



National Agricultural
Marketing Council
Promoting market access for South African agriculture

Markets and Economic Research Centre



Input cost monitoring

An update on selected items

February 2014

Table of Contents:

	Page
1. International price trends for selected fertilisers	1
2. Local price trends for selected fertilisers	1
3. Fuel prices	2
4. Baltic Freight Index	3
5. Labour cost	4
6. The impact of administered costs on the potato industry	4

1. International price trends for selected fertilisers:

As depicted in Figure 1, the prices of international fertilisers showed volatility but with a constant increasing trend with the exception of Muriate of Potash (MOP) that decline significantly over the depicted period. From January 2008 to January 2014 the prices of Urea and Muriate of Potash (MOP) increased by 33.8 % and 39.2 % respectively whilst the price of Di-Ammonium Phosphate (DAP) decreased by 18.2 %. During the same period the R/\$ exchange rate depreciated by 55.3 %.

From January 2013 to January 2014, the international price of Urea and DAP increased by 3 %, 2.2 % respectively and the price of MOP decreased by 11.6 % on a year-on-year basis. During the same period the R/\$ exchange rate depreciated by 22.6 %.

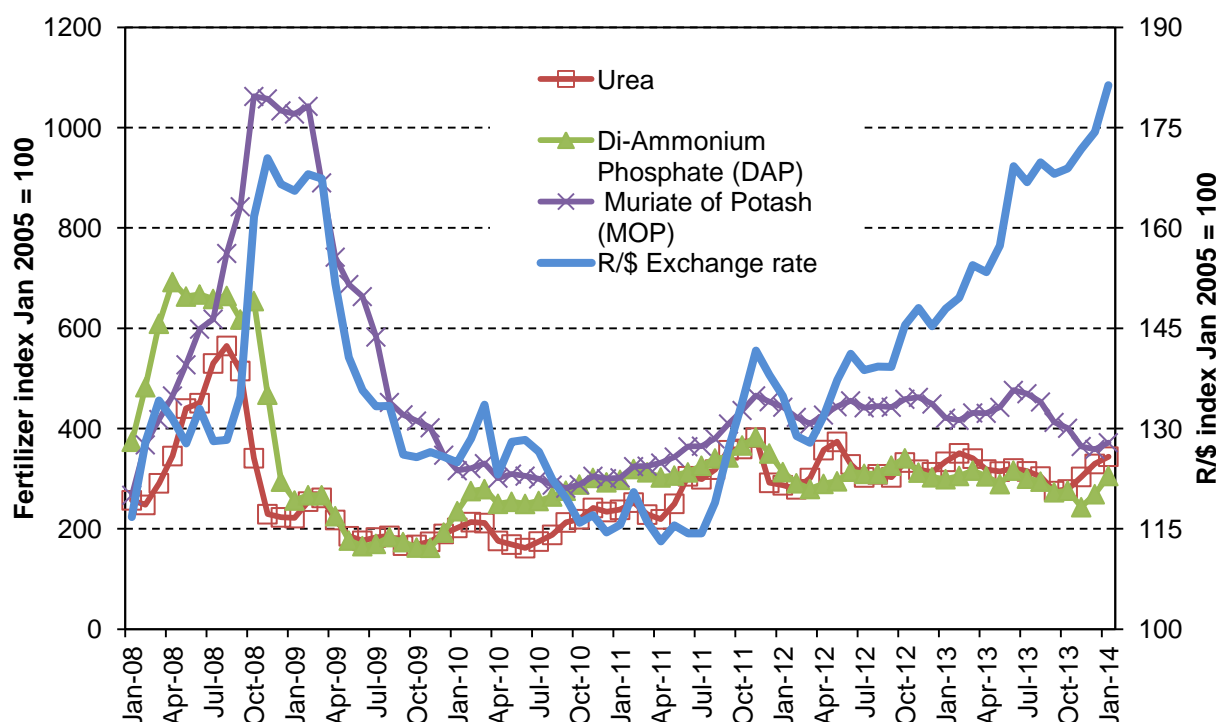


Figure 1: International price trends for selected fertilisers

Source: Own calculations based on data from Grain SA, 2014.

2. Local price trends for selected fertilisers:

As depicted in Figure 2, the prices of local fertilisers showed similar volatility and also with a constant increasing trend. From January 2008 to January 2014 the prices of Mono-Ammonium Phosphate (MAP), Urea and Potassium chloride increased by 17.6 %, 24.6 % and 60 % respectively.

From January 2013 to January 2014, the local price of Urea and MAP decreased by 1.8 % and 5.3 % respectively, whilst the price of Potassium chloride increased by 0.8 %.

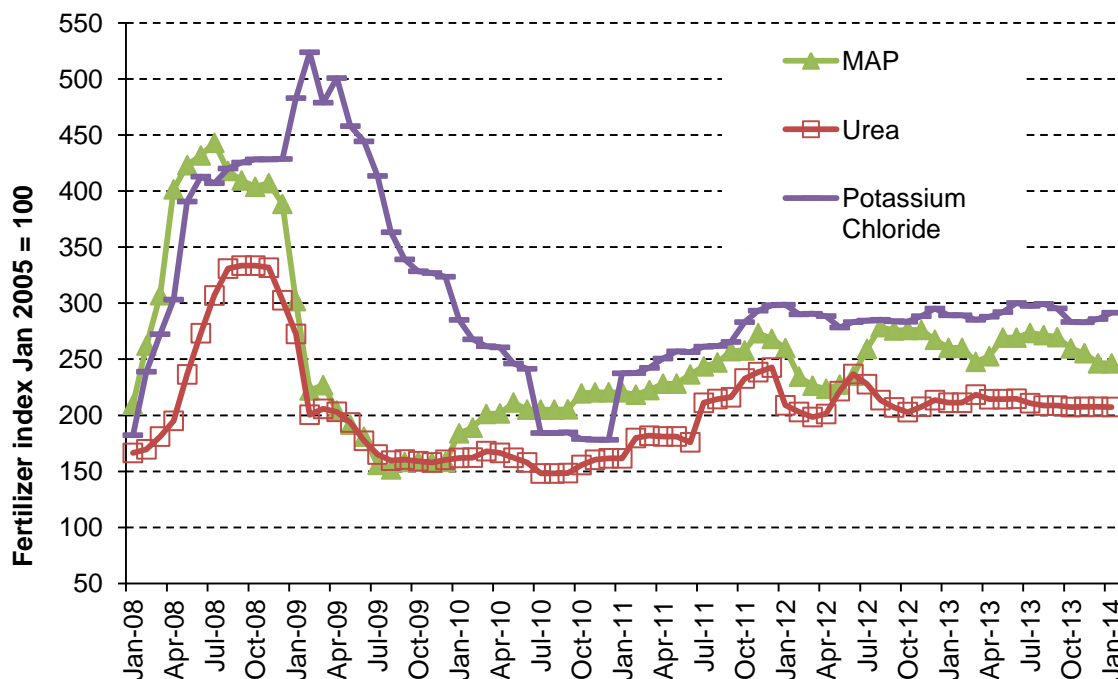


Figure 2: Local price trends for selected fertilisers

Source: Own calculations from price lists, 2014.

3. Fuel prices

As depicted in Figure 3, the prices of crude oil, petrol and diesel followed the same trends and from January 2008 to January 2014 increased by 16.5 %, 81.7 % and 77.5 %, respectively.

From January 2013 to January 2014, the prices of petrol and diesel increased by 14.4 % and 15.7 % respectively, whilst the price of crude oil decreased by 4.5 %.

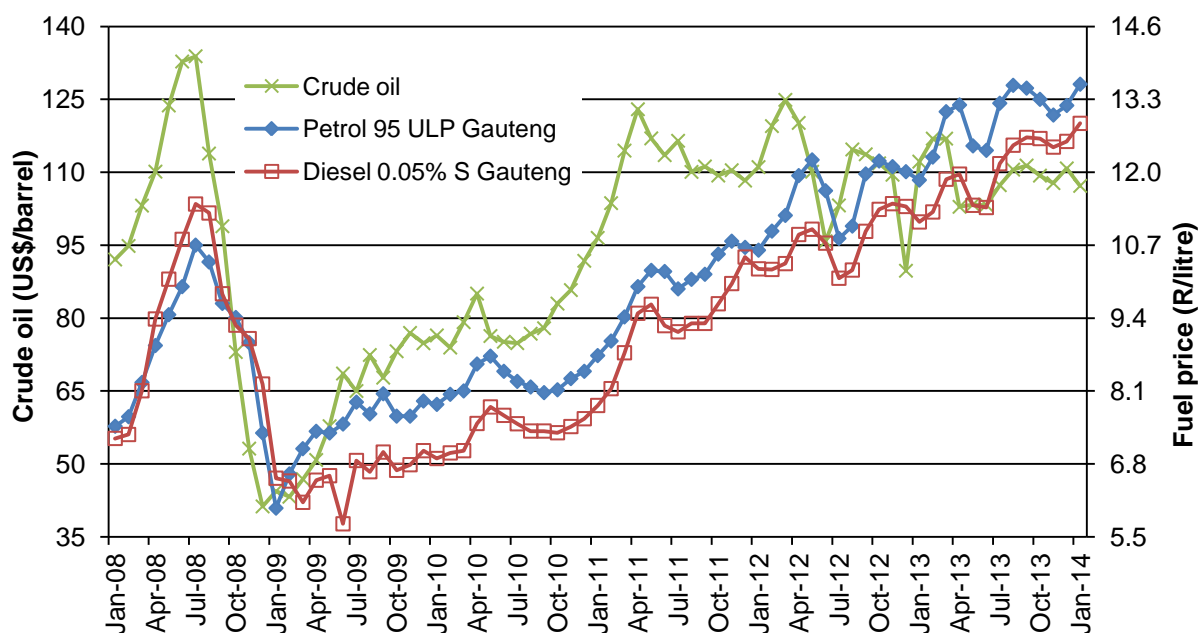


Figure 3: Crude oil and fuel prices

Source: Grain SA and SAPIA, 2014.

4. Baltic Freight Index

The Baltic Dry Index (BDI) measures international freight rates for dry bulk cargo, and is significantly influenced by the demand to move raw materials internationally and the supply of shipping capacity. Figure 4 shows that during the depicted period the index decreased by 79.4 %.

The BDI for January 2014 was 1 448 index points, a 86.7 % increase in comparison with January 2013.

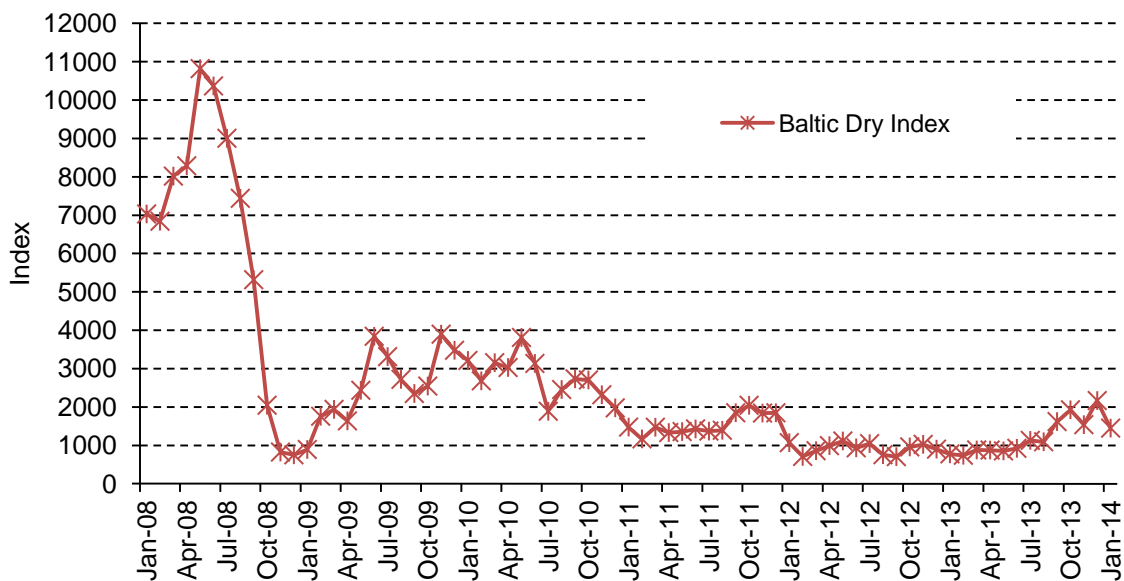


Figure 4: Baltic Dry Index
 Source: SAGIS, 2013.

5. Labour cost

Figure 5 depicts the minimum agricultural wage as regulated by the Department of Labour and changes are announced in January to be implemented in March of each year. Different municipalities were grouped in Area A and B until 2008 after which all workers receives the same minimum wage. The new hourly rate announced for 2014 is R12.41 and it accumulate to R2 420.41 per month. The 2014 wage is 202.7 % higher than the 2003 rate and 6.4 % year on year.

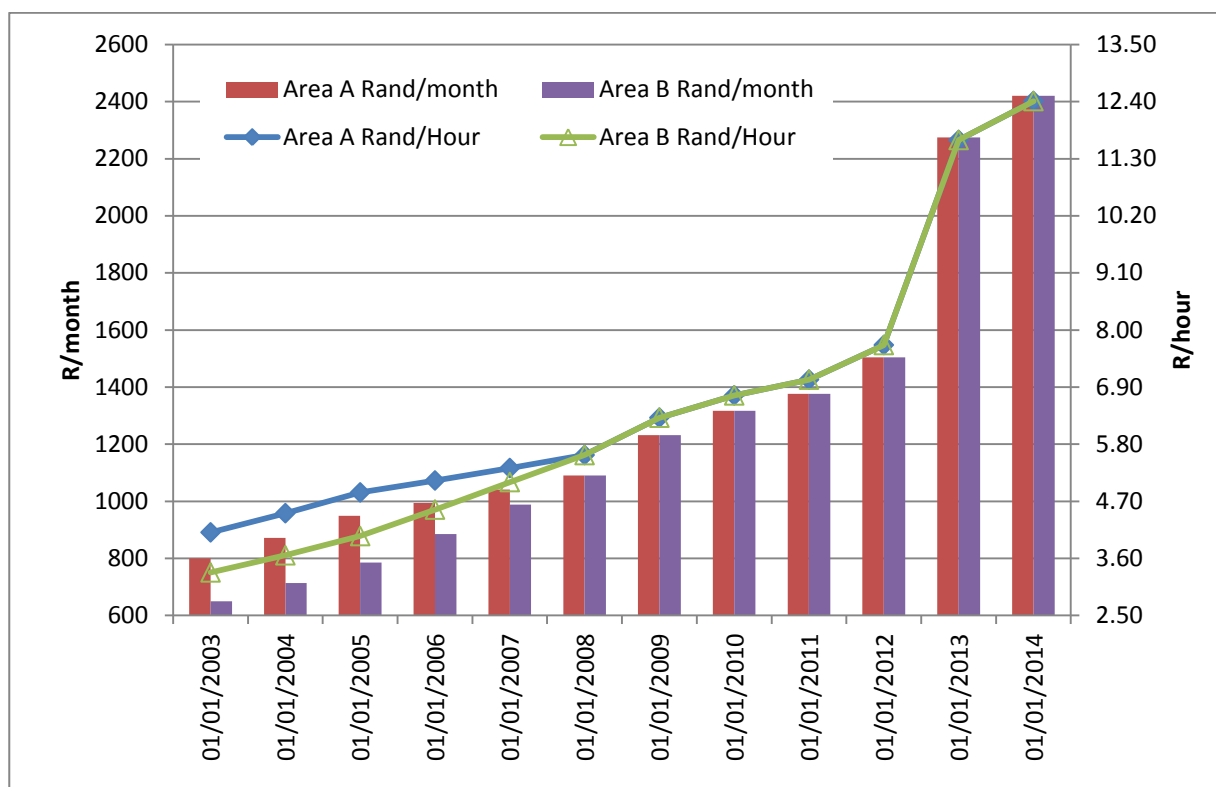


Figure 5: Minimum agricultural wage

Source: DOL, 2014.

6. The impact of administered costs on the potato industry

Potato SA collaborated with BFAP to measure the impact of increasing fuel, labour and electricity expenditure on the sustainability of agriculture and specific on the potato production in South Africa. It is a relevant case study since this industry, although relatively small in terms of its contributions to the Gross Value of Agricultural Production (GVAP), this sector employs 80 000 workers only at primary level (permanent and seasonal). Their calculations were based on the return on investment (ROI) measure because it enables one to compare with inflation and alternative investment options within a risky environment. Typically returns on investment should outperform inflation in order for your money to grow in real terms. Furthermore, a more risky investment typically requires a higher return than a low risk investment. According to the authors, farmers' investment decisions are directly influenced by the investment climate within which they operate and obviously the ROI. In the absence of an enabling environment and low ROI, farmers will not invest adequately in agriculture. Investing in agriculture is one of the most effective strategies for reducing poverty and hunger and promoting sustainability.

The typical potato farm analysed has a total cash expenditure of R15.1 million and total investment in land and machinery of R20.3 million during 2013. The 40% increase in the fuel price since the beginning of 2012 led to an additional R340 000 expenditure and thus a decrease of the NFI to the same effect. The increase of the daily minimum wage from R84 to R105 led to additional expenditure of R105 000 with the assumptions of increased wages for permanent workers as well as no layoffs. The 16% rise in electricity cost led to an increase of R79 000 on electricity expenditure. All these increases ultimately result in a decline in the NFI resulting in a decline in the ROI from 2.7% of the baseline calculations to 0.6%. It also means that the farm is running at a loss. From 2014 onwards a negative ROI is realised. It is clear that the financial performance of the typical potato farm is under severe pressure. The farm will experience a negative cash flow from 2013 onwards, given the three external price shocks in fuel, electricity and labour. Continuous negative cash flows are the first step to bankruptcy as the farm cannot generate enough cash to pay all expenses. Unfortunately farmers are price-takers which means they cannot easily pass on inflated costs to the consumer. Clearly sharp increases in costs can have a tremendous impact on the sustainability of agriculture and for that matter also food security.

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.