.2% (from R11 190/ton to R19 382/ton), respectively. The fluctuation of the domestic prices of fertilisers is subjected to price volatility in the global market as South Africa is a net importer. Since the beginning of 2021 international fertiliser prices have been rising steeply in response to lower global supply. Export restrictions by China and Russia of fertilizers and the high international price of gas is aggravating the local fertilizer price hikes. For net importing countries, macroeconomic factors such as the exchange rate also play a crucial role in this regard.

❖ Fuel prices & Illuminated paraffin

Between April 2021 and April 2022 diesel and petrol prices increased by 42.3% (from R14.77/litre to R21.01/litre) and 26.8% (from R17.32/litre to R21.96/litre), respectively. During the same period, the price of illuminated paraffin in both Coastal and Gauteng regions increased by 88.3% (R7.98/litre to R15.03/litre) and 80.1% (R8.80/litre to R15.85/litre), respectively. Crude oil prices in US dollar terms increased by 67.8% from US\$65.19/barrel to US\$109.37/barrel, with a 4.1% depreciation of the Rand (R14.41/\$ to R14.99/\$).

❖ Freight Indices

From March 2021 to March 2022, the Grain and Oilseeds Freight Index (GOFI) and Baltic Dry Index (BDI) increased by 27.5% and 21.2%, respectively. The shipping sector had been volatile since 2020 due to the global effects of the COVID-19 pandemic on demand for commodities and this had affected freight rates. In March 2022, the BDI reached 2 415 index points and the GOFI reached 218 index points.

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Introduction

Agricultural inputs such as fertilisers, play an important role in increasing agricultural productivity and yield. The Input Cost Monitoring (ICM) report, published by the National Agricultural Marketing Council (NAMC) is a quarterly report analysing historic and current trends from selected agricultural production input prices in both domestic and international markets.

The data for this publication is obtained from Grain South Africa (Grain SA), the Department of Energy (DoE) and the South African Grain Information Service (SAGIS).

International price trends for selected fertilisers

Figure 1 illustrates international fertiliser prices for selected fertilisers from February 2016 to February 2022. International prices (**Rand terms**) for Urea, Muriate of Potash (MOP) and Di-Ammonium Phosphate (DAP) increased by 158.2% (from R3 269.36/ton to R8 442.96/ton), 147.2% (from R3 853.74/ton to R9 525.00/ton) and 119.3% (R5 780.60/ton to R12 679.68/ton), respectively. During the depicted period, the Rand/US Dollar (R/\$) exchange rate appreciated by 3.5% (from R/\$15.79 to R/\$15.24). In terms of the US Dollar prices Urea, MOP and DAP increased by 167.6% (from US\$207/ton to US\$554/ton), 156.1% (from US\$244/ton to US\$625/ton) and 127.3% (from US\$366/ton to US\$832/ton), respectively.

From February 2021 to February 2022, international prices (**Rand terms**) for Urea, MOP and DAP increased by 158.2% (from R5 372.64/ton to R8 442.96/ton), 147.2% (from R2 966.76/ton to R9 525.00/ton) and 119.3% (from R7 881.84/ton to R12 679.68/ton), respectively. During the same period the R/\$ exchange rate depreciated by 3.3% from R/\$14.76 to R/\$15.24.

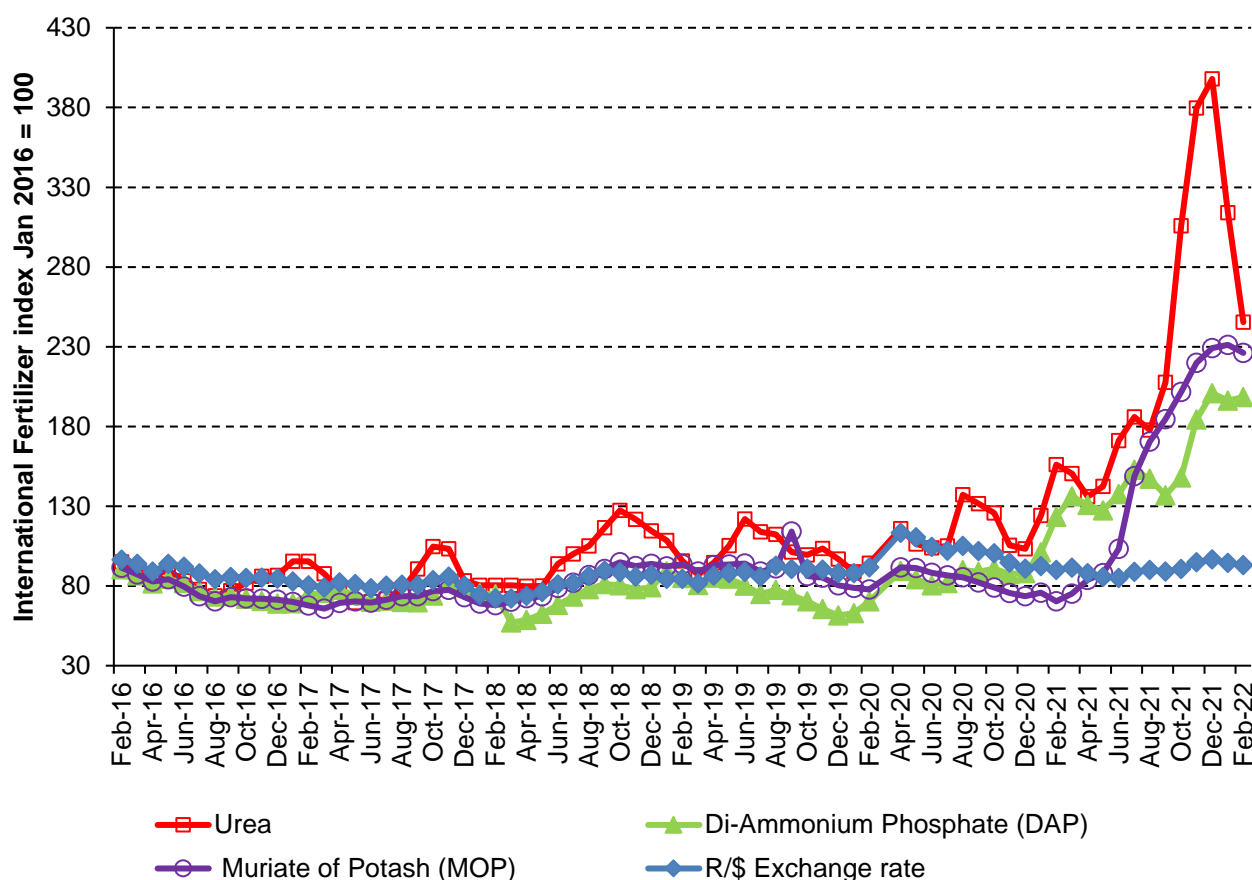


Figure 1: International price trends for selected fertilisers

Source: Own calculations based on data from Grain SA, 2022.

Domestic price trends for selected fertilisers

Figure 2 shows price trends for domestic fertiliser between March 2016 and March 2022. Over the depicted period the local fertiliser prices for Urea, Potassium Chloride (KCL) and Mono-Ammonium Phosphate (MAP) increased by 200.3% (from R6 208/ton to R18 644/ton), 114.4% (from R7 462/ton to R16 001/ton) and 102.5% (from R9 573/ton to R19 382/ton), respectively.

From March 2021 to March 2022, domestic fertilizer price for KCL, Urea and MAP increased by 134.6% (from R6 821/ton to R16 001/ton), 129.5% (from R8 123/ton to R18 644/ton) and 73.2% (from R11 190/ton to R19 382/ton), respectively. The fluctuation of the domestic prices of fertilisers is subjected to price volatility in the global market as South Africa is a net importer. Since the beginning of 2021 international fertiliser prices have been rising steeply in response to lower global supply. Export restrictions by China and Russia of fertilizers and the high international price of gas are aggravating the local fertilizer price hikes. For net importing countries, macroeconomic factors such as the exchange rate also play a crucial role in this regard.

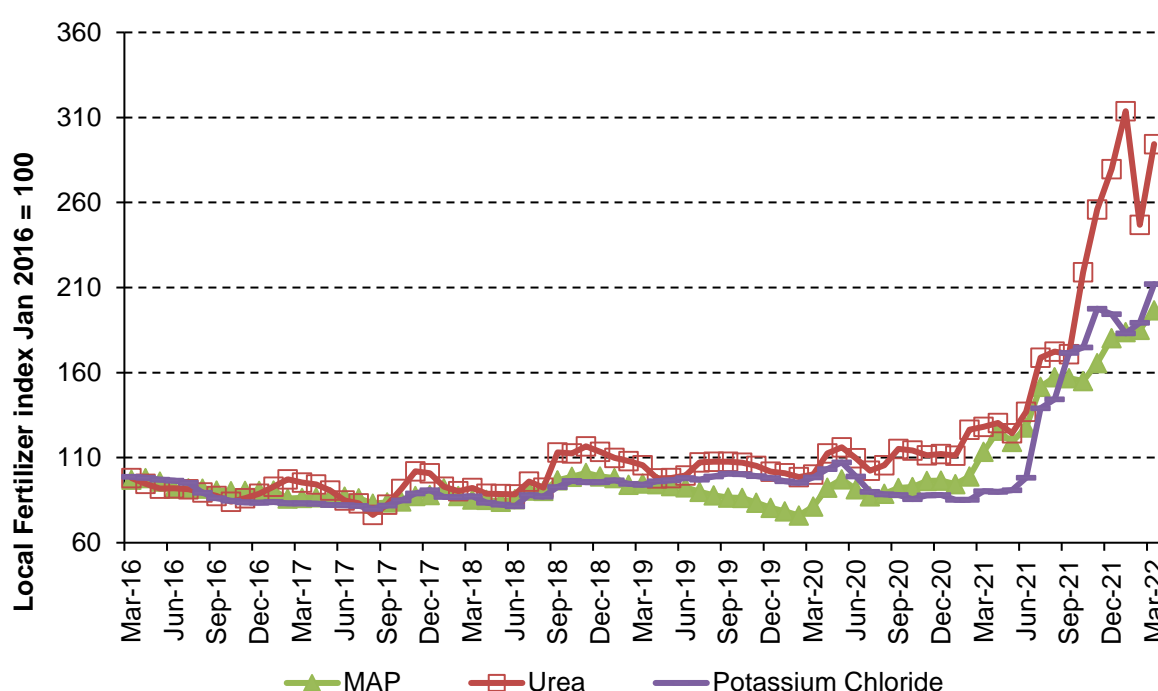


Figure 2: Domestic price trends for selected fertilisers

Source: Own calculations based on data from Grain SA, 2022.

Fuel prices

Domestic fuel prices are linked to factors such as international crude oil price (US\$ per barrel) and the R/\$ exchange rate. **Figure 3** presents crude oil price, petrol price, diesel price and the R/\$ exchange rate trends between April 2016 and April 2022. During this period, diesel and petrol prices increased by 99.4% (from R10.54/litre to R21.01/litre) and 74.0% (from R12.62/litre to R21.96/litre), respectively. In **US dollar terms**, crude oil prices increased by 153.5% (from US\$43.15/barrel to US\$109.37/barrel). During the same period, crude oil prices in **Rand terms** increased by 160.3% (from R630.10/barrel to R1 639.99/barrel).

Between April 2021 and April 2022 diesel and petrol prices increased by 42.3% (from R14.77/litre to R21.01/litre) and 26.8% (from R17.32/litre to R21.96/litre), respectively. Crude oil prices in US dollar terms increased by 67.8% from US\$65.19/barrel to US\$109.37/barrel, with a 4.1% depreciation of the Rand (R14.41/\$ to R14.99/\$). These fluctuations in South Africa's fuel prices have been largely driven by the rising price of international petroleum. The R1.50 reduction on the General Fuel Levy (GFL)

announced by the Minister of Finance at the end of March 2022 is welcome and will take some pressure off embattled consumers. This reduction is only for April and May 2022. The stronger Rand against the US Dollar softened the increases announced at the beginning of April but the fuel prices is still at record levels.

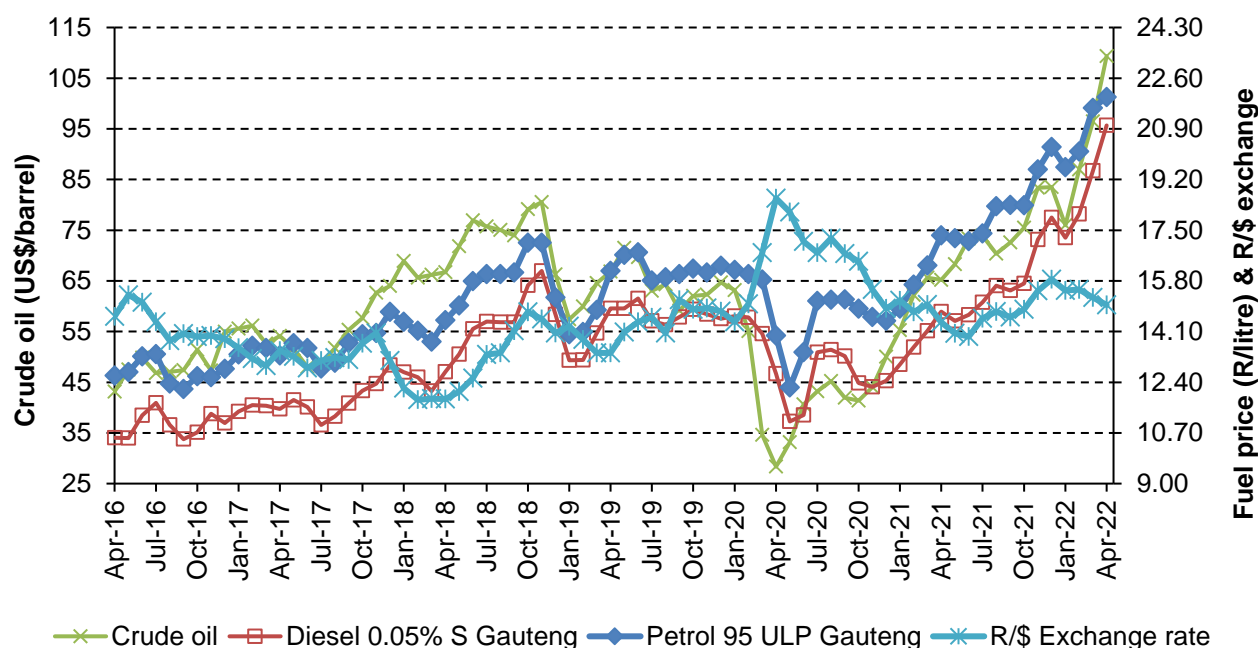


Figure 3: Crude oil and fuel prices

Source: Grain SA and DoE, 2021.

Baltic Dry Index

The Baltic Dry Index (BDI) measures international freight rates for dry bulk cargo which is affected by both the demand to move raw materials across international markets and the supply of shipping capacity. Using 2005 as a base year of 6000, the BDI is calculated monthly. The International Grains Council (IGC) introduced a new Grain and Oilseeds Freight Index (GOFI) with January 2013 used as a base year which represents 68 major grain routes.

Figure 4 presents BDI and GOFI between March 2016 and March 2022. The BDI and GOFI during this period increased by 535.1% and 244.2%, respectively. This can be attributed to changes in shipments times, congestions in ports and demand across the world. From March 2021 to March 2022, the GOFI and BDI increased by 27.5% and 21.2%, respectively. The shipping sector had been volatile since 2020 due to the global effects of the COVID-19 pandemic on demand for commodities and this had affected freight rates. In March 2022, the BDI reached 2 415 index points and the GOFI reached 218 index points.

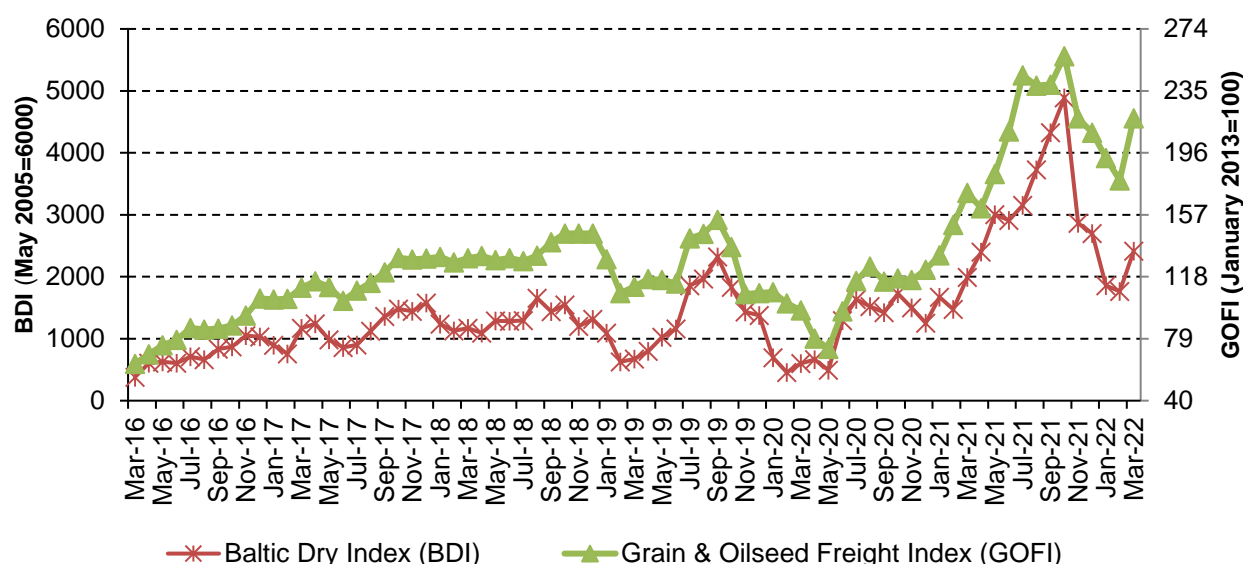


Figure 4: Baltic Dry Index versus Grain and Oilseeds Freight Index
 Source: SAGIS, 2022.

Illuminated paraffin price

Consumers utilise paraffin as an alternative source of household energy. As result, paraffin is classified as an essential backup fuel. **Figure 5** shows illuminated paraffin prices for both the Coastal and Gauteng regions from April 2016 to April 2022. During this period, illuminated paraffin prices for Coastal and Gauteng regions increased by 146.4% (from R6.10/litre to R15.03/litre) and 140.1% (from R6.60/litre to R15.85/litre), respectively.

Between April 2021 and April 2022, the price of illuminated paraffin in both Coastal and Gauteng regions increased by 88.3% (R7.98/litre to R15.03/litre) and 80.1%% (R8.80/litre to R15.85/litre), respectively. The movement of paraffin prices is typically affected by two main factors, international petroleum costs, and the movement in the rand/dollar exchange rate.

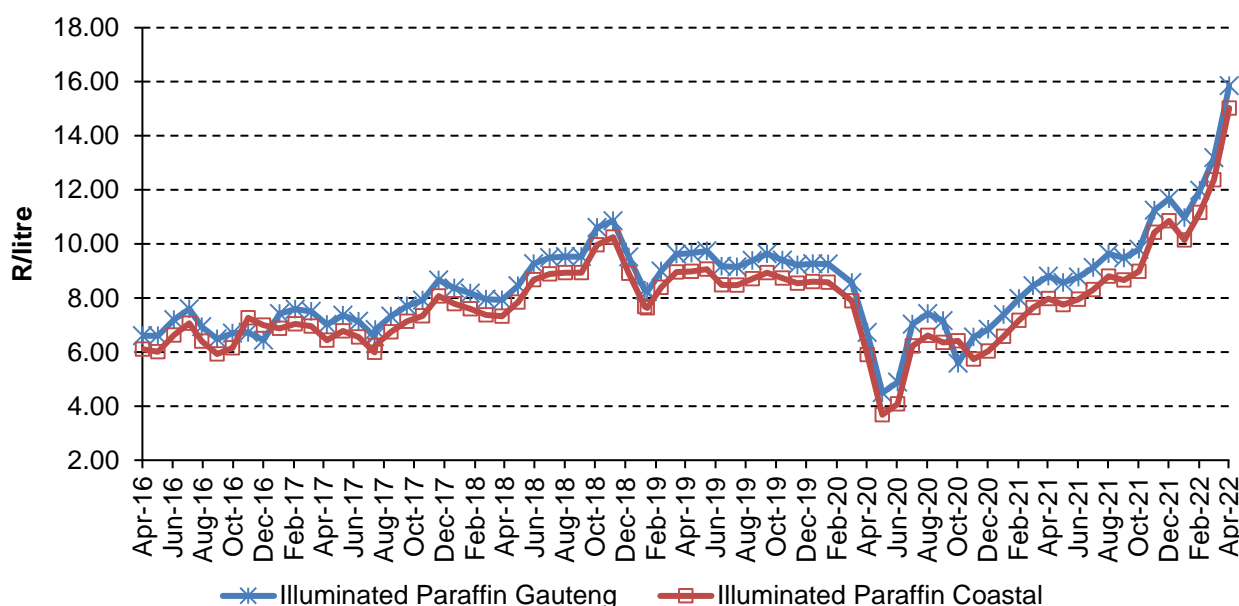


Figure 5: Comparison of illuminated paraffin price between Coastal and Gauteng regions
 Source: Department of Energy, 2022.

Conclusion

International fertiliser prices have increased due to several factors such as low stock levels caused by the COVID-19 pandemic, high natural gas prices, global supply chain disruptions and the export ban by China supported price hikes. South African fertiliser prices followed a similar trend in rand terms, although the increases had less of an impact locally because of the stronger currency, an increase in crude oil prices could push fertiliser prices higher. Furthermore, as aforementioned, South Africa's fuel prices are influenced by international and local factors. International factors include the fact that South Africa imports both crude oil and finished products at a price set at the international level, including importation costs, e.g. shipping costs. The continued increases in input costs might affect the ability of grain and oilseed farmers in South Africa to continue farming sustainably and profitably. Grains and oilseeds are components that are required in the poultry industry and other industries where feed plays a crucial role, and higher demand going forward will require substantial investment in coarse grains and oilseeds.

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