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REPUBLIC OF SOUTH AFRICA



**National Agricultural
Marketing Council**

Promoting market access for South African

South African Food Cost Review 2013



This publication attempts to provide more insight into the complex factors driving commodity and food prices. This is the seventh publication of the South African Food Cost Review, emanating from the recommendations by the Food Pricing Monitoring Committee in 2003 to monitor food prices in South Africa on a regular basis. The purpose of this publication is to reflect on food price trends during 2013.

South African Food Cost Review 2013



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EXECUTIVE SUMMARY

WHAT HAPPENED TO FOOD PRICES IN 2013?

Average world food inflation was estimated at 7.5% in 2013, an increase of 1.5% on 2012. Asia was the major contributor while African food inflation declined. The food inflation rate of the Americas and Europe remained subdued.

TRENDS IN AGRICULTURE, FORESTRY AND FISHERIES TRADE

In 2013, South Africa remained a net exporter of agricultural products, and hence the agricultural sector continued to be an important earner of foreign exchange. The value of agricultural exports amounted to R78 billion, while imports were valued at R62 billion in 2013.

TRENDS IN INPUT COSTS

The farming requisite price index increased by 7.1% from 2012 to 2013, with the biggest increase of 7.7% being in the price of machinery and implements. The prices of fertilizer, fuel and animal feed increased by 5.9%, 6.4% and 7.1%, respectively, between 2012 and 2013. The terms of trade for primary agriculture continued to decline in 2013.

The cost of food manufacturing is not just influenced by the price of raw commodities, but also by non-food inputs. The producer price index (PPI) for selected materials used in the food manufacturing process showed the following trends between 2012 and 2013:

- wood and paper and plastic products increased by 6.8%, and
- transport equipment increased by 6.3%.

Non-food inputs that are used at almost all stages of the food value chain include fuel, electricity, labour and water. All of these items fall within the category of administered and regulated prices, and showed the following price trends between 2012 and 2013:

- The regulated minimum wages for primary agriculture increased by 51.2% between 2012 and 2013.
- 0.05% sulphur diesel increased by 11.5% in Gauteng and by 11.6% at the coast.
- Electricity prices increased by 12.3%.

INFLATIONARY TRENDS FOR SELECTED FOOD ITEMS

The calculation of the Consumer Price index was rebased to December 2012 for the period of 2013. The average food and non-alcoholic beverages inflation rate was 5.8% in 2013, implying that for this period consumers had a small respite in terms of food price hikes. At the provincial level, the Mpumalanga Province experienced the highest food inflation (6.2%). The Free State Province had the least food inflation of 4.7% during 2013. The vegetables price index had the highest increase of 10.5% between 2012 and 2013, whilst the meat index had the lowest increase of 3.6%.

TRENDS IN FARM VALUES AND THE FARM-TO-RETAIL PRICE SPREADS FOR SELECTED COMMODITIES

The margin between farm gate prices and the price the consumer pays for selected food items is a topic that is frequently debated. In order to better understand the difference between farm gate and retail prices, farm values of selected products and the farm-to-retail price spreads (FTRPS) were calculated. The farm value share is the value of the farm product's equivalent in the final food product purchased by the consumers. The FTRPS is the difference between what the consumer pays for the food product at retail level and the value of the farm product used in that product. Price spreads measure the aggregate contributions of food manufacturing, distribution, wholesale and retail firms that transform farm commodities into final products.

Poultry: The real FTRPS of fresh whole chicken increased by 4.3% on average from 2012 to 2013. During the same period the real farm value share of fresh whole chicken decreased by 2.2%.

Beef: The real FTRPS of beef decreased by 4.6% between 2012 and 2013 and reached R35.60 in December 2013, while the real farm value share was 45% in December 2013.

Lamb: The real FTRPS of lamb increased by 4.5% between 2012 and 2013 and the farm value share decreased by 7.5% on average during the same period.

Pork: The real FTRPS of pork chops decreased by 3.9% between 2012 and 2013 while the farm value share decreased by 36.16% on average between 2012 and 2013.

Milk: The real FTRPS of milk increased by 1.66% between 2012 and 2013. On the other hand, the farm value share of milk was on average 37.83% in 2013 compared to 40.43% in 2012. Between 2012 and 2013, the farm value share of milk increased marginally by 0.02%.

Maize: The real farm value of special maize meal increased to R3024/ton in December 2012 and it decreased to R2408 in December 2013. The real farm value of super maize meal was R3750/ton in December 2012 and then decreased to R2980 in December 2013.

The FTRPS for super maize meal and special maize showed high volatility. This could be a substitution effect between special and super as prices change and consumers switch to the more affordable option of maize meal as pressures increase on disposable incomes increase.

Wheat: The average real farm value share in 2013 was 17.63% and 17.92% for brown and white bread, respectively. On average, the FTRPS for brown bread was R16 547/ton of flour in 2013. In the case of white bread, the average FTRPS was R17 295/ton of flour in 2013.

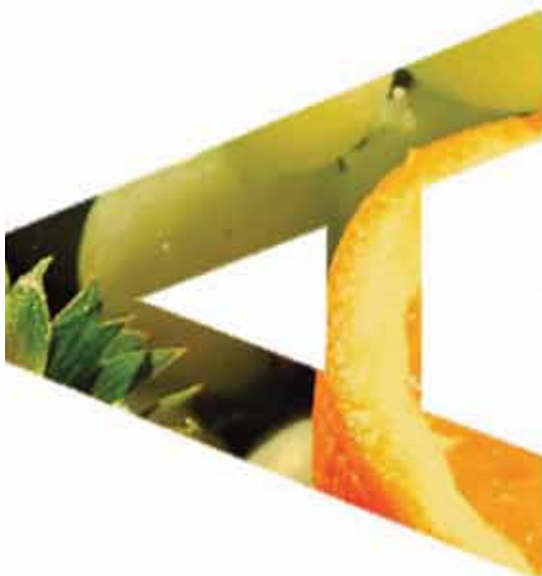
Vegetables: From 2012 to 2013 the average real FTRPS and real farm value share of vegetables showed the following trends:

- The real farm value share of cabbage showed a positive growth rate of 12.0% between 2012 and 2013, while on average the farm-to-retail price spread of cabbages decreased by 1.9% during the same period.
- The real FTRPS of onions increased by 7.3%, while the real farm value share of onions increased by 11.5%.
- The real FTRPS of tomatoes increased by 7.4%, while the real farm value share of tomatoes increased by 0.7%.
- The real FTRPS of potatoes decreased by 5.5%, while the real farm value share of potatoes increased by 1.9%.

SELECTED TOPICS

The Food Cost Review generally presents selected topics with regards to food production, food security and food prices. In this issue, the topic relates to the implications of regional market integration and agricultural policy for food security.

The issues covered are the global food security index, food availability per capita, and per capita food production. The efforts to ensure economic growth and poverty reduction in Africa through the Comprehensive Africa Agricultural Development Programme (CAADP) are also discussed.



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TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	i
ACKNOWLEDGEMENTS.....	iii
TABLE OF CONTENTS	v
LIST OF FIGURES.....	viii
LIST OF TABLES.....	x
1 WHAT HAPPENED TO FOOD PRICES?	1
1.1 Global food price trends and review of 2013.....	1
2 SOUTH AFRICA'S AGRICULTURE, FORESTRY AND FISHERIES TRADE REVIEW.....	2
2.1 South African Agricultural, Forestry and Fisheries Trade Performance in 2013.....	2
2.2 South African agricultural trade.....	3
2.3 South Africa's forestry trade.....	7
2.4 South African fisheries trade.....	10
3 TRENDS IN INPUT COSTS.....	13
3.1 Terms of trade for primary agriculture.....	13
3.2 Farming requisite price index trends.....	14
3.3 Producer price index trends.....	15
3.4 Trends in the cost of selected inputs.....	16
3.4.1 Fertilizer prices.....	16
3.4.2 Administered and regulated prices.....	17
4 INFLATIONARY TRENDS FOR SELECTED FOODSTUFFS.....	21
4.1 Food and non-alcoholic beverages.....	21
4.2 Urban food price trends.....	22
4.3 Rural food price trends.....	27
4.4 Comparison between rural and urban food prices.....	30
5 TRENDS IN PRICES, FARM VALUES AND PRICE SPREADS.....	32
5.1 Introduction.....	32
5.2 Price trends in the meat sector.....	33
5.2.1 Poultry industry.....	33
5.2.2 Beef.....	33
5.2.3 Lamb.....	34
5.2.4 Pork.....	35

5.3	Dairy sector.....	36
5.3.1	Price trends.....	36
5.4	Price trends in the maize sector.....	43
5.4.1	Production, consumption and stock levels of white maize.....	43
5.4.2	Production, stock levels and consumption of yellow maize.....	43
5.4.3	The South African maize balance sheet.....	45
5.4.4	White maize price trends.....	46
5.4.5	Yellow maize price trends.....	46
5.4.6	Real farm value of special maize meal.....	46
5.5	Wheat Sector.....	48
5.5.1	Production and Imports.....	48
5.5.2	Consumption.....	49
5.5.3	Price Trends.....	49
5.5.4	Real Farm Gate and Retail Prices of Brown and White Bread.....	49
5.6	Sunflower seed.....	51
5.6.1	Production and consumption of sunflower seed.....	51
5.6.2	Price trends for sunflower seeds.....	51
5.7	Soybeans.....	52
5.7.1	Soybean production.....	52
5.7.2	Soybean consumption.....	52
5.7.3	Price trends for soybeans.....	52
5.8	Vegetable sector	53
5.9	Farm values and price spreads.....	54

6 SELECTED TOPICS..... 56

6.1	Regional Market Integration & Agricultural Policy: Keys to Food Security?.....	56
6.1.1	Food security, agriculture and regionalism.....	56
6.1.2	Agriculture.....	60
6.1.3	Regional Integration.....	62
6.2	The Comprehensive Africa Agriculture Development Programme (CAADP).....	64
6.3	The Regional Agricultural Policy (RAP) of the Southern African Development Community (SADC) and CAADP Harmonisation	66

7	REFERENCES.....	70
8	APPENDICES.....	74
A.1	Meat Sector.....	74
A.1.1	Poultry Industry.....	74
A.1.2	Beef.....	74
A.1.3	Lamb.....	75
A.1.4	Pork.....	75
A.2	Dairy Sector.....	76
A.3	Maize Sector.....	77
A.4	Wheat Sector.....	78
A.4.1	Real Farm Value Share of Brown and White Bread.....	78
A.4.2	Real Farm to Retail Price Spread (FTRPS).....	78
A.5	Vegetable Sector.....	79
A.5.1	Cabbages.....	79
A.5.2	Onions.....	79
A.5.3	Tomatoes	79
A.5.4	Potatoes.....	79
9	ACRONYMS.....	80

LIST OF FIGURES

Figure 1: International food price index.....	1
Figure 2: International price indices for various food categories.....	1
Figure 3: South Africa's AFF trade: 2003 – 2013.....	2
Figure 4: South Africa's agricultural trade: 1996 – 2013.....	3
Figure 5: Terms of trade (2000–2013).....	13
Figure 6: Real gross income, expenditure on intermediate goods and services and net farming income (1990–2013).....	13
Figure 7: FRPI (1994–2013).....	14
Figure 8: FRPI of intermediate goods and services (1995–2013).....	14
Figure 9: PPI for selected industry groups (2000–2013).....	15
Figure 10: Producer price index for selected input items (2000–2013).....	15
Figure 11: International fertilizer prices (2000–2013).....	16
Figure 12: Local fertiliser price trends (2000–2013).....	17
Figure 13: Crude oil price (2000–2013).....	18
Figure 14: Diesel prices in Gauteng and at the coast (2000–2013).....	18
Figure 15: Vehicle costs over time for different sized vehicle (2004–2013).....	19
Figure 16: Annual changes in electricity unit cost (2011, 2012 and 2013).....	20
Figure 17: Minimum wages (2003–2013).....	20
Figure 18: CPI and CPI rate of change for food and non-alcoholic beverages.....	21
Figure 19: CPI food and non-alcoholic beverages in the different provinces in South Africa.....	21
Figure 20: CPI for different food groups.....	21
Figure 21: CPI for processed and unprocessed products.....	21
Figure 22: Comparison between rural and urban food prices in 2013.....	30
Figure 23: International poultry price trends.....	33
Figure 24: Poultry retail price trends.....	33
Figure 25: Poultry producer price trends.....	33
Figure 26: International beef price trends.....	33
Figure 27: Retail price trends for different beef cuts.....	34
Figure 28: Beef producer price trends.....	34
Figure 29: International lamb price trends.....	34
Figure 30: Lamb retail price trends.....	34
Figure 31: Lamb producer price trends.....	35
Figure 32: International pork price trends.....	35
Figure 33: Pork retail price trends.....	35
Figure 34: Pork producer price trends.....	35
Figure 35: Raw milk price and retail values for full cream and low fat milk, sachets (R/litre).....	36
Figure 36: Retail price of powdered milk, (R/kg).....	42
Figure 37: Retail price of milk, (R/litre), cheddar cheese and butter, (R/kg).....	42
Figure 38: Domestic maize production, consumption and area harvested (white maize)	43

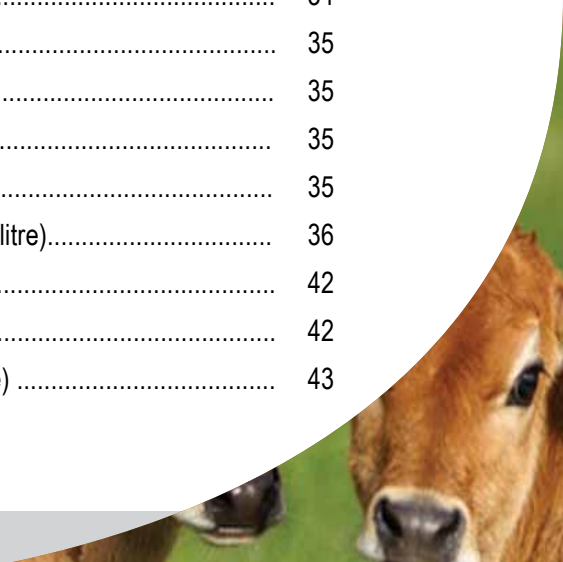


Figure 39: Total Exports, Pipeline requirements, carry out and carry out as a % of total domestic demand (white maize).....	43
Figure 40: Domestic maize production, consumption and area harvested (white maize).....	43
Figure 41: Domestic maize production, consumption and area harvested (yellow maize).....	44
Figure 42: Total Exports, Pipeline requirements, carry out and carry out as a % of total domestic demand (yellow maize).	44
Figure 43: Import parity, export parity and SAFEX white maize price.....	46
Figure 44: Import parity, export parity and SAFEX yellow price.....	46
Figure 45: Real retail value and farm value of special maize meal.....	46
Figure 46: Real retail value and farm value of super maize meal.....	47
Figure 47: Real farm value share of special and super maize meal.....	47
Figure 48: Area planted, production and imports (tons).....	48
Figure 49: Wheat consumption and production.....	49
Figure 50: Import parity, export parity and SAFEX wheat price.....	49
Figure 51: Real farm gate price of wheat and real retail prices of brown and white bread.....	49
Figure 52: Price difference between white and brown bread.....	50
Figure 53: Area planted; production and consumption of sunflower seeds in South Africa.....	51
Figure 54: Domestic sunflower seed price and retail price of sunflower oil (750ml).....	51
Figure 55: Area planted, production and demand of soybean seed in South Africa.....	51
Figure 56: Area planted, production and demand for soybeans in South Africa.....	52
Figure 57: Price trends for soybeans.....	52
Figure 58: Volume of selected vegetables sold at fresh produce markets.....	53
Figure 59: Market price trends for selected fresh vegetables.....	53
Figure 60: Retail price trends for selected fresh vegetables.....	53
Figure 61: Real farm value share average, 2009-2013.....	54
Figure 62: Real farm-to-retail price spread averages, 2009-2013.....	55
Figure 63: Global food security risk index 2013.....	57
Figure 64: Food availability per capita (1960-2000).....	58
Figure 65: Regional per capita food production (1961-2011).....	60



LIST OF TABLES

Table 1: South Africa's agricultural products destination markets and main suppliers of imported products.....	4
Table 2: South African Agricultural exports to the world.....	5
Table 3: South Africa's leading Agricultural imports from the world: 2003 and 2013.....	6
Table 4: South African forestry destination markets and main supplies of imported products.....	7
Table 5: South African exports of forestry products.....	8
Table 6: South Africa imports of forestry products.....	9
Table 7: South African fisheries products destination markets and main suppliers of imported products.....	10
Table 8: South Africa's fishery exports to the world.....	11
Table 9: South Africa's fishery imports from the world.....	12
Table 10: The South African fertilizer demand, domestic production and imports.....	16
Table 11: Vehicle cost changes from 2004 to 2011.....	19
Table 12: Average annual retail prices for certain food items in the bread and cereal group.....	22
Table 13: Average annual retail prices for certain food items in the meat group.....	23
Table 14: Average annual retail prices for certain food items in the fish group.....	23
Table 15: Average annual retail prices for certain food items in the milk group.....	24
Table 16: Average annual retail prices for eggs and cheese.....	24
Table 17: Average annual retail prices for certain food items in the oils and fats group.....	25
Table 18: Average annual retail prices for fruit.....	25
Table 19: Average annual retail prices for certain food items in the vegetable group.....	26
Table 20: Average annual retail prices for sugar.....	26
Table 21: Average annual retail prices for tea and coffee.....	27
Table 22: Average annual retail prices for bread and cereals in rural areas.....	27
Table 23 : Average annual retail prices for oils and fats in rural areas.....	28
Table 24: Average annual retail prices for beans in rural areas.....	28
Table 25: Average annual retail prices for milk in rural areas.....	29
Table 26: Average annual retail prices for tea and coffee in rural areas.....	29
Table 27: Average annual retail prices of sugar in rural areas.....	29
Table 28: Typical cost composition of pasteurised full cream milk in 2-litre containers offered for sale in a retail store.....	39
Table 29: South African maize balance sheet for 2013/14 season.....	45
Table 30: Real farm value share average, 2009-2013.....	54
Table 31: Real farm-to-retail price spread averages, 2009-2013.....	55



I WHAT HAPPENED TO FOOD PRICES?

I.1 Global Food Price Trends and Review of 2013

World food inflation for 2013 was estimated at 7.5% compared to 6.0% in 2012. Asia is the region that contributed the most to this increase, with an estimated inflation of 8.6% in 2013, compared to 6.1% in 2012. South America also added to world inflation in 2013. In the rest of the Americas and in most of Europe, food price inflation remained relatively subdued, while in Africa, it continued to decline, with the inflation rate for 2013 recorded at 7.3% compared to 9.1% in 2012. The food inflation rate for Africa was half its 2011 level.

The international food price index decreased by 3.3% between January 2013 and December 2013 (Figure 1). The average value of the food price index is 0.6% lower than that of 2012.

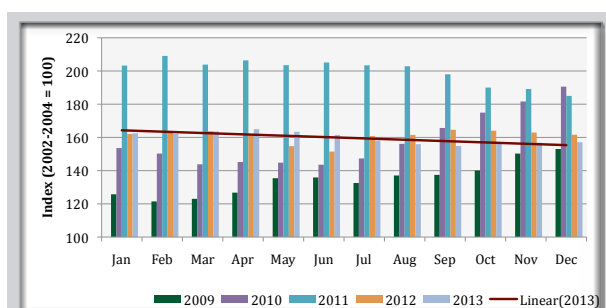


Figure 1 : International food price index
Source : FAO, 2013

Figure 2 shows the international price indices for various food categories. The prices of agricultural commodities eased in 2013 as supply improved. The relatively high prices for key staples in recent years have encouraged farmers to increase planting areas. The cereal price index decreased by 21.5% between January 2013 and December 2013. On a year-on-year basis, the index decreased by 6.2% between 2012 and 2013. The sugar price index decreased by 12.3% between January 2013 and December 2013. On average, the index decreased by 16.6% between 2012 and 2013. On the contrary, the dairy price index increased by 25.4% between January 2013 and December 2013. On an annual basis, the index increased by 26.3% between 2012 and 2013.

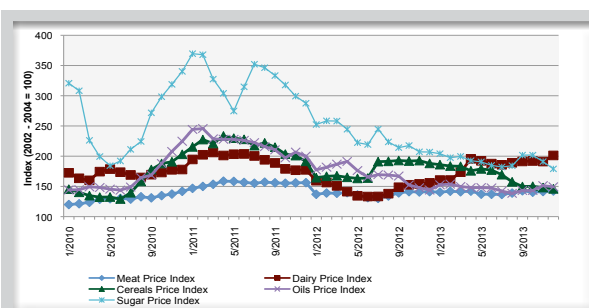


Figure 2 : International price indices for various food categories,
Source : FAO, 2013

2 SOUTH AFRICA'S AGRICULTURE, FORESTRY AND FISHERIES TRADE REVIEW

2.1 South African Agricultural, Forestry and Fisheries Trade Performance in 2013

South Africa's agriculture, forestry and fisheries (AFF) sector is a significant earner of foreign currency. The sector is known as a big net exporter, maintaining a positive trade balance (expressed in value terms). The sector's exports are mainly oranges, maize, wine, grapes, wool, woodpulp and apples while its imports are mainly rice, soybean oilcake, palm oil, whiskies and chicken cuts. The country's exports of AFF products amounted to approximately R78 billion in 2013, recording an annual growth rate of 10% between 2003 and 2013. Imports stood at R62 billion in 2013, growing at an annual average rate of 15% between 2003 and 2013. Interesting to note is that AFF imports have been growing more rapidly than exports. South Africa's export share to Africa (31%) outgrew that of EU28¹ (30%) and Asia (29%) in 2013. EU28 remains a big market for AFF products exports from South Africa absorbing about 35% of exports in 2013. South African exports of AFF to Asian markets accounted for 32% in 2013 while Africa

accounted for 5% of the value. The fact that South Africa's AFF exports to Asia and Africa markets are claiming an increasing share of total exports of AFF is encouraging considering the vulnerability of the country to policy changes in the EU28 (for example, citrus is a typical vulnerability).

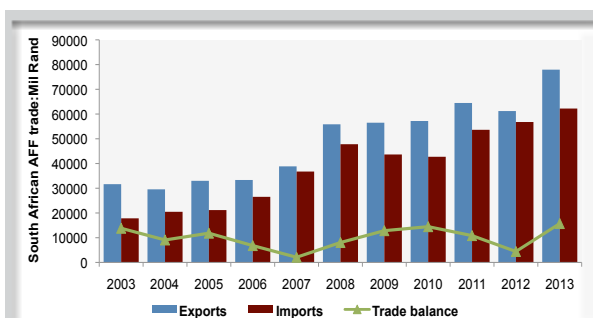


Figure 3 : South Africa's AFF trade: 2003 – 2013
Source : World Trade Atlas, 2013

¹ Croatia became a member of the EU in July 2013. Croatia is not a big trading partner to South Africa. It is ranked number 70 on the import list with a total supply value of R516 million in 2013. It mainly supplies electrical machinery and plastic products into South Africa.

2.2 South African Agricultural Trade

South Africa's agricultural trade trends between 1996 and 2013 present a clear picture of a country that is consistently a net exporter. In 2007, the gap between exports and imports was at its minimum (but remained positive); however, the positive trade balance has since increased to about R12.9 billion in 2013. Most agricultural commodities recorded a positive export growth (measured in value) in 2013, led by strongest export growth in oranges, maize, wine, table grapes and wool products. Between 2012 and 2013, the top ten South African agricultural exported products grew by an average rate of 26% to 40%.

The strong positive growth can be attributed to a weaker exchange rate that favoured exports and relatively large production output. Figure 4 shows 18 years of agricultural export and import trends. Agricultural exports increased by R15.6 billion to record a growth rate of 31% between 2012 and 2013, the highest growth rate achieved since the 2008 global recession.

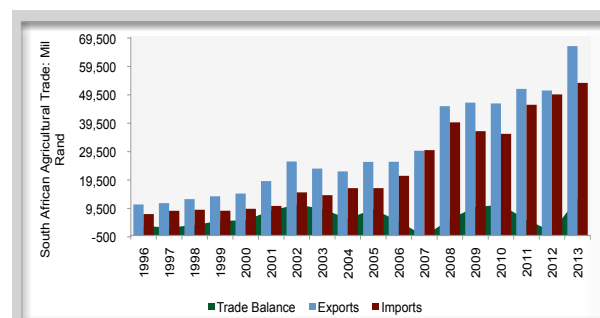


Figure 4 : South Africa's agricultural trade: 1996 – 2013
Source : World Trade Atlas, 2013

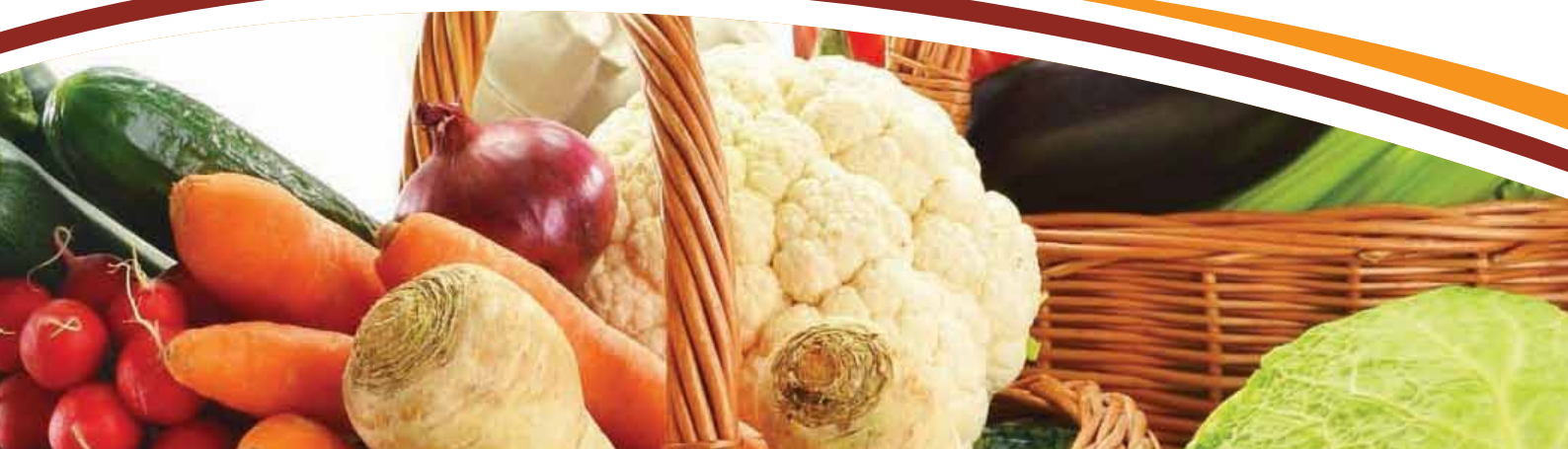


Table 1 provides a detailed analysis of the main destinations of South African agricultural exports as well as the main suppliers of imported agricultural products. In addition, Table 1 shows the growth rate and share of these markets in South Africa's agricultural exports and imports. It is clear that the EU 28 region remains a significant trading partner to South Africa. The region absorbs about 32% of South Africa's agricultural exports and supplies the country with 33% of its agricultural imports.

It can also be noted that in recent years the trading relations between South Africa and Africa and BRIC markets have grown exponentially. In the past ten years agricultural exports destined for Africa and

BRIC markets have increased from R7.1 billion, in 2003, to an impressive R26.3 billion in 2013, which is equivalent to a growth rate of 270%. South Africa is also increasing its imports from the two markets.

In the past ten years agricultural imports originating from Africa and BRIC markets have increased from R4.1 billion, in 2003, to a highest import value of R14.4 billion in 2013, which is equivalent to a growth rate of 251%. It is clear that South Africa's exports to these two markets are growing faster than the imports from these markets, which is a good sign as it affirms the country as a net exporter of agricultural products.

Table 1: South Africa's agricultural products destination markets and main suppliers of imported products

South African agricultural exports					South African agricultural imports				
Markets	Export Value: 2003 - Mil Rand	Export Value: 2013 - Mil Rand	10 Year Growth: %	Share in SA Exports: 2013	Suppliers	Imports Value: 2003 - Mil Rand	Imports Value: 2013 - Mil Rand	10 Year Growth: %	Share in SA Imports: 2013
World	23 534	66 686	183%	100%	World	14 175	53 718	279%	100%
EU28	10 243	21 291	108%	32%	EU28	3 240	17 741	447%	33%
Africa	6 489	20 919	222%	31%	Asia (excl. China & India)	2 499	10 118	305%	19%
Asia (excl. China & India)	3 865	13 041	237%	20%	Africa	1 578	4 110	95%	6%
BRIC	661	5 417	719%	8%	BRIC	2 542	11 335	346%	21%
CAMANZ	233	1 851	694%	3%	CAMANZ	2 467	7 129	189%	13%
USA	1 011	1 763	74%	3%	USA	1 115	2 430	118%	5%

Source : World Trade Atlas, 2013

Note : CAMANZ – include: Chile, Argentina, Mexico, Australia and New Zealand

: BRIC – Brazil, Russia, India and China

Table 2 shows the top ten Agricultural products that were exported by South Africa in 2013 to global markets. Although total exports increased by 31% compared to the previous year, the export basket (i.e., product mixture) remained the same as in 2003. This suggests that South Africa is not diversifying its export basket, which could be an indication of the strong comparative advantage that

the country has in these products. EU28 is the main destination market for unprocessed agricultural exports whilst Africa is the main destination for processed agricultural exports. The BRIC market is rapidly claiming a larger share in South African agricultural exports, mainly importing wool, maize, wine and fruit products.

Table 2: South African Agricultural exports to the world

Codes	Product Description	Export Value: 2003 - Mil Rand	Export Value: 2013 - Mil Rand	10 Year Growth: %	Main Destinations of South African Agricultural Exports (Share in SA Exports in 2013)
	Unprocessed	11 463	33 675	194%	EU28 (35%); Asia excl China & India (27%); Africa (19%); BRIC (12%); CAMANZ (3%) & USA (2%)
	Processed	12 071	33 011	173%	Africa (44%); EU28 (29%); Asia excl China & India (12%); BRIC (5%); USA (4%) & CAMANZ (3%)
080510	Oranges	1 603	5 657	253%	EU28 (38%); Asia excl China & India (35%); BRIC (13%); Africa (4%); USA (5%) & CAMANZ (0%)
100590 & 100510	Maize	1 036	5 981	477%	Asia excl China & India (57%); Africa (18%); CAMANZ (17%) & EU28 (3%)
220421 & 220429	Wine	3 095	7 667	148%	EU28 (60%); Asia excl China & India (7%); Africa (9%); USA (8%); BRIC (6%) & CAMANZ (2%)
080610	Table Grapes	1 382	4 225	206%	EU28 (70%); Asia excl China & India (16%); BRIC (9%) & Africa (3%)
080810	Apples	1 074	4 095	281%	EU28 (36%); Africa (34%); Asia excl China & India (27%) & BRIC (2%)
510111	Wool	505	2 804	455%	BRIC (75%); EU28 (21%) & Africa (4%)
170199	Sugar	496	1 527	208%	Africa (97%); EU28 (1%) & Asia excl China & India (1%)
080550	Lemons	284	1 242	337%	Asia excl China & India (52%); EU28 (25%); BRIC (14%) & Africa (2%)
210690	Food Preparations Nesoi	251	1 240	395%	Africa (89%); EU28 (6%); Asia excl China & India (2%)
080520	Mandarins	272	1 218	348%	EU28 (69%); Asia excl China & India (14%); BRIC (6%); Africa (2%) & USA (2%)

Source : Global Trade Atlas, 2013

Note : CAMANZ – include: Chile, Argentina, Mexico, Australia and New Zealand

: BRIC – Brazil, Russia, India and China

Table 3 shows the main suppliers of agricultural products into South Africa. It also shows the top ten products imported by South Africa. Rice is the largest agricultural commodity imported by South Africa, followed by soybean oilcake, palm oil, whisky and chicken cuts products. South Africa's agricultural imports increased by 8% (equivalent to R4 billion) between 2012 and 2013. Unprocessed

agricultural imports increased by R389 million while processed agricultural imports recorded a growth of R3.6 billion between 2012 and 2013. BRIC is a main supplier of unprocessed agricultural imports and EU28 is the main supplier of processed agricultural imports such as whiskey and prepared food products.

Table 3: South Africa's leading Agricultural imports from the world: 2003 and 2013

HS Codes	Product Description	Import Value: 2003 - Mil Rand	Import Value: 2013 - Mil Rand	10 Year Growth: %	Main Suppliers of South African Agricultural Imports (Share in SA Imports in 2013)
	Unprocessed	4 287	7 164	67%	BRIC (34%); Africa (27%); Asia excl China & India (13%); EU28 (11%); USA (7%) & CAMANZ (4%)
	Processed	9 889	46 554	371%	EU28 (36%); Asia excl China & India (20%); BRIC (19%); CAMANZ (15%); USA (4%) & Africa (2%)
100630	Rice	1 160	6 122	428%	BRIC (59%); Asia excl China & India (39%) & EU (1%)
230400	Soybean Oilcake	659	3 169	381%	CAMANZ (100%)
151190	Palm Oil	733	2 974	306%	Asia excl China & India (99%)
220830	Whiskies	554	2 753	397%	EU28 (94%) & USA (5%)
020714	Chicken Cuts And Edible Offal	413	2 598	530%	EU28 (68%); BRIC (25%) & Asia excl China & India (1%)
210690	Food Preparations Nesoi	419	1 718	310%	EU28 (61%); Asia excl China & India (9%); BRIC (5%) & Africa (1%)
150790	Soybean Oil	277	1 671	503%	EU28 (69%) & CAMANZ (31%)
170199	Sugar	33	1 421	4168%	BRIC (98%) & Asia excl China & India (2%)
151211	Sunflower Seed & Oil	133	1 328	897%	EU28 (55%) & CAMANZ (37%)
020712	Meat And Edible Offal Of Chickens	39	834	2023%	BRIC (74%); EU28 (16%) & CAMANZ (9%)

Source : World Trade Atlas, 2013

Note : CAMANZ – include: Chile, Argentina, Mexico, Australia and New Zealand

: BRIC – Brazil, Russia, India and China

2.3 South Africa's Forestry Trade

South African forestry subsector's exports and imports increased by 75% and 20% respectively between 2003 and 2013, maintaining a positive trade balance (see Table 4). In 2013 South Africa exported a value share of 26% of its forestry products to Asia, making it a leading forestry market. BRIC and Africa remain rising markets for South African forestry while SA exports to the EU28 and United States of America (USA) are showing a slightly

declining trend. The EU 28 is a traditional supplier of forestry products to South Africa, commanding almost half of South Africa's forestry imports in 2013. CAMANZ countries have shown a rapid increase in their supply of forestry products into South Africa. The same trend that was observed for agriculture is true for forestry: exporting unprocessed products and importing processed products.

Table 4: South African forestry destination markets and main supplies of imported products

South African forestry exports					South African forestry imports				
Markets	Export Value: 2003 - Mil Rand	Export Value: 2013 - Mil Rand	10-Year Growth: %	Share in SA Exports: 2013	Suppliers	Imports Value: 2003 - Mil Rand	Imports Value: 2013 - Mil Rand	10-Year Growth: %	Share in SA Imports: 2013
World	6 562	11 425	74%		World	3 468	8 316	140%	
ASIA (excl China & India)	1 334	2 961	122%	26%	EU28	1 866	4 045	117%	49%
BRIC	692	2 869	315%	25%	BRIC	251	1 619	545%	19%
AFRICA	1 524	2 730	79%	24%	USA	471	1 019	117%	12%
EU28	2 313	2 255	-2%	20%	Asia (excl China & India)	468	874	87%	11%
United States	440	341	-23%	12%	CAMANZ	90	555	515%	7%
CAMANZ	171	191			AFRICA	178	126	-29%	2%

Source : World Trade Atlas, 2013

Note : CAMANZ – include: Chile, Argentina, Mexico, Australia and New Zealand

: BRIC – Brazil, Russia, India and China

Table 5 shows forestry products exported by South Africa for the period 2003 – 2013. African countries are a leading destination for the top ten forestry products (by value) exported by South Africa. South Africa exports the least value of forestry product to the USA (for the listed product in Table 5). Chemical woodpulp is the most exported forestry product by

South Africa, increasing by R4.9 billion between 2003 and 2013. Uncoated Kraftliner and Sulfate Chemical woodpulp ranked as second and third most-exported forestry products, while the export values of Newsprint, Kraftliner and Doorframes have declined over the reviewed period.

Table 5: South African exports of forestry products

HS Codes	Product Description	Export Value: 2003 - Mil Rand	Export Value: 2013 - Mil Rand	10 Year Growth: %	Main Markets for South African Agricultural Exports (Share in SA Imports in 2013)
	Forestry	6 561	11 425	74%	
470200	Chemical Woodpulp	2 158	6 019	179%	Asia (43%), BRIC (37%), EU28 (15%)
480419	Kraftliner, Uncoated	524	1 490	184%	EU (78%), CAMANZ (11%), Africa (5%), Asia (2%), USA (1%)
470329	Sulfate Chemical Woodpulp	509	714	40%	BRIC (64%), Asia (36%)
481910	Cartons	138	348	152%	Africa (85%), BRIC (13%), Asia (2%)
490199	Printed Books	136	304	124%	Africa (88%), EU28 (10%), USA (2%)
480100	Newsprint	320	257	-20%	Africa (99%)
480411	Kraftliner	621	181	-71%	Africa (97%), BRIC (2%), Asia (1%)
441820	Doors and Frames	536	133	-75%	Africa (47%), EU28 (34%), USA (18%)
481920	Folding Cartons	93	124	34%	Africa (90%), Asia (2%), BRIC (1%),
482110	Paper Labels	65	109	67%	Africa (97%), EU28 (2%)

Source : World Trade Atlas, 2013

Note : CAMANZ – include: Chile, Argentina, Mexico, Australia and New Zealand

: BRIC – Brazil, Russia, India and China

Table 6 highlights the top ten forestry products imported by South Africa from the world. Printed books represents the product with the highest demand, with the EU28 being the main source.

Of the listed products in Table 6 the EU28 is the leading average supplier, with imports from African countries representing the lowest share.

Table 6: South Africa imports of forestry products

HS Codes	Product Description	Import Value: 2003 - Mil Rand	Import Value: 2013 - Mil Rand	10 Year Growth: %	Main Suppliers of South African Agricultural Imports (Share in SA Imports in 2013)
	Forestry	3 468	8 316	140%	
490199	Printed Books	890	1 641	84%	EU28 (60%), BRIC (33%), USA (19%), Asia (12%), CAMANZ (1%), Africa (0.4%)
470321	Chemical Woodpulp	131	543	315%	CAMANZ (45%), USA (40%), EU28 (12%), BRIC (1%)
481190	Paper, Paperboard	90	448	395%	EU28 (72%), Asia (13%), BRIC (11%), CAMANZ (1%), USA (1%)
481029	Paper and Paperboard	153	337	120%	EU28 (61%), BRIC (29%), Asia (7%), USA (1%)
480421	Sack Kraft Paper	85	336	296%	EU (82%), USA (9%), BRIC (7%), CAMANZ (2%)
441600	Casks, Barrels	183	210	15%	EU28 (81%), USA (13%), CAMANZ (6%),
480920	Self-Copy Paper	54	194	260%	EU28 (64%), ASIA (18%), USA (11%), BRIC (7%)
441299	Plywood	56	189	239%	BRIC (56%), EU (19%), Asia (18%), Africa (12%),
481039	Kraft Paper	63	187	195%	EU28 (87%), BRIC (5%), USA (5%), Asia (2%)
481920	Folding Cartons	15	177	118%	EU28 (69%), BRIC (18%), Asia (9%), Africa (1%)

Source : World Trade Atlas, 2013

Note : CAMANZ – include: Chile, Argentina, Mexico, Australia and New Zealand

: BRIC – Brazil, Russia, India and China

2.4 South African fisheries trade

Table 7 shows fishery trade performance between 2003 and 2013. Fishery imports outgrew exports by R829 million in 2013, with exports declining by 36% between 2003 and 2013. Approximately 50% of South African fishery exports were destined for the EU28; however the value of exports (to the EU28) shrank by 52% between 2003 and 2013. Interesting to note is that South African fishery exports to

BRIC and Asian markets revealed a declining trend between 2003 and 2013, whilst the USA, Africa and CAMANZ countries are rapidly increasing markets for South African fishery products. South Africa sources 80% of its fishery imports from Asia, with imports from BRIC, EU28 and CAMANZ showing a decline.

Table 7: South African fisheries products destination markets and main suppliers of imported products

Markets	Export Value: 2003 - Mil Rand	Export Value: 2013 - Mil Rand	10 Year Growth: %	Share in SA Exports: 2013	Suppliers	Imports Value: 2003 - Mil Rand	Imports Value: 2013 - Mil Rand	10 Year Growth: %	Share in SA Imports: 2013
World	1 903	1 218	-36%		World	417	2 047	5%	
EU28	1 275	614	-52%	50%	Asia (exl China & India)	214	1 635	663%	80%
USA	165	202	22%	17%	BRIC	205	200	-2%	10%
AFRICA	102	134	31%	11%	EU28	84	80	-4%	4%
ASIA (exl China & India)	278	98	-65%	8%	AFRICA	15	38	155%	2%
BRIC	16	10	-37%	1%	USA	24	31	28%	2%
CAMANZ	31	136	340%	11%	CAMANZ	11	5	-52%	0%

Source : World Trade Atlas, 2013

Note : CAMANZ – include: Chile, Argentina, Mexico, Australia and New Zealand

: BRIC – Brazil, Russia, India and China

Table 8 shows that cuttle fish is the most exported, with the EU28 being a key market for the product. It is worthy to note that exports of cuttle fish have

declined by R192 million between 2003 and 2013. Africa is a leading export market for sardine and mackerel.

Table 8: South Africa's fishery exports to the world

HS Codes	Product Description	Export Value: 2003 - Mil Rand	Export Value: 2013 - Mil Rand	10 Year Growth: %	Main Destinations of South African Agricultural Exports (Share in SA Exports in 2013)
Group 5	Fishery	1 903	1 218	-36%	
030749	Cuttle Fish	484	292	-40%	EU28 (98%), Asia (1%), Africa (1%)
030611	Rock Lobster	189	286	52%	USA (64%), Asia (20%), BRIC (3%), EU28 (1%)
160419	Fish, Nesoi	4	220	6 079%	EU28 (76%), CAMANZ (19%), Africa (5%)
160420	Fish, Prepared	6	143	2 284%	EU28 (48%), Australia (37%), Africa (12%), USA (2%)
030341	Albacore	30	71	138%	EU28 (97%), Africa (2%)
160413	Sardines	58	49	-16%	Africa (95%), EU28 (3%)
030549	Fish inc fillets	7	34	397%	CAMANZ (99%), Africa (1%)
160415	Mackerel	0	23	42 580%	Africa (100%)
030232	Yellowfin Tunas	28	18	-33%	USA (75%), Asia (13%), EU28 (10%)
030559	Fish, Dried	35	18	-49%	Asia (56%), Africa (44%)

Source : World Trade Atlas, 2013

Note : CAMANZ – include: Chile, Argentina, Mexico, Australia and New Zealand

: BRIC – Brazil, Russia, India and China

Table 9 highlights the top ten fishery products imported by South Africa. Sardines are the most imported, followed by tuna and cuttle fish. South African demand for sardines and rock lobster

showed a rapid increase over the reviewed periods. Asia is a leading supplier of fishery products into South Africa.

Table 9: South Africa's fishery imports from the world

HS Codes	Product Description	Import Value: 2003 - Mil Rand	Import Value: 2013 - Mil Rand	10 Year Growth: %	Main Suppliers of South African Agricultural Imports (Share in SA Imports in 2013)
	Fishery	417	2 047	391%	Asia (80%), BRIC (10%), EU28 (4%), Africa (2%), USA (2%)
160413	Sardines	17	1 257	7106%	Asia (90%), BRIC (7%), EU28 (2%)
160414	Tunas	139	490	251%	Asia (95%), BRIC (5%)
030749	Cuttle Fish	82	134	63%	BRIC (43%), EU28 (16%), ASIA (9%), CAMANZ (3%), USA (3%)
160411	Salmon	8	37	381%	USA (60%), BRIC (19%), EU28 (14%)
030611	Rock Lobster	3	30	1024%	Africa (99%)
160415	Mackerel	5	20	295%	BRIC (70%), Asia (20%), EU28 (9%)
030551	Cod	8	17	109%	EU28 (13%), Asia (4%)
160420	Fish, Prepared	13	11	-15%	BRIC (49%), EU28 (23%), Asia (25%), CAMANZ (3%)
160540	Crustaceans	3	6	112%	Asia (57%), BRIC (36%), EU28 (5%)
030333	Sole	6	6	10%	Africa (82%), USA (11%), Asia (7%), USA (7%)

Source : World Trade Atlas, 2013

Note : CAMANZ – include: Chile, Argentina, Mexico, Australia and New Zealand

: BRIC – Brazil, Russia, India and China

3 TRENDS IN INPUT COSTS

3.1 Terms of Trade for Primary Agriculture

The rise in input costs at farm level creates what is known as the cost-price squeeze effect. This is best illustrated by calculating the terms of trade at the primary agricultural level by dividing the primary Producer Price Index (PPI) by the Farming Requisite Price Index (FRPI) i.e., the prices received by farmers for their output divided by the prices paid for farm inputs. From Figure 5, it is evident that the terms of trade at the primary agricultural level have deteriorated significantly over time. There was, however, some relief during the commodity price boom from 2005 to 2007.

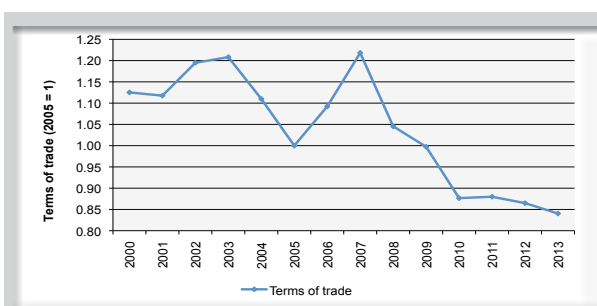


Figure 5 : Terms of trade (2000–2013)

Source : Own calculations based on data from DAFF, 2013

The overall financial position of primary producers is constantly under pressure. Figure 6 shows the real gross income, real expenditure on intermediate goods and services, and the real net farming income

from 1990 to 2013. Over the depicted period, the gross income increased by 84.3 %, while the expenditure on intermediate goods and services increased by 167.1%. This led to an increase of only 102% in the real net farming income. Between 2012 and 2013, the changes were 2.7%, 3.0% and 1.5% respectively. During 2011 the real net farming income increased by 16% and during 2012, the real net farming income increased by 15.3%.

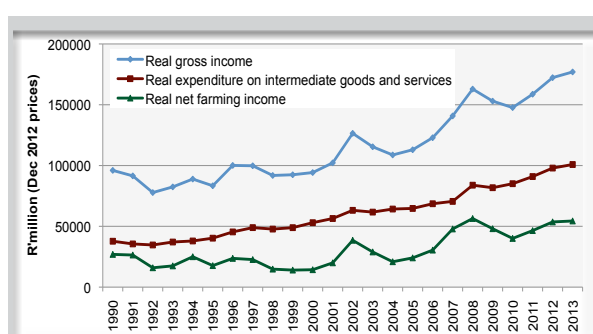


Figure 6 : Real gross income, expenditure on intermediate goods and services and net farming income (1990–2013)

Source : Own calculations based on data from DAFF, 2013

Against this background, this section reflects on the cost trends for selected inputs in the primary agriculture and food value chain which cause this cost-price squeeze.

3.2 Farming Requisite Price Index Trends

The FRPI, as calculated by the Department of Forestry and Fisheries (DAFF), measures the trends of prices farmers pay for farming inputs. This index includes prices of machinery and implements, material for fixed improvements and intermediate goods and services and is a weighted average index.

From Figure 7, it is evident that all the input category prices showed continuous increases throughout the depicted period. The total FRPI increased by 511.7% from 1994 to 2013, with the price of intermediate goods and services increasing the most (by 534.5%), followed by the price of machinery and implements, and then materials for fixed improvements (by 397.2% and 339.8% respectively). The FRPI increased by 7.1% from 2012 to 2013, with the biggest increase of 7.7% being in the price of machinery and implements.

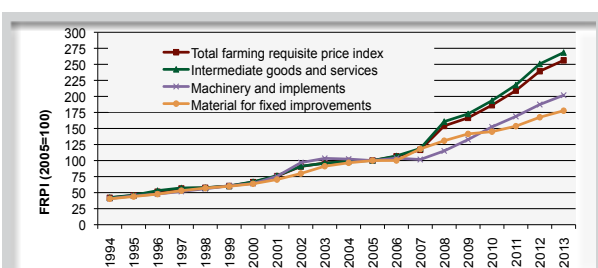


Figure 7 : FRPI (1994–2013)
Source : DAFF, 2013

When considering the price trends of intermediate goods and services, it is clear from Figure 8 that the price of fertilizer and fuel is much more volatile than other prices and peaked at higher levels during 2008. The price of fertilizer came down during 2009 and 2010, but not to the levels prior to 2008 and peaked at new record levels during 2013 after repeated increases during 2011 and 2012. From 1994 to 2013, the price of fertilizer rose by 759.8%, the price of fuel rose by 623.7% and the price of animal feed increased by 601.7%. The price trends of these inputs from 2012 to 2013 were as follows: an increase of 5.9% in the price of fertilizer, an increase of 6.4% in the price of fuel, and an increase of 7.1% in the price of animal feed.

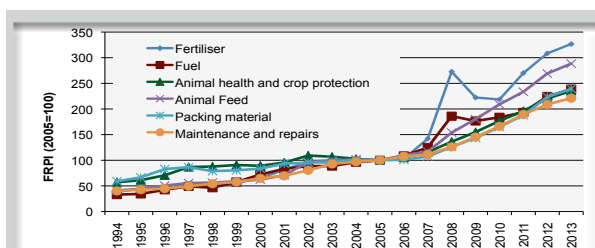


Figure 8 : FRPI of intermediate goods and services (1995–2013)
Source : DAFF, 2013

3.3 Producer Price Index Trends

As mentioned above, the cost of food manufacturing is not just influenced by the price of raw commodities as inputs, but also by non-food inputs. Among these are the cost of diesel, packaging material, electricity and labour. The PPI – as calculated by the Statistics South Africa (Stats SA) – was reclassified and rebased during 2013. The index changed from a first point of sale (factory level) measure to a stage of production measure. Thus the new PPI measures the change in the prices of goods either as they leave their place of production or as they enter the production process. This index includes the production stages of final manufactured goods, intermediate manufactured goods, electricity and water, mining and agriculture, forestry and fishing.

The PPI is measured at production stages and is a weighted average index to indicate the production inflation of the economy. Figure 9 shows the PPI for the different stages of production. From 2008 to 2013, the PPI of final manufactured goods (headline PPI) increased by 26.9%, that of intermediate manufactured goods increased by 20%, electricity and water by 131.7%, mining by 22.9% and the PPI of agriculture, forestry and fishing increased by 12.9%. During 2013 the increases were 6%, 7.9%, 10.6%, 5.3% and 2.5% respectively.

Contributing to the increase of 6% during 2013 in final manufactured goods was an increase of 7.4% in the prices of transport equipment, 6.8% in wood and paper products as well as coke, petroleum, chemical, rubber and plastic products, a 6.3% increase in the price of non-metallic mineral products, a 5.9% increase in the price of food products, beverages and tobacco products, a 5.1% increase in textiles, clothing and footwear prices as well as electrical machinery and apparatus and subcomponents, a 4.5% increase in the price of metals, machinery, equipment and computing equipment prices, and a 3.1% increase in the price of furniture and other manufacturing plastic products.

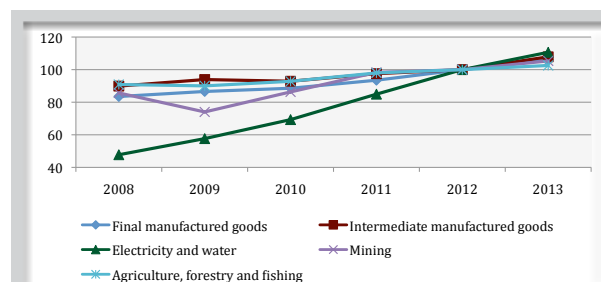


Figure 9 : PPI for selected industry groups (2000–2013)
Source : Stats SA, 2013

Figure 10 shows the PPI for intermediate manufactured goods. These items are not industry-specific, but indicate price trends to industry on the input side. From 2008 to 2013, the PPI of sawmilling and wood increased by 43.7%, rubber products increased by 30.4%, glass and glass products increased by 51.6% and basic and fabricated metals by 12.5%.

Price trends between 2012 and 2013 for the items depicted were as follows: sawmilling and wood increased by 5.1% and rubber products increased by 18.4%, glass and glass products increased by 7.5% and basic and fabricated metals increased by 7.7%.

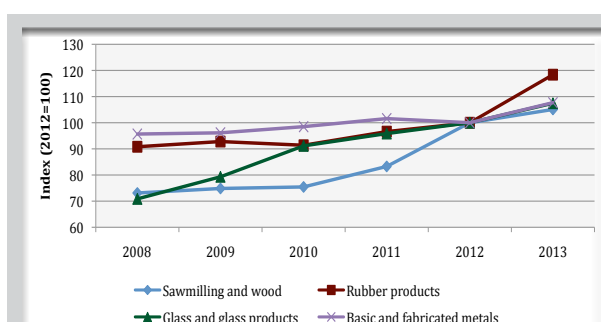


Figure 10 : Producer price index for selected input items (2000–2013)
Source : Stats SA, 2013

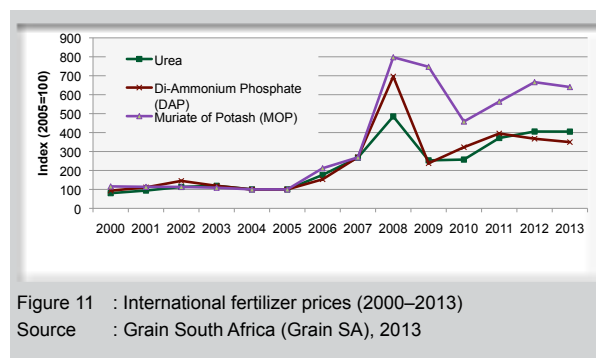
3.4 Trends in the Cost of Selected Inputs

3.4.1 Fertilizer prices

International fertilizer prices

According to the International Fertilizer Industry Association (IFA) (2013), following a 2.2% increase in 2011/12, world fertilizer demand in 2012/13 is seen as stagnating at 176.3 million tons despite strong agricultural fundamentals. Their outlook for 2013/14 is more positive and it is forecasted that global demand will increase by 2.4% to 180.5 million tons. Whilst it is anticipated that agricultural commodity prices will be under downward pressure, they should remain attractive and stimulate fertilizer application.

Figure 11 shows the international fertilizer price movements. Price changes for the items between 2012 and 2013 were as follows: the price of urea decreased by 0.1%, the price of muriate of potash (MOP) decreased by 3.9% and the di-ammonium phosphate (DAP) price decreased by 4.8%.



Domestic fertilizer prices

The South African fertilizer industry is fully exposed to world market forces in a totally deregulated environment, with no import tariffs or government-sponsored measures. The local demand for fertilizer is in the region of 2 million physical tons. This amounts to approximately 750 000 tons of plant nutrient (N + P₂O₅ + K₂O). Table 10 shows the South African fertilizer demand, domestic production and import situation.

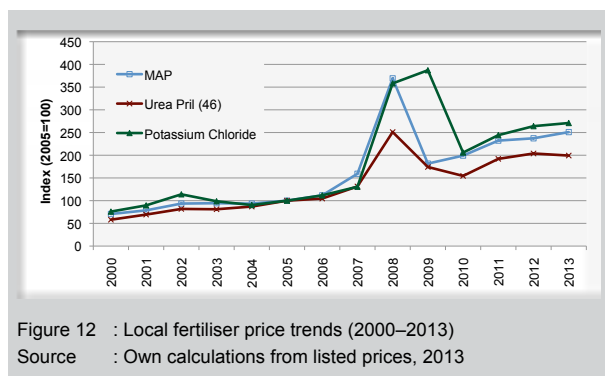
Table 10: The South African fertilizer demand, domestic production and imports

Nutrient	Demand (thousand tons)	Domestic production (thousand tons)	Imports (thousand tons)	Products
Nitrogen (N)	400	250	150	Mostly urea
Phosphate (P ₂ O ₅)	200	Over 75% of demand	<25% of demand	Mostly DAP
Potassium (K ₂ O)	160	None	All	Mostly MOP

Source: Fertilizer Society of South Africa (FSSA), 2013

South Africa is a net importer of potassium and imports approximately 40% of its nitrogen requirements. Thus, domestic prices are significantly impacted by international prices of raw material and fertilizer, as well as shipping costs and the rand/dollar exchange rate.

Figure 12 depicts the price movement of local fertilizer prices. From 2000 to 2013, the local prices of MAP, urea prill (46) and potassium chloride increased by 255.4%, 243.3 % and 256.8% respectively. Figure 12 further shows that, on average, price movements were generally sideways, with some smaller fluctuations until the end of 2007, after which they escalated during 2008, and, with the exception of potassium chloride, decreased during 2009. Price trends for the items depicted between 2012 and 2013 were as follows: MAP increased by 5.8%, urea prill (46) decreased by 2.2% and potassium chloride increased by 2.6%.



3.4.2 Administered and regulated prices

An administered price is defined as the price of a product that is set consciously by an individual producer or group of producers and/or any price that can be determined or influenced by government, either directly or through a government agency/institution without reference to market forces.

Examples of administered prices are the following:

- Housing (assessment rates, sanitary fees, refuse removal, water, electricity and paraffin)
- Transport (petrol, public transport – trains, motor licenses and motor vehicle registration)
- Communication (telephone fees, postage, cell phone calls)
- Recreation and culture (television licence)
- Education (school fees and university, technikon and college fees)
- Restaurants and hotels (university boarding fees).

Regulated prices are those administered prices that are monitored and controlled by government policy. To this end, price regulation does not necessarily imply the presence of an economic regulator, but a restriction on the extent to which prices may vary, depending on government's policy objective.

Examples of administered prices that are regulated are the following:

- Housing (water, electricity and paraffin)
- Transport (petrol)
- Communication (telephone fees, postage, cell phone calls)

Transport

International crude oil prices

Crude oil prices affect food value chains in several complex ways, from influencing the prices of primary agricultural inputs, to inputs used in value addition processes (e.g., packaging) to the distribution of food. Trends in the crude oil price are therefore an important indicator of trends in prices throughout the food value chain.

Figure 13 shows the trends in the crude oil price. Crude oil prices rocketed in the early part of 2007 to reach a peak of US\$145 per barrel in July 2008. The average price per barrel in 2008 was US\$97.55 per barrel. The oil price has decreased significantly since the peak in 2008. According to the International Energy Agency (IEA) (2009), the price of oil depends on a multitude of global economic factors, such as economic growth, future demand and supply of oil, and speculation in the oil market.

Tighter credit availability, the slowdown in economic activity as a result of the global financial and economic crises, and less speculation in the oil market are reasons provided by the IEA for the significant drop in oil prices since mid-2008. On an average annual basis, the price decreased by 36.65% from US\$97.55 per barrel in 2008 to US\$61.80 per barrel in 2009. Unfortunately, this downward trend did not continue during 2010 and the crude oil price increased by 28.9% on an average annual basis.

During 2011 the average crude oil price surpassed the 2008 peak and increased further by 39.5% to an average of \$111.15 per barrel. According to the IEA (2013), supply shortfalls during 2012 caused by the Libyan civil war, international sanctions against Iran and unplanned non-OPEC output stoppages, forced the price past the 2008 peak. Record levels of supply from USA and Iraq and some recovery in Libyan supply during 2012 improved the situation. On the demand side, the global economic recovery lost momentum and there are signs that demand from China is reducing. During 2012 the crude oil price decreased by only 0.7 % with a further 0.9% decrease during 2013.

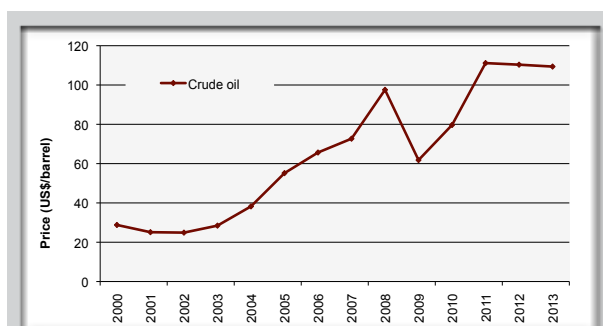


Figure 13 : Crude oil price (2000–2013)

Source : Grain SA, 2014

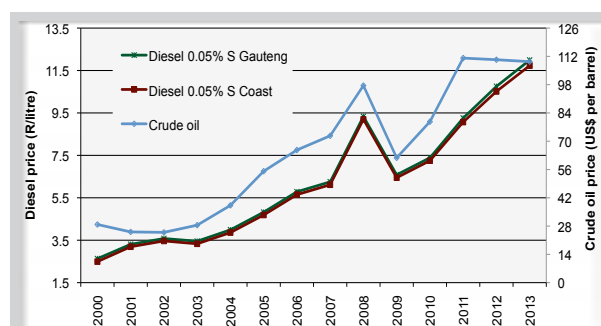


Figure 14 : Diesel prices in Gauteng and at the coast 2000–2013)

Source : South African Petroleum Industry Association (SAPIA) and Grain SA, 2014

Domestic fuel and transport costs

Fuel makes a significant contribution to the variable costs of primary agricultural production, as well as food distribution costs. Figure 14 illustrates trends in the crude oil price and 0.05% sulphur diesel price in Gauteng and at the coast. Variation in the diesel price is affected by the international oil price, the rand/dollar exchange rate and changes in taxes and levies. The crude oil price (dollar per barrel) increased by 279.9% from 2000 to 2013 and the price of 0.05% sulphur diesel in Gauteng and at the coast increased by 355.9 % and 370.7%, respectively.

The diesel price peaked in 2008, achieving an average rate of R9.27/litre, with R9.34/litre in Gauteng and R9.20/litre at the coast. The average diesel price, however, decreased significantly during 2009 (by 29.7%). Over the same period, the crude oil price decreased by 36.7%.

These peaks in the price of diesel were surpassed during 2012 and 2013 when the average diesel price amounted to R10.63 and R11.86 per litre. Price trends for the items depicted between 2012 and 2013 were as follows: 0.05% sulphur diesel in Gauteng increased by 11.5%, 0.05 % sulphur diesel at the coast increased by 11.6%, and the crude oil price increased by 0.9%.

Transport and logistical costs account for a substantial portion of the overall cost of food. The diverse nature, location and size of the various agricultural value chains from farm gate to consumer present a highly complex transport matrix. Furthermore, there is a perception that food prices are driven up by high fuel prices, but never come down when fuel prices drop. Cognisance should be taken of the fact that there are also other cost drivers that affect transport and logistical costs.

Based on the National Freight Database (NFD), three vehicle categories were chosen to represent vehicles typically used to transport agricultural products and livestock. The NFD categorises vehicles by their number of axles. This method is similar to that applied in the calculation of toll road fees.

Figure 15 illustrates the vehicle cost composition over time for different sized vehicles.² Fixed costs include depreciation, cost of capital, licence, insurance and wages. Running costs include fuel, oil, maintenance, tyres and incidental costs. The sum of the fixed and running costs is the total operational cost.

² Assumptions:

- 1 – 85 000 km per annum, 260 work days, 8-ton payload and estimated economical life of 8 years.
- 2 – 180 000 km per annum, 286 work days, 28-ton payload and estimated economical life of 5 years.
- 3 – 200 000 km per annum, 286 work days, 36-ton payload and estimated economical life of 4 years.

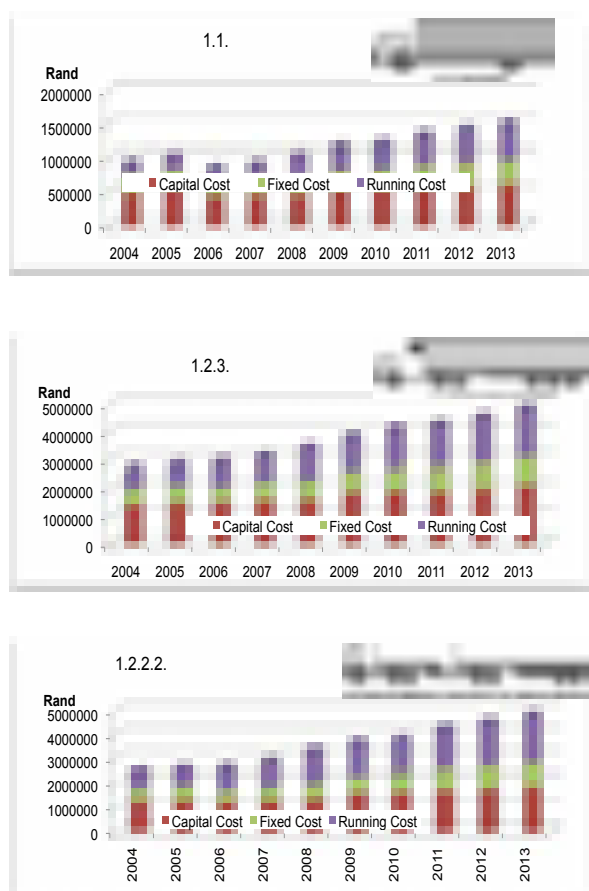


Figure 15 : Vehicle costs over time for different sized vehicle (2004–2013)

Source : Max Braun Consulting Services, 2014

Table 11 : Vehicle cost changes from 2004 to 2012

2-axle vehicles	6-axle vehicles	7-axle vehicles
Capital cost: 24.9%	Capital cost: 48.5%	Capital cost: 48.2%
Fixed cost: 41.7%	Fixed cost: 61.7%	Fixed cost: 62.7%
Running cost: 159.6%	Running cost: 167.3%	Running cost: 216.9%

Source : Own calculations based on Max Braun Consulting Services, 2013

Electricity

Figure 16 shows the annual changes in electricity unit costs from 2011 to 2013. For the last two consecutive years, South Africa has had the second highest increases for the countries depicted, ranging from 23.1% in 2012 to 12.3% in 2013. As one of the depicted countries, South Africa enjoyed the lowest per unit cost for electricity until 2010 followed by Australia. Canada currently has the lowest unit cost. During 2013, a kWh cost of 9.10 US cents in South Africa were recorded, in comparison to 20.56 US cents in Italy, which has consistently been the most expensive country over the past three years.

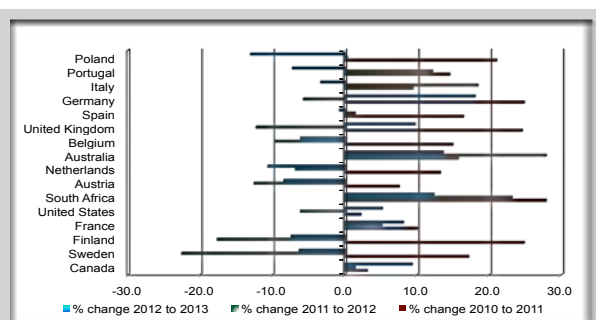


Figure 16 : Annual changes in electricity unit cost (2011, 2012 and 2013)

Source : NUS Consulting, 2013

Labour

Figure 17 shows the regulated minimum wages for primary agriculture. This minimum wage is always revised at the beginning of the year in accordance with labour legislation. In the past, different wages were distinguished in two different areas, but from 2008 the wages were the same for both the areas. The minimum wage for Area A increased by 184.4% from 2003 to 2013 and the wage for Area B increased by 250.2%. Wages increased by 51.2% between 2012 and 2013.

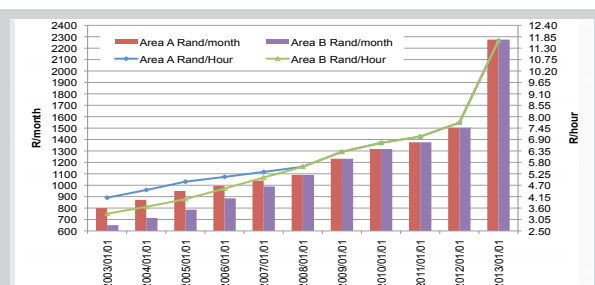


Figure 17 : Minimum wages (2003–2013)

Source : Department of Labour, 2013

4 INFLATIONARY TRENDS FOR SELECTED FOODSTUFFS

4.1 Food and Non-Alcoholic Beverages

The base year for calculating the Consumer Price Index was changed to December 2012 by Statistics South Africa. Following these changes, the overall South African food and non-alcoholic beverages inflation rate for 2012 became 7.4%. The rate averaged 5.8% in 2013, implying that during 2013 the rate of increase of consumer prices eased slightly. Presented in Figure 18 are the food and non-alcoholic beverage index and rate of change.

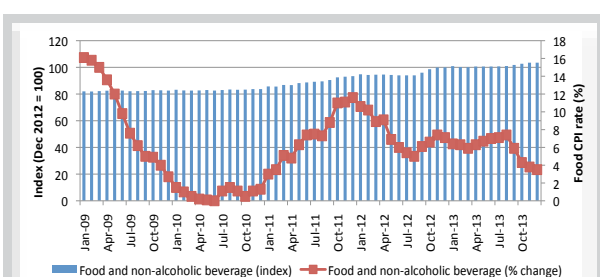


Figure 18 : CPI and CPI rate of change for food and non-alcoholic beverages

Source : Stats SA, 2013

The indices for the different food CPI components are shown in Figure 20. It is evident that the vegetables index showed the largest increase (10.5%) between 2012 and 2013. The meat index was the lowest with a 3.6% increase between 2012 and 2013. Also evident in the graph is that inflation of most of the different food CPI components is increasing on an annual basis.

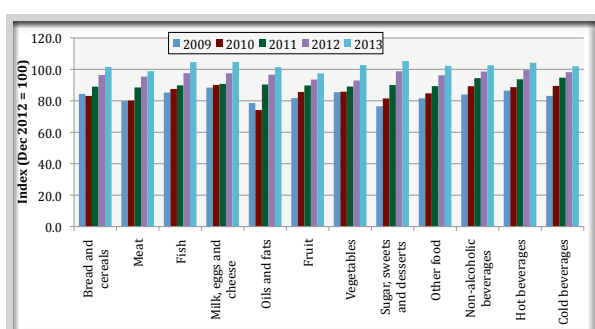


Figure 20 : CPI for different food groups

Source : Stats SA, 2013

The food inflation indices for the nine provinces of the country are shown in Figure 19. The figure shows that Mpumalanga province had the highest food inflation index increase (6.2%) between 2012 and 2013. The Free State province had the lowest increase (4.7%) between 2012 and 2013.

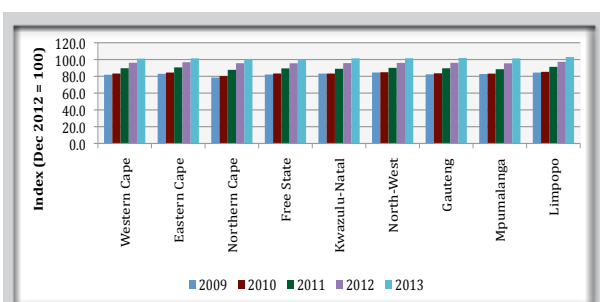


Figure 19 : CPI food and non-alcoholic beverages in the different provinces in South Africa

Source : Stats SA, 2013

The price index for processed and unprocessed products is shown in Figure 21. The index of prices for processed and unprocessed food products increased by 6.6% and 5.1% respectively on average from 2012 to 2013.

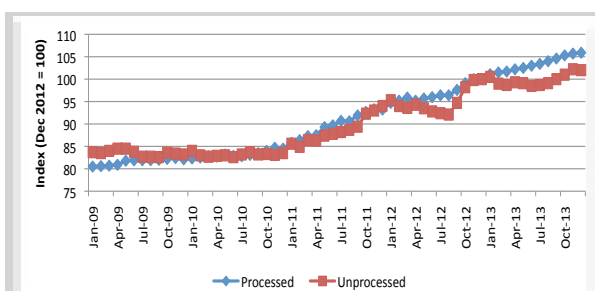


Figure 21 : CPI for processed and unprocessed products

Source : Stats SA, 2013

4.2 Urban Food Price Trends

This section provides insights pertaining to the average retail prices of specific food items in urban areas for 2013 and how they compared to the retail prices for 2012 and 2011. Selected retail prices in the bread and cereal group are shown in Table 12. On average, the retail price of bread and cereals

increased by 7.9% from 2012 to 2013. The bread prices increased by 23.3% and 19.2% for a 600g loaf of brown bread and a 600g loaf of white bread, respectively.

Table 12: Average annual retail prices for certain food items in the bread and cereal group

Bread and cereals	2011	2012	2013	Percentage change 2011–2013	Percentage change 2012–2013
Cake flour 1kg	9.77	10.00	10.45	6.90	4.45
Cake flour 2.5kg	18.37	19.05	20.93	13.96	9.87
Cereals 300g	19.07	20.72	22.32	17.04	7.72
Cereals 400g	27.58	28.20	30.61	10.99	8.57
Cereals 450g	16.97	18.93	19.87	17.08	4.96
Cereals 500g	23.71	25.64	27.17	14.59	5.97
Cereals 750g	30.89	33.46	34.96	13.17	4.48
Loaf of brown bread 600g	5.11	5.31	6.54	28.04	23.30
Loaf of brown bread 700g	7.77	8.45	9.19	18.28	8.87
Loaf of white bread 600g	6.00	6.14	7.31	21.71	19.02
Loaf of white bread 700g	8.72	9.46	10.28	17.82	8.60
Maize special 5kg*	18.43	26.95	27.09	46.96	0.53
Maize super 5kg*	25.11	30.65	29.62	17.98	-3.35
Rice 500g	6.66	6.86	7.15	7.29	4.13
Rice 1kg	12.70	13.91	14.14	11.28	1.63
Rice 2kg	20.52	21.51	21.80	6.26	1.38
Spaghetti 500g	9.30	9.38	9.88	6.31	5.34
Macaroni plain 500g*	8.14	8.49	9.04	11.07	6.46

Source: Stats SA; *AC Nielsen, 2013

Table 13 shows the retail prices of selected meat products from 2011 to 2013. On average, the retail prices for the different beef cuts increased by 0.5% between 2012 and 2013. The average retail price of pork chops increased by 7.5% from 2012 (R55.54 per kg) to 2013 (R59.70 per kg). Fresh chicken portions and whole fresh chicken prices increased by 6.9% and 7.1% respectively, while frozen chicken portions prices increased by 5.5% over the same period.

Table 13: Average annual retail prices for certain food items in the meat group

Meat	2011	2012	2013	Percentage change 2011–2013	Percentage change 2012–2013
Beef brisket – fresh per kg	52.40	57.55	56.49	7.80	-1.85
Beef chuck – fresh per kg	53.55	58.90	57.92	8.17	-1.66
Beef mince – fresh per kg	53.95	60.36	61.33	13.67	1.60
Beef rump steak – fresh per kg	84.77	93.42	95.16	12.26	1.86
Beef T-bone – fresh per kg	69.64	75.90	77.87	11.81	2.59
Chicken portions – fresh per kg	38.76	41.94	44.84	15.70	6.92
Chicken portions – frozen per kg	22.55	23.66	24.96	10.71	5.49
Ham per kg	92.15	88.66	97.81	6.14	10.32
Lamb – fresh per kg	91.33	93.13	96.23	5.37	3.33
Polony per kg	28.05	29.04	27.72	-1.16	-4.55
Pork chops – fresh per kg	52.25	55.54	59.70	14.27	7.49
Whole chicken – fresh per kg	29.60	32.20	34.49	16.53	7.10

Source: Stats SA; *AC Nielsen, 2013

The prices of selected fish products for 2011, 2012 and 2013 are presented in Table 14. The retail prices of tinned fish (excluding tuna) 155g, 215g and 245g increased by 7.9%, 9.3% and 10.9% respectively between 2012 and 2013. The average retail price of tinned tuna -170g - increased by 20.7% during the same period.

Table 14: Average annual retail prices for certain food items in the fish group

Fish	2011	2012	2013	Percentage change 2011–2013	Percentage change 2012–2013
Fish (excluding tuna) – tinned 155g	6.30	6.90	7.45	18.33	7.89
Fish (excluding tuna) – tinned 215g	8.16	8.81	9.63	17.99	9.29
Fish (excluding tuna) – tinned 400g	13.12	13.39	14.84	13.17	10.85
Tuna – tinned 170 g	9.84	11.82	14.27	44.96	20.72

Source: Stats SA, 2013

Table 15 below indicates that all the retail prices of milk and milk products increased between 2012 and 2013, with fresh milk low fat 1ℓ showing the largest increase. It is also evident that when comparing 2013 milk retail prices to those of 2011, the increases are very significant, ranging from 16.3% to 51.8%. This implies that consumers in urban areas are continuing to pay more for milk products.

Table 15: Average annual retail prices for certain food items in the milk group

Milk	2011	2012	2013	Percentage change 2011–2013	Percentage change 2012–2013
Fresh milk full cream 1ℓ*	6.65	9.38	10.09	51.79	7.54
Fresh milk full cream 2ℓ*	15.40	18.11	19.69	27.80	8.69
Fresh milk low fat 1ℓ*	9.56	7.64	7.98	-16.56	4.36
Fresh milk low fat 2ℓ*	15.80	17.72	19.58	23.94	10.47
Skimmed powder milk 1kg*	60.84	70.16	75.11	23.45	7.05
Total butter 500g*	26.92	30.48	31.33	16.38	2.79

Source: Stats SA; *AC Nielsen, 2013

Table 16 shows the average retail prices of eggs and cheese. The retail prices of eggs increased by 9.9% and 8.1% respectively, for 1.5 dozen and 2.5 dozen between 2012 and 2013. However, when comparing the average retail price of eggs in 2013 with those in 2011, the prices increased by 16.8% and 14.7% for 1.5 dozen and 2.5 dozen respectively. The 0.5 dozen eggs decreased by 1.7% between 2012 and 2013. The average retail price of cheddar cheese had a positive growth rate of 9.7% between 2012 and 2013.

Table 16: Average annual retail prices for eggs and cheese

Eggs	2011	2012	2013	Percentage change 2011–2013	Percentage change 2012–2013
Eggs 0.5 dozen	9.28	9.84	9.68	4.36	-1.66
Eggs 1.5 dozen	24.85	26.41	29.01	16.76	9.86
Eggs 2.5 dozen	33.72	35.79	38.67	14.67	8.05
Cheese					
Cheddar cheese per kg	87.41	94.32	103.49	18.39	9.72

Source: Stats SA, 2013

The retail prices for oils and fats increased between 2012 and 2013, with the exception of the medium fat spread 1kg tub as shown in Table 17. The prices of brick margarine 250g and peanut butter 400g increased by 9.2% and 6.5%, respectively. The retail price of margarine spread 250g increased by 3.1% between 2012 and 2013.

Table 17: Average annual retail prices for certain food items in the oils and fats group

Oils and fats	2011	2012	2013	Percentage change 2011–2013	Percentage change 2012–2013
Brick margarine 250g	10.27	10.42	11.37	10.78	9.19
Margarine spread 250g	32.57	32.87	33.88	4.03	3.06
Margarine spread 1kg	18.07	19.18	19.37	7.19	1.02
Medium fat spread 1kg tub*	20.58	23.36	22.85	11.03	-2.18
Total butter 500g*	26.92	30.48	31.33	16.38	2.79
Sunflower oil 750ml	16.09	16.79	17.24	7.16	2.66
Sunflower oil 4l	65.87	66.90	69.65	5.73	4.10
Peanut butter 400g	18.01	20.78	22.14	22.91	6.51

Source: Stats SA; *AC Nielsen, 2013

The average retail prices of apples and oranges increased by 5.5% and 1.1% respectively, between 2012 and 2013, as shown in Table 18. The retail price of bananas decreased by 0.88%, between 2012 and 2013. However, when comparing the retail prices of fruit in 2011 and 2013, all categories showed some increases.

Table 18: Average annual retail prices for fruit

Fruit	2011	2012	2013	Percentage change 2011–2013	Percentage change 2012–2013
Apples – fresh per kg	13.25	13.55	14.30	7.91	5.52
Bananas – fresh per kg	10.38	11.00	10.90	5.07	-0.88
Oranges – fresh per kg	7.30	7.87	7.95	8.90	1.05

Source: Stats SA, 2013

Table 19 shows the average retail prices for selected vegetable products (fresh vegetables, as well as processed vegetables). Tomatoes and sweet corn showed the largest price increases. Urban consumers paid 70.1% and 24.3% more for tomatoes and sweet corn respectively between 2012 and 2013. The average retail price of tomato and onion mix experienced the largest decrease (35.4%) between 2012 and 2013.

Table 19: Average annual retail prices for certain food items in the vegetable group

Vegetables	2011	2012	2013	Percentage change 2011–2013	Percentage change 2012–2013
Baby carrots 1kg*	31.24	34.48	36.12	15.61	4.75
Baked beans – tinned 410g	6.29	6.48	6.87	9.34	5.98
Canned peas 410g*	8.42	8.31	9.16	8.72	10.22
Carrots – fresh per kg	11.56	11.77	12.71	9.96	7.93
Cauliflower – fresh per kg	28.24	30.58	36.62	29.64	19.74
Chopped peeled tomato 410g*	11.23	11.85	12.48	11.11	5.32
Lettuce – fresh per kg	25.80	37.81	35.34	37.00	-6.52
Onions – fresh per kg	8.25	8.28	9.82	19.08	18.64
Potatoes – fresh per kg	9.21	9.03	9.67	4.94	7.03
Pumpkin – fresh per kg	11.25	13.56	14.92	32.66	10.03
Sweet corn – tinned 410g	8.91	9.27	9.95	11.68	7.29
Sweet corn – tinned 420g	10.10	9.85	12.25	21.25	24.32
Sweet potatoes – fresh per kg	10.14	14.45	14.28	40.85	-1.18
Tomato and onion mix 410 g*	11.92	15.64	10.10	-15.25	-35.40
Tomatoes – fresh per kg	8.77	9.86	16.77	91.33	70.13

Source: Stats SA; *AC Nielsen, 2013

The retail price of sugar continued to increase, as shown in Table 20. The retail price of white sugar 1kg and white sugar 2.5kg increased by 9.1% and 9.4% respectively between 2012 and 2013. When comparing the sugar prices between 2011 and 2013, an increase of 21.5% and 18.0% was seen for 1kg of white sugar and 2.5kg of sugar respectively.

Table 20: Average annual retail prices for sugar

Sugar and sweets	2011	2012	2013	Percentage change 2011–2013	Percentage change 2012–2013
White sugar 1kg	10.55	11.75	12.82	21.45	9.12
White sugar 2.5kg	21.07	22.74	24.87	18.02	9.35

Source: Stats SA, 2013

4.3 Rural Food Price Trends

The retail price of 750g instant coffee and 250g instant coffee increased by 4.6% and 3.8% respectively between 2012 and 2013 (see Table 21). On the other hand, the average retail price of instant coffee 100g decreased by 13.4% between 2012 and 2013. The retail price of 62.5g Ceylon black tea, 250g Ceylon black tea and 500g Ceylon black tea increased by 7.3%, 9.3% and 6.8% respectively during the same period. However, the price of 125g Ceylon tea decreased by 7.4% between 2012 and 2013.

Table 21: Average annual retail prices for tea and coffee

Tea and coffee	2011	2012	2013	Percentage change 2011–2013	Percentage change 2012–2013
Ceylon black tea 62.5g	7.31	7.60	8.15	11.50	7.32
Ceylon black tea 125g	15.88	15.15	14.03	-11.65	-7.39
Ceylon black tea 250g	18.27	18.77	20.50	12.25	9.25
Ceylon black tea 500g	34.68	36.84	39.33	13.39	6.76
Instant coffee 100g	21.57	21.88	18.95	-12.12	-13.36
Instant coffee 250g	24.49	27.15	28.18	15.05	3.81
instant coffee 750g	53.80	58.37	61.03	13.44	4.55

Source: Stats SA, 2013

This section provides an insight into the average prices of specific food items in rural areas for 2013 and how they compare to the prices of 2012 and 2011.

Table 22 shows that in 2013, consumers in rural areas paid 9.97% more on average for a loaf of brown bread (700g) and 5.92% more for a loaf of white bread (700g) than they did in 2012. On average, the rural retail price of 2kg of rice decreased by 11.97% between 2012 and 2013. Consumers in the rural areas also paid 22.78% more in 2013 for maize meal 1kg than they paid in 2012.

Table 22: Average annual retail prices for bread and cereals in rural areas

Bread and cereals	2011	2012	2013	Percentage change 2011–2013	Percentage change 2012–2013
Loaf of brown bread 600g	7.10	7.37	7.39	4.01	0.27
Loaf of brown bread 700g	7.75	7.92	8.71	12.39	9.97
Loaf of white bread 600g	7.77	8.11	8.08	3.99	-0.37
Loaf of white bread 700g	8.70	8.95	9.48	3.97	5.92
Maize meal 12.5kg	55.66	65.40	49.92	-10.31	-23.67
Maize meal 1kg	6.66	6.54	8.03	20.57	22.78
Maize meal 2.5kg	14.98	16.94	16.94	13.08	0.00
Maize meal 5kg	26.40	32.37	31.29	18.52	-3.34
Rice 1kg	12.83	12.83	13.70	6.78	6.78
Rice 2kg	25.18	26.30	23.15	-8.06	-11.97
Rice 500g	7.03	7.42	7.27	3.41	-2.01
Samp 1kg	6.55	7.32	8.48	29.47	15.85

Source: Stats SA, 2013

The average price in rural areas of 750ml sunflower oil, 500ml sunflower oil, 500g margarine and 125g margarine increased by 5.3%, 9.3%, 17% and 5.04% respectively between 2012 and 2013 (Table 23). On average, the price of 400g peanut butter increased by 9% during the same period. There were also significant price increases between 2011 and 2013.

Table 23: Average annual retail prices for oils and fats in rural areas

Oils and fats	2011	2012	2013	Percentage change 2011–2013	Percentage change 2012–2013
Margarine 125g	6.47	7.14	7.50	15.92	5.04
Margarine 250g	10.73	10.79	11.32	5.50	4.91
Margarine 500g	16.83	17.36	20.31	20.68	17.00
Peanut butter 270g	13.23	15.27	18.38	38.93	20.37
Peanut butter 400g	17.57	20.91	22.79	29.71	9.00
Sunflower oil 2l	31.41	33.51	33.50	6.65	-0.03
Sunflower oil 500ml	10.64	10.85	11.86	11.47	9.31
Sunflower oil 750ml	13.82	14.53	15.30	10.71	5.30

Source: Stats SA, 2013

Table 24 shows the average retail prices of beans as paid by consumers in rural areas in 2013. The prices of 1kg beans and 500g beans increased by 42.6% and 35.5% respectively between 2012 and 2013.

Table 24: Average annual retail prices for beans in rural areas.

Vegetables	2011	2012	2013	Percentage change 2011–2013	Percentage change 2012–2013
Beans 1 g	14.38	17.29	24.66	71.45	42.63
Beans 500g	8.21	9.41	12.75	55.30	35.49

Source: Stats SA, 2013

Consumers in rural areas paid 2.4% less for 500ml full cream long life milk and 4.8% more for 1l full cream long life milk in 2013 when compared to 2012 (Table 25).

Table 25: Average annual retail prices for milk in rural areas

Milk	2011	2012	2013	Percentage change 2011–2013	Percentage change 2012–2013
Full cream long life milk 1l	11.01	11.19	10.92	-0.82	-2.41
Full cream long life milk 500ml	6.87	7.08	7.42	8.01	4.80

Source: Stats SA, 2013

Table 26 shows the price of tagless tea bags and instant coffee paid by consumers in rural areas in the period from 2011 to 2013. On average, the price of 250g tagless teabags increased by 22.9% between 2012 and 2013. On the other hand, the price of instant coffee decreased by 6.5% and 14.3% respectively during the same period.

Table 26: Average annual retail prices for tea and coffee in rural areas

Tea and coffee	2011	2012	2013	Percentage change 2011–2013	Percentage change 2012–2013
Tagless tea bags 250g	19.01	18.66	22.93	20.62	22.88
Tagless tea bags 62.5g	8.03	7.52	6.93	-13.70	-7.85
Instant coffee 100g	13.42	14.37	13.44	0.15	-6.47
Instant coffee 250g	27.12	28.88	24.76	-8.70	-14.27

Source: Stats SA, 2013

The retail price of sugar in the rural areas showed an increase of 7.7%, 5.3% and 6.9% for 1kg white sugar; 2.5kg white sugar and 500g white sugar respectively between 2012 and 2013 (see Table 27).

Table 27: Average annual retail prices of sugar in rural areas

Sugar	2011	2012	2013	Percentage change 2011–2013	Percentage change 2012–2013
White sugar 1kg	10.45	11.47	12.35	18.18	7.67
White sugar 2.5kg	23.71	25.66	27.03	14.00	5.34
White sugar 500g	5.76	6.12	6.54	13.54	6.86

Source: Stats SA, 2013

4.4 Comparison between Rural and Urban Food Prices

Figure 22 shows the urban versus rural food and non-alcoholic beverage price index between January 2013 and December 2013. On average, the rural food and non-alcoholic beverage index was higher than the urban food and non-alcoholic beverage index. This is an indication that the consumers in rural areas are paying more for food than those in the urban areas ³.

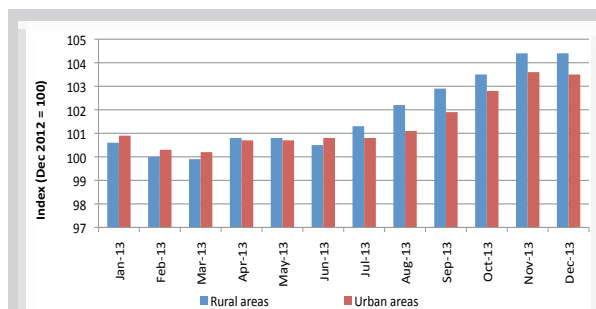


Figure 22 : Comparison between rural and urban food prices in 2013
Source : Stats SA, 2013

³ The reasons for the difference in food prices between the rural and urban shops include: (i) transport costs, which include fuel and maintenance costs, as well as the frequency of trips to and from suppliers and distance from suppliers; (ii) low or no volume discounts for the rural outlets; (iii) stock losses due to spoilage, breakage, products exceeding their expiry dates and stock theft, and (iv) loading costs, which entails casual labour associated with loading at the wholesale markets.



5 TRENDS IN PRICES, FARM VALUES AND PRICE SPREADS

5.1 Introduction

This section provides an overview of the price trends in selected food value chains. Where information is available, international trends are also discussed. This section also provides more detail on the different cost components that contribute to the margin between farm gate prices and the price

the consumer pays for selected food items. One way to investigate this is to look at the farm values of selected products and the farm-to-retail price spreads (FTRPS).



5.2 Price Trends in the Meat Sector

5.2.1 Poultry industry

Figure 23 shows the FAO Poultry Meat Price Index, Brazil export value for chicken and the USA export unit value of broiler cuts. The Poultry Meat Price Index, according to the FAO, increased by 2.7% between 2012 and 2013.

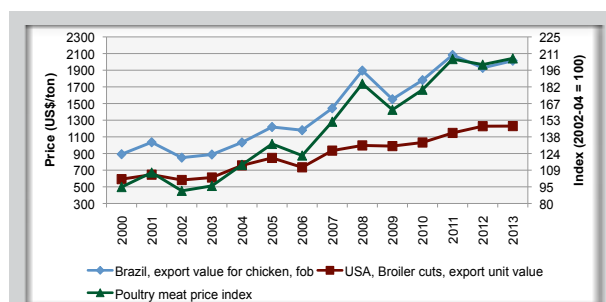


Figure 23 : International poultry price trends

Source : FAO, 2013; IMF, 2013

The retail prices for selected poultry products are shown in Figure 24. The retail price of fresh whole chickens increased by 7.1% between 2012 and 2013, while the retail prices of fresh chicken portions and frozen chicken portions increased by 6.9% and 5.5% respectively between 2012 and 2013.

Retail prices in real terms showed a positive trend for poultry meat with the exception of frozen chicken portions. In real terms, the annual retail price for frozen chicken portions decreased by 0.2% between 2012 and 2013 whilst the prices of fresh chicken portions and fresh whole chickens increased by 1.1%, and 1.3% respectively between 2012 and 2013.

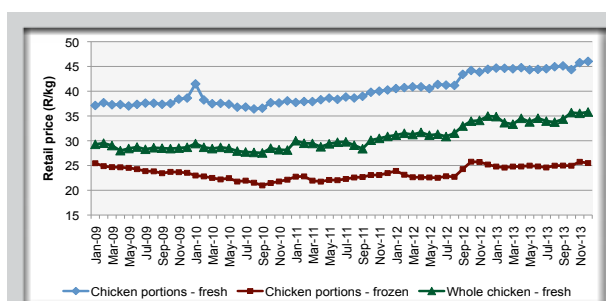


Figure 24 : Poultry retail price trends

Source : Stats SA, 2013

Figure 25 shows trends in the producer prices of poultry. The annual average producer price of frozen chicken increased by 15.5% (from R16.11/kg in 2012 to R18.60/kg in 2013). The annual average producer price of fresh chicken increased by 4.7% (from R18.14/kg in 2012 to R19/kg during the period under review). Compared to 2008 price levels, the 2013 average annual prices of fresh and frozen chickens increased by 13.7% and 30%, respectively. In real terms, frozen chicken producer prices increased by 9.3% between 2012 and 2013, whereas the fresh chicken producer price decreased by 1% over the same period. When compared to 2008, real producer prices decreased by 12.7% and 0.1% for fresh and frozen chicken respectively.

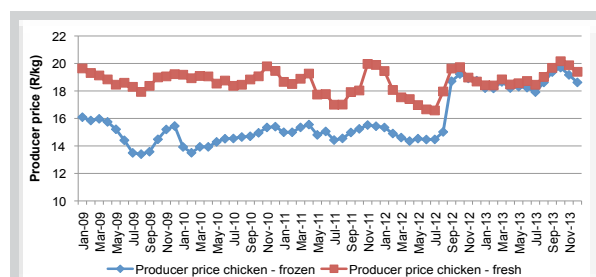


Figure 25 : Poultry producer price trends

Source : Agrimark Trends (AMT), 2013

5.2.2 Beef

Figure 26 shows international beef price trends. According to the FAO Bovine Meat Price Index, the annual average international beef price increased by 1.2% between 2012 and 2013. When comparing the figures for 2011 and 2012, the annual average international beef price increased by 2.1%.

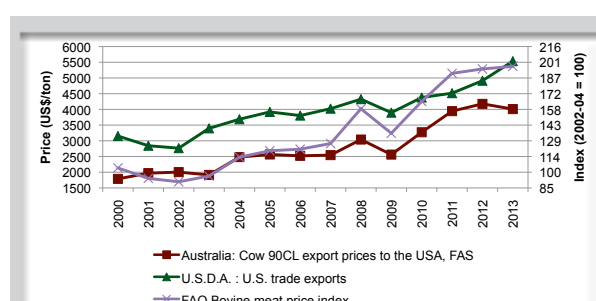


Figure 26 : International beef price trends

Source : FAO, 2013; IMF, 2013

The retail price of beef continued to increase throughout 2013 except for brisket and chuck (see Figure 27). The average retail prices for mince, rump steak, and t-bone increased by 1.6%, 1.9% and 2.6% respectively between 2012 and 2013. The average retail prices for brisket and chuck decreased by 1.9% and 1.7% respectively during 2013.

In real terms, the average retail prices for the different beef cuts showed decreases. The largest decrease was seen for brisket, which decreased by 7.1% between 2012 and 2013. The other cuts decreased by 6.9%, 3.9%, 3.6% and 3% for chuck, beef mince, rump steak, and t-bone respectively between 2012 and 2013.

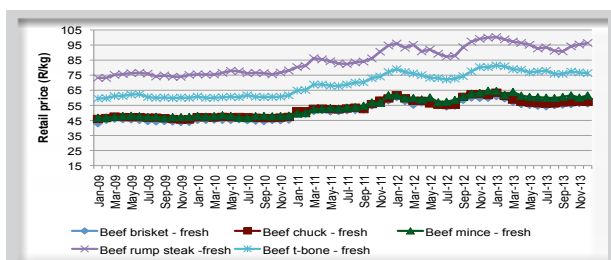


Figure 27 : Retail price trends for different beef cuts
Source : Stats SA, 2013

The producer prices for the different classes of beef are shown in Figure 28. The annual average producer price of beef class C2/C3 decreased by 5.9% between 2012 and 2013, while that of classes B2/B3 and A2/A3 decreased by 3.4% and 1.8% respectively during the same period. In real terms, beef producer prices showed a decreasing trend. The annual average real producer price of class A2/A3 decreased by 7.1% between 2012 and 2013 whilst the annual average real producer prices of classes B2/B3 and C2/C3 decreased by 8.7% and 11% respectively.

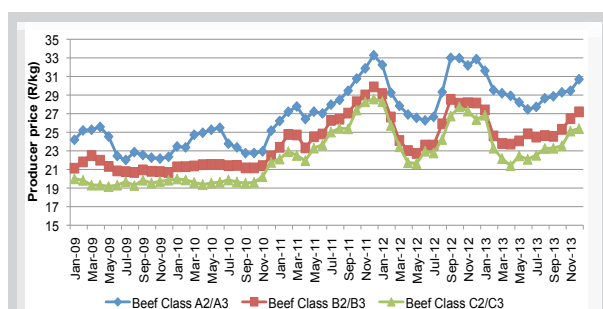


Figure 28 : Beef producer price trends
Source : AMT, 2013

5.2.3 Lamb

International lamb prices continued their upward trend, but with some decline during 2012 and 2013 (Figure 29). According to the FAO Ovine Meat Price Index, the average annual international lamb price decreased by 13.1% between 2012 and 2013. When comparing the New Zealand prices for 2013 to those for 2012, the annual average decrease in the international lamb price was also 13.1%.

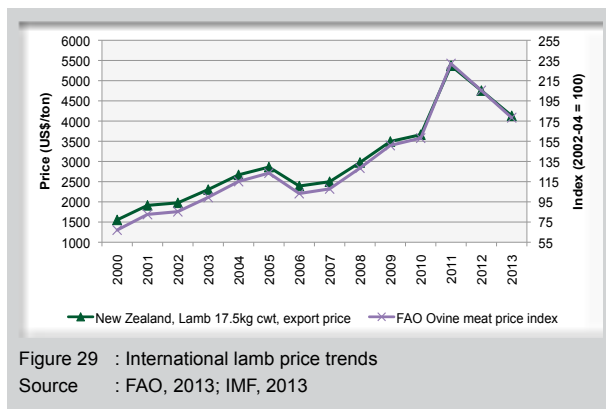


Figure 29 : International lamb price trends
Source : FAO, 2013; IMF, 2013

The domestic retail prices for lamb showed a slight decline during 2012 and 2013 but over the long term an increasing trend is evident (Figure 30). The annual average retail price of lamb increased by 3.3% between 2012 (R93.13/kg) and 2013 (R96.23/kg). The average annual retail price of lamb was 29.4% higher than the average retail price recorded in 2010. In real terms, lamb prices decreased by 2.3% between 2012 and 2013 compared to the 10.4% increase between 2010 and 2013.

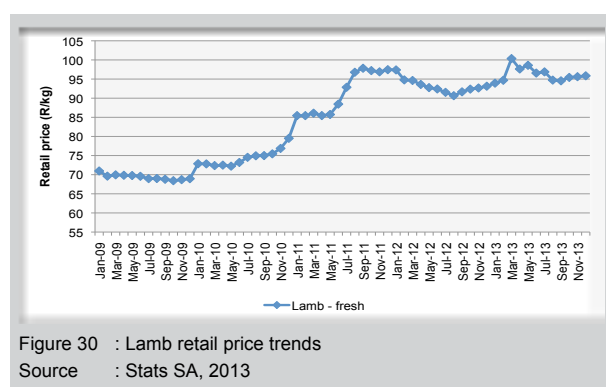


Figure 30 : Lamb retail price trends
Source : Stats SA, 2013

Figure 31 shows that the producer price for the different lamb classes has been following an increasing trend over the years with a noticeable decline during 2012 and 2013. The average producer price of class A2/A3 decreased by 4.2% between 2012 (R44.37/kg) and 2013 (R42.50/kg). The annual average producer prices for class B and class C2/C3 decreased by 8.1% and 4.3% respectively between 2012 and 2013.

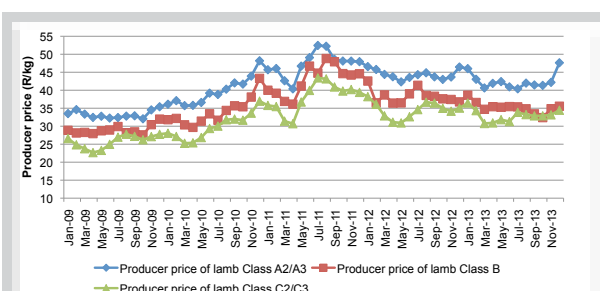


Figure 31 : Lamb producer price trends
Source : AMT, 2013

5.2.4 Pork

According to the FAO Pig Meat Price Index, annual average international pork prices increased by 2.8 % between 2012 and 2013. The annual average USA frozen pork price increased by 1.6 % between 2012 and 2013.

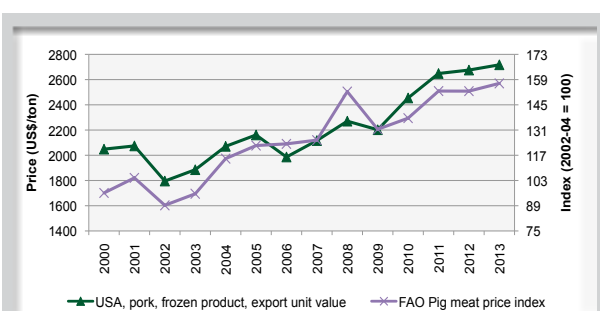


Figure 32 : International pork price trends
Source : FAO, 2013; IMF, 2013

Figure 33 shows the retail price trend of pork chops. The retail price of pork chops increased by 7.1% between 2012 (R55.54/kg) and 2013 (R57.53/kg). In real terms, the average retail price of pork chops increased by 1.3% during the period under review.

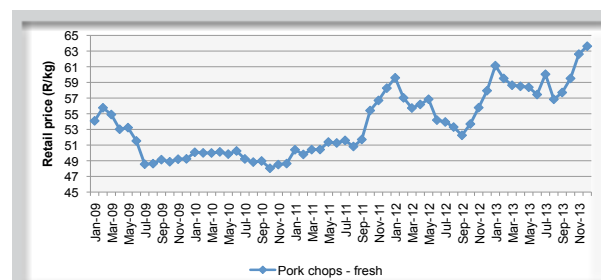


Figure 33 : Pork retail price trends
Source : Stats SA, 2013

Figure 34 shows that the producer price of porkers and baconer has experienced much more volatility since the end of 2011. The annual average retail prices of porkers and baconer increased by 1.9% and 3.6% respectively between 2012 and 2013. During 2013 the annual average real producer prices decreased by 3.7% and 2.1% for porker and baconer respectively.

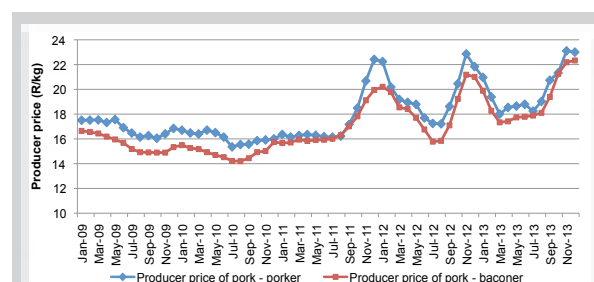


Figure 34 : Pork producer price trends
Source : AMT, 2013

5.3 Dairy sector

5.3.1 Price trends

Figure 35 shows the trends in the raw milk price and retail values for full cream and low fat milk between January 2009 and December 2013. The average retail price in 2013 was R10.09/ℓ and R7.98/ℓ respectively for full cream and low fat milk. Compared to 2012, full cream milk and low fat milk increased from R9.38ℓ and R7.64ℓ, respectively.

Between 2012 and 2013, the price increased, on average, by 7.54% for full cream milk and 4.36% for low fat milk. The average calculated raw milk price increased from R3.49/ℓ to R3.76/ℓ (change of 7.63%) between 2012 and 2013.

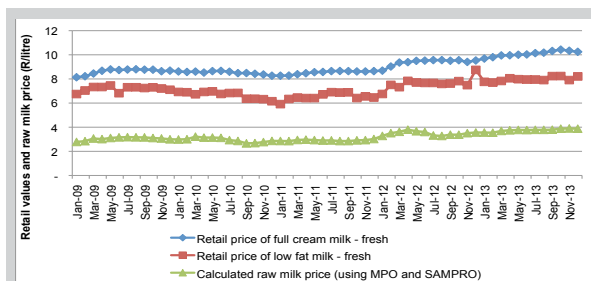


Figure 35 : Raw milk price and retail values for full cream and low fat milk, sachets (R/litre)

Sources : Stats SA, 2013; AC Nielsen, 2013; Milk Producers' Organisation (MPO), 2013; South African Milk Processors' Organisation (SAMPRO), 2013 and own calculations

The main activities to deliver fresh milk to the consumer are depicted in Diagram 1.

Diagram 1: Typical activities include actions from raw milk at the raw milk production unit to packaged pasteurised milk offered for sale in a retail outlet

Action 1: Collection of raw milk at raw milk production unit and delivery to processing plant

- Raw milk procurement management and administration;
- Raw milk tests at raw milk production unit;
- Raw milk pumped into container of transport vehicle;
- Transport of raw milk to processing plant;
- Testing of milk at processing plant;
- Pumping of milk from transport vehicle to bulk tank including filtering;
- During all these actions the milk must be kept cooled at 4°C.

Action 2: Processing and packaging

- Production management and administration;
- Quality assurance;
- Heating of milk to more or less 60°C;
- Standardisation of milk;
- Homogenisation of milk;
- Pasteurisation;
- Cooling of pasteurised milk to 4°C;
- Packing of milk in containers suitable for retail sale;
- Packing of individual containers in crates;
- Crates moved to storage area;
- After pasteurisation the milk must be kept cooled at 4°C.

Action 3: Marketing and distribution

- Marketing management and administration;
- Logistics management and administration;
- Products packed according to orders (milk is ordered in different packaging sizes, different types of packaging and different classes according to fat content);
- Loading of transport vehicles;
- Transport to retail shops;
- Packaging of products on retail shelves;
- Removal of damaged and outdated products;
- Collection of empty crates;
- During all these actions the milk must be kept at 4°C.

Action 4: Retailing

- In retail store the milk must be kept at 4°C.

Source: Office of SAMPRO, 2010

In order to get a better understanding of the margins and costs in the fresh milk dairy chain, industry stakeholders, including the Office of SAMPRO, were consulted with regard to the off-farm value chain. Two different scenarios were constructed to explain the costs and margins in the fresh milk value chain as applicable to full cream pasteurised milk in a 2ℓ container, namely:

- (i) A low value-added scenario:
 - Raw milk close to processing plant;
 - Less complex technology;
 - Cheaper with respect to type and size of packaging;
 - Direct surroundings of distribution; and
 - Limiting marketing- and advertising costs.
- (ii) A high value-added scenario:
 - Raw milk farther from processing plant;
 - More complex technology;
 - Type and size of packaging are more expensive;
 - Distribution to further outlets; and
 - Marketing- and advertising costs.

It should be noted that the typical contribution of each value-adding activity to the retail selling price of full cream pasteurised milk in a 2ℓ container will differ from firm to firm, from region to region, from one to the other type and size of packaging and from season to season. Information revealed by a number of highly experienced and informed milk processors indicated what they regard as typical low- and high-cost scenarios in South Africa for each of the value-adding activities. Table 28 shows the distribution costs and margins along the fresh milk dairy chain per action of both a low- and high cost scenario.

From Table 26 it is evident that in January 2014 the raw milk price contributed between 32.4% and 40.1% of the total selling price to the consumer, whereas in January 2013 it contributed between 31.5% and 38.9%. The raw milk price for the low cost scenario in January 2014 was R7.60 per 2ℓ container, compared to the R6.80 in January 2013. This shows a growth rate of 11.8%. The raw milk price for the high cost scenario was R8.35 and R7.60 respectively in January 2014 and January 2013, indicating a growth rate of 9.9%.

Action 1 - consisting of the raw milk collection and transportation to the processing plant of both the low- and high cost scenarios - contributed 4.5% to the total price consumers paid in January 2014. Action 2 (the sum thereof) contributes between 19% and 21.2%, while Action 3 (excluding the selling price to the retailer) contributes a significant proportion, of between 22.9% and 26.6% in total, to the selling price of the consumer in January 2014.

When considering the individual items of the actions mentioned, marketing and distribution by the milk processor (part of action 3) contributes the greatest proportion of 15% to 16.5% of the selling price. The retailer mark-up (part of action 4) constitutes approximately 13.5% to 15.9% of the difference between the price the consumer pays and the price at which the retailer procures the milk. This spread includes all costs e.g., electricity, labour, distribution costs, etc., at retail level. Container (2 ℓ plastic or gable top) costs constitute the third highest proportion. Between January 2013 and January 2014 the growth for the low- versus the high cost scenarios of the selling price to the consumer, varied between 6.6% and 8.3%.

Table 28: Typical cost composition of pasteurised full cream milk in 2-litre containers offered for sale in a retail store

Item	Low cost Jan-14			Low cost Jan-13			Low cost Jan-12			Low cost Jan-11	
	R/2ℓ	% of selling price		R/2ℓ	% of selling price		R/ℓ	% of selling price		R/ℓ	% of selling price
Raw milk price (2 ℓ)	7.60	40.1	11.8	6.80	38.9		6.40	38.6		5.70	38.6
Action 1											
Raw milk collection and transport to processing plant	0.85	4.5	13.3	0.75	4.3		0.70	4.2		0.53	3.6
Action 2:											
Processing and quality assurance	1.70	9.0	6.3	1.60	9.1		1.50	9.1		1.26	8.5
Container (2ℓ plastic or 2ℓ gable top)	1.75	9.2	9.4	1.60	9.1		1.50	9.1		1.37	9.3
Filling of 2ℓ containers	0.15	0.8	7.1	0.14	0.8		0.12	0.7		0.11	0.7
Action 3:											
Marketing and distribution by milk processor	2.85	15.0	7.5	2.65	15.2		2.55	15.4		2.42	16.4
Interest, profit and overhead costs	1.50	7.9	3.4	1.45	8.3		1.40	8.4		1.37	9.3
Selling price to retailer	16.40	86.5	9.4	14.99	6.1.1		14.17	85.5		12.76	86.4
Action 4:											
Retailer mark-up	2.55	13.5	2.0	2.50	14.3		2.40	14.5		2.00	13.6
Selling price to consumer	18.95	100.0	8.3	17.49	100.0		16.57	100.0		14.76	100.0

Item	High cost Jan-14			High cost Jan-13			High cost Jan-12			High cost Jan-11	
	R/2ℓ	% of selling price		R/2ℓ	% of selling price		R/2ℓ	% of selling price		R/2ℓ	% of selling price
Raw milk price (2 ℓ)	8.35	32.4	9.9	7.60	31.5		7.30	31.9		6.70	34.2
Action 1											
Raw milk collection and transport to processing plant	1.15	4.5	12.7	1.02	4.2		0.95	4.1		0.74	3.7
Action 2:											
Processing and quality assurance	2.50	9.7	4.2	2.40	9.9		2.25	9.8		1.47	7.5
Container (2ℓ plastic or 2ℓ gable top)	2.75	10.7	5.8	2.60	10.8		2.45	10.7		1.58	8.0
Filling of 2 ℓ containers	0.20	0.8	11.1	0.18	0.7		0.15	0.7		0.11	0.5
Action 3:											
Marketing and distribution by milk processor	4.25	16.5	7.6	3.95	16.4		3.75	16.4		3.47	17.7
Interest, profit and overhead costs	2.45	10.1	2.1	2.40	9.9		2.25	9.8		2.21	11.2
Selling price to retailer	21.65	84.1	7.4	20.15	83.4		19.10	83.4		16.26	82.9
Action 4:											
Retailer mark-up	4.10	15.9	2.5	4.00	16.6		3.80	16.6		3.36	17.1
Selling price to consumer	25.75	100.0	6.6	24.15	100.0		22.90	100.0		19.62	100.0

Source: Office of SAMRO and own calculations, 2013

When attempting to explain the difference between what farmers receive for their milk and what consumers pay for milk, cognisance should be taken regarding the complexity of the different processes involved from sourcing raw milk from a cow until the milk and its by-products are sold.

To produce 1ℓ of packaged, standardised pasteurised milk, more than 1ℓ of raw milk is required as the processes of pasteurisation and packaging create a loss of milk volume and as standardisation of the fat content of milk often means that fat (cream) is removed, a reduced quantity of milk is available to sell.⁴ If the fat content of the non-standardised raw milk is higher than the fat level required, the quantity of standardised milk will be lower than the quantity of non-standardised raw milk used as input. To reduce the fat content, cream (consisting typically of 40% fat) should be removed from the milk and as a result, the quantity of milk will reduce. For example:

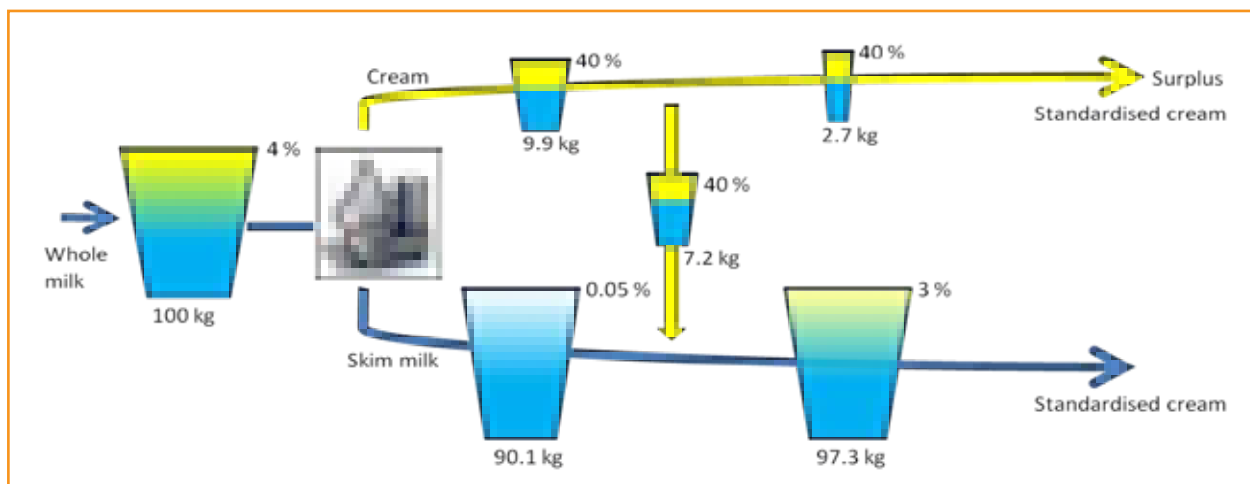
⁴ Verified by dairy scientist, Mr. G. Venter (M.Sc. Food Science)

100kg milk with 4% fat (or 4kg fat):

= 90.1kg of skimmed milk with 0.05% fat or 0.04kg fat plus 9.9kg of cream containing 40% fat or 3.9kg of fat (The fat of the two products, namely 0.04kg plus 3.96kg = 4 kg)

=97.3kg of milk with 3% fat or 2.92kg of fat plus 2.7kg of cream containing 40% fat or 1.08kg fat (The total fat of the two products is 2.92kg and 1.08kg = 4kg).

The diagram below illustrates the treatment of 100kg whole milk with 4% fat. The requirement is to produce an optimal amount of 3% standardised milk and surplus cream containing 40% fat.



Source: Dairy Processing Handbook, 2003

If the fat content of the non-standardised milk is lower than the required level, cream should be added and as a result the quantity of standardised milk will be higher than the quantity of the milk with too-low fat content which was used as input.

Figure 36 shows the trends in the powdered milk retail price for 250g and 500g packets between January 2009 and December 2013. The average retail prices in 2013 were R31.48 and R43.00 for 250g and 500g powdered milk, respectively. Compared to 2012, the prices of 250g and 500g powdered milk were lower at R27.14 and R39.83 respectively. Between 2012 and 2013, the price increased, on average, by 15.99% and 7.97% for 250g and 500g powdered milk.

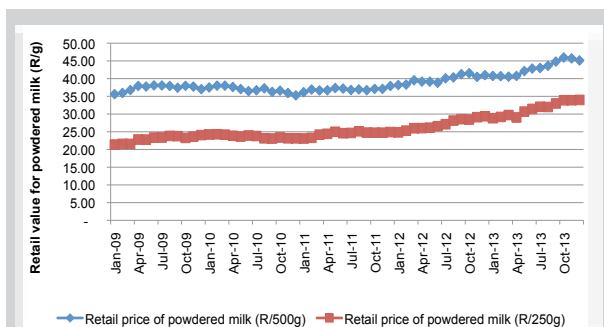


Figure 36 : Retail price of powdered milk, (R/kg)

Source : Stats SA, 2013

Figure 37 show the trends in the retail price for full cream and low fat milk, together with the retail values for cheddar cheese and butter, between January 2009 and December 2013. The average retail prices in 2013 were R31.48 and R43.00 for 250g and 500g powdered milk, respectively.

Compared to 2012, the prices of 250g and 500g powdered milk were lower at R27.147 and R39.83, respectively. Between 2012 and 2013, the price increased, on average, by 15.99% and 7.97% for 250 g and 500g powdered milk, respectively.

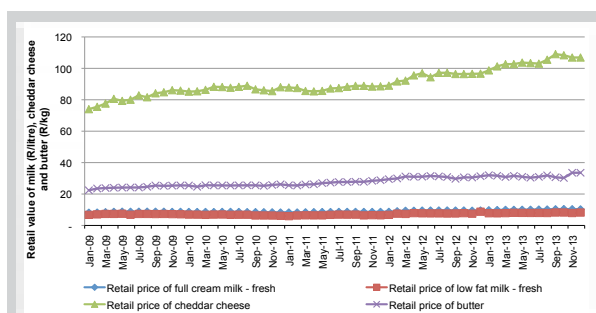


Figure 37 : Retail price of milk, (R/litre), cheddar cheese and butter, (R/kg)

Sources : Stats SA, 2013.

5.4. Price Trends in the Maize Sector

5.4.1. Production, consumption and stock levels of white maize

White maize is the primary staple food in South Africa and 80% is used for human consumption, mainly in the form of maize meal. South African farmers produce sufficient white maize for consumption as illustrated in Figure 38. The marketing season for maize is from 1 May to 30 April.

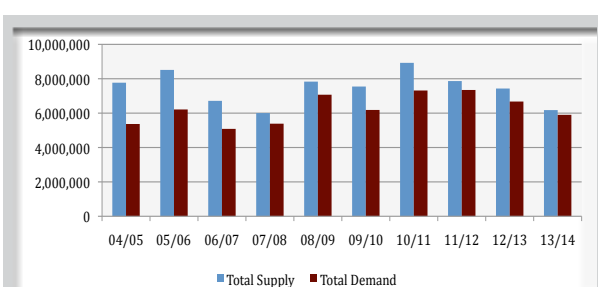


Figure 38 : Domestic maize production, consumption and area harvested (white maize)

Source : SAGIS, 2013

Stock levels for white maize were put under pressure due to very high expected exports in 2013. Figure 39 illustrates the carry out for white maize and required pipeline (consumption for 45 days). Carry out as a percentage of commercial demand is also the lowest for the past 15 years.

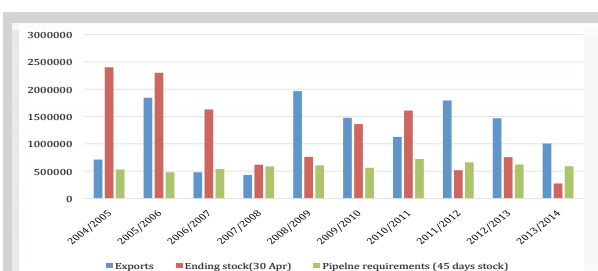


Figure 39 : Total exports, pipeline requirements, carry out and carry out as a % of total domestic demand (white maize)

Source : SAGIS, 2013

White maize is predominately used for human consumption and yellow for animal feed. This tendency can change depending on the price difference between white and yellow. If white maize is trading below yellow maize then feed manufacturers tend to use white in their feed rations. If yellow maize trades below white the same tendency does not happen in the market, due to the sophisticated preference of the maize meal market. Table 29 illustrates the breakdown of consumption for the 2013/14 season.

The per capita consumption (processed for humans) of white maize increased from 74.66 kg in 2003/04, and peaked at 77.59 kg in 2012/13 as illustrated in Figure 40. The average consumption over the past 10 years constitutes 79.03 kg.

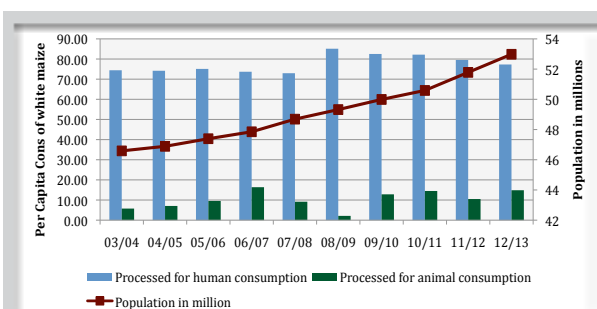


Figure 40 : Domestic maize production, consumption and area harvested (white maize)

Source : SAGIS, Stats SA 2013 and own calculations

5.4.2. Production, stock levels and consumption of yellow maize

Although yellow maize is the primarily used in the feed industry, approximately 10% is used for human consumption. South African farmers produced sufficient yellow maize for consumption as illustrated in Figure 41. The marketing season for maize is from 1 May to 30 April.

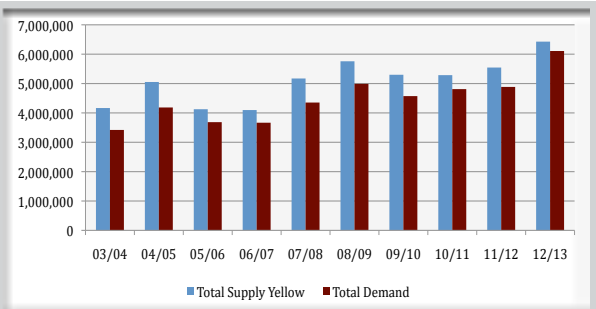


Figure 41 : Domestic maize production, consumption and area harvested (yellow maize)
Source : SAGIS; Grain SA, 2013 and own calculations.

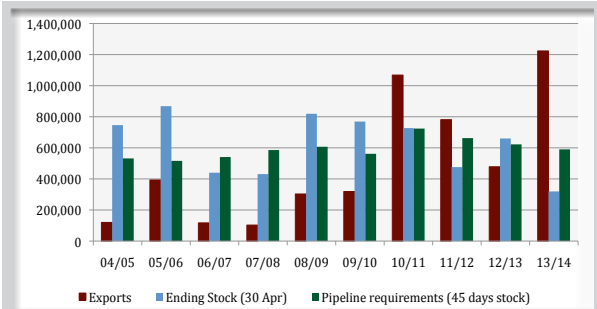


Figure 42 : Total Exports, Pipeline requirements, carry out and carry out as a % of total domestic demand (yellow maize).
Source : SAGIS, Grain SA, 2013.

Stock levels for yellow maize also came under pressure from higher than expected exports in 2013. Figure 42 illustrates the carry out for white maize and required pipeline (consumption for 45 days) of 679 tons.

5.4.3. The South African Maize Balance Sheet

South Africa is self-sufficient in maize production (both yellow and white) and is a net exporter of maize.

Table 29: South African maize balance sheet for 2013/14 season

	White	Yellow	Total
CEC (Crop Estimate)	5,606,800	6,203,800	11,810,600
CEC (Retention)			
SUPPLY			
Opening stock (1 May)	757,214	660,179	1,417,393
Production deliveries	5,349,542	5,636,197	10,985,739
Imports	0	79,682	79,682
Surplus	69,792	51,174	120,966
Total Supply	6,176,548	6,427,232	12,603,780
DEMAND			
Processed	4,785,382	4,479,638	9,265,020
-human	4,110,783	458,182	4,568,965
-animal	636,450	4,008,626	4,645,076
-gristing	38,149	12,830	50,979
-bio-fuel	0	0	0
Withdrawn by producers	33,851	117,277	151,128
Released to end-consumers	64,115	274,023	338,138
Net receipts(-)/disp(+)	11,561	13,574	25,135
Deficit	0	0	0
Exports	1,006,848	1,223,266	2,230,114
Total Demand	5,901,757	6,107,778	12,009,535
Ending Stock (30 Apr)	274,791	319,454	594,245
- processed p/month	398,782	373,303	772,085
- months' stock	0.700	0.900	0.800
Pipeline requirements (45 days stock)	589,979	552,284	1,142,263

Source: SAGIS, 2013

5.4.4. White maize price trends

Figure 43 explains the trends in the white maize prices in South Africa. The average spot price for white maize started to increase in September 2013. The primary reason was an estimation of very low stock levels later in the season. The spot price reached a high of R3765 in the beginning of March 2014. This was R2150 above import parity. The maize price then declined as the new season crop started to realise.

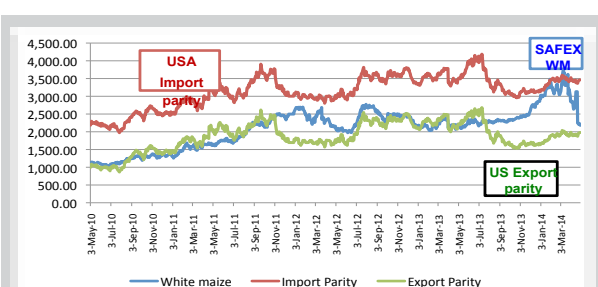


Figure 43 : Import parity, export parity and SAFEX white maize price
Source : Grain SA, 2011.

5.4.5. Yellow maize price trends

Figure 44 explains the trends in the yellow maize prices in South Africa. The average spot price for yellow maize started to increase in September 2013. The primary reason was an estimation of very low stock levels later in the season. The spot price reached a high of R3850 in the beginning of March 2014. This was R300 above import parity. The maize price then declined as the new season crop started to realise.

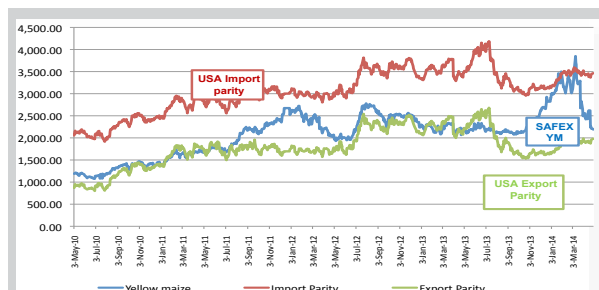


Figure 44 : Import parity, export parity and SAFEX yellow price
Source : Grain SA, 2011.

5.4.6. Real farm value of special maize meal

Figure 45 shows the trends in the real farm value⁵ or real farm gate price and real retail value of special maize meal between January 2005 and December 2013. The real farm value of special maize meal increased from mid-2005 and peaked at R2 370/ton in July 2007, after which it declined gradually to reach R1114 in October 2010. The real retail value of special maize meal followed a similar trend, but not with the same magnitude. It increased more rapidly with maize price increases but did not decrease at the same rate when maize prices decreased.

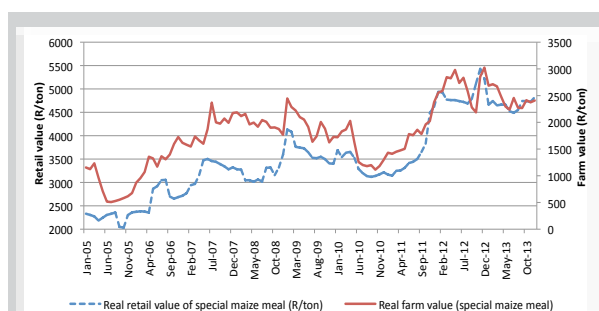


Figure 45 : Real retail value and farm value of special maize meal
Source : SAFEX, Stats SA and own calculations, 2013.

⁵ Farm value = SAFEX white maize spot price - (transport cost to the silo + silo handling, grading & commission) + 1% physical loss + average storage cost for 60 days + Transport differential/extraction rate.

Figure 46 shows the trends in the real farm value and real retail value of super maize meal between January 2005 and December 2013. The real farm value of super maize meal increased from R650 per ton in mid-2005 and peaked at R3 000 per ton in July 2007. The real farm value was R3750/ton in December 2012 and then it decreased to R2980 in December 2013.

The real retail value of super maize meal peaked later at R3030 per ton in January 2009. It peaked at R6030 in January 2012 and decreased to R5130 in December 2013.

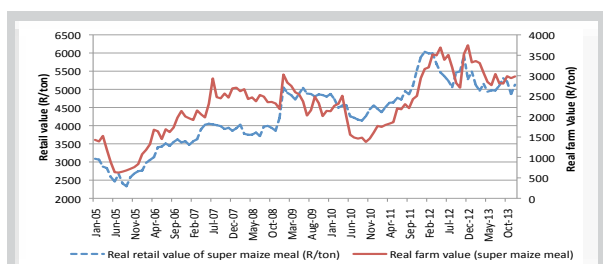


Figure 46 : Real retail value and farm value of super maize meal
Source : SAFEX, Stats SA and own calculations, 2011.

Figure 47 shows the trends in the farm value shares for super maize meal and special maize meal. The two farm value shares increased between mid-2005 and mid-2007. Between 2011 and 2013 the average farm value share of super fluctuated by about 50% and special maize meal increased from 40% to 60%.

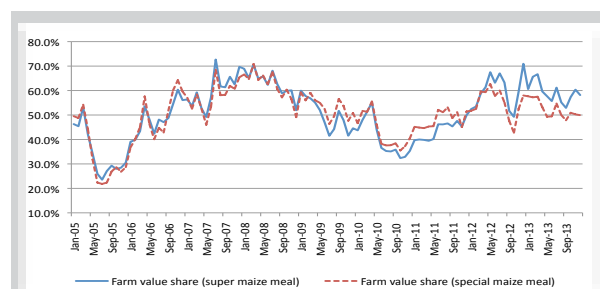


Figure 47 : Real farm value share of special and super maize meal
Source : SAFEX, Stats SA and own calculations, 2013.

5.5. Wheat Sector

5.5.1. Production and imports

South Africa produced 1.837 million tons of wheat in the 2012/13 season⁶ from 511 200 hectares. This is a slight decrease from the previous season of 1.973 million tons. South Africa showed a declining trend in the importation of wheat for the period as depicted in Figure 48. South Africa imported 1.393 million tons in the 2012/13 season. South Africa exported 304 236 tons in the 2011/12 season to neighbouring countries.

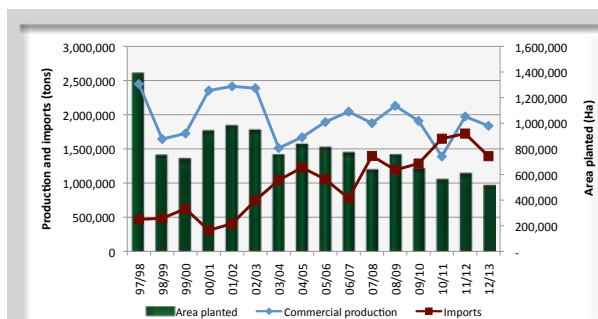


Figure 48 : Area planted, production and imports (tons)

Source : SAGIS, 2013

⁶ RSA production season for 2012/13 starts 1 October 2012 and runs to 30 September 2013.

5.5.2. Consumption

South Africans consumed 3.392 million tons of wheat in the 2012/13 season. Less than 1% of wheat consumed in South Africa is for the feed market; the rest is for human consumption. Figure 49 illustrates the domestic wheat consumption and production for the past ten years.

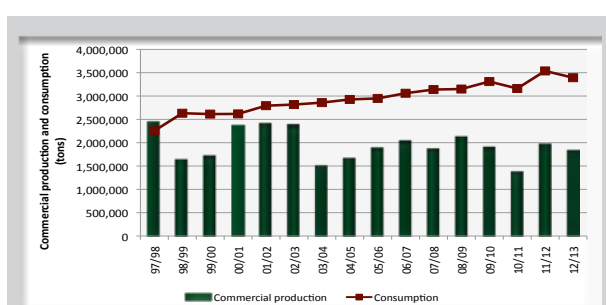


Figure 49 : Wheat consumption and production

Source : SAGIS, 2013

5.5.3. Price trends

South Africa is a net importer of wheat and hence the local wheat price tends to trade close to import parity levels (see Figure 50). This partly implies that changes in the exchange rate and the world price for wheat will be reflected almost immediately in the local price of wheat.

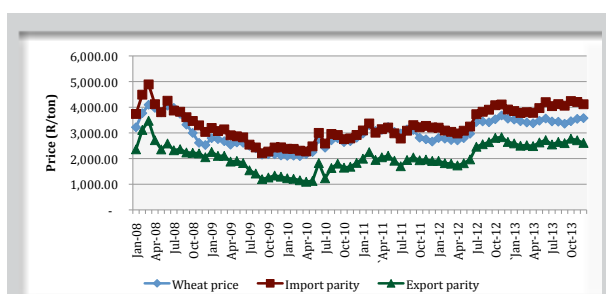


Figure 50 : Import parity, export parity and SAFEX wheat price

Source : SAGIS, 2014; SAFEX, 2013

5.5.4. Real Farm gate and retail prices of brown and white bread

Figure 51 depicts the real farm gate price of wheat per ton lagged by four months compared to the retail price of brown and white bread. The average real farm gate price of wheat (lagged by four months) increased by 5.05% from R2 730.59/ton in 2012 to R2 868.48/ton in 2013. The real retail prices for white and brown bread increased slightly by 2.03% and 2.28% respectively, from 2012 to 2013.

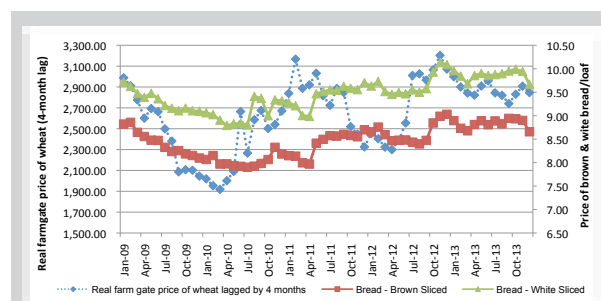


Figure 51 : Real farm gate price of wheat and real retail prices of brown and white bread

Source : SAFEX, 2014; Stats SA, 2014 and own calculations

⁷ Note: In order to calculate the real farm value and real retail value of a ton of flour used for a 700 g loaf of white bread the following assumptions were made: The extraction rate from 1 ton of wheat is 0.8 tons of white bread flour and 0.87 tons of brown bread flour. An average of 464 grams of flour is needed to bake a 700g white bread and 440g to bake a 700g brown bread.

Figure 52 illustrates the percentage difference in real prices between white and brown bread from 2009. On average during 2013, white bread was 11.76% more expensive than brown bread. Brown bread is zero rated for value added tax (VAT), while 14% VAT is charged on white bread.

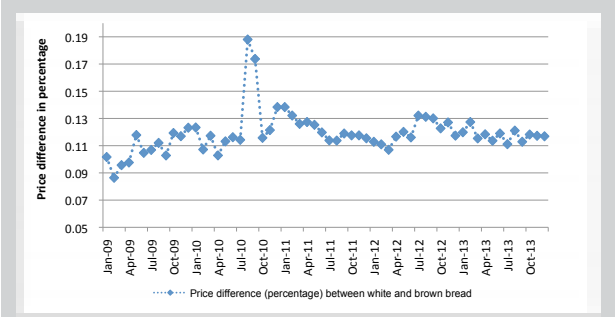


Figure 52 : Price difference between white and brown bread
Source : Stats SA, 2014 and own calculations



5.6. Sunflower Seed

Sunflower seed is mainly used as an input in the manufacturing of sunflower oil. The meal is normally used in the feed industry. The husk is used as bedding in the broiler industry or as an energy source at processing plants. The cultivation of sunflowers mostly occurs in the North West and Free State provinces. Sunflower seed constitutes about 5% of the total grains cultivated in South Africa.

5.6.1. Production and consumption of sunflower seed

Figure 53 illustrates the area planted, the production and consumption of sunflower seed. The area planted varied between 316 350 ha and 828 000 ha between 1998 and 2014, with 504 700 ha were planted in the 2013/14 season. The decision for a farmer to plant sunflower depends on the price of substitute product such as maize as well as climatic conditions at that specific time. Sunflower is well conditioned for South African weather conditions.

Sunflower can be produced economically in South Africa even if planting conditions are not good enough for other crops. The average yield (tons/ha) differs between 0.95 and 1.55 tons per ha over the past ten years. Processed sunflower seed for consumption also indicates volatile trends over the past ten years and increased by 5.9% from December 2012 (572 519 tons) to December 2013 (606 200 tons).

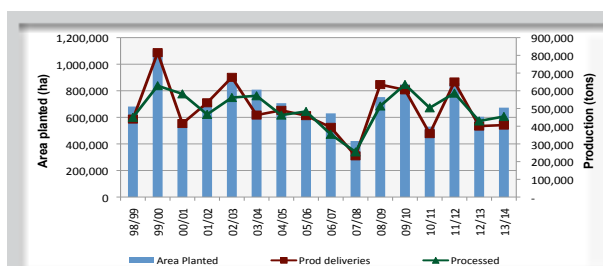


Figure 53 : Area planted; production and consumption of sunflower seeds in South Africa

Source : SAGIS, 2012; own calculations, 20143

5.6.2. Price trends for sunflower seeds

The domestic (SAFEX) sunflower price, as illustrated in Figure 54, decreased by 1.3% from December 2012 (R5 997) to December 2013 (R5 922). The retail price of sunflower oil (750ml) increased by 0.4% from December 2012 (R17.36 / 750ml) to Dec 2013 (R17.43 / 750ml).

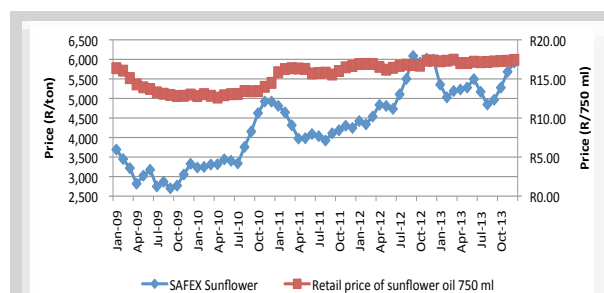


Figure 54 : Domestic sunflower seed price and retail price of sunflower oil (750ml)

Source : SAGIS and Stats SA, 2013

Soybeans are cultivated in KwaZulu-Natal and Mpumalanga under dryland and irrigation conditions. Increasingly, planting is happening in the eastern parts of the Free State and some farmers in the North West province and the northern parts of the Free State have recently started to plant soybeans with success. Soybeans constitute approximately 3% of the total grains produced in South Africa.

5.7. Soybeans

5.7.1. Soybean production

South Africa produced 756 430 tons of soybeans in the 2013 as illustrated in Figure 55. From 2012 to 2013 the production of soybeans increased by 21.6%. The area planted increased by 9.4% from 2012 (472 000 ha) to 2013 (516 500 ha). Research and development are limited and very few new cultivars were released over the past five years in South Africa. The Protein Research Institution has promoted and funded the development and testing of foreign cultivars in South Africa.

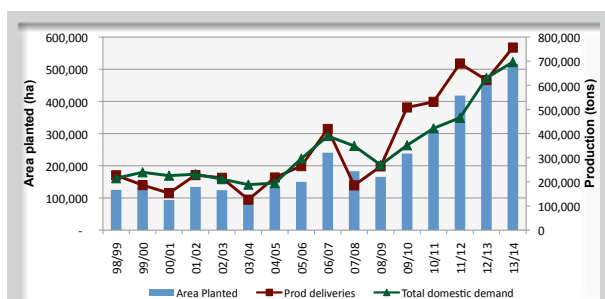


Figure 55 : Area planted, production and demand of soybean seed in South Africa

Source : SAGIS and own calculations, 2013

5.7.2. Soybean consumption

South Africa domestically demanded approximately 696 496 tons of soybeans in 2013, of which 147 664 tons were processed as feed and full fat soybean meal. This is an increase of 7.5% from 2012. The highest quantity of beans processed for feed and full fat soybean meal was in the 2006 season at 216 600 tons. South Africa has shown an increased demand for soybeans for the manufacturing of oil and oilcake market.

This is mainly a result of a higher demand for high quality protein meal for the feed industry. The demand for soybeans for human consumption was 24 409 tons in 2013. This is a slight decrease from 2012 as illustrated in Figure 56.

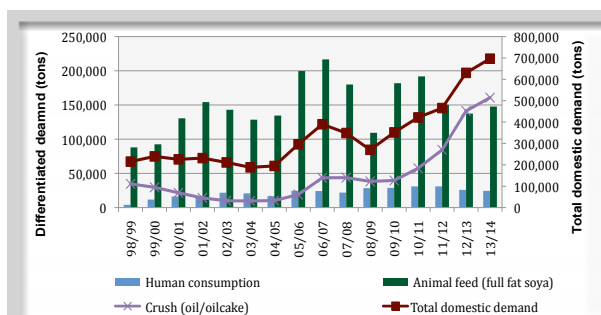


Figure 56 : Area planted, production and demand for soybeans in South Africa

Source : SAGIS and own calculations, 2013

5.7.3. Price trends for soybeans

Figure 57 illustrates the domestic (SAFEX), import and export parity price at Randfontein for soybeans. The domestic price increased by 24.4% from December 2012 (R5 385/ton) to December 2013 (R6 700/ton). The import parity price increased by 11.8% and export parity by 10.1% over the same period.

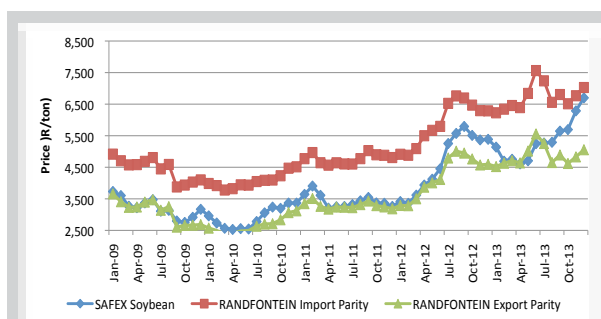


Figure 57 : Price trends for soybeans

Source : Grain SA, 2013

5.8. Vegetable Sector

Figure 58 shows the volumes of selected fresh vegetables sold at the national fresh produce markets from January 2009 to December 2013. The average volume of cabbages sold increased by 3.5% between 2012 and 2013. The average volume of onions, tomatoes and potatoes decreased by 8.6%, 3.5% and 2.1% respectively, between 2012 and 2013.

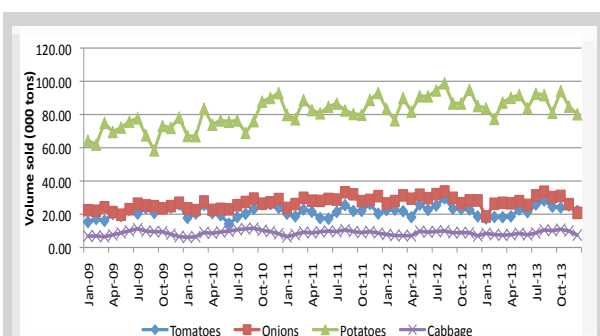


Figure 58 : Volume of selected vegetables sold at fresh produce markets

Source : DAFF, 2013 and own calculations

The market price trends for selected fresh vegetables from January 2009 to December 2013 are shown in Figure 59. The market prices for selected vegetables were, on average, lower in 2012 compared to 2013. In nominal terms, the average market price per ton of onions, potatoes, cabbages and tomatoes was 32.1%, 27.6%, 19.0% and 14.3% higher in 2013 compared to 2012.

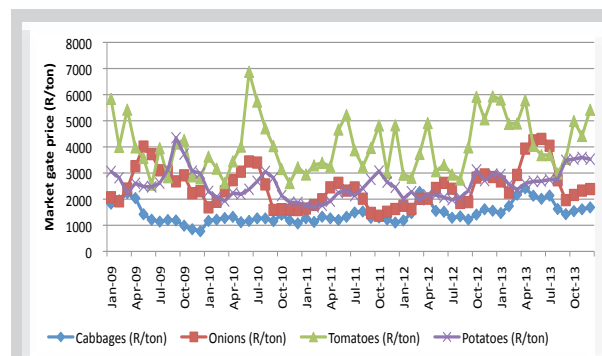


Figure 59 : Market price trends for selected fresh vegetables

Source : DAFF, 2013 and own calculations

Figure 60 depicts the nominal retail price trends for selected fresh vegetables from January 2009 to December 2013. On the same note, the retail prices for the different vegetables showed a positive growth rate between 2012 and 2013. The average retail prices of onions, tomatoes, potatoes and cabbage increased by 18.6%, 7.2%, 7.0% and 5.9% respectively between 2012 and 2013.

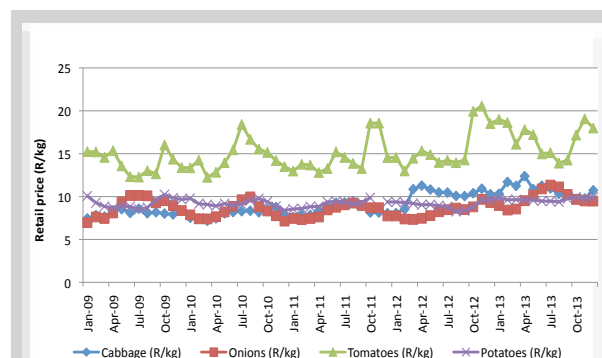


Figure 60 : Retail price trends for selected fresh vegetables

Source : Stats SA, 2013 and own calculations

5.9. Farm Values and Price Spreads

The farm value is the value of the farm product's equivalent in the final food product purchased by consumers. Farm values are calculated by multiplying disappearance in quantities on a farm weight basis with the prices received by the farmers. The farm value does not include the value of by-products. The farm value share is computed by dividing the farm value by consumer food expenditures, and is reported in percentages. Over time, the share reflects relative changes in expenditure for farm products, food marketing services and retail food products. A summary of the five year farm value share of the different products is reflected in Table 30 and Figure 61.

From Figure 61 it is evident that the super and special maize meal shares showed high volatility. The farm value share for chicken has shown an annual decrease since 2010. The remainder of the products showed relatively stable farm value shares.

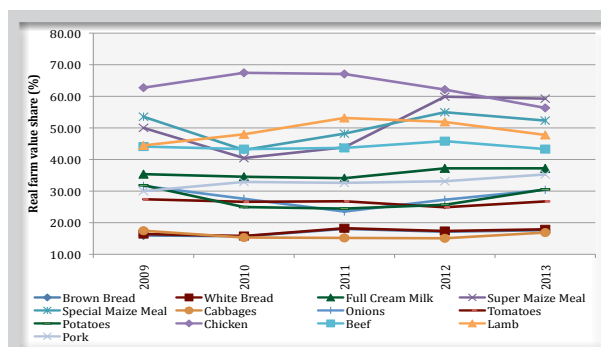


Figure 61 : Real farm value share average, 2009-2013

Table 30: Real farm value share average, 2009-2013

Product	2009	2010	2011	2012	2013
Brown Bread	15.98	15.70	18.04	17.15	17.63
White Bread	16.41	15.79	18.25	17.38	17.92
Full Cream Milk	35.37	34.54	34.09	37.21	37.21
Super Maize Meal	50.00	40.47	43.86	59.89	59.26
Special Maize Meal	53.53	43.02	48.19	54.97	52.33
Chicken	62.74	67.44	67.07	62.13	56.34
Beef	44.10	43.30	43.66	45.82	43.30
Lamb	44.46	47.98	53.15	51.90	47.78
Pork	30.01	32.91	32.61	33.13	35.27
Cabbages	17.46	15.31	15.18	15.07	16.89
Onions	31.65	27.57	23.54	27.27	30.41
Tomatoes	27.42	26.62	26.79	24.89	26.74
Potatoes	31.86	24.96	24.46	25.67	30.55

Source : Stats SA, 2013; DAFF, 2013; MPO, 2013; SAMPRO, 2013; AMT, 2013

The FTRPS is the difference between what the consumer pays for the retail food product and the value of the farm products used in that product. Price spreads measure the aggregate contributions of food manufacturing, distribution, wholesaling and retailing firms that transform farm commodities into final food products. A summary of the five year farm-to-retail price spread of the different products is reflected in Table 31 and Figure 62.

Detailed graphs of the farm values and FTRPS of the different sectors are reflected in Appendix A.

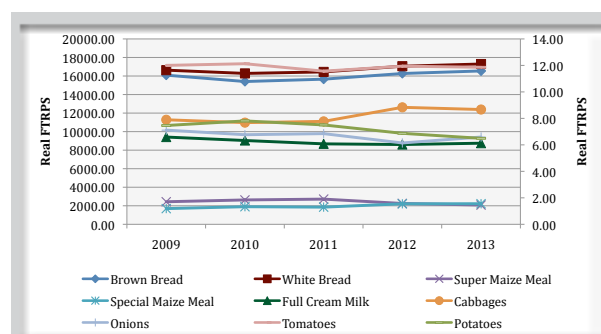


Figure 62 : Real farm-to-retail price spread averages, 2009-2013

Source : Stats SA, 2013; DAFF, 2013; MPO, 2013; SAMPRO, 2013; AMT, 2013

Table 31: Real farm-to-retail price spread averages, 2009-2013

Product	2009	2010	2011	2012	2013
Brown Bread	16 092.11	15 405.43	15 658.78	16 270.20	16 547.45
White Bread	16 632.40	16 280.25	16 443.96	17 057.50	17 294.80
Full Cream Milk	6.59	6.33	6.08	6.03	6.13
Super Maize Meal	2 434.26	2 629.78	2 718.54	2 248.65	2 077.57
Special Maize Meal	1 695.40	1 899.30	1 853.33	2 211.57	2 221.65
Chicken	12.52	11.03	10.57	12.11	14.37
Beef	35.59	36.31	35.13	36.53	39.64
Lamb	51.66	42.71	39.45	47.44	49.75
Pork	423.23	378.46	350.04	350.14	340.93
Cabbages	7.89	7.68	7.77	8.84	8.67
Onions	7.11	6.77	6.85	6.14	6.59
Tomatoes	12.00	12.13	11.57	11.94	11.86
Potatoes	7.46	7.81	7.51	6.87	6.49

Source : Stats SA, 2013; DAFF, 2013; MPO, 2013; SAMPRO, 2013; AMT, 2013

6. SELECTED TOPICS

6.1. Regional Market Integration & Agricultural Policy: Keys to Food Security?

For much of its duration, the process of regional integration among African nations, as elsewhere in the developing world,⁸ has focused almost exclusively on industrialisation.⁹ As a result, literature addressing the impact of various integration measures¹⁰ on agriculture and food security is comparatively limited; however, more recently, international governance institutions and developmental think tanks are taking strides to fill that void. The purpose of this section is to consolidate and highlight seminal thinking in this area, and also to give a cursory overview of developments.

6.1.1. Food security, agriculture and regionalism

Definitions of “food security” vary across sectors and disciplines, but the most widely recognised is that devised during the 1996 World Food summit. Accordingly, food security is described as a state

where “all people at all times have physical, social and economic access to sufficient, safe, nutritious food that meets their dietary needs and food preferences for maintaining a healthy and active life.”¹¹ Pursuant to this definition, food security is built on the following three pillars:

- (1) Availability, i.e., the presence of sufficient quantities of food, either through production or trade;
- (2) Access, i.e., possessing the means, be it productive or financial, to procure appropriate foods for a nutritious diet; and
- (3) Utility, i.e., efficient use of available food stuffs based on basic knowledge of human nutritional requirements and preservation methods in conjuncture with adequate water and sanitation.

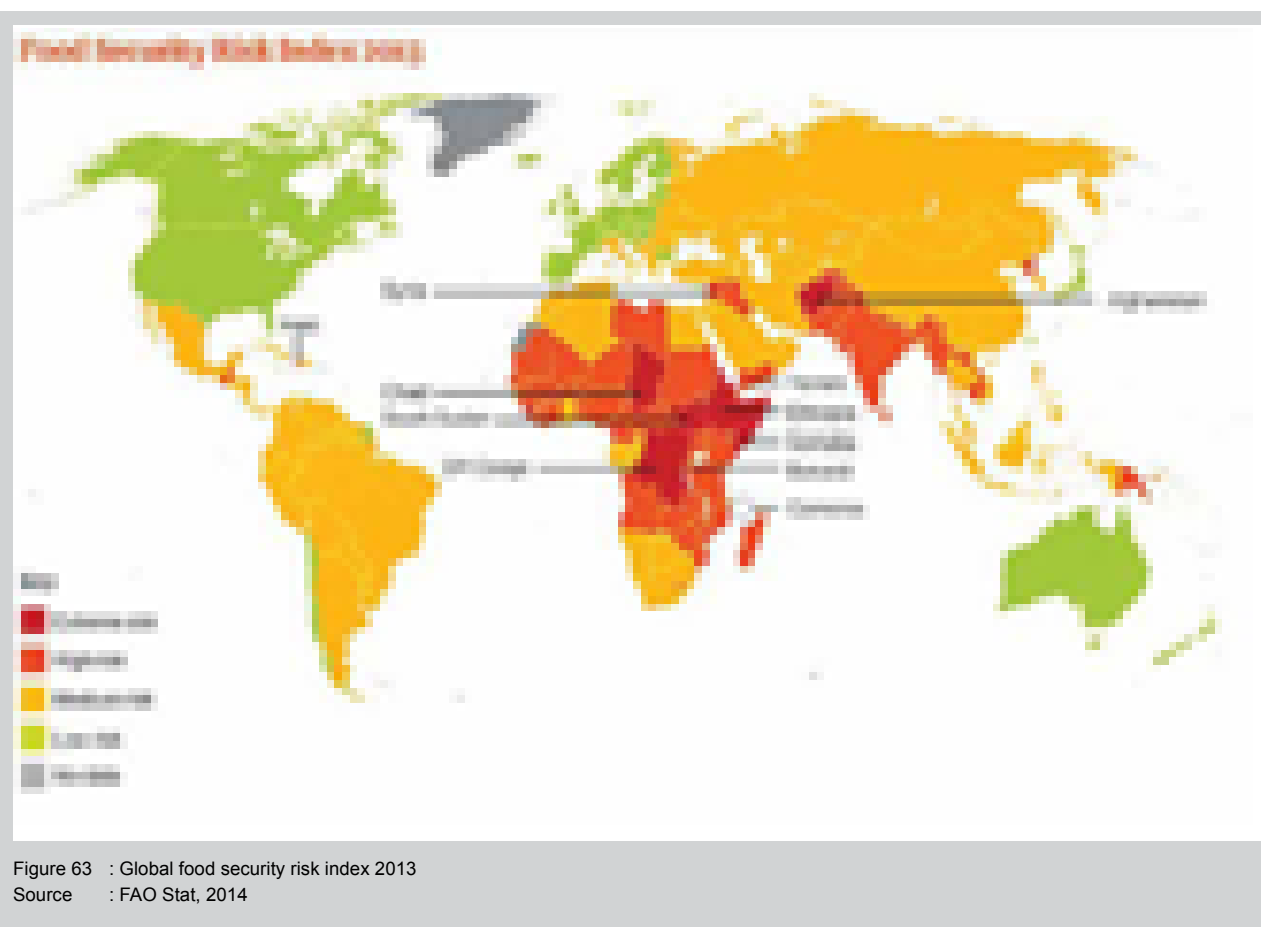
⁸ Matthew Shearer, Juliana Salles Almeida & Carlos M. Gutierrez, ‘The Treatment of Agriculture in Regional Trade Agreements in the Americas’ (December 2009) IDB Working Paper Series IDB-WP-145, 3—12 <<http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=35030397>> accessed 18 November 2013.

⁹ Alan Matthews, Regional Integration & Food Security in Developing Countries (2003, FAO Training materials for Agricultural Planning) 3.

¹⁰ A regional integration arrangement is a preferential (usually reciprocal) agreement among countries that reduces barriers to economic & non-economic transactions. Such an arrangement can take several forms, differing in the way discrimination is applied to non-members & in the depth & breadth of integration, ARIA I (n 11) 9.

¹¹ Christopher B Barrett & Erin C Lentz, ‘Food Insecurity & Food Aid in Africa’ in Ernest Aryeetey & others (eds), The Oxford Companion to the Economics of Africa (OUP 2012) 79.

The map below depicts the estimated food security outlook of different countries for the year 2013:



Globally, food production and access thereto have improved on a nearly annual basis since the end of the Second World War,¹² but as the map illustrates, a large percentage of people in Africa have not experienced the benefits of advancement in the world's food system. Despite comparing favourably with international food security levels during the first half of the 20th Century,¹³ Sub-Saharan Africans¹⁴ are currently at greater risk of being food insecure than people living anywhere else in the world ¹⁵ (Figure 63).

¹² David J. Spielman & Rajul Pandya-Lorch, "Fifty Years of Progress" in David J. Spielman & Rajul Pandya-Lorch (eds), *Millions Fed: Proven Success in Agricultural Development* (IFPRI 2009) 1—18. ¹³ Ewout Frankema & Marlous van Waijenburg, 'Structural Impediments to African Growth? New Evidence from Real Wages in British Africa 1880-1965' (December 2010) Universities of Utrecht & Northwestern, 11—14.

¹⁴ It should be noted that a high degree of heterogeneity exists between the prevalence & causes of food insecurity in different African countries & also between different areas within countries. Food insecurity has a multiplicity of causes that coexist at the individual, household, community & national levels. As this article is concerned with the regional perspective, figures are referenced in aggregate, but this is not meant to detract from the intricacy or diversity of the micro-level issues coalescing to form the cumulative whole. ¹⁵ Rudy Rabbinge, 'Food First in Africa: Promise, Potential & Progress' (19 June 2012, Food First Conference, Florida, USA) 8 <http://www.foodfirst.eu/19juni2012/20120619_RRabbinge.pdf> accessed 6 September 2013.

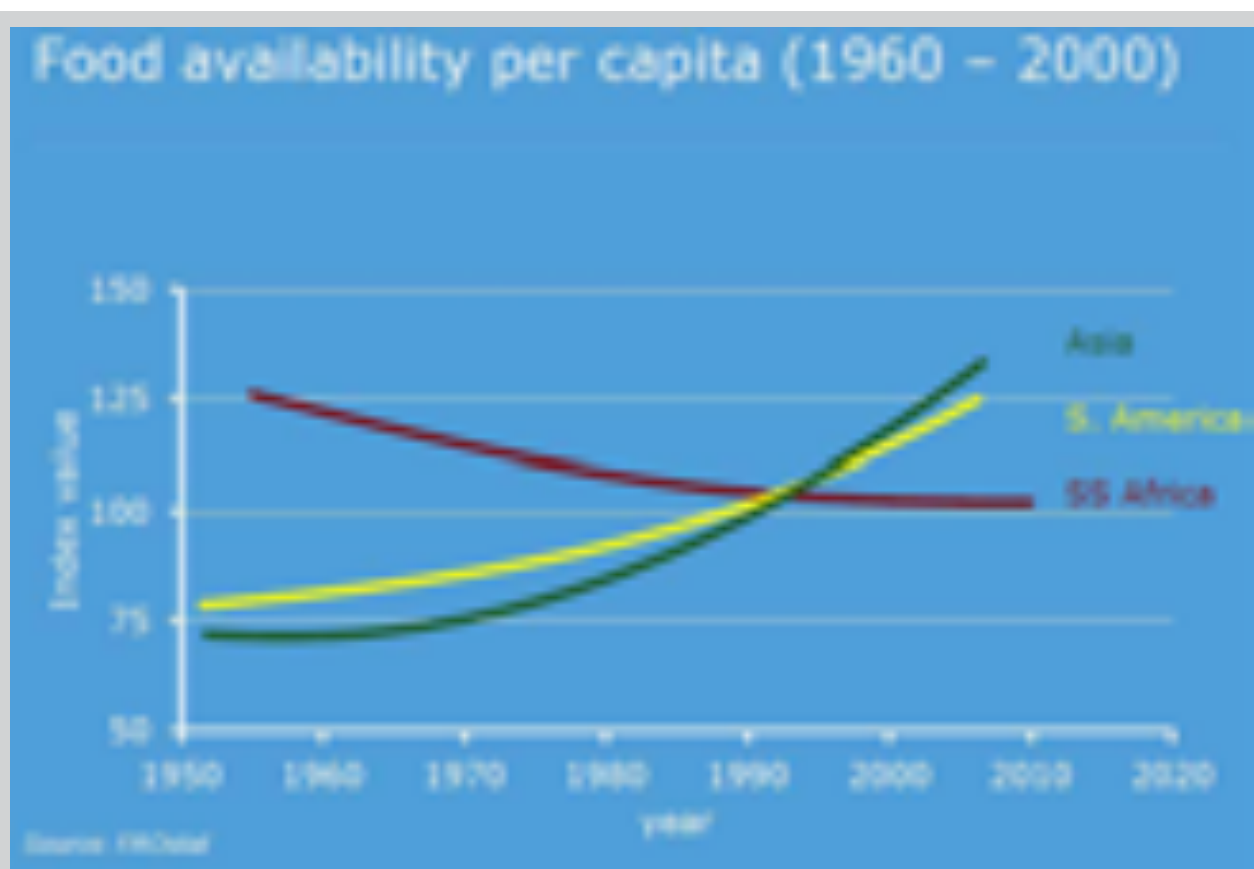


Figure 64 : Food availability per capita (1960-2000)
Source : FAO Stat, 2013

Based on the premise that agricultural surpluses in food secure regions are sufficient to meet the needs of those experiencing scarcity, it is sometimes argued that any remaining deficits must stem from ineffectual distribution, rather than production shortfalls.¹⁶ While not technically inaccurate, this point of view runs the risk of misrepresenting hunger as an essentially logistical issue, with production costs and consequent food prices considered only from a consumption perspective.¹⁷

In fact, a high percentage of Africa's food insecure are farmers themselves,¹⁸ rendering the availability of production factors, the associated costs and the ability to offset yields for profit inseparable from the region's food security challenge.¹⁹ Distribution is but one part of an intricate bundle of factors,²⁰ and while arguments emphasising it do make legitimate points (not least in the context of international food aid)²¹ it is crucial that the limitations of distribution-oriented approaches are thoroughly scrutinised and understood.

¹⁶ Jan Van de Poel, 'The Right to Food & the Transition towards a more Sustainable food system' 'Food Security & Food Access' (Grace Communications Foundation) <<http://www.sustainabletable.org/280/food-security-food-access>> accessed 19 November 2013; 'Is Speculation Causing Food Prices to Rise?' (Issue 3 2013, CommodityFacts.org) <<http://www.commodityfacts.org/issues/is-speculation-causing-food-prices-to-rise/>> accessed 17 November 2013; ¹⁷ Homi Kharas, 'Making Sense of Food Price Volatility' (3 March 2011, Brookings Research Opinion) <<http://www.brookings.edu/research/opinions/2011/03/03-food-prices-kharas>> accessed 14 March 2012. ¹⁸ Susanne Neubert, 'How Small Farmers Can Secure Their Food' German Development Institute Press (Bonn, 15 October 2012) <[http://www.die-gdi.de/CMS-Homepage/openwebcms3_e.nsf/\(ynDK_contentByKey\)/MRUR-8Z4JUD?Open](http://www.die-gdi.de/CMS-Homepage/openwebcms3_e.nsf/(ynDK_contentByKey)/MRUR-8Z4JUD?Open)> accessed 27 November 2013. ¹⁹ Barrett & Lentz (n 4) 80—82. ²⁰ 'Scarcity vs Distribution' (2011, A Well-fed World: Feeding Families, Saving Animals) <<http://awellfedworld.org/issues/scarcity>> accessed 27 November 2013. ²¹ Barrett & Lentz (n 4) 83.

In particular, it is when such interventions are implemented, not as interim humanitarian relief, but on the long-term, without any clear links to scaled capacity building or exit strategies that the model becomes problematic.²² For one, the assumptions relied upon by such measures are often generalised and relevant only within a static set of circumstances,²³ leaving much to be desired with regard to sustainability – not to mention practicality.²⁴ Most significant perhaps, is that enduring efforts based on this type of approach fail to acknowledge a basic tenet of development that has been observed across cultures throughout history: in the words of Frankema, “... no civilisation has ever flourished for long without an effective strategy to gather, produce and trade food in sufficient quantity and quality [to meet their own needs].”²⁵

The fact that Africa has been populated for at least as long as Europe, Asia and the Americas indicates that African households could, and indeed have, managed to meet their own food requirements for generations. Thus, any proposition that detracts from the fundamental right of every person to “feed themselves with dignity”²⁶ is ignoring history and in doing so, disregarding not only the value of autonomous African development prior to the advent of globalisation, but for the future as well.

So why then, are Africans left hungry?

²² Sheryl Hendriks, Presidential Address (1 October 2013, AEASA Conference, Bela Bela, South Africa); Mike Gangwer, ‘The View from Here: Examining Development & Entitlement’ (6 June 2012, Dairyman Blog) <http://www.progressivedairy.com/index.php?option=com_content&view=article&id=8904:the-view-from-here-examining-development-&-entitlement-&catid=84:mike-gangwer&Itemid=124> accessed 12 July 2013.

²³ Edmund A. Walsh, ‘Feeding Dependency in the Americas: US Food Aid Practices in Haiti & Guatemala’ (23 July 2013) GJIA <<http://journal.georgetown.edu/2013/07/23/feeding-dependency-in-the-americas-u-s-food-aid-practices-in-haiti-&-guatemala-by-saskia-westenberg/>> accessed 4 August 2013; Paul Guenette, ‘The Food Aid Debate is a Distraction’ The Guardian (Washington DC, 17 June 2013) <<http://www.theguardian.com/global-development-professionals-network/2013/jun/17/food-aid-debate-distraction>> accessed 20 June 2013; Daniel E. Shaughnessy, ‘Fifty Years of International Food Aid– Time To Change?’ (Hunger Notes) <<http://www.worldhunger.org/articles/04/editorials/shaughnessy.htm>> accessed 20 June 2013.²⁴ Gangwer (n 12). ²⁵ Ewout Frankema, Africa & the Green Revolution: A Global Historical Perspective (23 May 2013, Inaugural lecture upon taking up the post of Professor of Rural & Environmental History at Wageningen University) 3.

²⁶ ‘Right to Adequate Food: Questions & Answers’ (2013, FAO: Right to Food: FAQs) <<http://www.fao.org/righttofood/faqs/en/>> accessed 27 November 2013.

6.1.2. Agriculture

Historically, sub-Saharan food shortages were predominantly circumstantial in nature, caused by climate shocks, disease epidemics or military conflict. However, since the late 20th Century such shortages have become increasingly associated with “a structural mismatch”²⁷ between local supply and demand. What this means in essence, is that Africa’s food production has not kept pace with its population growth. Compared to other developing regions, the continent’s per capita food production fell by 13 percent between 1961 and 2011, while rising by 44 percent in Asia and 48 percent in South America (Figure 65).

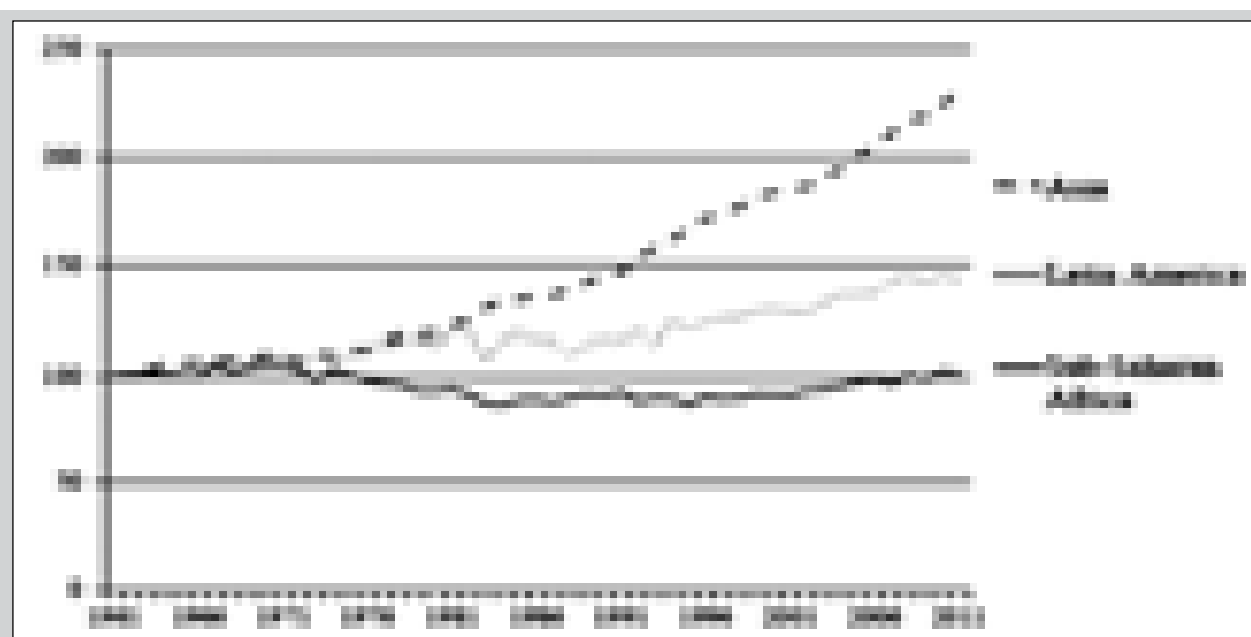


Figure 65 : Regional per capita food production (1961-2011)

Source : FAO, 2014

A historical assessment of regional outputs (i.e., comparing Africa to itself) reveals that 30 of the continent’s 53 states are currently producing less food per head of the population than they did in the early 1960s.²⁸ The effect of this statistic becomes clear when agriculture is considered in terms of its contribution to African economies. On average, the sector accounts for:²⁹

- 30 percent of sub-Saharan national GDPs;
- 40—80 percent of export value;
- 70—80 percent of employment opportunities;
- 75 percent of rural livelihoods; and
- 66 percent of manufactured goods.

As noted by De Janvry and Sadoulet, “few countries with large rural populations have been able to [stimulate and maintain development] without a previous successful productivity revolution in agriculture,”³⁰ and it is in this category that most sub-Saharan countries find themselves. There are several reasons for this to be the case. The successive failure of various administrations to acquaint themselves with local realities and the consequent implementation of measures driven by ideology rather than responsive solutions is frequently cited.³¹ Part and parcel of this is the long-term neglect of the agricultural sector in international development discourse and the consequent dis-incentivising of both public and private investment in the sector.³² While recent research has confirmed that investment by farmers themselves is indeed the most critical determinant of

agricultural growth,³³ a half century of injudicious policy and regulatory misuse has left no doubt about the role of competent, proactive governance in ensuring that any such growth ultimately translates into development. Primarily, the public sector must fulfil its functions pertaining to:

- (1) The delivery of public goods such as rule of law, infrastructure and research;³⁴
- (2) Effectively compensating for market failure through smart regulation;³⁵ and
- (3) Forming transparent, development-oriented partnerships with the private sector to ensure coherence between government action and requirements for sustainable growth.

In the African context, the sheer size of the sector's contribution to the total economy makes it highly relevant for aggregate growth.³⁶ A second factor highlighting the importance of an agriculture-centred development agenda, is that agriculture often has a default comparative advantage in developing economies, since the institutional demands of modern industry and services make investments in these sectors a more precarious option in the short—and even medium term.³⁷ A third is that, with domestic supply strongly influencing domestic food prices and therefore nominal wages, competitiveness of all sectors in the economy depends on the performance of domestic agriculture in securing affordable food stuffs.³⁸ The importance of agricultural productivity in achieving not only food security, but economy-wide development is undeniable.³⁹ However, the process through which this is achieved will determine whether or not such development is ultimately sustainable.

The high prevalence of small-holder and subsistence activity on the continent means that productivity increases on these levels are essential.⁴⁰ The challenges inherent in this approach are daunting, particularly when government resources for assistance are limited,⁴¹ yet there is some evidence of success.⁴² Where they do in fact operate successfully, large-scale farms have an important role to play in leveraging economies of scale and also for attracting opportunities that would not otherwise be available within the local market.⁴³ What is crucial is that the strategy adopted caters specifically for the conditions of sub-Saharan Africa, as well as the challenges of individual countries. This means taking cognisance of a high degree of heterogeneity and weak supporting conditions overall in terms of markets, institutions and public goods.⁴⁴ Due to the range and cost of these issues, participatory, multi-pronged tactics are required that focus not only on agriculture, but on sectoral linkages with non-farming activities that open up additional income opportunities for the rural population.⁴⁵ It is here where integrated territorial approaches are of particular interest.

²⁷ Frankema (n 7) 5. ²⁸ *ibid.* ²⁹ Alain de Janvry & Elisabeth Sadoulet, 'Why Agriculture Remains the Key to Sub-Saharan African Development' in Ernest Aryeetey & others (eds), *The Oxford Companion to the Economics of Africa* (OUP 2012) 73. Figures exclude South Africa & other large mining economies. ³⁰ *ibid.* ³¹ Colin Poulton, 'Democratisation and the Political Economy of Agricultural Policy in Africa' (July 2012) FAC PEAPA Working Paper 043 <http://www.google.co.za/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&cad=rja&ved=0CCwQFjAA&url=http%3A%2F%2Fwww.future-agricultures.org%2Fpp-conference-papers%2Fdoc_download%2F1579-democratisation-and-the-political-economy-of-agricultural-policy-in-africa&ei=Z-iaUvS7E4XD7AbVjYDwAw&usg=AFQjCNF00YTMAmNnt1uAhDeZ9y_kg-Juew&bvm=bv.57155469.d.Yms> accessed 7 August 2013; Bernard Gauthier & Waly Wane, 'Delivering Basic Services in Africa: Institutional Deficiencies and Avenues of Solutions' in Ernest Aryeetey and others (eds), *The Oxford Companion to the Economics of Africa* (OUP 2012) 208–214; Manitra A. Rakotoarisoa, Massimo lafrate & Marianna Paschali, 'Why has Africa become a Net Food Importer? Explaining Africa's Agricultural & Food Trade Deficits (2012, FAO) 49–64 <http://www.fao.org/fileadmin/templates/est/PUBLICATIONS/Books/AFRICA_STUDY_BOOK_REVISED_low_res.pdf> accessed 2 July 2013; Ha-Joon Chang, 'Rethinking Public Policy in Agriculture: Lessons from Distant & Recent History (2009, FAO Policy Assistance Series, Volume 7) 13–55; Robert L. Paarlberg, 'Governance and Food Security in an Age of Globalisation' (February 2002) IFPRI Food, Agriculture, and the Environment Discussion Paper 36 <<http://www.ifpri.org/sites/default/files/publications/2020dp36.pdf>> accessed 30 July 2013; David Osterfeld, 'Africa and the Difference Between Growing Food and Eating It,' (Foundation for Economic Education, 1 May 1988) <http://www.fee.org/the_freeman/detail/africa-and-the-difference-between-growing-food-and-eating-it#axzz2kuuAZLUF> accessed 12 December 2012; David Osterfeld, 'African Famine: The Harvest of Socialist Agriculture,' (Foundation for Economic Education, 1 October 1985) <http://www.fee.org/the_freeman/detail/african-famine-the-harvest-of-socialist-agriculture#axzz2kuuAZLUF> accessed 12 December 2012. ³² Chang (n 20) 6–7. ³³ José Graziano da Silva, *The State of Food & Agriculture 2012: Investing in Agriculture for a Better Future* (2012, FAO) 9–55 <<http://www.fao.org/docrep/017/i3028e/i3028e.pdf>> accessed 21 May 2013. ³⁴ Paarlberg (n24) 2. ³⁵ Acharya and others, 'Market Failures & Regulatory Failures: Lessons from Past & Present Financial Crises,' (February 2011) ADBI No. 264, 1–10 <http://saber.eaber.org/sites/default/files/documents/2011.02.08.wp264.market.regulatory.failures.lessons.gfc_.pdf> accessed 28 March 2012. ³⁶ De Janvry & Sadoulet (n 18). ³⁷ *ibid.* ³⁸ *ibid.* ³⁹ *ibid.* ⁴⁰ Xinshen Diao & Peter Hazell, 'Exploring Market Opportunities for African Small-holders' (1–3 April 2004, IFPRI Conference Brief, 'Assuring Food & Nutrition Security in Africa by 2020: Prioritising Actions, Strengthening Actors, & Facilitating Partnerships,' Kampala, Uganda) <<http://www.ifpri.org/sites/default/files/publications/ib22.pdf>> accessed 22 December 2012. ⁴¹ European Commission: Agriculture & Rural Development, *The Common Agricultural Policy: A Story to be Continued* (2012, Publications Office of the European Union) 4–6 <http://ec.europa.eu/agriculture/50-years-of-cap/files/history/history_book_lr_en.pdf> accessed 6 June 2013. ⁴² Jikun Huang, Xiaobing Wang & Huangang Qiu, 'Small-scale farmers in China in the face of Modernisation and Globalisation (2012, IIED) 6–34 <<http://pubs.iied.org/pdfs/16515IIED.pdf>> accessed 12 June 2013; Geoffrey Livingston, Steven Schonberger & Sara Delaney, 'Sub-Saharan Africa: The State of Smallholders in Agriculture' (24–25 January 2011, IFAD Conference, 'New Directions for Small-holder Agriculture,' Rome, Italy) <<http://www.ifad.org/events/agriculture/doc/papers/livingston.pdf>> accessed 12 June 2013. ⁴³ De Janvry & Sadoulet (n 18) 76. ⁴⁴ Michael J. Trebilcock & Mariana Monta Prado, 'What Makes Poor Countries Poor? Institutional Determinants of Development (2011, Edward Elgar Publishing) 1–116, 224–250, 267–274; Rober L. Paarlberg, 'Governance and Food Security in an Age of Globalisation' (February 2002) IFPRI Food, Agriculture, and the Environment Discussion Paper 36 <<http://www.ifpri.org/sites/default/files/publications/2020dp36.pdf>> accessed 30 July 2013. ⁴⁵ *ibid.* 75.

6.1.3. Regional integration

When considering the juncture between food security, agriculture and regional integration, it is useful to begin by considering the two main aspects that form the juncture between these concepts, namely:⁴⁶

- (1) The food production and income consequences of regional integration, with an emphasis on trade; and
- (2) The opportunities that exist to address food insecurity within a regional framework.

The benefits of regional integration include gains from new trade opportunities, larger markets, and increased competition, which (theoretically) leads to greater efficiency, lower prices and stimulates innovation.⁴⁷ Integration can also raise returns on investments, facilitate larger investments, and induce industries to expand or move to more strategic locations.⁴⁸ Regional integration can also help facilitate the rule of law by binding governments to reforms, increase bargaining power of industries which can help to curb corruption,⁴⁹ enhance cooperation, and improve security. But these benefits are neither automatic nor necessarily large. Regional integration arrangements must be viewed as means to improve welfare in participating countries—not as ends in themselves.

Regional integration is expected to promote food security to the same extent that it promotes and facilitates intra-regional trade which fosters economic growth and increases employment prospects, thus increasing the income-earning capacities of the population.⁵⁰ Whether regional integration promotes overall economic growth or not will depend on the design of the agreement, and whether it succeeds in promoting more trade creation rather than trade diversion.⁵¹

However, the consequences of regional trade integration require country-specific and region-specific evaluations of market integration on the overall status of food insecure households.⁵² Potential beneficiaries of regional integration among low-income farm households may be unable to take advantage of increased market access opportunities in the presence of supply-side constraints.⁵³ There will also be those households in both rural and urban areas which either fall behind or lose out in this process. Where supply constraints are identified, regional integration strategies should include investment and training interventions to address these constraints. Where negative impacts are identified, then a regional integration strategy which is food-security aware should be accompanied by flanking measures to address these negative impacts.

⁴⁶ Matthews (n2).

⁴⁷ Alpha Oumar Konaré & K.Y. Amoako (eds), *Assessing Regional Integration in Africa I*, (2004, UNECA Policy Research Report) 11.

⁴⁸ *ibid.*

⁴⁹ John Morrel & Kim Eric Bettcher, 'Approaches to Collective Action: How Businesses Together Can Lead the Fight against Corruption' (September 2013) CIPE Economic Reform Feature Service, 2—4 <http://www.cipe.org/sites/default/files/publication-docs/FS_09-10-2013_JMKB_Collectivepercent20Action.pdf> accessed 29 October 2013.

⁵⁰ De Janvry & Sadoulet (n 10) 69—78.

⁵¹ ARIA I (n 11) 23—29.

⁵² Matthews (n 2).

⁵³ Jane Korinek & Mark Melatos, 'Trade Impacts of Selected Regional Trade Agreements in Agriculture' (2009) Trade Policy Working Paper 87, 12—15 <<http://www.oecd.org/tad/benefitlib/42770785.pdf>> accessed 18 November 2013.

A Food Security Financial Instrument is proposed to finance initiatives both to protect vulnerable groups from any adverse consequences from and to assist them to take advantage of, regional integration initiatives.

Incorporating agriculture into RTAs will increase the pressure to harmonise agricultural policies either by transferring responsibility to the supranational, regional level or by coordinating national policies. Key issues which will need to be addressed in this process include the level of the common external tariff, rules on domestic subsidies to farmers, the priority to be given to tackling different kinds of market-fragmenting barriers, and the need for financial mechanisms to address any adverse inter-country distributional effects of supporting farm prices within the union.

It will also make sense to pursue a strategy of policy coordination to reduce barriers to intra-regional agricultural trade. Many measures to facilitate intra-regional trade are not specifically agricultural, for example, improved transport, communications and payments links and the elimination of border obstacles. Specific food and agricultural measures to facilitate trade might include:

- Support for measures to improve the quality of Sanitary and Phytosanitary Standards (SPS) controls and to harmonise standards within the region both to eliminate SPS barriers to intra-regional trade and to ensure unimpeded access to extra-regional markets;
- Support for commodity development programmes where similar export commodities are produced in a number of countries in the region;
- Support for regional market information services to enhance awareness among producers and traders of market opportunities in neighbouring countries;
- Support for studies to identify the potential for increased intra-regional agricultural and food trade;

- Support for improved statistical information on agricultural trade flows as a prerequisite to monitor the impact of market integration on the evolution of intra-regional trade flows compared to extra-regional flows. Improved trade statistics are also crucial to a fair and acceptable division of customs duties in a customs union;
- Assistance to enhance the capacity of countries to participate effectively and to coordinate their positions in future multilateral trade negotiations in agriculture;
- Budgetary support where reductions in import protection on agricultural products give rise to revenue problems for member governments.

Whatever the ambitions of regional groupings involving developing countries, it is likely that they will need considerable technical assistance, support and capacity building. This is particularly the case where developing countries are engaged in parallel series of trade negotiations covering increasingly complex areas of integration at the same time. This is an area where donor assistance can be useful.

The difficulties of managing and coordinating regional institutions in the context of institutional weakness are exacerbated when countries are members of overlapping and possibly competing regional groupings. This problem appears particularly acute in Sub-Saharan Africa (SSA). For SSA countries, choosing a unique and appropriate regional arrangement is likely to be a prerequisite for success in the next period of regionalism.

6.2. The Comprehensive Africa Agriculture Development Programme (CAADP)

The Comprehensive Africa Agriculture Development Programme (CAADP) was endorsed by the Heads of State and Government at the Maputo African Union (AU) Summit in 2003 as the potential driver for economic growth and poverty reduction in the continent. CAADP is at the hub of endeavours by African Governments to accelerate economic growth in the member states of the African Union. The philosophy behind the CAADP framework and its processes is to ensure that agriculture returns to the centre-stage of socio-economic development. The responsibility for implementation at country level lies within the CAADP country team; this involves management and coordination of the CAADP process with national stakeholders to review studies and data gathered for the CAADP process, debate priorities, develop recommendations for investment programmes and design and implement programmes. But beyond this,

Country teams must champion the necessary reform processes which create the enabling policy and institutional frameworks and inevitably translate to tangible impacts on agricultural productivity leading to increased food security and wealth creation.

The Comprehensive Africa Agriculture Development Programme (CAADP) is a pan-African agriculture initiative of the New Partnership for Africa's Development (NEPAD), which in turn, makes up the strategic economic development framework of the African Union (AU). Established by the AU assembly in 2003, CAADP's principle aim is to eliminate hunger and reduce poverty through agricultural growth and development.

To this end, African governments have agreed to increase public investment in agriculture by a minimum of ten percent of their domestic budgets and raise agricultural productivity by at least six percent per annum. CAADP identifies four key pillars for food security improvement and agricultural investment:

- (1) Sustainable Land and Water Management;
- (2) Market Access;

- (3) Food Supply and Hunger; and
- (4) Agricultural Research.

The CAADP is centred on the definition of national and regional plans ('Compacts' and 'Investment Plans'), an agreement between all stakeholders (public, private, non-state actors and development partners) serving as a framework for partnerships, alliances, and dialogue to design and implement the required policy interventions and investment programmes.

The formulation of national and regional investment plans is one of the most important activities to implement CAADP after the definition and signature of the Compact. To date 30 countries in Africa have signed the national CAADP compacts, and more than 24 have reviewed investment plans.

One regional CAADP compact and investment plan has been launched in West Africa, while other regions are currently making efforts to develop and launch similar compacts. CAADP therefore is not a (donors') programme, it is a common framework for stimulating and guiding national, regional and continental initiatives on enhanced agriculture productivity and food security which each region and country can develop and implement as preferred. CAADP is the first 'Africa led, Africa owned, Africa wide' agriculture and food security initiative.

The endorsement of CAADP by African heads of states has renewed interest in and prioritised the continent's agriculture agenda, as well as put food security objectives at the fore of national, regional, continental and even global processes. With CAADP, governments and regional economic communities (RECs) are more inclined to initiate, take ownership and commit to being responsible for their own national and regional agricultural development actions. The process of introducing, developing, launching, implementing and eventually monitoring CAADP holds great potential to serve as a rallying point for a wide range of stakeholders. A broad range of actors drives the

formulation and implementation of CAADP-related initiatives. CAADP being a continental framework, the AU, and the NEPAD Planning and Coordinating Agency (NPCA), is tasked with its coordination. RECs facilitate the formulation and implementation of a regional compact and a regional agricultural investment plan, while supporting their member states with CAADP initiatives on the national level. At the national level, governments facilitate the formulation and implementation of a national compact and investment plan.

The CAADP process is organised in such a way that key stakeholders meet once a year at the CAADP Partnership Platform (PP) meetings, to mutually review progress and challenges around CAADP at all levels- national, regional and continental. This is followed by a CAADP Business Meeting, half way to the next Partnership Platform meeting. In addition to these platforms, development partners who support CAADP come together through the CAADP Development Partners Task Team (DPTT), to promote dialogue, shared learning and harmonisation among development partners on their support to African CAADP process and institutions. The DPTT operates on the basis of a concrete work plan and exchanges information through regular phone conference meetings.

One specific financial donor vehicle to support the CAADP processes (not investments), is the CAADP Multi-Donor Trust Fund (MTDF) hosted at the World Bank. The MTDF aims to strengthen institutional capacities of African drivers of CAADP, particularly on the continental and regional level, to effectively lead, implement, monitor and evaluate CAADP processes. Resources from the MTDF are allocated to CAADP institutions, such as the NPCA and RECs through 'Child Trust Funds'. Financing for the investment plans could be mobilised through public sector funding, development finance, private sector partnerships and applications to the multilateral financing mechanism, the Global Agriculture and Food Security Programme (GAFSP).

Traction around the regional dimension of CAADP

has also gradually increased. There is widespread consensus in most African regions that the value of regional CAADP lies in strategic regional action and investments that individual countries, acting alone, cannot achieve or afford. Most stakeholders concur that regional compacts would serve to accelerate individual country agricultural growth by enabling them to benefit from regional spill-overs and economies of scale in technology, human and policy development, as well as in trade and investment. Currently, processes are underway to launch compacts in IGAD, COMESA, EAC and ECCAS.

As CAADP approaches its 10-year mark, the priority for African stakeholders is to sustain the momentum, by focusing on policy and investment decisions that will help the continent transform its agricultural sector and ensure food security.

The next stage of CAADP seeks to move away from the process of developing compacts towards mobilising concrete sustainable investments for the priorities identified in the compacts. In this respect, and in order to strengthen the performance and competitiveness of the continent's agriculture sector, the focus will be on increasing public sector budgets for agriculture and exploring partnerships with the private sector, beyond development finance, for countries that are now at the investment stage. At the regional level, trilateral cooperation (development partners, governments and private sector) is also seen as a way to finance cross-border agricultural development initiatives and contribute to overall regional integration and regional food security.

6.3. The Regional Agricultural Policy (RAP) of the Southern African Development Community (SADC) and CAADP Harmonisation

SADC never formally launched a regional CAADP compact preparatory process as it is currently developing a Regional Agricultural Policy (RAP). Although, according to some stakeholders in Southern Africa, the exact relationship between the CAADP and the RAP is not yet fully clear, the initial ambiguity around possible competition between these two frameworks is clearing up. The formulation of the RAP and the regional CAADP compact preparation now form part of the same process.

Indeed, the RAP is being designed through the same multidimensional approach to food security as CAADP, and the thematic pillars of the two frameworks match. Given this alignment, but also taking into account current criticisms about the RAP such as insufficient multi-stakeholder ownership, the regional CAADP compact and the RAP would be brought closer by further mainstreaming the CAADP principles into the RAP:

- enlarging the range of stakeholders regularly involved in the regional preparations;
- including in the mechanism's governing regional food security actions a strong mutual accountability framework for those responsible for implementation, also in relation to the continental CAADP processes and the peer-reviewing of the regional compact and investment plan;
- ensuring coherence and harmonisation, and promoting coordination, between the national and regional CAADP compacts and investment plans in SADC.

Indeed most consulted stakeholders tend to agree that one of the weaknesses of the RAP process so far was the limited multi-stakeholder engagement. Compared to its early stages, RAP consultations are now broader and more aligned to the CAADP methodology. However, it is still unclear for many actors what is the actual way forward for a "CAADP-

compatible" RAP, what the concrete plans are for designing the regional compact in the coming months, and what process will be followed to ensure that such a compact adds value to national food security strategies. It would be important to make this information widely available to the public, so that the SADC agenda, relevant documents and steps to design a common approach to food security are accessible for any interested stakeholder.

This would also counter the perceptions that the SADC Secretariat and a few other SADC member states (MS) officials tend to centralise the important work on RAP and that such regional preparations are slow and inefficient. Another crucial process improvement would be to widen the scope and depth of non-state-actors (NSA) consultations on the RAP. Most NSA lack platforms to engage regularly on food security at regional level, and creating such platforms for CAADP/RAP would be urgent particularly for small farmers and other intermediary business organisations.

A pre-condition for increased engagement would be capacity building for farmers and institutional strengthening for both regional and national farmers' associations. This in turn would require a mapping of farmers' organisations in each SADC country, to assess type of membership, geographical coverage and assistance needed. A consensus seems also to emerge in the region about the need for more institutional support for the SADC Secretariat given its key role in an effective regional CAADP preparatory process.

The Secretariat is already acting to tackle some of the challenges it traditionally faces, such as the internal 'silos mentality' hampering coherence and coordination between different areas of regional cooperation. But the SADC MS should also do more to support the Secretariat. A possible recommendation for the way forward

is to strengthen the Secretariat, including by enhancing efforts by MS for more systematic input and interaction with the Secretariat on 'agriculture and rural development' (ARD) and food security as well as increased support by donors to the 'Food, Agriculture and Natural Resources' Directorate to increase the quantity and quality of technical personnel dedicated specifically to food security processes at national and regional level.

SADC Development partners' contribution to the regional food security plans has been lukewarm, with weak donor coordination and not-functioning (though existing) donor-SADC engagement structures. In general, more donors are needed to step up their support to regional food security initiatives in SADC, and in particular to the RAP as the overarching framework that should guide future external support. Many donors assist ARD programmes at national level in SADC countries, but few of them have a policy to create synergies between regional and national level assistance and between their different sectoral programmes that contribute to food security (e.g., aid for trade).

According to many actors in SADC, both types of synergies should be built, and if donors are to fulfil their commitment to support implementation of CAADP at regional level, including to fast-track regional action, they could: improve operational linkages and coordination around regional CAADP plans between their respective head-quarters, regional and national offices; increase regional donor coordination in SADC around CAADP including by assigning a donor lead agency (possibly in Gaborone); and establish a specific donor working group for the SADC regional CAADP. Existing formal engagement structures between SADC and development partners have lost impetus, and all parties agree this type of dialogue should be revitalised (looking possibly at the experience of the water Joint Working Group which is one that has been making better progress).

Another emerging message from the SADC stakeholders is that the regional agricultural plans, which have the overall RI framework (RISDP) explicitly at their core, should take into account the cross-cutting general bottlenecks to RI experienced by SADC thus far. For RI to work, including cooperation on CAADP, a better match should be achieved between: i) bottom-up RI (business-led) processes and dynamics; and ii) top down (government-led) RI moves, like policy frameworks and protocols.

There seems to be no "low hanging fruit" in regional cooperation, and formal binding SADC frameworks are not sufficiently followed-up at national level: the same is likely to hold for a future regional CAADP. In addition, ARD action will have to be accompanied by a much better 'campaign' in each SADC MS to raise awareness in every proposed regional cooperation area relevant to food security about the benefits of regional approaches, and about the results achieved so far (in this sense the example of the 'water basin cooperation awareness kits', disseminated also in the rural areas, could be replicated for future ARD programmes and other initiatives like the 'trade corridors').

Most of the suggestions by consulted stakeholders on the way forward for a regional CAADP relate to the process and not the substance. This is not only because the content of the RAP has not been developed yet, but also because few SADC countries have signed a national CAADP compact and the national-regional nexus in agriculture is yet to be fully explored within SADC. Such 'vertical' coherence (and synergies) between national and regional policies and investments, however, is deemed crucial by many actors in SADC, in parallel with the 'horizontal' coherence (and synergies) between policies and investments in food security and in other sectors of regional cooperation in SADC. Despite this process being in its early stages,

and strategic thinking on regional policies and investment to complement action at national level being lacking within several SADC governments, many SADC stakeholders realise the importance of linking a regional CAADP to ongoing initiatives on ARD, trade, infrastructure and natural resources, and are willing to explore in detail the opportunities and challenges for the creation of synergies. This paper shows that some linkages will naturally emerge, such as on sanitary and phytosanitary measures, 'agriculture trade corridors', irrigation as well as existing regional agricultural programmes and institutions.

Other synergies will need to be carefully analysed, in order to design a regional CAADP compact which includes policies and investments that are coherent, complementary and coordinated with those that SADC is taking forward in other RI areas. In specific cases, building synergies with an existing SADC initiative and framing it within a comprehensive and multi-stakeholder policy process like CAADP could also contribute to removing some of the current obstacles to its full implementation.

As most actors in the region agree on the need for an holistic regional approach to food security and for stronger cross-sector linkages, a realistic

way forward for an overarching multidimensional regional CAADP could be a programmatic approach to different areas of intervention. This could meet the interest of all involved SADC countries and their different stakeholder groups and could be shaped as a differentiated gears' regional CAADP framework. SADC countries are very different and it would be realistic and useful to build the regional food security compact and investment plan around different cooperation areas that are progressing at differentiated gears and different sub-groups of SADC countries which already cooperate well in specific areas (or are likely to) and do have in place a series of programmatic cooperation initiatives.

Countries would come on board gradually in various sectors and parts of the regional compact where they see interest and also benefits (to be assessed on a sector by sector basis). Some of the CAADP initiatives will be new; in other areas the supporting regional institutions and strategies are already in place and a regional CAADP compact would only need to integrate them into the overarching food security plan for the region. Hence "different gears" for different groups of countries: for instance a uniform agricultural markets information system for those where, de facto, the trade integration happens already; further and faster natural resources management cooperation for countries who share

water basins; and so on. A faster 'gear' would mean a specific investment plan for that specific area or sub-sector, or a pilot joint programme to be initially implemented only by those few willing SADC MS.

The added value of such an approach would be to look at existing sector progress and find a niche for CAADP, either as synergy-creation or in some cases as new 'multi-purpose' programmes related to food security, e.g., a value chain development approach which identifies and addresses simultaneously the bottlenecks on natural resources, corridors, and trade. Such a gradual and 'differentiated-gears' approach could also apply to the formulation of a flexible 'Tripartite' CAADP compact (bearing in mind that the pace and directions towards a possible 'Tripartite' compact will be set by formal consultations involving the policy organs of the three RECs).

This approach would allow SADC to simultaneously formulate its part of the 'Tripartite' compact and complete its ongoing process for the RAP, but without imposing to non-SADC countries the same degree of legal value in other programmes that will instead be common to the three RECs on certain shared challenges. Given the many countries involved and the complexities at stake, the process

towards a flexible, differentiated-gear, regional food security framework would necessarily take time for identification, agreement and definition of realistic plans. Careful design of a 'comprehensive, internally coherent and differentiated gears' compact would require a step-by-step multi-stakeholder consultative process, where all key actors should be represented.

This would probably have to start with identifying a minimum common ground among SADC MS on what major bottlenecks and opportunities are for: establishing operational linkages between CAADP and other regional programmes; articulating possible multi-sector priorities into the SADC (and 'Tripartite') CAADP compact; and finding ways for regional actors and their development partners to work more effectively together to fast-track implementation of a regional CAADP.



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8. APPENDICES

A.1 Meat Sector

Appendix A – Farm Values and Farm-to-Retail Price Spreads

A.1.1 Poultry industry

The real Farm-to-Retail Price Spread (FTRPS) and farm value share of fresh whole chickens are shown in Figure A.1.1. The real FTRPS of fresh whole chickens increased by 4.3%, on average, between 2012 and 2013. During the same period, the farm value share of fresh whole chicken decreased by 2.2%. The average farm value share for fresh whole chicken per kg in 2013 was 55.09%.

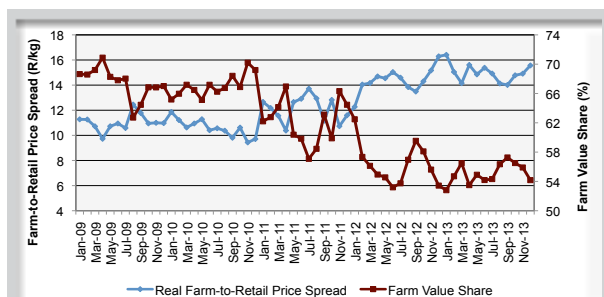


Figure A.1.1 : Real farm-to retail price spread and farm value share of poultry

Source : Stats SA, 2013; AMT, 2013 and own calculations

A.1.2 Beef

The real Farm-to-Retail Price Spread (FTRPS) and the farm value share for beef are shown in Figure A.1.2 below. The average real FTRPS of beef decreased by 4.6% between 2012 and 2013 and reached R35.60 in December 2013. The farm value share of beef decreased by 1.3% between 2012 and 2013. The farm value share of beef was 45% in December 2013.

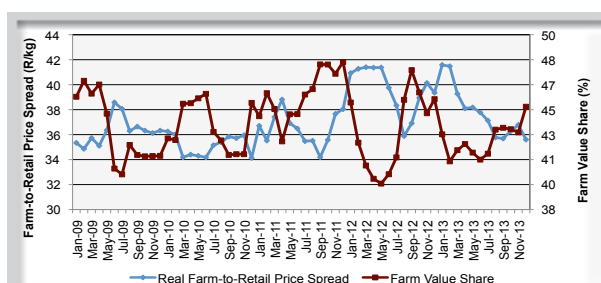


Figure A.1.2 : Real farm-to-retail price spread and farm value share for beef

Source : Stats SA, 2013; AMT, 2013 and own calculations

A.1.3 Lamb

The real Farm-to-Retail Price Spread (FTRPS) and the farm value share of lamb are depicted in Figure A.1.3. The real FTRPS of lamb increased by 4.5% between 2012 and 2013 and reached R45.75/kg in December 2013. The farm value share decreased by 7.5% on average between 2012 and 2013 and was 49.69% during December 2013.

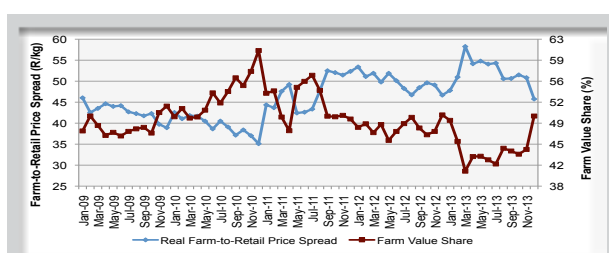


Figure A.1.3 : Real farm-to-retail price spreads and farm value share of lamb

Source : Stats SA, 2013; AMT, 2013 and own calculations

A.1.4 Pork

Figure A.1.4 shows the real Farm-to-Retail Price Spread (FTRPS) and farm value share of pork chops. The average real FTRPS increased from R340.93 in 2012 to R354.38 in 2013 (3.9%). The farm value decreased by 4.9% on average between 2012 and 2013 and was 36.16 % during December 2013.

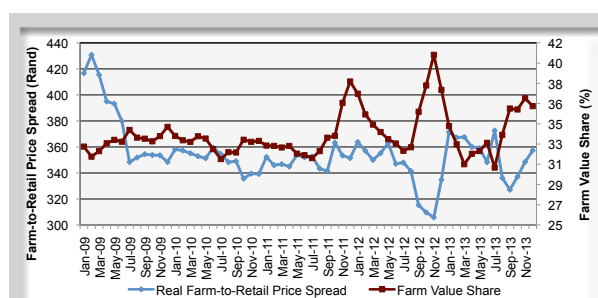


Figure A.1.4 : Real farm-to-retail price spread and farm value share of pork

Source : Stats SA, 2013; AMT, 2013 and own calculations

A.2 Dairy Sector

In order to explain the FTRPS for dairy, four main activities were identified, all of which require a diverse set of resources and inputs:

- Human resources capable of conducting diverse activities;
- Capital equipment such as transport, production, packaging, cooling and testing equipment;
- Electricity is needed to heat or cool the milk from the time of milking up to the moment when the product leaves the retail shelves;
- Different types of packaging materials are used (plastic, carton, multilayer composite material) and this is a major cost contributor.

Figure A.2.1 shows the farm value share as a percentage of the real retail value for full cream milk, between January 2009 and December 2013. In January 2009, the farm value share of full cream milk was 34.12%. The farm value share for full cream milk decreased to reach its lowest point of 31.32% in September 2010 after which it increased to peak at 40.43% in April 2012.

In December 2013 the farm value share for full cream milk was 37.83%. The average farm value share in 2013 remained constant at 37.21% as was the case in 2012. Between 2012 and 2013, the average farm value share marginally increased, on average, by 0.02%.

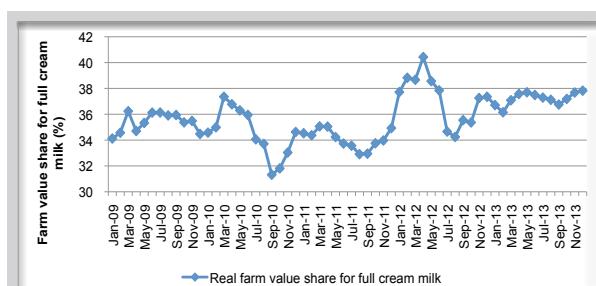


Figure A.2.1 : Real farm value shares for full cream milk, sachets (R/litre)
Sources : Stats SA, 2013; MPO, 2013; SAMPRO, 2013 and own calculations

Figure A.2.2 shows the trends in the real farm-to-retail-price-spread (FTRPS) for full cream milk between January 2009 and December 2013. From January 2009, the spread was R6.49/l and increased to reach a peak of R6.76/l in April 2009. The real FTRPS then decreased to reach a trough of R5.69/l in January 2012. The average real FTRPS increased from R6.03/l to R6.13/l (1.66%) between 2012 and 2013.

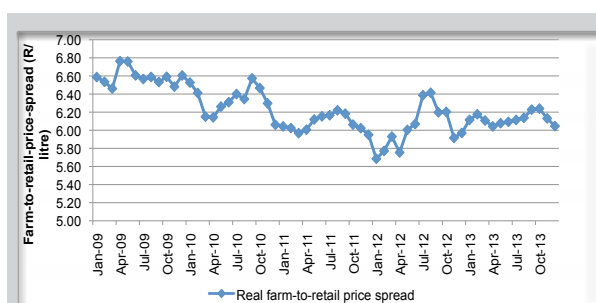


Figure A.2.2 : Real farm-to-retail price spread for full cream milk, sachets (R/litre)
Sources : Stats SA, 2013; MPO, 2013; SAMPRO, 2013 and own calculations

A.3 Maize Sector

Figure A.3.1 shows the trends in the farm value shares for super maize meal and special maize meal. The two farm value shares increased between mid-2005 and mid-2007. Between 2011 and 2013 the average farm value share of super fluctuated by about 50% and special maize meal increased from 40% to 60%.

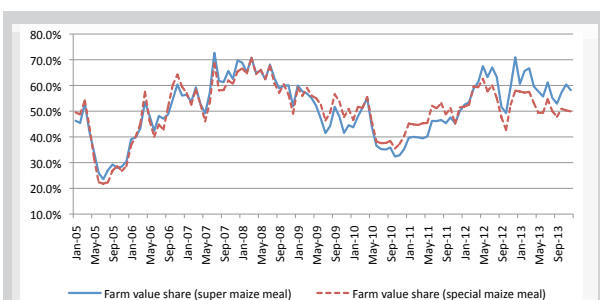


Figure A.3.1 : Real farm value share of special and super maize meal
Source : SAFEX, Stats SA and own calculations, 2013.

Figure A.3.2 shows the FTRPS for super maize meal and special maize meal between January 2005 and December 2013. The two spreads showed high volatility. This can be a result of the substitution effect between special and super maize meal grades as prices changed and consumers switched to the more affordable option of maize meal as pressure on disposable income realized.

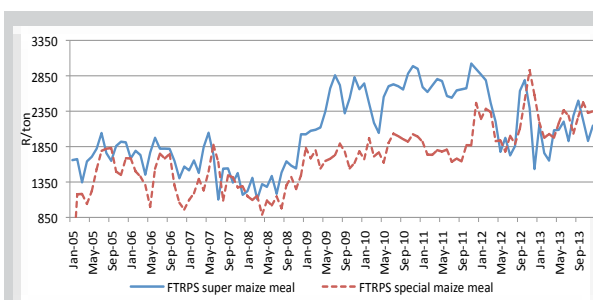


Figure A.3.2 : Real farm to retail price spread of special and super maize meal
Source : SAFEX, Stats SA and own calculations, 2013.



A.4 Wheat Sector

A.4.1 Real farm value share of brown and white bread

Figure A.4.1 shows that the real farm value share for both brown and white bread was between 17% and 19% for 2013. The averages in 2013 were 17.63% and 17.92% for brown and white bread, respectively.

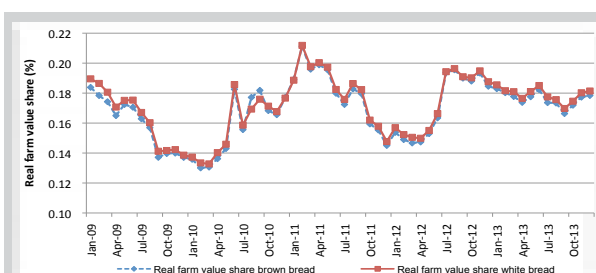


Figure A.4.1 : Real farm value share of brown and white bread
Source : SAFEX, 2013; Stats SA, 2013 and own calculations

A.4.2 Real farm to retail price spread (FTRPS)⁵⁴

Figure A.4.2 shows the real FTRPS for brown and white bread. On average, the FTRPS for brown bread was R16 547/ton of flour in 2013. In the case of white bread, the average FTRPS was R17 295/ton of flour in 2013.

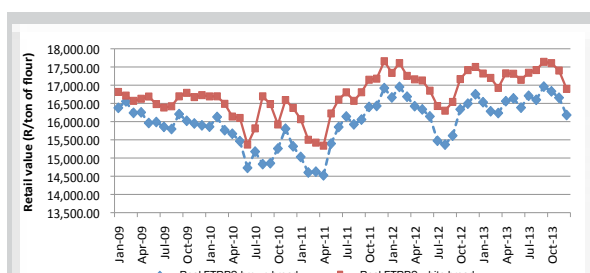


Figure A.4.2 : Real farm to retail price spread of brown and white bread
Source : SAFEX, 2013; Stats SA, 2013 and own calculation

⁵⁴ Note: The real farm to retail price spread is calculated by deducting the real farm value for ton of flour from the real retail value of a ton of flour. The price spread is representative of all the cost involved in the value adding process.

A.5 Vegetable Sector

A.5.1 Cabbages

Figure A.5.1 shows the real FTRPS and the real farm value share of cabbages. On average the farm-to-retail price spread of cabbages decreased by 1.9% between 2012 and 2013. On the other hand, the farm value share of cabbages showed a positive growth rate of 12.0% between 2012 and 2013.

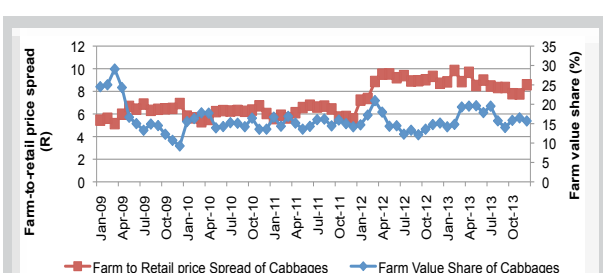


Figure A.5.1 : Real farm-to-retail price spread and farm value share of cabbages

Source : DAFF, 2013; Stats SA, 2013 and own calculations

A.5.2 Onions

The real FTRPS and the real farm value share of onions are shown in Figure A.5.2. The average farm-to-retail price spread of onions showed an increase of 7.3% between 2012 and 2013. The farm value share of onions showed a positive growth rate of 11.5% between 2012 and 2013.

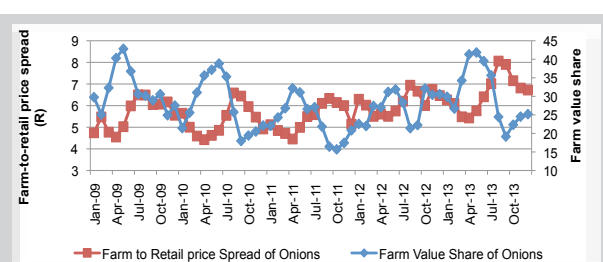


Figure A.5.2 : Real farm-to-retail price spread and farm value share of onions

Source : DAFF, 2013; Stats SA, 2013 and own calculations

A.5.3 Tomatoes

Figure A.5.3 shows the real FTRPS and farm value share of tomatoes. The farm-to-retail price spread of tomatoes increased by 7.4% between 2012 and 2013. On the other hand, the farm value share of tomatoes showed a negative growth rate of 0.7% between 2012 and 2013.

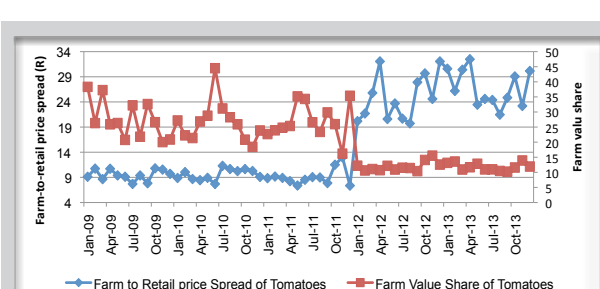


Figure A.5.3 : Real FRPS and farm value share of tomatoes

Source : DAFF, 2013; Stats SA, 2013 and own calculations

A.5.4 Potatoes

The real FTRPS and real farm value share of potatoes are shown in Figure A.5.4. The farm-to-retail price spread of potatoes decreased by 5.5% between 2012 and 2013. On the contrary, the farm value share of potatoes increased by 19.0% between 2012 and 2013.

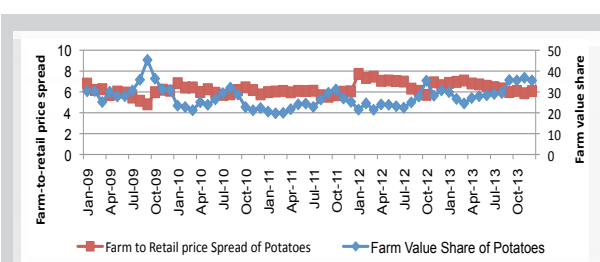


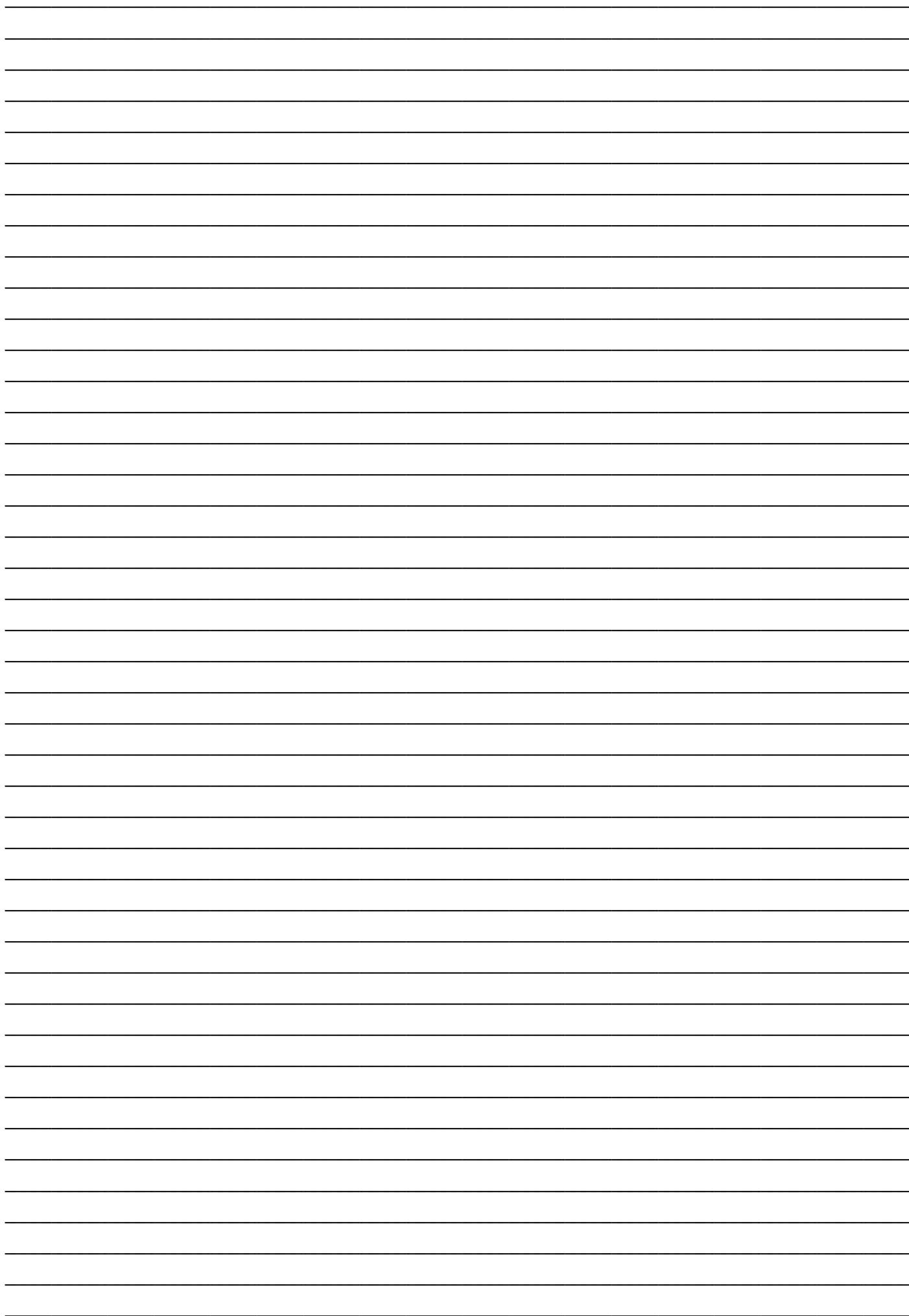
Figure A.5.4 : Real farm-to-retail price spread and farm value share of potatoes

Source : DAFF, 2013; Stats SA, 2013 and own calculations

ACRONYMS

AMPS	All Media and Products Study
AMT	Agrimark Trends
BDI	Baltic Dry Index
CPI	Consumer Price Index
DAFF	Department of Agriculture, Forestry and Fisheries
DAP	Di-ammonium phosphate
DPME	Department of Performance Monitoring and Evaluation
EU	European Union
FAO	Food and Agricultural Organisation
FCR	Food Cost Review
FRPI	Farming Requisite Price Index
FTRPS	Farm-to-retail price spread
FSSA	Fertilizer Society of South Africa
Grain SA	Grain South Africa
GTA	Global Trade Atlas
ICESCR	International Covenant on Economic, Social and Cultural Rights
IEA	International Energy Association
IFA	International Fertilizer Industry Association
IFSS	Integrated Food Security Strategy
ITC	International Trade Centre
LSM	Living Standards Measure
MDG	Millenium Developmant Goals
MOP	Murate of potash
MPO	Milk Producers' Organization
MTSF	Medium Term Strategic Framework
NESOI	Not elsewhere specified or included
NFD	National Freight Database
USA	United States of America
UK	United Kingdom
PPI	Producer Price Index
SAARF	South African Advertising Research Foundation
SAFEX	South African Futures Exchange
SAGIS	South African Grain Information Service
SAMPRO	South African Milk Processors' Organization
SAPIA	South African Petroleum Industry Association
Stats SA	Statistics South Africa
SARB	South African Reserve Bank
SSA	Sub-Saharan Africa
SME	Small and medium enterprises
UAE	United Arab Emirates
UN	United Nations
VAT	Value Added Tax
WTA	World Trade Atlas

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