



National Agricultural  
Marketing Council  
Promoting market access for South African agriculture

# Markets and Economic Research Centre



## Input cost monitoring

*An update on selected items*

*October 2019*

## EXECUTIVE SUMMARY

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

From September 2018 to September 2019, the international price (Rand terms) of Muriate of Potash (MOP) increased by 25.9% whilst Di-Ammonium Phosphate (DAP) and Urea decreased by 13% and 8%, respectively. During the same period the Rand/US Dollar (R/\$) exchange rate depreciated by 1%.



The domestic prices of Urea, Mono-Ammonium Phosphate (MAP) and Potassium Chloride (KCL) increased by 20.4%, 8.4% and 12.9% respectively. From September 2018 to September 2019, the domestic price of KCL increased by 8.5%, whilst MAP and Urea decreased by 10.5% and 4.9%, respectively.

### ❖ Fuel prices & Illuminated paraffin

From October 2018 to October 2019, the price of diesel and petrol increased by 31.5% and 23.8%, respectively. The price of crude oil (US\$ terms) increased by 45.1%, with 12% depreciation of the Rand.



In October 2019, the price of illuminated paraffin in Gauteng reached R9.64/litre compared to the Coastal regions' price of R8.94/litre.

### ❖ Freight Indices

From October 2018 to October 2019, the Baltic Dry Index (BDI) increased by 18.3%, whilst the Grain and Oilseeds Freight Index (GOFI) decreased by 5.8%. The Baltic Exchange's main sea freight index edged higher in October 2019, as a rise in panamax vessel demand offset declines in both the capesize and supramax segments (Reuters, 2019).



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## 1. Introduction

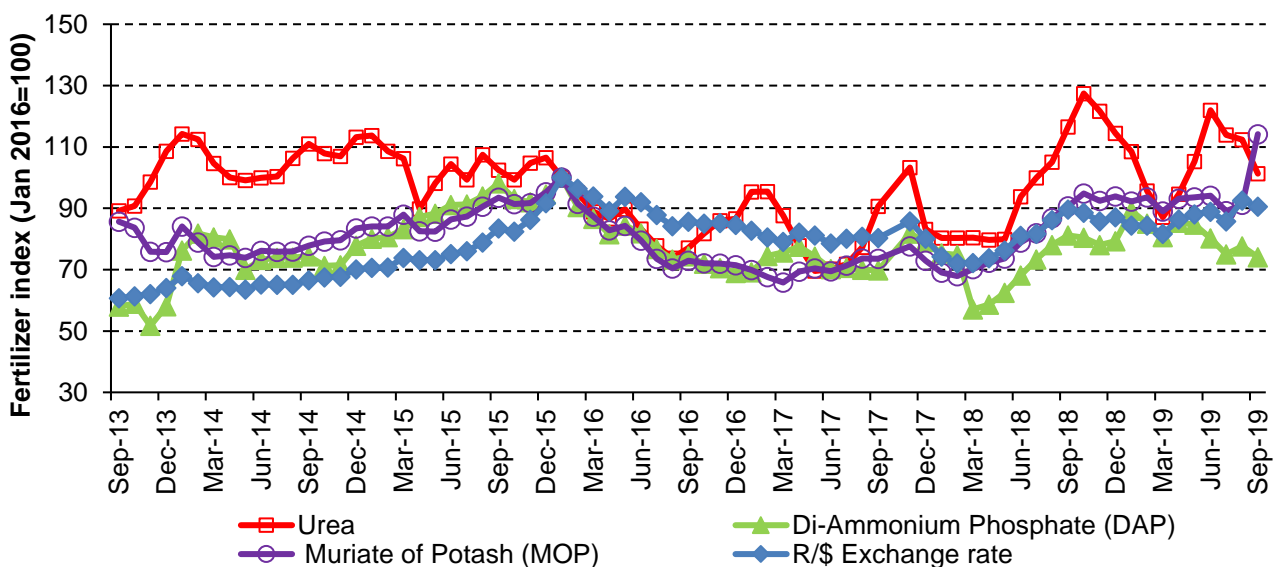
Agricultural inputs provide potential to improve agricultural productivity with the ultimate goal of maximising agricultural productivity. Agricultural inputs are an imperative determinant of yields in agricultural production. Agriculture has become extremely dynamic and the adoption of technology in the development of inputs has subsequently improved. The Input Cost Monitoring (ICM) report, published by the National Agricultural Marketing Council (NAMC), is a quarterly report analysing selected agricultural production input prices in both domestic and international markets. The objective of this report is to compile information that will track both historic and current price trends of selected agricultural production inputs in South Africa versus the international perspective.

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).

## 2. International price trends for selected fertilisers

In **Figure 1**, the price of international fertilisers indicate continuous to fluctuate. From September 2013 to September 2019, the international price (**Rand terms**) of Muriate of Potash (MOP), Di-Ammonium Phosphate (DAP) and Urea increased by 33.3%, 27.8% and 13.6%, respectively. During the same period the Rand/US Dollar (R/\$) exchange rate depreciated by 49.2%. Prices of Urea, DAP and MOP (**US Dollar terms**) decreased by 23.9%, 14.4%, and 10.7%, respectively.

From September 2018 to September 2019, the international price (**Rand terms**) of MOP increased by 25.9% whilst DAP and Urea decreased by 13% and 8%, respectively. During the same period the R/\$ exchange rate depreciated by 1%.

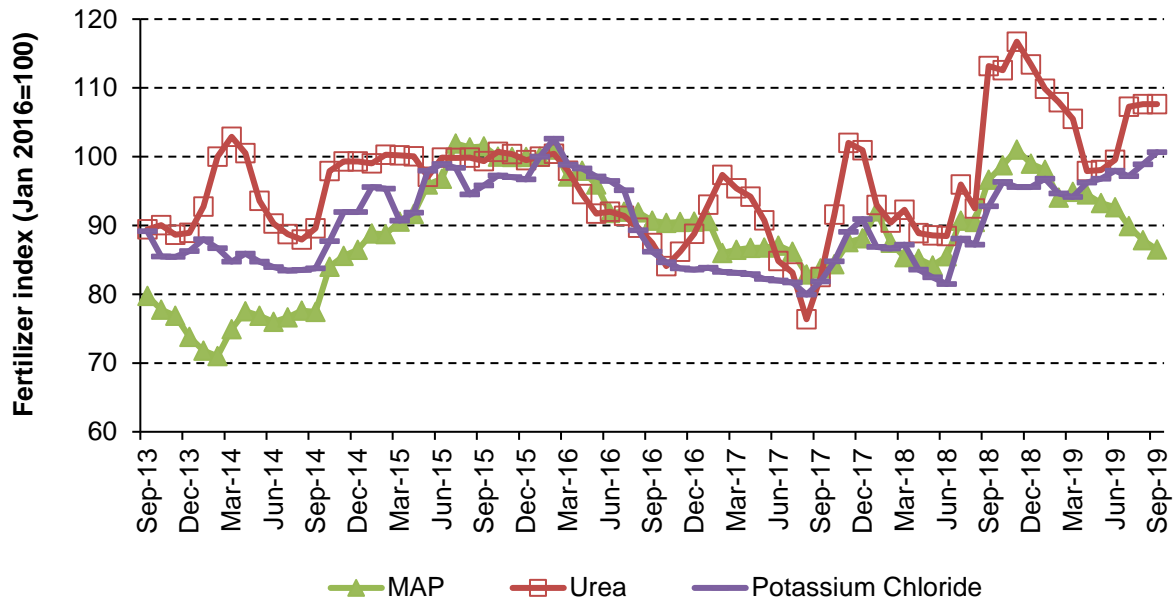


**Figure 1: International price trends for selected fertilisers**

Source: Own calculations based on data from Grain SA, 2019.

## 3. Domestic price trends for selected fertilisers

**Figure 2** shows the trends of domestic fertiliser prices between September 2013 and September 2019. From September 2013 and September 2019, the prices of Urea, Mono-Ammonium Phosphate (MAP) and Potassium Chloride (KCL) increased by 20.4%, 8.4% and 12.9% respectively. From September 2018 to September 2019, the domestic price of KCL increased by 8.5%, whilst MAP and Urea decreased by 10.5% and 4.9%, respectively.



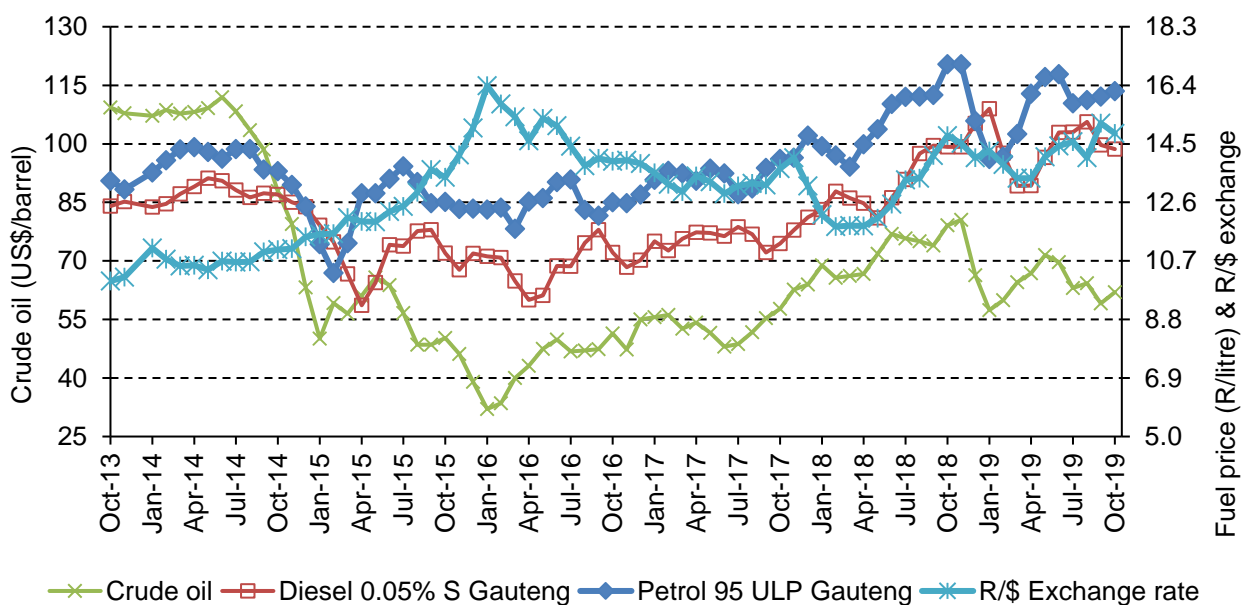
**Figure 2: Domestic price trends for selected fertilisers**

Source: Own calculations from price lists, 2019.

#### 4. Fuel prices

The domestic fuel price is linked to the international price of crude oil (US\$ per barrel). Crude oil prices combined with the R/\$ exchange rate have a major impact on domestic fuel prices (DoE, 2019). In **Figure 3**, the price of crude oil, petrol and diesel follow similar trends. From October 2013 to October 2019, the price of petrol and diesel increased by 19.7% and 13.7% respectively, while the US\$ price of crude oil decreased by 41.2%. During the same period the price of crude oil (**Rand terms**) decreased by 17.7%. This was fuelled by the slowdown of the global economy amid a flare-up in US-China trade tension (OPEC, 2019).

From October 2018 to October 2019, the price of diesel and petrol increased by 31.5% and 23.8%, respectively. The price of crude oil (**US\$ terms**) increased by 45.1%, with a 12% depreciation of the Rand.



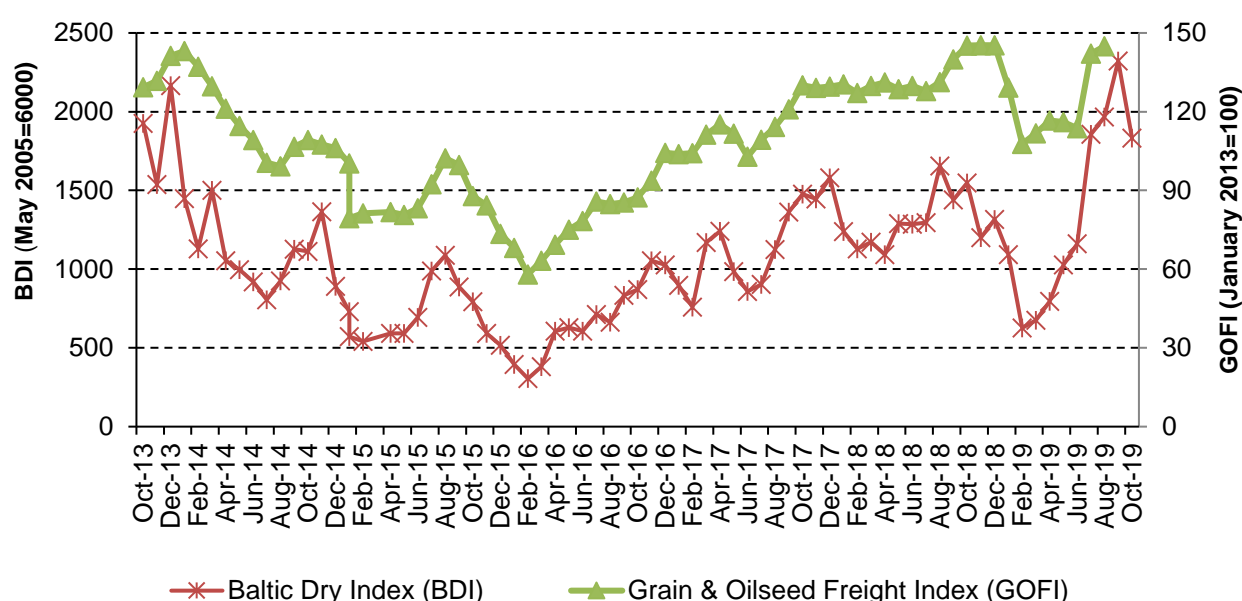
**Figure 3: Crude oil and fuel prices**

Source: Grain SA and DoE, 2019.

## 5. Baltic Dry Index

The Baltic Dry Index (BDI) measures international freight rates for dry bulk cargo affected by both the demand to move raw materials internationally and the supply of shipping capacity. The BDI is calculated on a monthly basis with May 2005 as its base of 6 000. The International Grains Council (IGC) introduced a new Grain and Oilseeds Freight Index (GOFI) with January 2013 as its base year which represents 68 major grain routes.

In **Figure 4**, between October 2013 and October 2019 the GOFI increased by 5.7%, whilst the BDI decreased by 4.9%. From October 2018 to October 2019, the BDI increased by 18.3% whilst the GOFI decreased by 5.8%. The Baltic Exchange’s main sea freight index edged higher in October 2019, as a rise in panamax vessel demand offset declines in both the capesize and supramax segments (Reuters, 2019). In October 2019, the BDI was 1 832 index points and the GOFI was 137 index points.



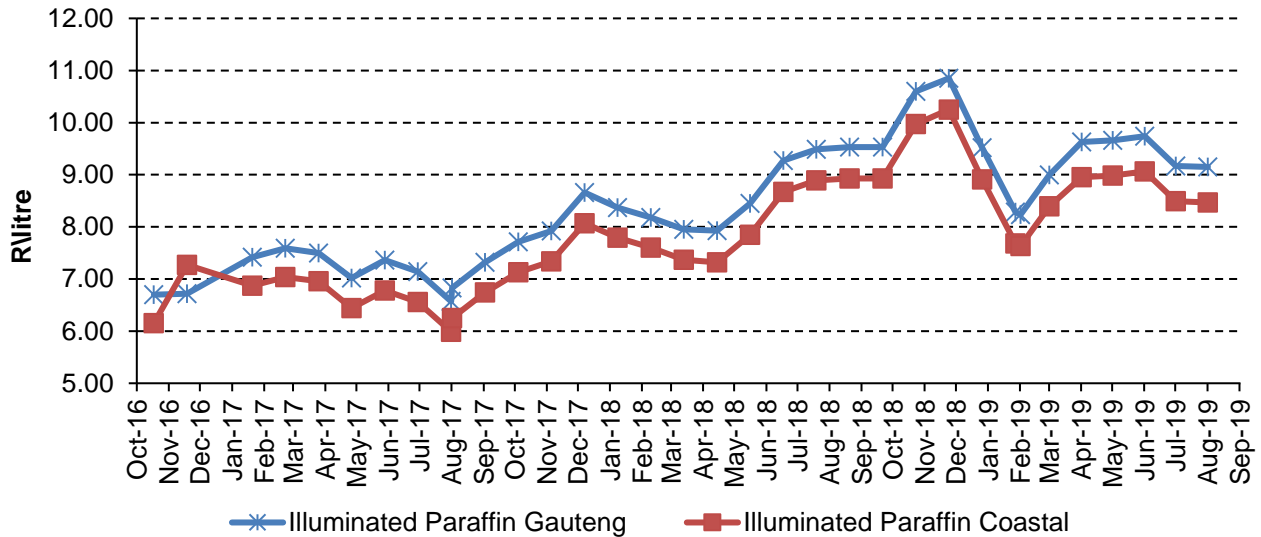
**Figure 4: Baltic Dry Index versus Grain and Oilseeds Freight Index**

Source: SAGIS, 2019.

## 6. Illuminated paraffin price

Consumers utilise paraffin as an alternative source to their household energy mix, classified as an essential backup fuel. **Figure 5** depicts the price of illuminated paraffin for the Coastal and Gauteng regions during October 2016 to October 2019. During this period, the price of illuminated paraffin for the Coastal and Gauteng regions increased by 45.4% and 43.9%, respectively.

Between October 2018 and October 2019, the price of illuminated paraffin in Coastal and Gauteng regions increased by 10.3% and 9.1%, respectively. In October 2019, the price of illuminated paraffin in Gauteng reached R9.64/litre compared to the Coastal regions’ price of R8.94/litre.



**Figure 5: Comparison of illuminated paraffin price between Coastal regions and Gauteng**  
 Source: Department of Energy, 2019.

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