



National Agricultural  
Marketing Council  
Promoting market access for South African agriculture

# Markets and Economic Research Centre



## Input cost monitoring

*An update on selected items*

*January 2018*

## EXECUTIVE SUMMARY

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

From December 2016 to December 2017, the international price in Rand terms of DAP and MOP increased by 14.7% and 2.0% respectively, while Urea decreased by 3.9%. During the same period the R/\$ exchange rate appreciated by 5.3%.



The domestic price of Urea and Potassium Chloride (KCL) increased by 13.7% and 8.8% respectively, while Mono-Ammonium Phosphate (MAP) decreased by 2.7% between December 2016 and December 2017.

### ❖ Fuel prices

From January 2017 to January 2018, the prices of diesel and petrol increased by 11.5% and 4.5%, respectively. The price of crude oil (US\$ terms) increased by 26.1%, with a 11.6% appreciation of the Rand.



Between January 2017 and January 2018, the price of illuminated paraffin in the Coastal and Gauteng regions increased by 13.4% and 12.8%, respectively. In January 2018, the price of illuminated paraffin in Gauteng was R8.37/litre compared to the Coastal regions' price of R7.79/litre.

### ❖ Freight Indices

From January 2017 to January 2018, the BDI and GFI increased by 42.9% and 23.5%, respectively. In January 2018, the GFI and BDI were 4 600 and 1 282 index points, respectively.



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## 1. Introduction

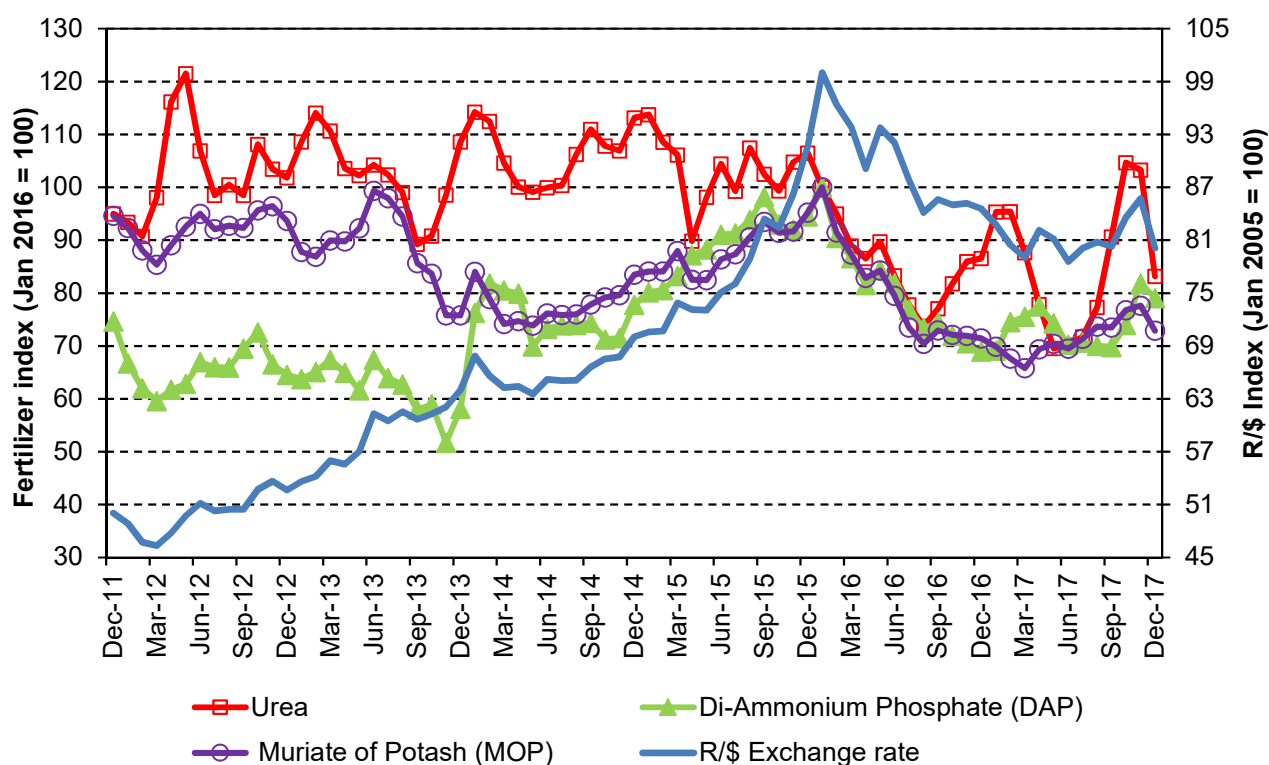
With the ultimate goal of maximising agricultural productivity, agricultural inputs have potential to improve agricultural productivity. Agricultural inputs are a great determinant of yields in agricultural production. Agriculture has become extremely dynamic, adoption of technology in the development of inputs subsequently improved. The Input Cost Monitoring report, published by the National Agricultural Marketing Council (NAMC), is a quarterly report analyses selected agricultural production input prices in domestic and international markets. The objective of this report is to compile information that will path both a historical and current picture of selected agricultural production input prices in South Africa versus the international perspective.

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

## 2. International price trends for selected fertilisers

In **Figure 1**, the prices of international fertilisers show continuous decreasing trends since 2011, with the exception of Di-Ammonium Phosphate (DAP). From December 2011 to December 2017, the international prices in Rand terms of Muriate of Potash (MOP) and Urea decreased by 23% and 12.4% respectively, while Di-Ammonium Phosphate (DAP) increased by 6.0%. During the same period the R/\$ exchange rate depreciated by 60.1%. Measured in US Dollar terms the prices of MOP, Urea and DAP decreased by 51.9%, 45.3% and 33.8% respectively.

From December 2016 to December 2017, the international price in Rand terms of DAP and MOP increased by 14.7% and 2.0% respectively, while Urea decreased by 3.9%. During the same period the R/\$ exchange rate appreciated by 5.3%.

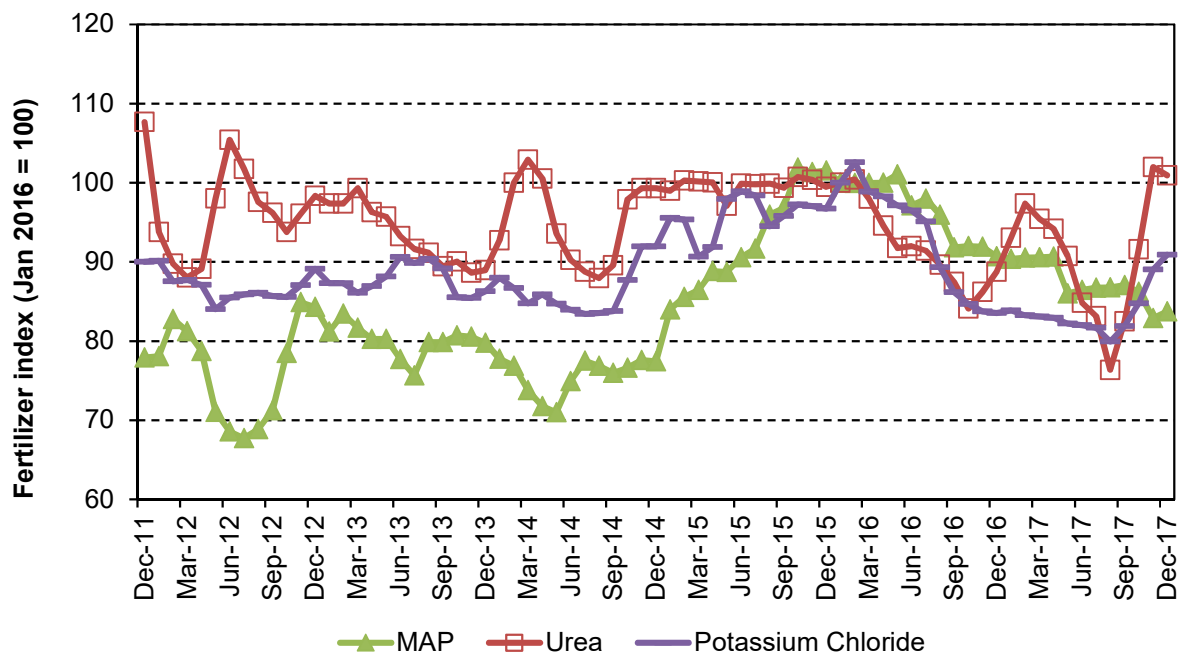


**Figure 1: International price trends for selected fertilisers**

Source: Own calculations based on data from Grain SA, 2018.

### 3. Domestic price trends for selected fertilisers

In **Figure 2**, the prices of domestic fertilisers did not strictly follow the decreasing trend of international prices, with the exception of Urea. From December 2011 to December 2017, the prices of Mono-Ammonium Phosphate (MAP) and Potassium Chloride (KCL) increased by 8.5% and 1.0% respectively, while Urea decreased by 6.3%. From December 2016 to December 2017, the domestic prices of Urea and KCL increased by 13.7% and 8.8% respectively, while MAP decreased by 2.7%.



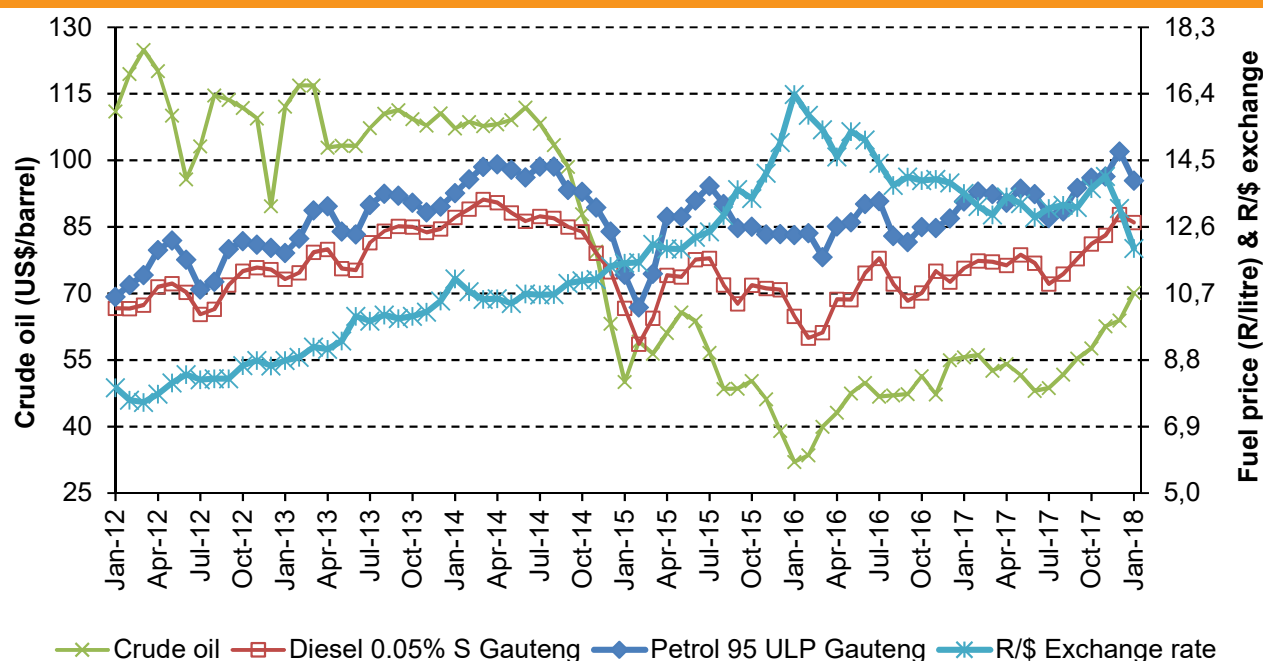
**Figure 2: Domestic price trends for selected fertilisers**

Source: Own calculations from price lists, 2018.

### 4. Fuel prices

The South African petrol price is linked to the international price of crude oil (US\$ per barrel). Crude oil prices combined with the Rand/Dollar (R/\$) exchange rate have a major impact on domestic fuel prices (Department of Energy, 2017). In **Figure 3**, the prices of crude oil, petrol and diesel followed similar trends. From January 2012 to January 2018, the price of petrol and diesel increased by 1.8% and 1.3% respectively, while the US\$ price of crude oil decreased by 22.2%. The price of crude oil (in Rand terms) decreased by 193% during the same period mainly attributed to the depreciation of the Rand by 2.2%.

From January 2017 to January 2018, the prices of diesel and petrol increased by 11.5% and 4.5%, respectively. The price of crude oil (US\$ terms) increased by 26.1%, with a 11.6% appreciation of the Rand.

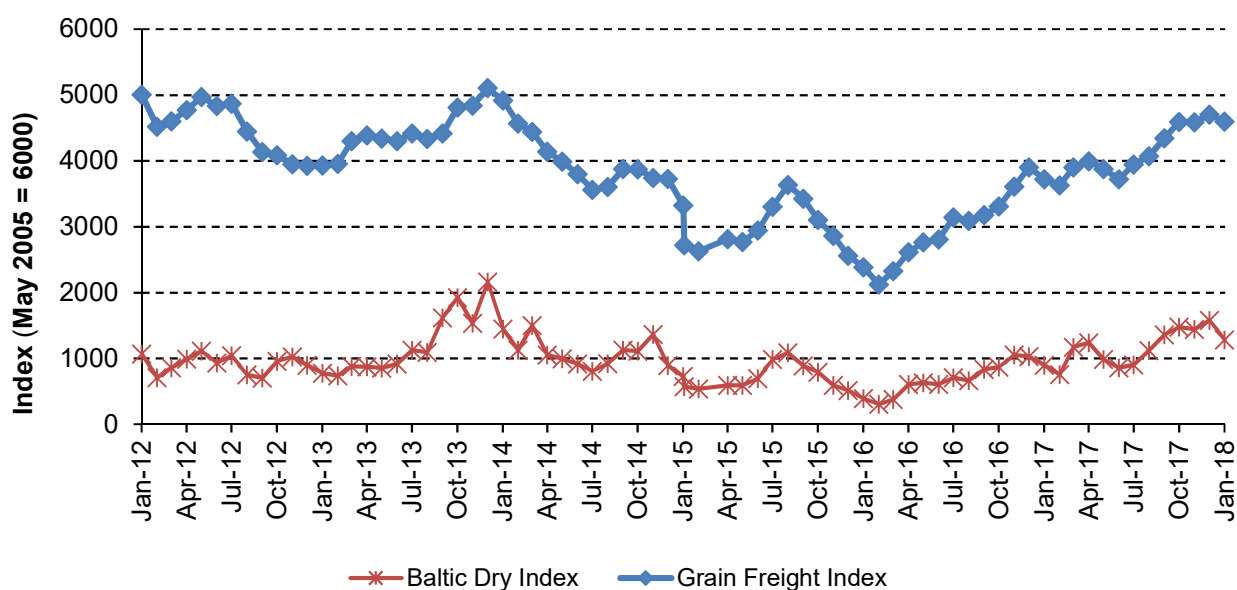


**Figure 3: Crude oil and fuel prices**

Source: Grain SA and Department of Energy, 2018.

## 5. Freight Indices

The Baltic Dry Index (BDI) measures international freight rates for dry bulk cargo, and is affected by both the demand to move raw materials internationally, and the supply of shipping capacity. The Grain Freight Index (GFI) measures movements in rates for ocean transportation of grains. This is based on 15 major grain routes, with representation of the different sizes of vessels typically involved in these trades. **Figure 4** shows that during the period January 2012 to January 2018, the BDI and GFI increased by 20% and 6.9% respectively. From January 2017 to January 2018, the BDI and GFI increased by 42.9% and 23.5%, respectively. In January 2018, the GFI and BDI were 4 600 and 1 282 index points, respectively.



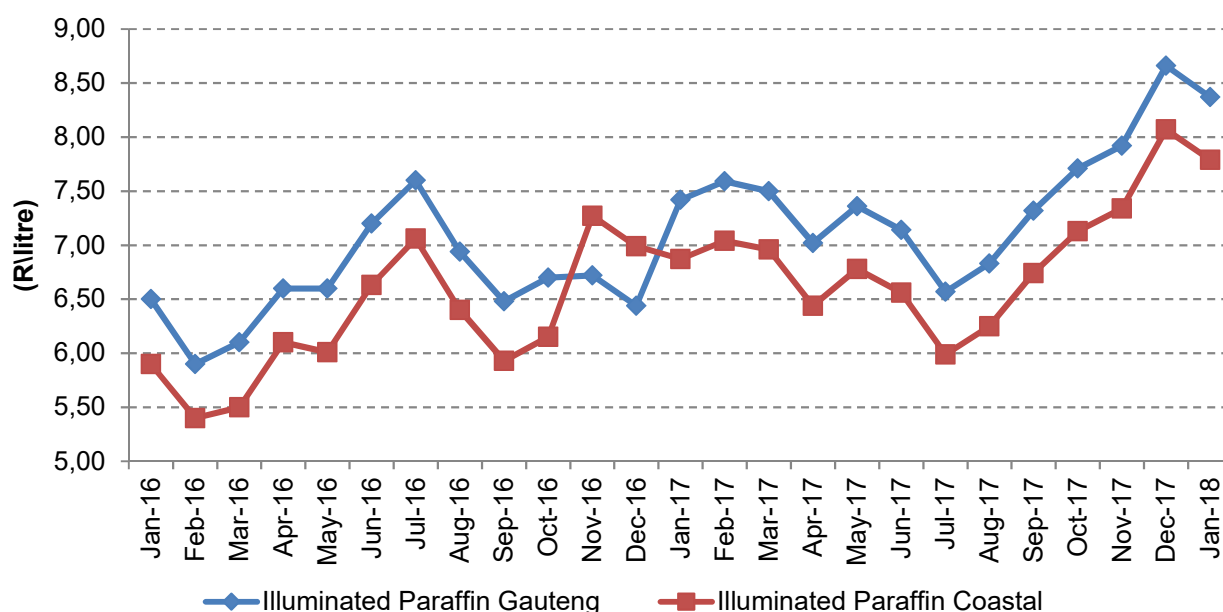
**Figure 4: Baltic Dry Index versus Grain Freight Index**

Source: SAGIS, 2018.

## 6. Illuminated paraffin price

Consumers utilize paraffin as an important part of their household energy mix, classifying it as an essential backup fuel. **Figure 5** depicts the price of illuminated paraffin for the Coastal and Gauteng regions during January 2016 to January 2018. During this period, the price of illuminated paraffin for the Coastal and Gauteng regions increased by 32.0% and 28.8%, respectively.

Between January 2017 and January 2018, the price of illuminated paraffin in the Coastal and Gauteng regions increased by 13.4% and 12.8%, respectively. In January 2018, the price of illuminated paraffin in Gauteng was R8.37/litre compared to the Coastal regions' price of R7.79/litre.



**Figure 5: Comparison of illuminated paraffin price between Coastal regions and Gauteng**  
 Source: Department of Energy, 2018



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