



# NAMMC

Promoting market access for South African agriculture



# Input

COST MONITORING

An update on selected items

June 2023

INPUT COST MONITORING | JUNE 2023

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## EXECUTIVE SUMMARY

### ❖ International and domestic price trends for selected fertilizers

International fertilizer prices measured in Rands per ton (R/ton) between 2017 and May 2023 for Muriate of Potash (MOP), Ammonia, Urea and Di-Ammonium Phosphate (DAP) increased by 174.9% (from R2 966 to R8 154), 167.5% (R4 562 to R12 204), and 127.6% (from R2 394 to R5 448) and 92.9% (from R4 748 to R9 157), respectively. The exchange rate (Rand per United States dollar – R/US\$), which plays a crucial role when purchasing inputs from the global market depreciated by 42.4% during the observed period.

During this period, the local price per ton of fertilizers for Potassium Chloride (KCL) increased by 89.6% (from R6 206 to R11 764), followed by Monoammonium phosphate (MAP) with 84.8%, (from R8 553 to R15 803), Ammonium Nitrate (LAN) with 83.5% (from R5 131 to R9 414) and Urea granules with 68.3% (from R5 750 to R9 678). Global fertilizer prices have significantly improved from the record high levels recorded following market disruptions due to the COVID-19 outbreak, supply chain bottlenecks, and the Russia-Ukraine conflict. This improvement is beginning to show up in domestic fertilizer prices, a trend that may continue if global market circumstances improve. However, the huge depreciation of the Rand over time undermines the improvements of local prices at the same rate as worldwide prices.

### ❖ Fuel prices and Illuminated paraffin

Between May 2022 and May 2023, petrol increased by 6.9% (from R21.84/litre to R23.34/litre) while diesel prices decreased by 8.4% (from R21.99/litre to R20.15/litre). Crude oil prices in US\$ decreased by 27.5% from US\$104.78/barrel to US\$75.95/barrel, while the value of the Rand depreciated against the US Dollar from R14.90 to R18.94 during the same period.

Between May 2022 and May 2023, the price of illuminated paraffin in both Gauteng and Coastal regions decreased by 13.5% (R16.64/litre to R14.39/litre) and 15.0% (R15.85/litre to R13.47/litre), respectively. International petroleum prices and the fluctuation in the exchange rate (R/US\$) often had the biggest impact on paraffin prices.

### ❖ Freight Indices

The Baltic Dry Index (BDI) and Grain and Oilseeds Freight Index (GOFI) are used for the analysis between June 2017 and June 2023. During this period, the GOFI increased by 20.3% while the BDI increased by 26.6%. Year-on-year (May 2022 vs May 2023), the BDI and GOFI decreased by 54.1% and 42.6%, respectively. The decline in both GOFI and BDI in recent months is attributed to several factors including improvements in crude oil prices and improved operations along supply chains. As a result of these developments, as of June 2023, the BDI was 1 088 index points while the GOFI reached 124 index points from 142 index points reported during March 2023.

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## Introduction

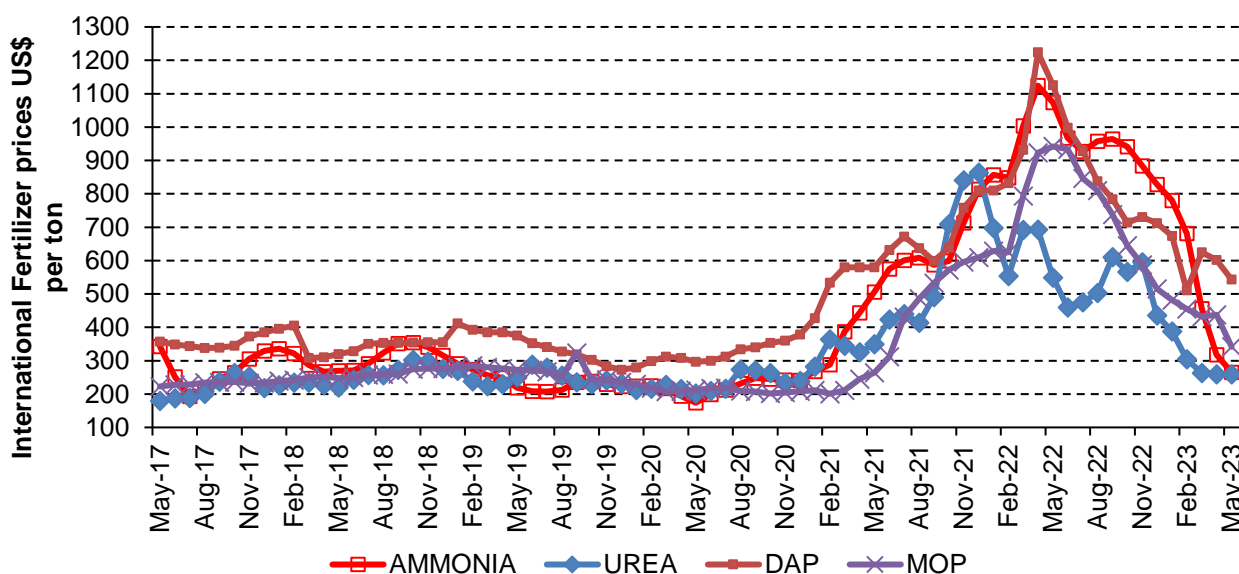
Agricultural inputs such as fertilisers, play an important role in increasing agricultural productivity. The Input Cost Monitoring (ICM) report, published by the National Agricultural Marketing Council (NAMC) is a quarterly report analysing historic and current trends of selected agricultural production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

**Figure 1** illustrates international fertilizer prices for selected fertilizers between May 2017 and May 2023. International prices measured in US Dollars per ton (US\$/ton) for Ammonia decreased by 75.3% from US\$343 to US\$265 while MOP, Urea and DAP decreased by 63.7%, 52.8% and 51.7%, respectively.

International prices measured in Rand per ton (R/ton) for Muriate of Potash (MOP), Ammonia, Urea and Di-Ammonium Phosphate (DAP) increased by 174.9% (from R2 966 to R8 154), 167.5% (R4 562 to R12 204), and 127.6% (from R2 394 to R5 448) and 92.9% (from R4 748 to R9 157) respectively. The exchange rate (Rand per United States dollar – R/US\$) which plays a crucial role when purchasing inputs from the global market depreciated by 42.4% during the observed period.

In Rand value, international fertilizer prices per ton for DAP, MOP, Urea, and Ammonia decreased by 48.8%, 45.5%, 37.6% and 28.5%, respectively, for the same period.



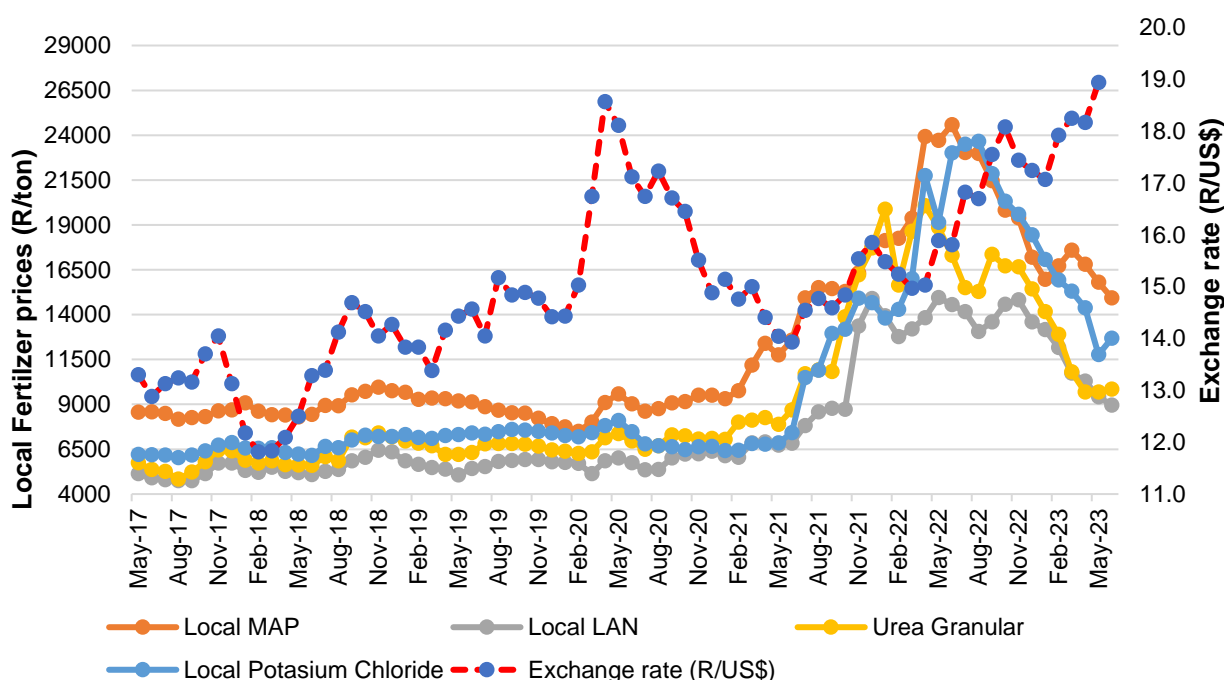
**Figure 1: International price trends for selected fertilizers**

Source: Own calculations based on data from Grain SA, 2023.

## Domestic price trends for selected fertilizers

**Figure 2** shows domestic price trends for fertilizers between May 2017 and May 2023. During this period, the local price per ton of fertilizers for Potassium Chloride (KCL) increased by 89.6% (from R6 206 to R11 764), followed by MAP with 84.8% (from R8 553 to R15 803), Ammonium Nitrate (LAN) 83.5%, (from R5 131 to R9 414) and Urea granular with 68.3% (from R5 750 to R9 678), respectively.

Between May 2022 and May 2023 (y/y), domestic fertilizer prices for Urea decreased by 48.7% (from R18 862 to R9 678), KCL decreased by 38.5% (from R19 136 to R11 764), and MAP decreased by 33.4% (from R23 718 to R15 803). Globally, fertilizer prices have significantly improved from the record high levels recorded, following market disruptions from due to COVID-19 outbreak, supply chain bottlenecks and the Russia-Ukraine conflict. This improvement in international prices is beginning to show up in domestic fertilizer prices, a trend that may continue if global market circumstances improve. However, the huge depreciation of the Rand over time undermines the improvements of local prices at the same rate as worldwide prices.



**Figure 2: Domestic price trends for selected fertilizers and exchange rate (R/US\$)**

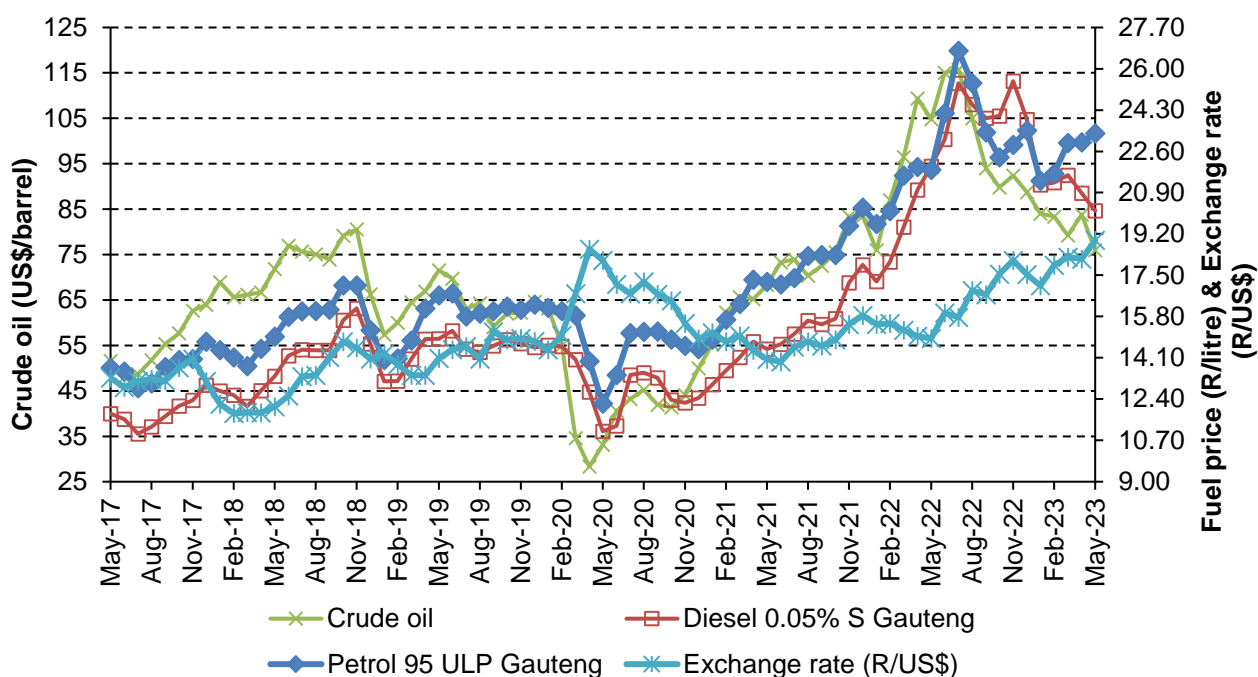
Source: Own calculations based on data from Grain SA, 2023.

## Fuel prices

Domestic fuel prices are linked to factors such as international crude oil price (US\$ per barrel) and the exchange rate. **Figure 3** presents price trends of crude oil, petrol, diesel and the trend of the exchange rate between May 2017 and May 2023. During this period, diesel and petrol prices increased by 70.7% (from R11.80/litre to R20.15/litre) and 70.4% (from R13.70/litre to R23.34/litre), respectively. Crude oil prices increased by 47.2% (from US\$51.59/barrel to US\$75.95/barrel) while in Rand value, crude oil prices increased by 110.1% (from R684.60/barrel to R1 438/barrel) during the same period.

Between May 2022 and May 2023, petrol increased by 6.9% (from R21.84/litre to R23.34) while diesel prices decreased by 8.4% (from R21.99 to R20.15). Crude oil prices in US\$ decreased by 27.5% from US\$104.78 to US\$75.95, while the Rand depreciated against the US Dollar from R14.90 to R18.94 from May 2022 to May 2023.





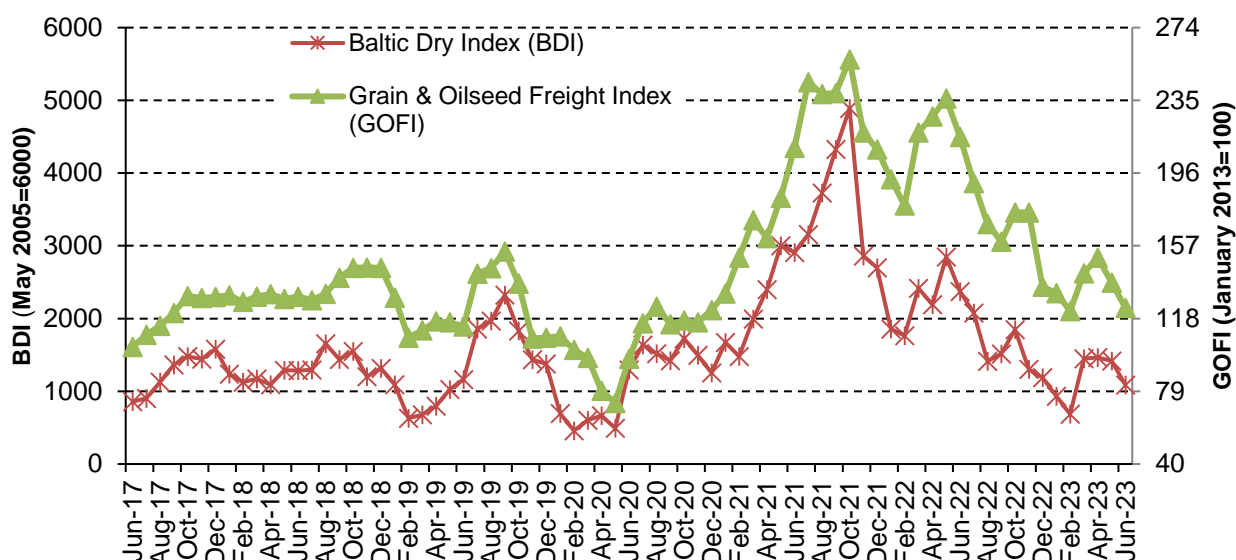
**Figure 3: Price trends for crude oil, fuel and exchange rate trend**

Source: DoE, 2023.

## Freight rates

The Baltic Dry Index (BDI) is used to monitor international freight rates for dry bulk cargo across the world. Specific to grains and oilseeds, the International Grains Council (IGC) introduced the Grain and Oilseeds Freight Index (GOFI) which is used to track international freight rates on grains and oilseeds globally. Using January 2013 as a base year for the GOFI, at least 68 key grains and oilseeds routes are monitored.

**Figure 4** presents BDI and GOFI between June 2017 and June 2023. During this period, the GOFI increased by 20.3% while the BDI increased by 26.6%. Year-on-year (May 2022 vs May 2023), the BDI and GOFI decreased by 54.1% and 42.6%, respectively. The decline in both GOFI and BDI in recent months is attributed to several factors including the drop in crude oil prices and partly improved operations along supply chains. As a result of these developments, as of June 2023, the BDI was 1 088 index points while the GOFI reached 124 index points from 142 index points reported during March 2023.



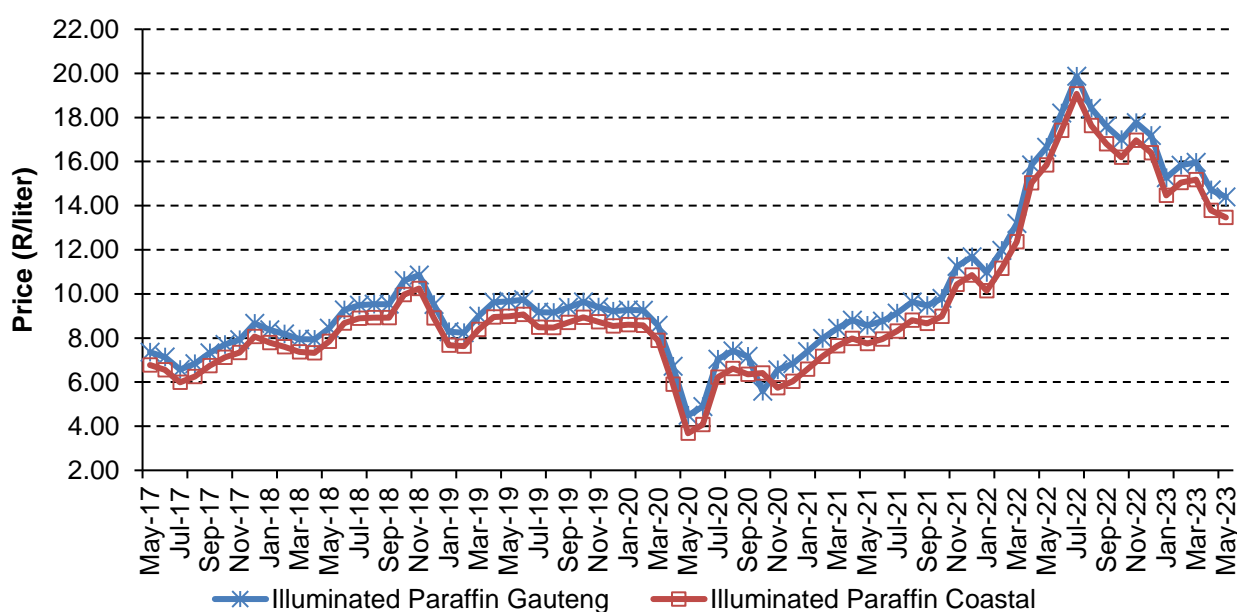
**Figure 4: Baltic Dry Index versus Grain and Oilseeds Freight Index**

Source: SAGIS, 2023.

### Illuminated paraffin price

Consumers in South Africa utilise paraffin as an alternative source of energy at household level. As result, paraffin is classified as an essential fuel. **Figure 5** shows prices trends of illuminated paraffin for both the Coastal and Gauteng regions, from May 2017 to May 2023. During this period, illuminated paraffin prices for Gauteng and Coastal regions increased by 95.5% (from R7.36/litre to R14.39/litre) and 98.7% (from R6.78/litre to R13.47/litre), respectively.

Between May 2022 and May 2023, the price of illuminated paraffin in both Gauteng and Coastal regions decreased by 13.5% (R16.64/litre to R14.39/litre) and 15.0% (R15.85/litre to R13.47/litre), respectively. International petroleum prices and the fluctuation in the exchange rate (R/US\$) often have the biggest impact on paraffin prices.



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

Source: Department of Energy, 2023.

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