



NAMMC
Promoting market access for South African agriculture



Input

Cost Monitoring

June 2021

An update on selected items



EXECUTIVE SUMMARY

❖ International and domestic price trends for selected fertilisers

From May 2020 to May 2021, international price (**Rand terms**) for Di-Ammonium Phosphate (DAP) and Urea increased by 51.4% (from R5 378.67/ton to R8 143.20/ton) and 33.9% (from R3 658.22/ton to R4 899.96/ton), respectively, while Muriate of Potash (MOP) decreased by 3.5% (from R3 839.32/ton to R3 706.56/ton). During the same period the R/\$ exchange rate appreciated by 22.5% from R/\$18.11 to R/\$14.04.

From May 2020 to May 2021, fertilizer domestic price for Urea and Mono-Ammonium Phosphate (MAP) increased by 7.1% (from R7 358/ton to R7 880/ton) and 22.6% (from R9 583/ton to R11 753/ton), respectively. The price for Potassium Chloride (KCL) decreased by 15.4% (from R8 100/ton to R6 856/ton). The fluctuation of the domestic prices of fertilisers is subjected to price volatility in the global market as South Africa is a net importer, as well as the R/\$ exchange rate.

❖ Fuel prices & Illuminated paraffin

Between May 2020 and May 2021 petrol and diesel prices increased by 37.6% from R12.52/litre to R17.23/litre and 30.5% (from R11.08/litre to R14.46/litre), respectively. Crude oil prices in US dollar terms increased by 106% from US\$33.15/barrel to US\$68.30/barrel, with a 22.5% appreciation of the Rand (R18.11/\$ to R14.04/\$). These fluctuations in South Africa's fuel prices have been largely driven by higher oil prices.

Between May 2020 and May 2021, the price of illuminated paraffin in both Coastal and Gauteng regions increased by 110.6% (R3.68/litre to R7.75/litre) and 90.9% (R4.49/litre to R8.57/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.

❖ Freight Indices

From May 2020 to May 2021, the Baltic Dry Index (BDI) and the Grain and Oilseeds Freight Index (GOFI) increased by 510.8% and 151.2%, respectively. The shipping industry had been volatile in 2020 due to the global effects of the COVID-19 pandemic on demand for commodities and this had affected freight rates. In May 2021, the BDI reached 3 004 index points and the GOFI reached 183 index points.

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Introduction

The agricultural inputs such as fertilisers, play an important role towards 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 domestically and international markets.

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

International and domestic price trends for selected fertilisers

Figure 1 illustrates international fertiliser prices for selected fertilisers from May 2015 to May 2021. International prices (**Rand terms**) for Urea, Di-Ammonium Phosphate (DAP) and Muriate of Potash (MOP) by increased by 45.1% (R3 377.01/ton to R4 899.96/ton), 44.% (from R5 640.32/ton to R8 143.20/ton) and 6.7% (from R3 472.81/ton to R3 706.56/ton), respectively. During the depicted period the Rand/US Dollar (R/\$) exchange rate depreciated by 17.2% (from R/\$11.97 to R/\$14.04). In terms of the US Dollar prices DAP and Urea increased by 23.1% (from US\$471/ton to US\$580/ton) and 23.8% (from US\$282/ton to US\$349/ton), respectively, MOP decreased by 9.0% (from US\$290/ton to US\$264/ton),

From May 2020 to May 2021, international price (**Rand terms**) for DAP and Urea increased by 51.4% (from R5 378.67/ton to R8 143.20/ton) and 33.9% (from R3 658.22/ton to R4 899.96/ton), respectively, while MOP decreased by 3.5% (from R3 839.32/ton to R3 706.56/ton). During the same period the R/\$ exchange rate appreciated by 22.5% from R/\$18.11 to R/\$14.04.

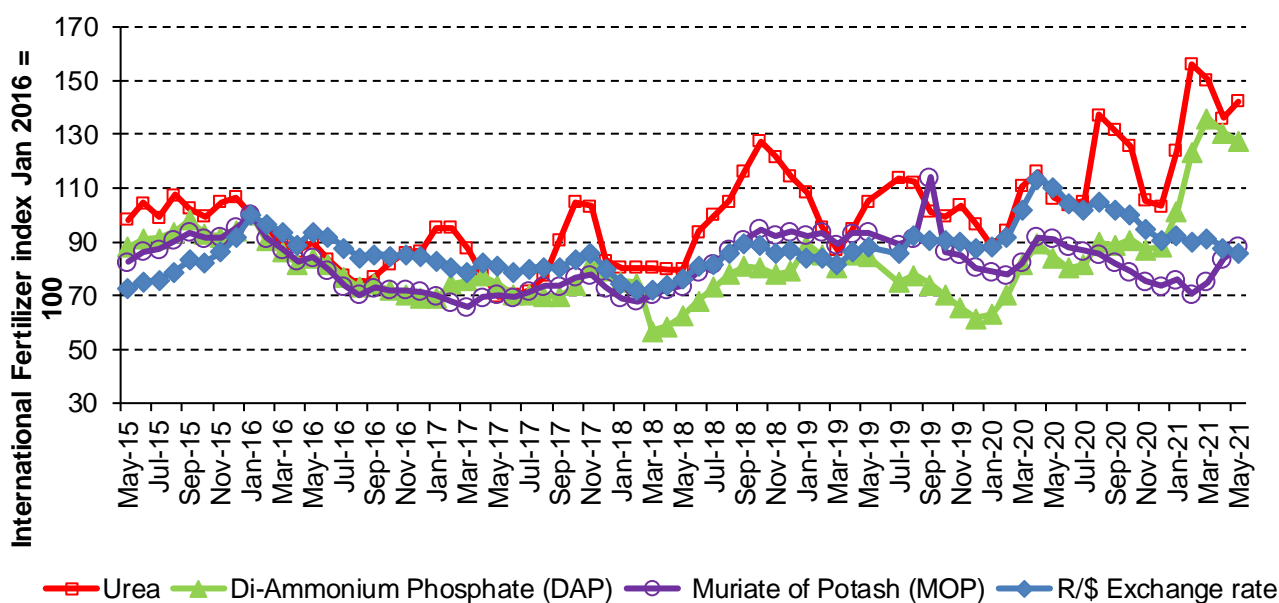


Figure 1: International price trends for selected fertilisers

Source: Own calculations based on data from Grain SA, 2021.

Figure 2 shows price trends for domestic fertiliser between May 2015 and May 2021. Over the depicted period the local fertiliser prices for Urea and Mono-Ammonium Phosphate (MAP) increased by 28.1% (from R6 152/ton to R7 880/ton) and 24.3% (from R9 457/ton to R11 753/ton), respectively, while Potassium Chloride (KCL) declined by 7.3% (from R7 393/ton to R6 856/ton).

From May 2020 to May 2021, domestic fertilizer price for Urea and MAP increased by 7.1% (from R7 358/ton to R7 880/ton) and 22.6% (from R9 583/ton to R11 753/ton), respectively. The price for KCL decreased by 15.4% (from R8 100/ton to R6 856/ton). The fluctuation of the domestic prices of fertilisers is subjected to price volatility in the global market as South Africa is a net importer, as well as the R/\$ exchange rate.

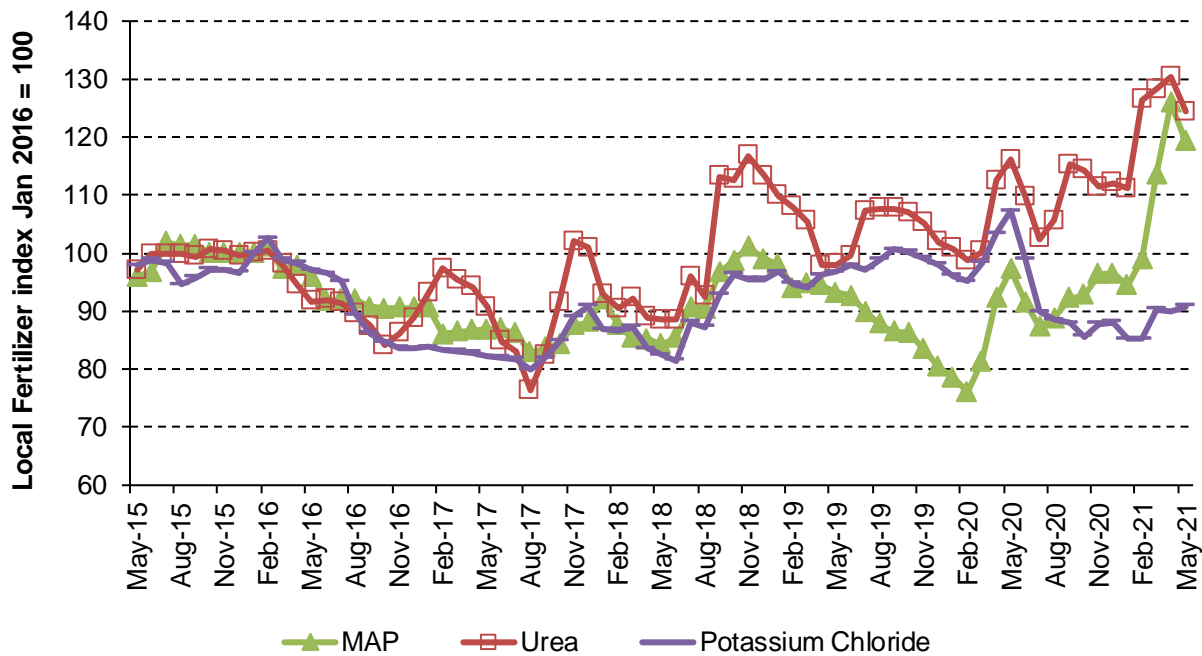


Figure 2: Domestic price trends for selected fertilisers

Source: Own calculations from price lists, 2021.

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 prices, petrol prices and diesel prices trends between May 2015 and May 2021. During this period petrol and diesel prices increased by 33.7% (from R12.89/litre to R17.23/litre) and 29.3% (from R11.18/litre to R14.46/litre), respectively. In US dollar terms crude oil prices increased by 3.9% (from US\$65.74/barrel to US\$68.30/barrel). During the same period crude oil prices in **Rand terms** increased by 21.8% (from R787.24/barrel to R958.93/barrel).

Between May 2020 and May 2021 petrol and diesel prices increased by 37.6% from R12.52/litre to R17.23/litre and 30.5% (from R11.08/litre to R14.46/litre), respectively. Crude oil prices in US dollar terms increased by 106% from US\$33.15/barrel to US\$68.30/barrel, with a 22.5% appreciation of the Rand (R18.11/\$ to R14.04/\$). These fluctuations in South Africa’s fuel prices have been largely driven by higher oil prices.

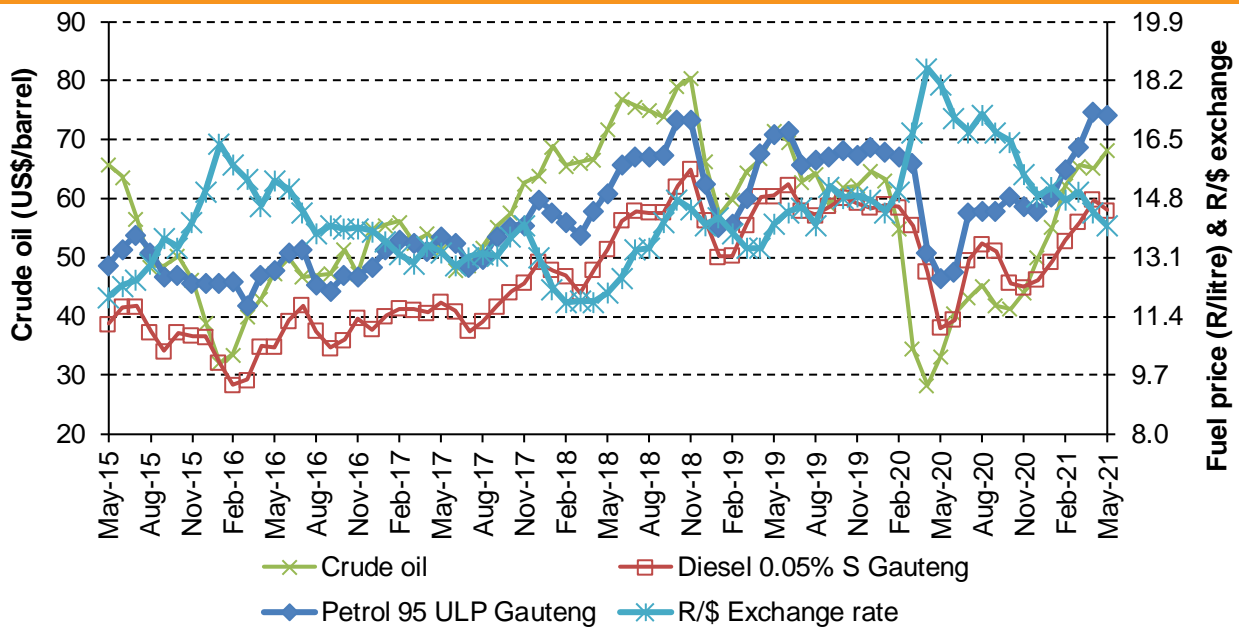


Figure 3: Crude oil and fuel prices
 Source: Grain SA and DoE, 2021.

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 on a monthly basis. 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 May 2015 and May 2021. The BDI and GOFI during this period increased by 406.3% and 126.5%, respectively attributed to changes in shipments times and demand across the world. From May 2020 to May 2021, the BDI and GOFI increased by 510.8% and 151.2%, respectively. The shipping sector had been volatile in 2020 due to the global effects of the COVID-19 pandemic on demand for commodities and this had affected freight rates. In May 2021, the BDI reached 3 004 index points and the GOFI reached 183 index points.

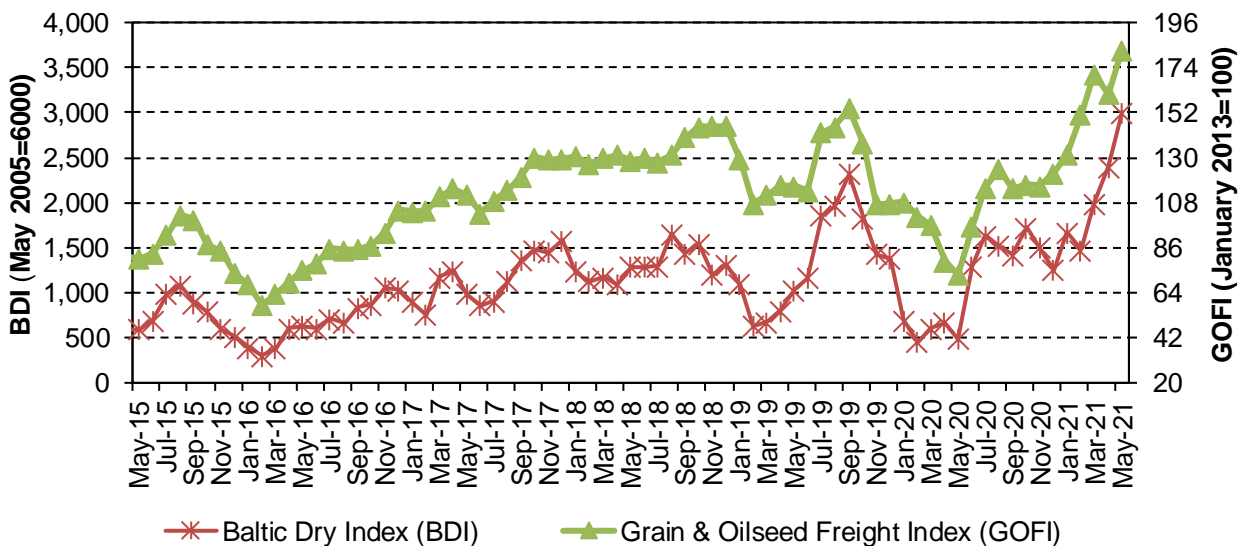


Figure 4: Baltic Dry Index versus Grain and Oilseeds Freight Index
 Source: SAGIS, 2021.

Illuminated paraffin price

Consumers utilise paraffin as an alternative source of household energy and is classified as an essential backup fuel. **Figure 5** shows illuminated paraffin prices for both the Coastal and Gauteng regions from May 2018 to May 2021. During this period, illuminated paraffin prices for Gauteng increased by 1.4% from R8.45/liter to R8.57/liter, while the Coastal regions decreased by 1.3% from R7.85/liter to R7.75/liter, respectively.

Between May 2020 and May 2021, the price of illuminated paraffin in both Coastal and Gauteng regions increased by 110.6% (R3.68/liter to R7.75/liter) and 90.9% (R4.49/liter to R8.57/liter), 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.

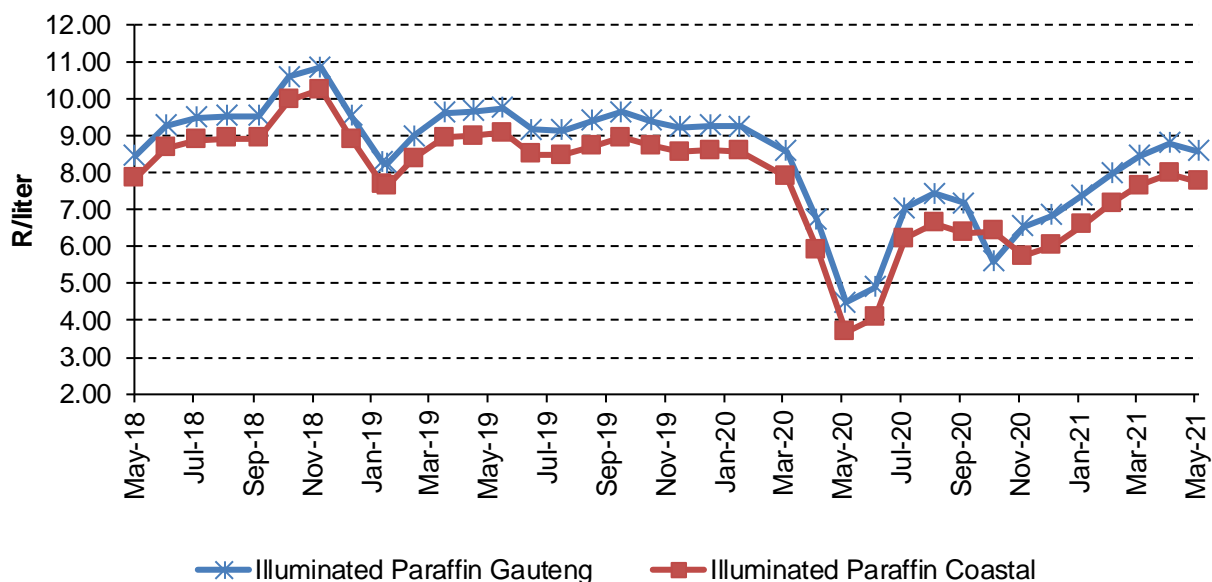


Figure 5: Comparison of illuminated paraffin price between Coastal and Gauteng regions

Source: Department of Energy, 2021.

Conclusion

International fertiliser prices have increased mainly due to several factors such as low stock levels caused by the COVID-19 pandemic, rising natural gas prices, and earlier plantings in the US and EU, which increased demand for fertilisers. Lower supply from China also 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 the 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. In nutshell, the continuation of increase in input costs had an effect on the ability of grain farmers in South Africa to continue farming sustainably and profitably.

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