



**NAMMC**  
Promoting market access for South African agriculture



# Input

Cost Monitoring

September 2021

An update on selected items



## EXECUTIVE SUMMARY

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

From August 2020 to August 2021, international price (Rand terms) for Muriate of Potash (MOP), Di-Ammonium Phosphate (DAP) and Urea increased by 99.3% (from R3 601.07/ton to R7 178.22/ton), 72.7% (from R5 754.82/ton to R9 940.21/ton) and 29.5% (from R4 721.02/ton to R6 114.78/ton), respectively. During the same period the R/\$ exchange rate appreciated by 14.3% from R/\$17.23 to R/\$14.77.

In terms of local fertilizers, between August 2020 and August 2021, domestic fertilizer price for Urea, Mono-Ammonium Phosphate (MAP) and Potassium Chloride (KCL) increased by 63.2% (from R6 692/ton to R10 919/ton) and 77.1% (from R8 751/ton to R15 498/ton) and 63.1% (from R6 682/ton to R10 897/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, as well as the R/\$ exchange rate.

### ❖ Fuel prices & Illuminated paraffin

Between August 2020 and August 2021 petrol and diesel prices increased by 26.5% from R14.47/litre to R18.30/litre and 15.9% (from R13.49/litre to R15.64/litre), respectively. Crude oil prices in US dollar terms increased by 55.5% from US\$45.23/barrel to US\$73.93/barrel, with a 14.3% appreciation of the Rand (R17.23/\$ to R14.77/\$). These fluctuations in South Africa's fuel prices have been largely driven by higher oil prices. During the same period, the price of illuminated paraffin in both Coastal and Gauteng regions increased by 33.1% (R6.62/litre to R8.81/litre) and 29.8% (R7.42/litre to R9.63/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 August 2020 to August 2021, the Baltic Dry Index (BDI) and the Grain and Oilseeds Freight Index (GOFI) increased by 145.5% and 107.3%, 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 August 2021, the BDI reached 3 729 index points and the GOFI reached 238 index points.

## Table of Contents

Introduction .....	4
International price trends for selected fertilisers.....	4
Fuel prices .....	5
Baltic Dry Index .....	6
Illuminated paraffin price .....	7
Conclusion.....	7

## Introduction

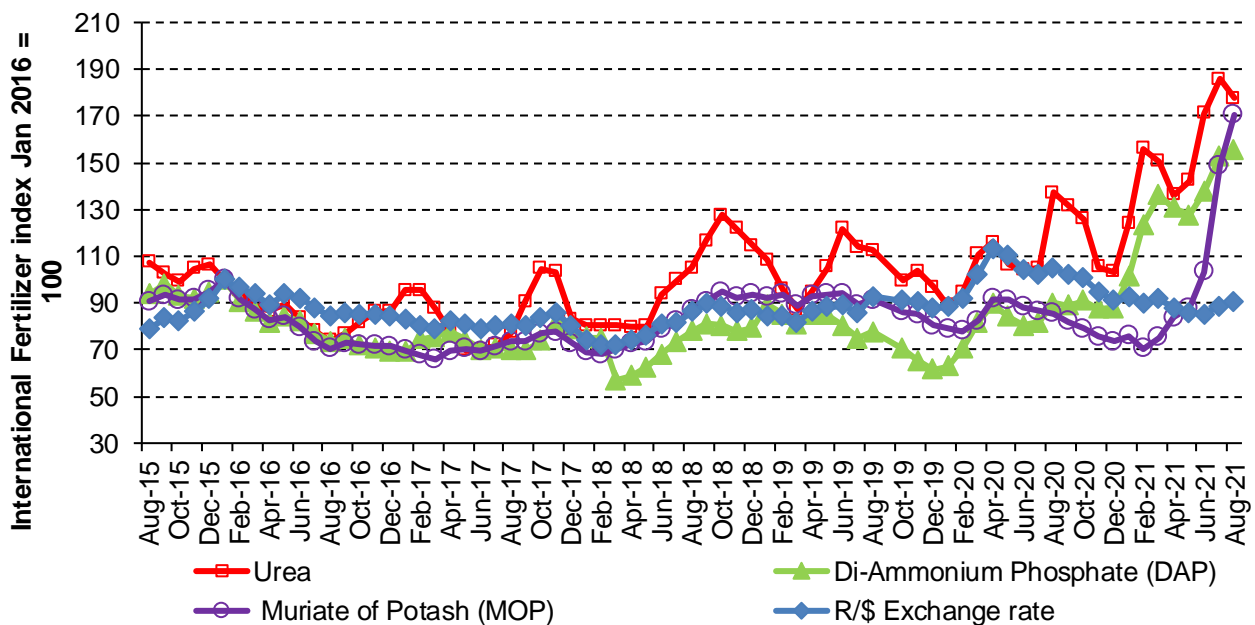
Agricultural inputs such as fertilisers, play an important role in agricultural productivity and yield. The Input Cost Monitoring (ICM) report, published by the National Agricultural Marketing Council (NAMC) is a quarterly report analysing historic and current trends from selected agricultural production 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 August 2015 to August 2021. International prices (**Rand terms**) for Muriate of Potash (MOP), Di-Ammonium Phosphate (DAP) and Urea increased by 88.2% (from R3 813.76/ton to R7 178.22/ton), 65.7% (from R5 998.59/ton to R9 940.21/ton) and 65.4% (R3 697.41/ton to R6 114.78/ton), respectively. During the depicted period the Rand/US Dollar (R/\$) exchange rate depreciated by 14.2% (from R/\$12.92 to R/\$14.77). In terms of the US Dollar prices MOP, DAP and Urea increased by 64.7% (from US\$295/ton to US\$486/ton), 45% (from US\$464/ton to US\$673/ton) and 44.8% (from US\$286/ton to US\$414/ton), respectively.

From August 2020 to August 2021, international price (**Rand terms**) for MOP, DAP and Urea increased by 99.3% (from R3 601.07/ton to R7 178.22/ton), 72.7% (from R5 754.82/ton to R9 940.21/ton) and 29.5% (from R4 721.02/ton to R6 114.78/ton), respectively. During the same period the R/\$ exchange rate appreciated by 14.3% from R/\$17.23 to R/\$14.77.



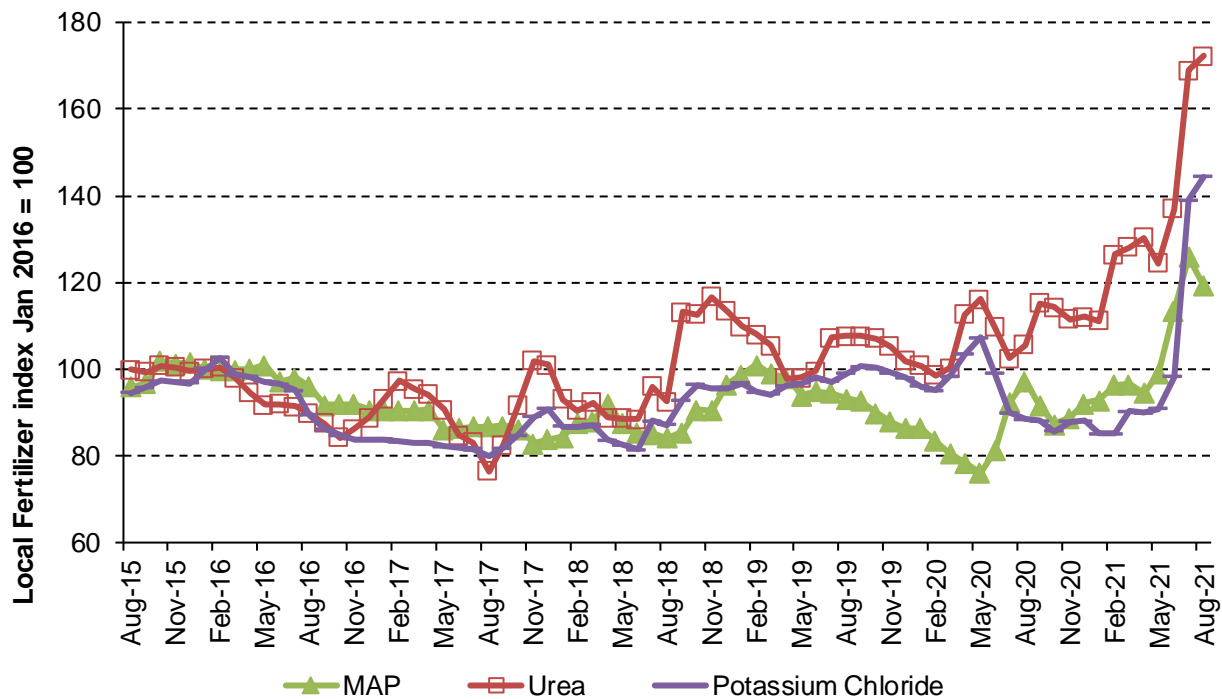
**Figure 1: International price trends for selected fertilisers**

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

**Domestic price trends for selected fertilisers**

**Figure 2** shows price trends for domestic fertiliser between August 2015 and August 2021. Over the depicted period the local fertiliser prices for Urea, Mono-Ammonium Phosphate (MAP) and Potassium Chloride (KCL) increased by 72.5% (from R6 329/ton to R10 919/ton), 55.2% (from R9 987/ton to R15 498/ton) and 52.7% (from R7 134/ton to R10 897/ton), respectively.

From August 2020 to August 2021, domestic fertilizer price for Urea, MAP and KCL increased by 63.2% (from R6 692/ton to R10 919/ton) and 77.1% (from R8 751/ton to R15 498/ton) and 63.1% (from R6 682/ton to R10 897/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, as well as the R/\$ exchange rate.



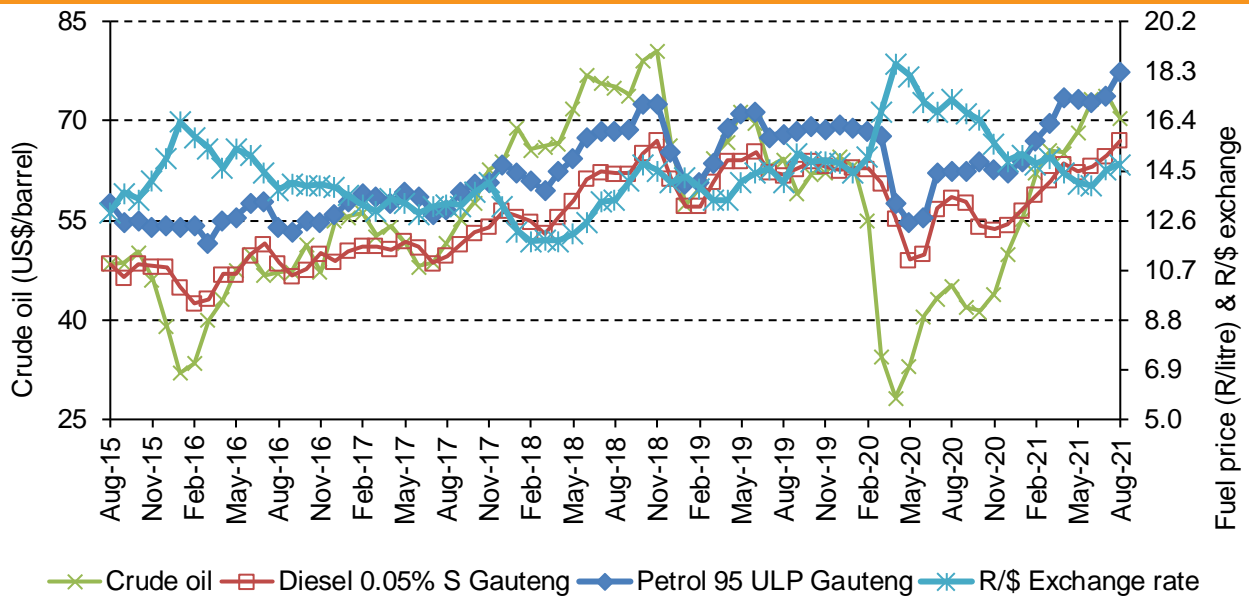
**Figure 2: Domestic price trends for selected fertilisers**

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 price, petrol price, diesel price and the R/\$ exchange rate trends between August 2015 and August 2021. During this period petrol and diesel prices increased by 38% (from R13.26/litre to R18.30/litre) and 42.8% (from R10.95/litre to R15.64/litre), respectively. In **US dollar terms**, crude oil prices increased by 45% (from US\$48.50/barrel to US\$70.34/barrel). During the same period crude oil prices in **Rand terms** increased by 65.7% (from R627.05/barrel to R1 038.92/barrel).

Between August 2020 and August 2021 petrol and diesel prices increased by 26.5% from R14.47/litre to R18.30/litre and 15.9% (from R13.49/litre to R15.64/litre), respectively. Crude oil prices in US dollar terms increased by 55.5% from US\$45.23/barrel to US\$73.93/barrel, with a 14.3% appreciation of the Rand (R17.23/\$ to R14.77/\$). These fluctuations in South Africa’s fuel prices have been largely driven by higher oil prices.

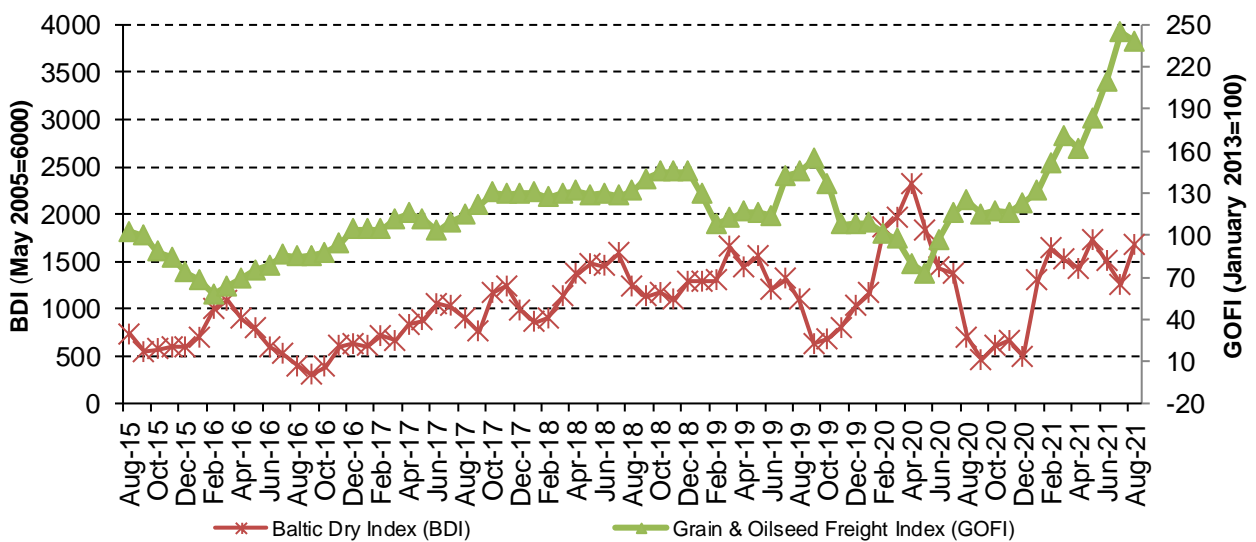


**Figure 3: Crude oil and fuel prices**  
 Source: Grain SA and DoE, 2021.

**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 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 August 2015 and August 2021. The BDI and GOFI during this period increased by 242.9% and 164.8%, respectively attributed to changes in shipments times and demand across the world. From August 2020 to August 2021, the BDI and GOFI increased by 145.5% and 107.3%, 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 August 2021, the BDI reached 3 729 index points and the GOFI reached 238 index points.

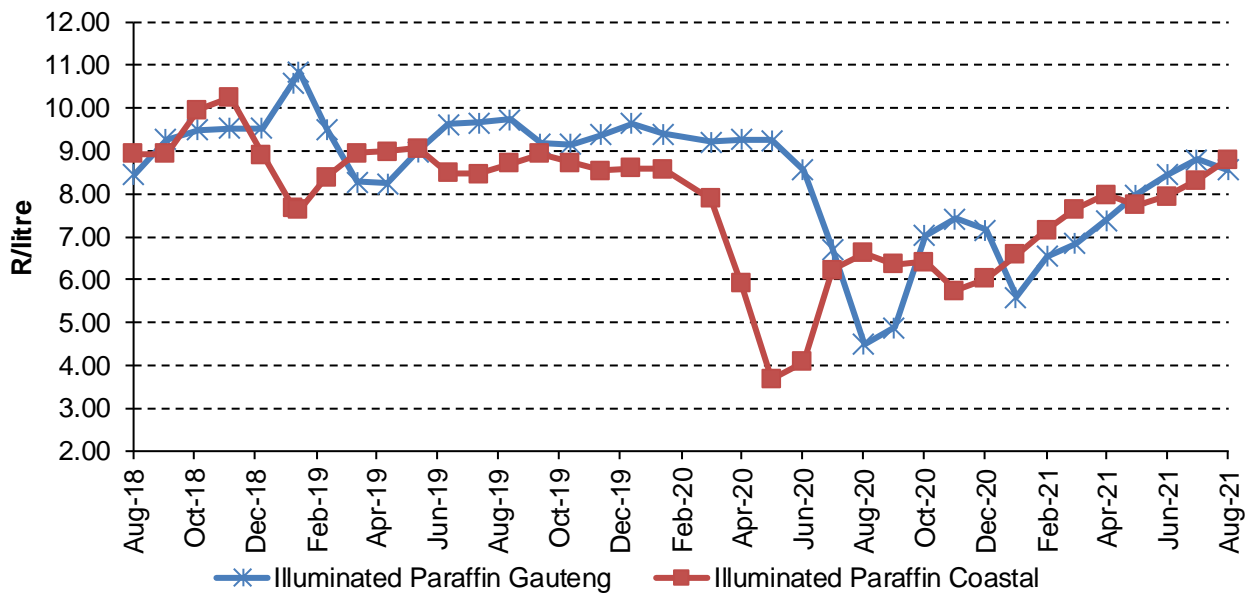


**Figure 4: Baltic Dry Index versus Grain and Oilseeds Freight Index**  
 Source: SAGIS, 2021.

## Illuminated paraffin price

Consumers utilise paraffin as an alternative source of household energy, as result is classified as an essential backup fuel. **Figure 5** shows illuminated paraffin prices for both the Coastal and Gauteng regions from August 2018 to August 2021. During this period, illuminated paraffin prices for Gauteng increased by 1.0% from R9.53/litre to R9.63/litre, while the Coastal regions decreased by 1.3% from R8.93/litre to R8.81/litre, respectively.

Between August 2020 and August 2021, the price of illuminated paraffin in both Coastal and Gauteng regions increased by 33.1% (R6.62/litre to R8.81/litre) and 29.8% (R7.42/litre to R9.63/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, 2021.

## Conclusion

International fertiliser prices have increased due to several factors such as low stock levels caused by the COVID-19 pandemic, rising natural gas prices, and earlier plantings in the United States (US) and European Union (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, 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, higher demand going forward, require investment in coarse grains and oilseeds.

Compiled by:

Trends and discussion on selected topics:

Fezeka Matebeni

Corné Dempers

Thabile Nkunjana

Ndiadivha Tempia

Christo Joubert

Enquiries: Dr Christo Joubert: +27 12 341 1115 or [christo@namc.co.za](mailto:christo@namc.co.za)

© 2021. National Agricultural Marketing Council.

**Disclaimer:**

*Information contained in this document results from research funded wholly or in part by the NAMC, acting in good faith. Opinions, attitudes and points of view expressed herein do not necessarily reflect the official position or policies of the NAMC. The NAMC makes no claims, promises or guarantees about the accuracy, completeness or adequacy of the contents of this document and expressly disclaims liability for errors and omissions regarding the content thereof. No warranty of any kind, implied, expressed, or statutory, including but not limited to the warranties of non-infringement of third party rights, title, merchantability, fitness for a particular purpose or freedom from computer virus is given with respect to the contents of this document in hardcopy, electronic format or electronic links thereto. Reference made to any specific product, process, and service by trade name, trade mark, manufacturer or another commercial commodity or entity are for informational purposes only and do not constitute or imply approval, endorsement or favouring by the NAMC.*