The South African Food Cost Review

Published in 2020 by

The National Agricultural Marketing Council

and

The Department of Agriculture, Land Reform and Rural Development

FOREWORD

In October 2002, the Cabinet approved the establishment of a food price monitoring mechanism (Food Pricing Monitoring Committee) in accordance with the Agricultural Marketing Act. The Food Pricing Monitoring Committee was appointed in January 2003 with specific terms of reference. A central part of the terms of reference related to the analysis of the price formation mechanism in supply chains of basic foodstuffs. The research output of the Committee provided a useful foundation upon which the state can monitor trends in food prices, food processing costs and farm-to-retail price spreads.

This is the fifteenth publication of the South African Food Cost Review (FCR) and it provides a specific overview of trends in food price inflation and food prices at retail level. The National Agricultural Marketing Council (NAMC)'s annual FCR is a valuable document that provides important information about the key factors that drive food prices in South Africa. This publication also reports on different factors that affect the agricultural sector either directly or indirectly, including domestic economic developments, consumer dynamics, climate change, the oil market, transport, input costs and agricultural trade.

Dr Simphiwe Ngqangweni - Chief Executive Officer, National Agricultural Marketing Council

FOOD COST REVIEW 2020 IN BRIEF

Global food price trends

Food prices across the globe declined throughout 2019 but started to increase in the last quarter of 2019 as COVID-19 became a reality. The main reason for this could be the logistic impact of the COVID-19 pandemic. A significant contraction in demand for many commodities followed (Moss, 2020). The Food and Agriculture Organization (FAO) Food Price Index (FFPI), which tracks international prices of the most commonly traded food commodities, averaged 95 and a real index of 95.6 for 2019. For 2020, the United States Department of Agriculture (USDA) predicts that food prices will increase between 1.5 % and 2.5 %. Dairy prices are expected to rise by 1.5 % to 2.5 %, vegetable prices by 0 % to 1 %, fresh fruit prices by 1 % to 2 %, cereal and bakery prices by 2 % to 3 %, beef and veal prices by 0 % to 1 %, poultry prices by 0.5 % to 1.5 %, and pork prices by 1.5 % to 2.5 % (Amadeo, 2019). The international Food Price Index (FPI) increased, on average, by 4.1 % from 2018 to 2019, y-o-y.

Trends in the agriculture, forestry and fisheries trade

South Africa showed a positive trade balance in 2019 and exported R74.16 worth of primary or unprocessed agricultural products – an increase of 0.45 % from 2018. South Africa imported unprocessed products to the value of R30.06 billion. The country's trade balance was R44.10 billion, with a decline of 2.53% compared to 2018, supported by the increase in imports. The largest export value of all the years depicted was experienced in, which could be a result of increased production across value chains due to new technologies and the opening of new markets. South Africa gained the most value from trading unprocessed agricultural products with the Netherlands (20.9 %), United Kingdom (15.6 %), China (13.6 %), Malaysia (8.7 %) and United Arab Emirates (6.4 %), among others, in 2019.

South Africa imports more processed products than unprocessed products (in terms of value). This could be an indication that there is a need for investment in the processing of agricultural products. South Africa had a positive trade balance in most of the years, with the exception of 2011 and 2012. South Africa exported the highest value agricultural products in 2019, to the value of R67.7 billion and imported the highest value of agricultural products in 2019, to a value of R60.9 billion. The trade balance of processed agricultural products in 2019 was R6.8 billion. South Africa gained the most from trading with Botswana (108.1 % trade balance gained), Mozambique (87.9 %), Namibia (84.4 %) and Lesotho (57.0 %).

Trends in input costs and Producer Price Index (PPI)

The cost-price squeeze effect continued through 2019 at farm level. The terms of trade at the primary agricultural level have deteriorated significantly over time. The terms of trade for primary agriculture declined by 4.1 % in 2019 compared with 2018.

The overall financial position of primary producers is constantly under pressure. Between 2018 and 2019, the real expenditure on intermediate goods and services increased by 1.6 %, while real net farm income and the real gross income decreased by 17.9 % and 5.4 % respectively.

According to the Fertilizer Association of Southern Africa (Fertasa, 2020), South Africa imported 2.2 million tons of overall fertiliser and exported 567.5 tons of fertiliser in 2019. KCL prices increased by 2.2 % while MAP and Urea Granular (46) decreased by 7.1 % and 2.5 % respectively between 2018 and 2019.

Crude oil prices showed a decrease of 11.7 % from 2018 to 2019. The price decreases during 2018 and 2019 mainly reflected a slowdown in oil demand as the US-China trade war weakened the global economy. The average value of crude oil was USD63.77/barrel in 2019.

Domestic fuel price trends between 2018 and 2019 were as follows: 0.05 % sulphur diesel in Gauteng and 0.05 % sulphur diesel at the coast increased by 3.2 % (R/ℓ) and 3.2 % (R/ℓ) respectively, while the crude oil price decreased by 11.7 % ($/barrel).

Eskom tariffs increased by 9.4 % compared to 2018, which is above inflation.

From 2012 to 2019, the PPI of electricity and water, mining, final manufactured goods (headline PPI), intermediate manufactured goods, and agriculture, forestry and fisheries increased by 85.1 %, 49.2 %, 46.1 %, 38.6 % and 31.6 % respectively. During 2019, increasing trends were realised for mining (17.4v%), electricity and water (11.4 %), final manufactured goods (4.6 %) and intermediate manufactured goods (2.6 %), while agriculture declined by 1.8 % compared to 2018.

Inflationary trends for selected food items
The South African headline and food and non-alcoholic beverages inflation rates reached 4.1 % and 4.2 % respectively in March 2020.

At a provincial level, the Western Cape Province experienced the highest annual food inflation increase (4.8 %) between March 2019 and March 2020, followed by the Northern Cape (4.1 %) and Gauteng (4.1 %) provinces.

Trends in prices, farm values and price spreads
Poultry: The real Farm-to-Retail-Price Spread (FTRPS) of fresh whole chicken increased on average by 5.4 % between 2018 and 2019. During the same period, the farm value share of fresh whole chicken decreased by 3.6 %. The average farm value share for fresh whole chicken per kg in 2019 was 54.9 %.

In real terms, Individually Quick Frozen (IQF) chicken, frozen and fresh chicken producer prices decreased by 4.6 %, 3.7 % and 3 % respectively between 2018 and 2019. Compared with 2010, the real producer prices of IQF and frozen chicken increased by 18.3 % and 11.5 % respectively, while fresh chicken decreased by 11.6 %.

Beef: The average real FTRPS of beef decreased by 1.95 % between 2018 and 2019, and reached R37.09/kg in 2019. The real farm value share of beef decreased by 3.8 % between 2018 and 2019. The real farm value share of beef was 51.4 % in 2019.

Lamb: The real FTRPS of lamb increased by 1.2 % between 2018 and 2019, and was R63.51/kg, on average during 2019. The real farm value share of lamb decreased by 6.6 % between 2018 and 2019.

Pork: The average real FTRPS decreased from R47.67/kg in 2018 to R45.80/kg in 2019 (3.9 %). The real farm value share increased by 0.2 % on average between 2018 and 2019 and was 33.6 % on average during 2019.

Milk: The average annual real FTRPS decreased from R9.31/ℓ (between March 2018 and March 2019) to R9.14/ℓ (between March 2019 and March 2020) (-1.8 %).

Maize: The FTRPS showed high instability due to a substitution effect between special and super maize meal. When prices change, a likelihood that arises is that consumers tend to switch to an affordable maize meal option as pressure on disposable income is realised. The FTRPS of super maize meal between 2015 and 2020 fluctuated between R1 720/ton and R5 037/ton.

Wheat: The retail price of white bread sliced increased by 1.15 %, while brown bread sliced increased by 2.95 % from 2018 to 2019. Total supply, including, production, imports and carry-over stocks, was at 3 948 000 tons, while local demand was at 3 409 000 tons.

On average, the FTRPS for brown bread was R20 941/ton of flour in 2019, while the white bread average FTRPS was R21 432/ton of flour in 2019.

Vegetables: The market prices for selected vegetables were, on average, higher in 2019, when compared to 2018. In nominal terms, the average increases in market prices, per ton, cabbages, tomatoes, and potatoes were 9.6 %, 8.2 %, and 6.9 % respectively in 2019 compared to 2018. The average market price of onions was 8.8 % lower in 2019 compared to 2018.

Fruit Sector: The average market prices per ton of bananas, oranges and apples were 9.3 %, 8.3 % and 5.1 % respectively higher in 2019 than in 2018.

On the retail level, the average prices per kg of apples, bananas and oranges were 11.6 %, 10.8 % and 3.3 % higher respectively in 2019, compared to 2018.

Selected Topics

The impact of COVID-19 on South Africa's imported staple foods

South Africa imports at least 50 % of its wheat and is therefore directly affected by global prices. Due to COVID-19, a drastic increase in global wheat prices was observed, and as a result, domestic prices were negatively affected because the country relies on global supplies. At the beginning of the year, global prices declined, with record stocks globally for wheat of over 740 million tons fuelling the decrease price (IGC, 2020). Simultaneously with prices going down, COVID-19 was rapidly spreading across the world, and countries started putting measures in place to control it from spreading further. In preparing for the lockdown, countries began to import more wheat stocks for reserve in fear and demand. An increase of 9% in wheat prices during March 2020 as demand escalated was observed (USDA, 2020). Black Sea countries such as Russia, Ukraine, Romania and Bulgaria began to limit their exports to countries outside Asia and Europe, with Kazakhstan and Russia setting export quotas for wheat and flour (World-Grain, 2020).

Global and local economy at high risk due to COVID-19

South Africa is likely to continue to experience the global and continental impact of COVID-19. Africa's largest economy is likely to witness increasingly slower economic growth and development for the duration of the pandemic, with South Africa's economy projected to decline by 4.5 % in 2020. Two of the major economic sectors – mining and tourism – are expected to be especially hurt by the pandemic (BusinessTech, 2020; Shaban, 2020). The current unemployment level is 29 % (Bronkhorst, 2020) and is expected to rise further even reaching up to 50 % (BusinessTech, 2020).

Impact on farmers of disruptions caused by COVID-19 on food supply chains

Logistics in food value chains include all activities that enable the flow of agriculture, namely inputs, outputs and agriculture-related services, such as transportation, warehousing, procurement, packaging and inventory management. The efficacy of logistics is critical for the agri-food sector, in particular in times of crisis. Disruptions in supply chains can have an adverse impact on the quality, freshness and safety of food and impede access to markets and affordability.

Consumers demand products that are climate friendly: Climate change discussion within the context of agricultural product prices

Natural disasters such as climate change, leading to drought, have a dire effect on agricultural production. Agriculture relies on climate and water availability to thrive; thus, it is easily impacted by natural events and disasters. Furthermore, COVID-19 has delayed implementation of some of the AFRICAP in-country activities

ACKNOWLEDGEMENTS

This report was compiled by a team of economists from the National Agricultural Marketing Council (NAMC). The efforts and dedication of the contributors are highly appreciated.

Table of Contents

List of Figures

List of Tables

Abbreviations/Acronyms

AFF	Agriculture, Forestry and Fisheries
AMT	Agrimark Trends
COVID-19	Corona Virus Disease 2019
CEC	Crop Estimates Committee
CPI	Consumer Price Index
DAFF	Department of Agriculture, Forestry and Fisheries
DAP	Diammonium Phosphate
DoL	Department of Labour
EU	European Union
FAO	Food and Agriculture Organization
Fertasa	Fertilizer Association of Southern Africa
FMD	Foot-and-Mouth Disease
FPI	Food Price Index
FP&M SETA	Fibre Processing and Manufacturing Sector Education and Training Authority
FRPI	Farming Requisite Price Index
FTRPS	Farm-to-Retail-Price-Spread
GDP	Gross Domestic Product
Grain SA	Grain South Africa
GTA	Global Trade Atlas
ha	Hectares
HS	Harmonised System
IEA	International Energy Association
IFA	International Fertilizer Association
IPAP	Industrial Policy Action Plan
IQF	Individually Quick Frozen
ITAC	International Trade Administration Commission of South Africa
KCL	Potassium Chloride
kg	Kilogram
km	Kilometre
kWh	Kilowatt Hour
MAP	Monoammonium Phosphate
m-o-m	Month-on-month
MOP	Muriate of Potash
MPO	Milk Producers' Organisation
NAMC	National Agricultural Marketing Council
NERSA	National Energy Regulator of South Africa
NFD	National Freight Database
NGP	National Growth Path
NRMDP	National Red Meat Development Programme
NSNP	National School Nutrition Programme
OLS	Ordinary Least Squares
OPEC	Organization of the Petroleum Exporting Countries
PPI	Producer Price Index
S&DEC	Supply & Demand Estimates Committee
SADC	Southern African Development Community
SAFEX	South African Futures Exchange
SAGIS	South African Grain Information Service
SAMPRO	South African Milk Processors' Organisation
SAPIA	South African Petroleum Industry Association
SARB	South African Reserve Bank

Stats SA	Statistics South Africa
TSP	Triple superphosphate
UK	United Kingdom
UN	United Nations
US	United States
USA	United States of America
USDA	United States Department of Agriculture
VAT	Value-Added Tax
WTA	World Trade Atlas
y-o-y	Year-on-year

1.FOOD PRICE TRENDS

1.1 Global food price trends

Global food commodity prices declined throughout 2019 but started to increase in the last quarter of 2019 as COVID-19 became a reality. The main reason for this is the logistical impact of the COVID-19 pandemic, resulting in a significant contraction in demand for many commodities (Moss, 2020).

The Food and Agriculture Organization (FAO) Food Price Index (FFPI), which tracks international prices of the most commonly traded food commodities, averaged a nominal average of 95 and a real index of 95.6 for 2019. For 2020, the United States Department of Agriculture (USDA) predicted that food prices would increase between 1.5 % and 2.5%. Dairy prices were expected to rise by 1.5 % to 2.5 %, vegetable prices by 0% to 1%, fresh fruit prices by 1 % to 2 %, cereal and bakery prices by 2 % to 3 %, beef and veal prices by 0 % to 1 %, poultry prices by 0.5 % to 1.5 %, and pork prices by 1.5 % to 2.5 % (Amadeo, 2019).

The international Food Price Index increased, on average, by 4.1 % from 2018 to 2019, y-o-y, with the increase so far during 2020 being 1 %, as illustrated in **Figure 1**.

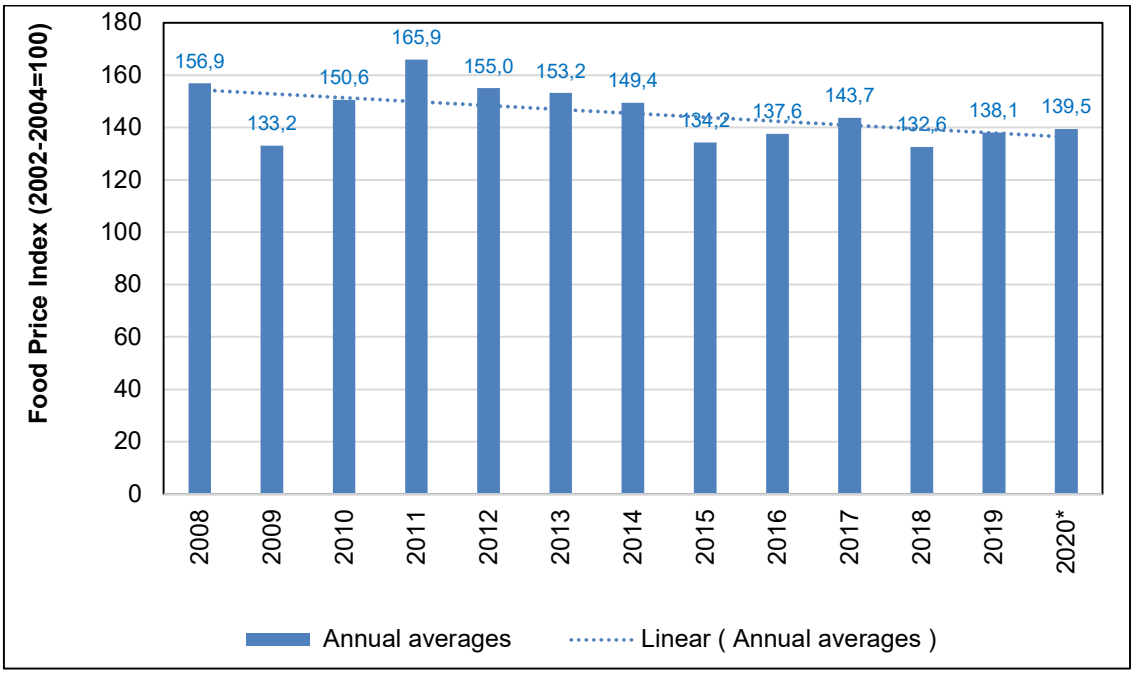

Figure 1: **Annual averages for the international Food Price Index**
Source: FAO (2020b)
**Note: including up to May 2020*

Figure 2 shows the international price indices for various food categories from January 2015 up to May 2020. Annual (May 2020 vs May 2019) growth in the following food categories was reported: the oils and cereals price indexes increased by 1 % and 0.4 %. The dairy price index recorded the largest annual decline of 19.2 %, followed by the sugar price index with a decline of 11.1 %.

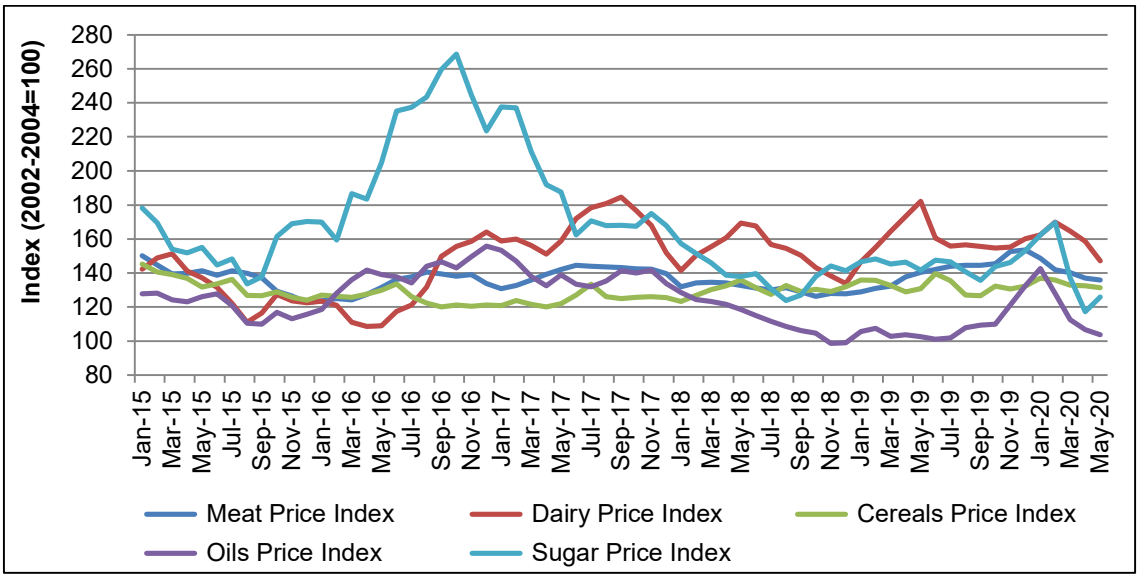

Figure 2: International price indices for various food categories
Source: FAO (2020b)

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

2.1. South Africa's agricultural trade review

2.1.1. South Africa's unprocessed agricultural trade

South Africa exports more unprocessed agricultural products compared to processed agricultural products (by value). This could be an indication that there is a need for investment in the processing of agricultural products, which in turn could lead to higher income for value-addition. **Figure 3** shows South Africa's trade performance in unprocessed agriculture over the last ten years, measured in millions of Rands. It can be noted that the exports of unprocessed agricultural products followed a positive upward trend. The trade balance also showed a positive trend as a result of a higher value in exports than in imports. South Africa exported R74.16 billion worth of unprocessed agricultural products in 2019, which was 0.45 % more than exports in 2018. In turn, South Africa imported R30.06 billion worth of unprocessed agricultural products, 5.17 % more than what was imported in 2018. The country's trade balance was R44.10 billion, with a decline of 2.53 % compared to 2018, supported by the increase in imports. The largest export value was experienced in 2019 compared to all the other years depicted, which could be the result of increased production across value chains due to new technologies and the opening of new markets. South Africa gained the most value from trading unprocessed agricultural products with the Netherlands (20.9 %), United Kingdom (15.6 %), China (13.6 %), Malaysia (8.7 %) and United Arab Emirates (6.4 %), among others, in 2019.

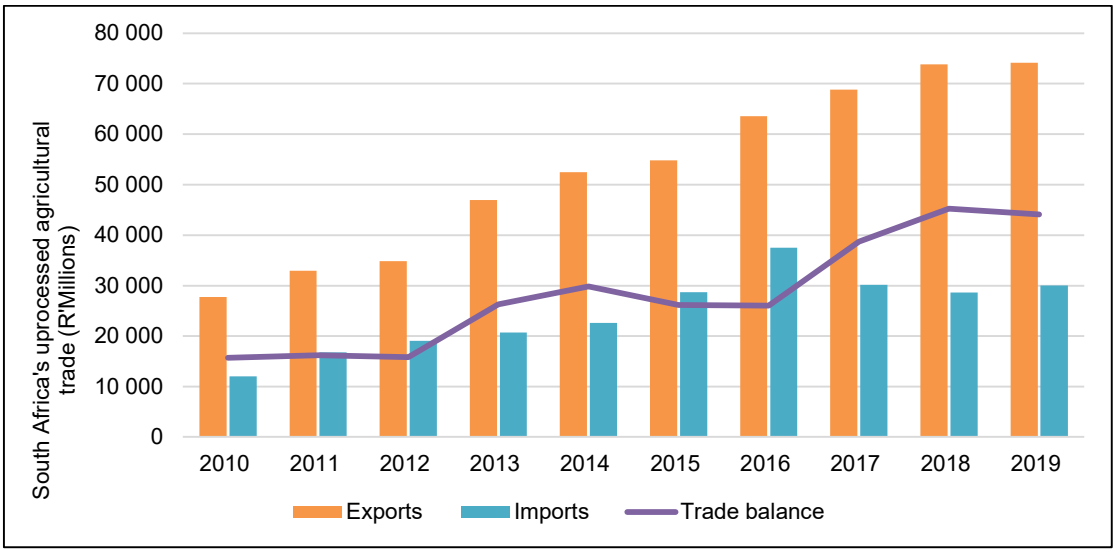

Figure 3: **Trade performance of South Africa's unprocessed agricultural products**
Source: Global Trade Atlas (GTA) (2020)

Table 1 shows the primary unprocessed agricultural products that were exported by South Africa between 2017 and 2019. Citrus remains the unprocessed agricultural product with the highest export value, with a value of R19.7 billion in 2019, 2.68 % lower than the previous year. Grapes followed citrus with an export value of R9.2 billion. Apples, pears and quinces were worth R8.0 billion, fresh or dried nuts R5.9 billion and wool R4.4 billion. Citrus was destined for the Netherlands, the United Kingdom (UK) and China, while grapes were also exported to the Netherlands and the UK. Apples, pears and quinces were exported to the UK, Malaysia and Russia. Raw cane sugar increased by approximately 64.8 % in 2019 compared to 2018 and berries by 33.3 %. Cane sugar was marketed to Malaysia and India, while berries were exported to the UK, Netherlands and Germany.

Table 1: Main unprocessed agricultural products exported by South Africa

Product HS code		Product Description	Value in R' Millions			Share value (%)			Growth (%)
			2017	2018	2019	2017	2018	2019	2018/2019
		Unprocessed agricultural products	**68857**	**73821**	**74157**				**0.45**
0805		Citrus Fruit, Fresh or Dried	18656	20273	19731	27.09	27.46	26.61	-2.68
0806		Grapes, Fresh or Dried	8534	9123	9235	12.39	12.36	12.45	1.22
0808		Apples, Pears and Quinces, Fresh	7645	7655	8040	11.1	10.37	10.84	5.02
0802		Nuts Nesoi, Fresh or Dried	4583	5260	5960	6.66	7.13	8.04	13.31
5101		Wool, Not Carded or Combed	4715	5268	4402	6.85	7.14	5.94	-16.44
170114		Cane Sugar, Solid, Raw, No Added Flav/Color, Nesoi	2066	2528	4166	3	3.42	5.62	64.82
1005		Corn (Maize)	6304	5998	4053	9.16	8.12	5.46	-32.43
0810		Fruit Nesoi, Fresh	1738	1811	2414	2.52	2.45	3.26	33.3
0804		Dates, Figs, Pineapples, Avocados Etc, Fr Or Dried	1284	1927	1548	1.86	2.61	2.09	-19.68
0809		Apricots, Cherries, Peaches, Plums & Sloes, Fresh	1653	1648	1508	2.4	2.23	2.03	-8.53

Source: GTA (2020)

South Africa is a net importer of rice and wheat because of the growth requirements of these crops. **Table 4** shows the main unprocessed agricultural products which South Africa imported over the last three years. South Africa imported R6.5 billion worth of rice in 2019 and R5.7 billion worth of wheat.

South Africa imported the majority of its rice from Thailand, India and Pakistan, while wheat was imported from Germany, Russia, Lithuania and the United States of America (USA), among others. South Africa also imported a large amount of maize in 2019 compared to 2018, mostly destined for the Western Cape due to price differences between inland and the Western Cape. It was cheaper to import maize than to transport yellow maize for feed from the maize production area. Imports of maize increased by 227.8 % in 2019 at a value of R1.9 billion. Most of the maize was from Argentina, the USA and Brazil. South Africa furthermore imported 29.2 % more of solid cane sugar with no additives in 2019 compared to 2018, as well as 27 % more nuts such as almonds, macadamia nuts, pistachios, etc. This might indicate an increase in demand for nuts in the country, while there is low local production, as the value of imports has been increasing.

Table 2: **Main unprocessed agricultural products imported by South Africa**

Product HS code	Product Description	Value in R' Millions			Share value (%)			Growth (%)
		2017	2018	2019	2017	2018	2019	2018/2019
Unprocessed Agricultural Products		**30145**	**28581**	**30060**				**5.17**
1006	Rice	6953	6881	6495	23.07	24.08	21.61	-5.62
1001	Wheat and Meslin	4370	5304	5650	14.5	18.56	18.8	6.52
01	Live Animals	2798	2977	2462	9.28	10.42	8.19	-17.33
170113	Cane Sugar Solid Raw No Added Flav/Colour	2176	1861	2404	7.22	6.51	8	29.19
1005	Corn (Maize)	1792	581	1903	5.94	2.03	6.33	227.8
2401	Tobacco, Unmanufactured; Tobacco Refuse	1715	1824	1199	5.69	6.38	3.99	-34.29
0901	Coffee; Coffee Husks etc.; Substitutes with Coffee	1225	1187	1149	4.06	4.15	3.82	-3.17
170114	Cane Sugar, Solid, Raw, No Added Flav/Colour, Nesoi	1110	798	878	3.68	2.79	2.92	10.04
1209	Seeds, Fruit and Spores, For Sowing	638	749	706	2.12	2.62	2.35	-5.79
0802	Nuts Nesoi, Fresh or Dried	415	533	676	1.38	1.86	2.25	26.99

Source: GTA (2020)

2.1.2. South Africa's processed agricultural trade

South Africa imports more processed products than unprocessed products (in terms of value). This could indicate a need for investment in the processing of agricultural products because there is a higher demand for processed agricultural products based on how much South Africa imports. The value of South Africa's trade in processed agricultural products, measured in million Rands, is depicted in **Figure 4**. South Africa exported the most in 2019, worth R67.7 billion of agricultural products, and imported the largest value of agricultural products in 2019, at R60.9 billion. The trade balance of processed agricultural products in 2019 was R6.8 billion. South Africa gained the most from trading with Botswana (108.1 % trade balance gained), Mozambique (87.9 %), Namibia (84.4 %) and Lesotho (57.0 %).

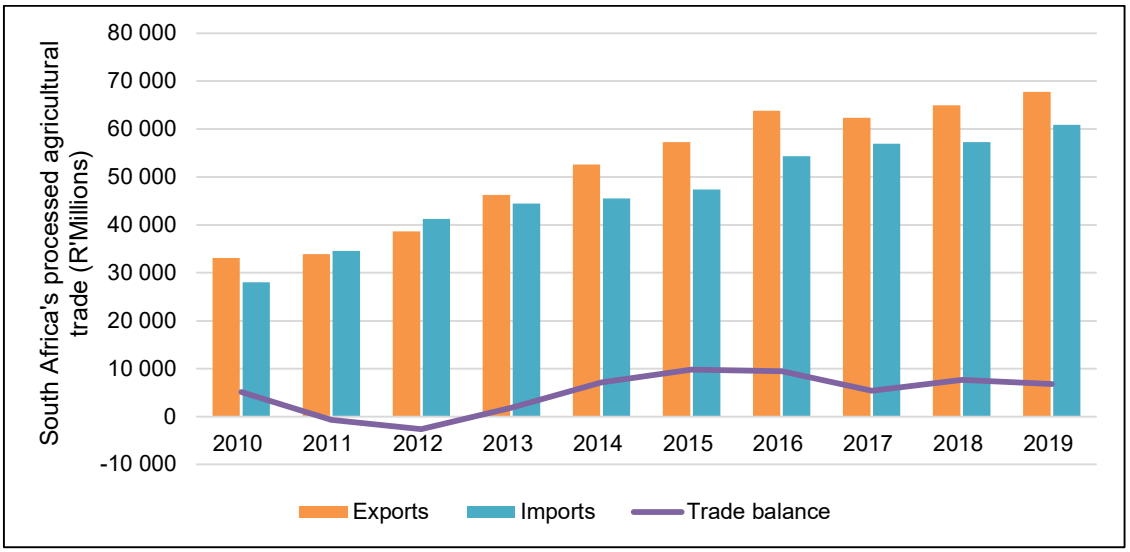

Figure 4: **Trade performance of South Africa's processed agricultural products**
Source: GTA (2020)

Table 3 shows the processed agricultural products exported by South Africa for over three years. South Africa exported R67.7 billion worth of processed products. South Africa's beverages were the highest earners of foreign income among processed agricultural products in the years under review, with wine of grapes having the largest share, followed by beer made from malt and ciders together with other beverages. Beverages made up a share of 27.6 % of agro-processed products and were worth a value of R18.7 billion, although it declined by 0.26 % compared to 2018. Beverages went to Europe, mainly the UK, the Netherlands and Germany. Products of preserved or mixed fruits and vegetables made up 13.1 % of the exports and had a value of R8.9 billion, having declined by 0.44 %. Food preparations such as sauces and soups made up 9.55 % of the processed products (R6.5 billion) and agro-food waste meant for animal feed made up 6.34 % (R4.3 billion). These kinds of products went to our neighbouring countries of Mozambique, Namibia and Botswana. The overall agro-processed products grew by 4.23% in 2019 compared to 2018. This was supported by the individual products and industries that grew in value, such as cane/beet sugar, which saw a growth of 19.7%, milling products (26.1 %), cigars, and cigarettes of tobacco (13.6 %). The positive growth in the value of agro-processed products shows the sector's potential to increase earnings for the country.

Table 3: Main processed agricultural products exported by South Africa

HS code	Product Description	Value in R' Million			Share value (%)			Growth (%)
		2017	2018	2019	2017	2018	2019	2018/2019
Processed Agricultural Products		**62339**	**64965**	**67712**				**4.23**
22	Beverages, Spirits and Vinegar	17611	18737	18689	28.25	28.84	27.6	-0.26
20	Prep Vegetables, Fruit, Nuts or Other Plant Parts	7883	8897	8858	12.65	13.69	13.08	-0.44
21	Miscellaneous Edible Preparations	5931	5966	6469	9.51	9.18	9.55	8.43
23	Food Industry Residues & Waste; Prep Animal Feed	3290	4234	4295	5.28	6.52	6.34	1.45
19	Prep Cereal, Flour, Starch or Milk; Bakers Wares	3349	3570	3850	5.37	5.5	5.69	7.86
02	Meat and Edible Meat Offal	3939	3533	3394	6.32	5.44	5.01	-3.94
15	Animal or Vegetable Fats, Oils Etc. & Waxes	3592	3230	3197	5.76	4.97	4.72	-1.01
170199	Cane/Beet Sugar chem Pure Sucrose	1477	2355	2820	2.37	3.63	4.16	19.72
11	Milling Products; Malt; Starch; Inulin; Wheat Gluten	2377	2160	2723	3.81	3.32	4.02	26.09

HS code	Product Description	Value in R' Million			Share value (%)			Growth (%)
		2017	2018	2019	2017	2018	2019	2018/2019
Processed Agricultural Products		**62339**	**64965**	**67712**				**4.23**
2402	Cigars, Cigarettes etc. of Tobacco or substitutes	1934	1725	1959	3.1	2.66	2.89	13.55

Source: GTA (2020)

Imported agro-processed products are represented in **Table 4**, expressed in millions of Rands. These imports were worth R60.9 billion in 2019, 6.37 % higher than in 2018. South Africa imported a value of R10.1 billion in beverages, which were in the form of beer, whiskies, spirits and others. This value grew by 24.9 % from 2018. Whiskies were imported from the UK and beer from Namibia, Mexico and the Netherlands. South Africa also imported animal and vegetable oils to the value of R9.1 billion and edible meat offal to the value of R8.5 billion. Although South Africa grew in milling products' export, South Africa also imported 21 % more milling products in 2019. South Africa furthermore imported 20 % more preserved fruit, vegetables and nuts in 2019 compared to 2018. Therefore, there is a demand for these products in the country and the specific industries to which they belong need to be strengthened to produce for the local market and the export market.

Table 4: Main processed agricultural products imported by South Africa

HS code	Product Description	Value in R' Million			Share value (%)			Growth (%)
		2017	2018	2019	2017	2018	2019	2018/2019
Processed Agricultural Products		**56938**	**57274**	**60924**				**6.37**
22	Beverages, Spirits and Vinegar	6741	8066	10071	11.84	14.08	16.53	24.86
15	Animal or Vegetable Fats, Oils Etc. & Waxes	10159	8770	9144	17.84	15.31	15.01	4.26
02	Meat and Edible Meat Offal	9012	9140	8456	15.83	15.96	13.88	-7.47
23	Food Industry Residues & Waste; Prep Animal Feed	5496	5445	5462	9.65	9.51	8.97	0.31
21	Miscellaneous Edible Preparations	4159	4600	4870	7.3	8.03	7.99	5.88
20	Prep Vegetables, Fruit, Nuts or Other Plant Parts	2791	3133	3766	4.9	5.47	6.18	20.2
19	Prep Cereal, Flour, Starch or Milk; Bakers Wares	1956	2276	2543	3.43	3.97	4.17	11.71
0504	Animal (Not Fish) Guts, Bladders, Stomachs & Parts	1557	1622	1735	2.74	2.83	2.85	6.96
1806	Chocolate & Other Food Products Containing Cocoa	1373	1554	1602	2.41	2.71	2.63	3.15
11	Milling Products; Malt; Starch; Inulin; Wheat Gluten	1124	1297	1573	1.97	2.26	2.58	21.31

Source: GTA (2020)

2.2. South African fisheries trade review

Since 2017, South Africa's fisheries products have been exhibiting a negative trade balance. Since 2018 and 2019, the negative trade balance has dropped by 65 %, which is a clear indication that the country exported more than what was imported. Among the top 10 fisheries products, the observed improvement in the trade balance performance was largely driven by frozen fish (03389), yellowfin tuna (030232) and frozen fish fillets (030489) whose positive trade balance increased by 363 %, 143 % and 103 % respectively. Notably, very large increases in the positive trade balance in South Africa are also registered by other products even though the monetary value may not have been very large. For instance, within a year (2018-2019) net exports of swordfish increased by 18785 % as was the case for sea cucumbers (2087 %), halibut/Greenland turbot (1859 %), flatfish (13041%) and Norway lobsters (1333%).

Figure 5, which presents trade performance of unprocessed fisheries reveals a 2 % and 15 % decline in exports and net exports (trade balance) respectively, and a 6 % rise in imports for 2018 and 2019. The increase in imports was driven by a rise in products sourced from Swaziland (3152 %), Mauritania (1399 %) Spain (667 %) and Chile (628 %) among others. Amongst the top 10 destinations for South Africa's unprocessed fisheries products, Cameroon registered the highest annual percentage increase of 2773 % while the United Kingdom had the largest drop of 35 %.

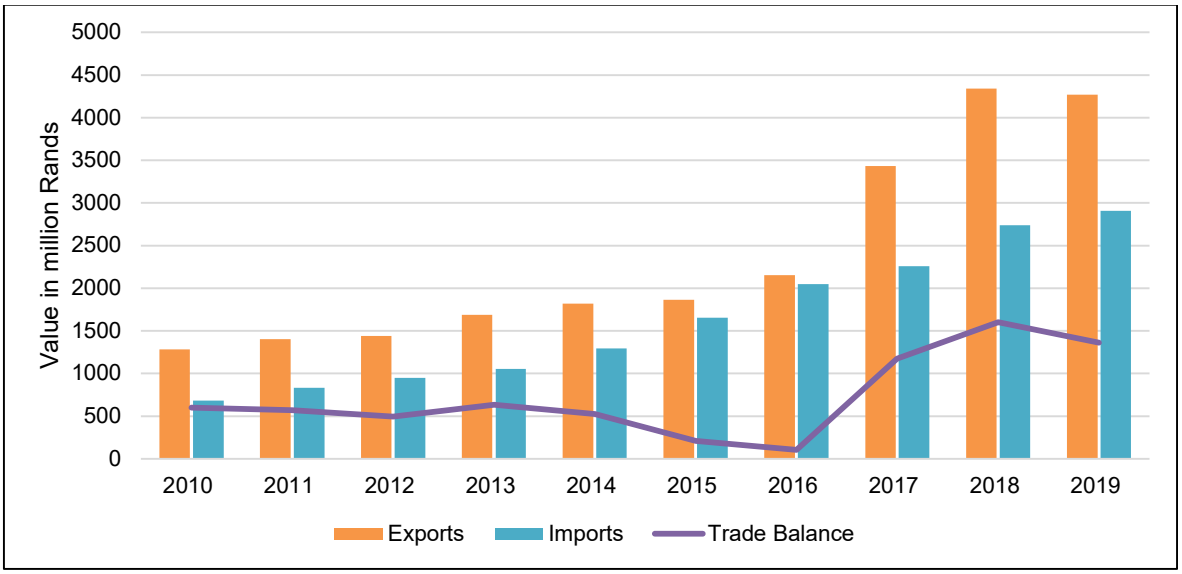

Figure 5: South Africa's unprocessed fisheries trade performance
Source: GTA (2020)

Table 5 shows South Africa's major exports of unprocessed fisheries products. Frozen fish (0303) exports contributed about R2011 million, translating into a share value of 47 % of all unprocessed fisheries products and a 17 % increase in value as compared to 2018. The top three export markets for South Africa's frozen fish are Spain (R519.1 million), Portugal (R358.9 million), Italy (R215.6 million) and Mozambique (R115.2 million). The overall decline in unprocessed fisheries exports is attributable to a fall in squid (34 %), frozen abalone (29 %), oysters (28 %), fresh fish (12 %) and rock lobster (7 %). A large drop in South Africa's squid exports was observed in Italy and Spain. Noteworthy, mussels registered the highest increase in exports (297 %), amounting to R3 million in 2019, followed by fresh abalone (99 %), which increased by about R100 million. Mussels were largely destined for the United States (R1.43 million) and Singapore (R 0.66 million) while fresh abalone was exported to Hong Kong (R137.4 million) and Taiwan (R45.7 million).

Table 5: South Africa's top ten exports of unprocessed fisheries products

HS Code	Product description	Value exported in R' Million			Share value %			% Change
		2017	2018	2019	2017	2018	2019	2019/2018
Unprocessed Fisheries products		3434	4341	4271	100	100	100	-1,61
0303	Fish, Frozen (No Fish Fillets Or Other Fish Meat)	1551	1715	2011	45	40	47	17
030743	Squid, Frozen	1061	1657	1094	31	38	26	-34
030631	Rock Lobster, Other Sea Crawfish Live/Fresh/Chill	501	534	498	15	12	12	-7
0302	Fish, Fresh Or Chilled (No Fillets Or Other Meat)	192	266	405	6	6	9	52

HS Code	Product description	Value exported in R' Million			Share value %			% Change
		2017	2018	2019	2017	2018	2019	2019/2018
Unprocessed Fisheries products		3434	4341	4271	100	100	100	-1,61
030781	Abalone, Live, Fresh Or Chilled	102	101	202	3	2	5	99
0301	Fish, Live	7	20	18	0	0	0	-12
030711	Oysters, Live, Fresh Or Chilled	13	20	14	0	0	0	-28
030752	Octopus, Frozen	3	9	10	0	0	0	2
030783	Abalone, Frozen	2	9	7	0	0	0	-29
030732	Mussels, Frozen	0	1	3	0	0	0	297

Source: GTA (2020)

South Africa's 10 most imported unprocessed fisheries products are presented in **Table 6**. Frozen fish (0303) was the most imported unprocessed fisheries product, accounting for 83 % of its imports. Morocco largely supplied frozen fish imports (31 %), followed by Namibia (19 %) and New Zealand (7 %). On the other hand, fresh fish was the second most imported product and registered the highest increase (25 %) as compared to what was imported in 2018. About 68.5 % of fresh fish imports were sourced from Norway, while Lesotho, Namibia and Mauritius collectively supplied 26 % of the fresh fish. A significant decline (57 %) was recorded for oyster imports as compared to 2018. This decline was largely due to a reduction of about R3 261 800 in imports from Namibia, the second largest supplier of fresh fish after Chile.

Table 6: South Africa's top ten imports of unprocessed fisheries products

HS Code	Product description	Value imported in R' Million			Share value %			% Change
		2017	2018	2019	2017	2018	2019	2019/2018
Unprocessed Fisheries products		2261	2738	2910	100	100	100	6
0303	Fish, Frozen (No Fish Fillets Or Other Fish Meat)	1930	2319	2406	85,36	85	83	4
0302	Fish, Fresh Or Chilled (No Fillets Or Other Meat)	230	289	362	10,19	11	12	25
030743	Squid, Frozen	74	93	90	3,29	3	3	-3
0301	Fish, Live	23	22	25	1,04	1	1	11
030742	Cuttle Fish And Squid, Live, Fresh Or Chilled	0	0	19	0	0	1	∞
030722	Scallops, Frozen	0	4	3	0	0	0	-13
030711	Oysters, Live, Fresh Or Chilled	1	7	3	0,06	0	0	-57
030721	Scallops Incl Queen Scallops, Live, Fresh, Chilled	1	1	1	0,05	0	0	20
030712	Oysters, Frozen	0	0	0	0	0	0	-
030636	Other Shrimp And Prawns, Live, Fresh Or Chilled	0	0	0	0	0	0	0

Source: GTA (2020)

With regard to processed fisheries products, **Figure 6** reveals that South Africa's exports increased by 1.7 % to R 3.769 billion in 2019 while imports dropped by 3 % from R3.912 billion realised in 2018, but the negative trade balance widened further by 0.87 %. The largest share (19 %) of processed fisheries products were destined for Spain, followed by Italy (14 %) and Hong Kong (11 %), among other countries. Conversely, processed fisheries products were mainly sourced from Thailand (37 %), an equivalent of R1.4 billion, followed by Namibia (21 %) and China (16 %).

Figure 6: South Africa's processed fisheries trade performance
Source: GTA (2020)

The top 10 processed fisheries products exported by South Africa during 2019 are presented in **Table 7**. Fish fillets (0304) were the most exported processed fisheries products, accounting for 55 % of all exports and they were destined for Spain (R709 million), Italy (R460 million) and Australia (R265 million), among other countries. Fish fillets were followed by fish preparations (16004), which increased by 12 % as compared to exports of 2018, and were destined for Botswana (R157 million), Germany (R79 million) and Lesotho (R74 million) and other countries. Among the top 10 exports by value, crustaceans (030619) recorded the highest drop in exports of 85 % compared to exports of 2018, followed by cuttlefish & squid (030747) which declined by 53 %. The drop in the value of 2019 exports of crustaceans was due to a significant fall in the volume from 779 tons in 2018 to only 21 tons in 2019, although the global price of crustaceans drastically increased from R89 127 per ton in 2018.

Table 7: South Africa's top ten exports of processed fisheries products (by value)

HS Code	Product description	Value exported in R' Million			Share value %			% Change
		2017	2018	2019	2017	2018	2019	2019/2018
Processed Secondary Fisheries products		3435	3706	3769	100	100	100	2
0304	Fish Fillets & Oth Fish Meat, Fresh, Chill Or Froz	1512	1926	2089	44	52	55	8
1604	Prep Or Pres Fish; Caviar & Caviar Substitutes	685	580	651	20	16	17	12
030611	Rock Lobster And Other Sea Crawfish, Frozen	317	208	288	9	6	8	39
030787	Abalone, Nesoi	318	351	276	9	9	7	-22
1605	Crustaceans, Molluscs Etc. Prepared Or Pre-served	200	281	232	6	8	6	-17
0305	Fish, Dried, Salted Etc, Smoked Etc; Ed Fish Meal	94	102	131	3	3	3	29
030617	Shrimps and Prawns, Frozen, Nesoi	111	86	41	3	2	1	-53
030749	Cuttle Fish & Squid, Froz, Dri, Salted or In Brine	101	55	23	3	2	1	-59
030619	Crustaceans Nesoi Ckd Stmg/Boilg Frzn Flrs Mls Etc	13	69	10	0	2	0	-85
030615	Norway Lobsters, Frozen	5	1	7	0	0	0	1334

Source: GTA (2020)

Imports of processed fisheries products are presented in **Table 8.** Fish preparations (1604) were the most imported product in 2019 and were supplied by Thailand (R1.39 billion), China (R0.33 billion) and Namibia (R0.24 billion) among other countries. Although fish preparations were the most imported product, they declined by 6 % compared to the value of what was imported in 2018. The decline was driven by a 10 000 tons reduction in the volume imported, especially from Thailand, China, and Namibia, the product's top suppliers. Even though imports of dried shrimps and prawns (030695) were valued at only R67 million, the product registered the largest increase (637 %) in value compared to what was imported in 2018. This massive leap is attributable to the 735 tons increase in imports, more than 85 % of which came from Ecuador alone, despite a decline in the price by R47 524 per ton. Rock lobster and other sea crawfish (030611) are the other keen interest product, given the 318 % increase in its imports between 2018 and 2019. This product is supplied to South Africa by three countries – Argentina, Mozambique and Swaziland. Supplies (120 tons) from Argentina, which accounts for 75 % of rock lobster and other sea crawfish imports, were the biggest driver of the increase during the period under consideration, coupled with the lucrative global price of R134 462 per ton paid in 2019 as compared to R108 518 received in 2018.

Table 8: South Africa's top ten imports of processed fisheries products (by value)

HS Code	Product description	Value imported in R' Million			Share value %			% Change
		2017	2018	2019	2017	2018	2019	2019/2018
Processed Fisheries products		3378	3912	3796	100	100	100	-3
1604	Prep or Pres Fish; Caviar & Caviar Substitutes	1645	2149	2021	49	55	53	-6
0304	Fish Fillets & Oth Fish Meat, Fresh, Chill or Froz	548	581	628	16	15	17	8
030617	Shrimps And Prawns, Frozen, Nesoi	612	571	439	18	15	12	-23
030749	Cuttle Fish & Squid, Froz, Dri, Salted or In Brine	242	244	256	7	6	7	5
1605	Crustaceans, Molluscs Etc. Prepared or Preserved	214	237	234	6	6	6	-1
030695	Shrimps and Prawns Dried, Salted or In Brine, Smok	1	9	67	0	0	2	637
0305	Fish, Dried, Salted Etc, Smoked Etc; Ed Fish Meal	31	45	61	1	1	2	35
030614	Crabs, Including In Shell, Frozen	27	24	34	1	1	1	40
030611	Rock Lobster and Other Sea Crawfish, Frozen	9	5	21	0	0	1	318
030616	Cold-Water Shrimps and Prawns, Frozen	4	11	12	0	0	0	8

Source: GTA (2020)

2.3. South African forestry trade review

Forestry industry plays an important role towards economic growth, job creation, rural development and enhancing the livelihoods primarily in historically poor and underdeveloped regions. In addition, the industry supports an entire value chain in wood and paper products manufacturing and is well developed with functional downstream manufacturing specialisation in pulp and paper, sawmilling, wood chipping, and furniture manufacturing. Local companies such as Mondi and Sappi are global players in the pulp and paper business. Establishing plantation forestry requires identifying and securing land rights in areas of existing and proposed plantation forest coverage. Indeed, additional land suitable for growing and maintaining plantation forests is principally in the Eastern Cape (60 000 hectares available and 10 000 hectares of wattle forest available for conversion) and KwaZulu-Natal (40 000 hectares available) (TIPS, 2020). Potential sites are generally in traditional areas where establishing operations can be made more difficult by communal land rights, requiring community negotiation and

consensus. According to the GTA database, for the past two years, South Africa has been importing more forestry products than it exports. In 2019, South Africa saw an R16.7 billion a negative trade balance. About R23.5 billion worth of forestry products were exported in 2019, with India being the principal supplier of 11.67 %, followed by Japan (9.95 %), China (9.89 %), Namibia (7.06 %) and Zimbabwe (6.23 %).

South Africa exports more primary forestry products than imports, which resulted in a positive trade balance for the period under review. About R5.2 billion of primary forestry products were imported to the international markets, while on the other hand, a value of R7.4 billion was exported in the 2019 period. Figure 7 highlights the trade performance of South Africa's unprocessed forestry products in the period under review. In 2019, unprocessed forestry exports constituted about 26 % of the total forestry exports, while unprocessed forestry imports constituted 13.8 % of the total forestry imports. It can be depicted that South Africa's trade in unprocessed forestry products increased during the period under review. However, exports of unprocessed forestry products decreased by 4.67 % from R7.7 billion in 2018 to R7.4 billion in 2019, while imports increased by 4.10 % from R5.04 billion in 2018 to R5.24 billion in 2019.

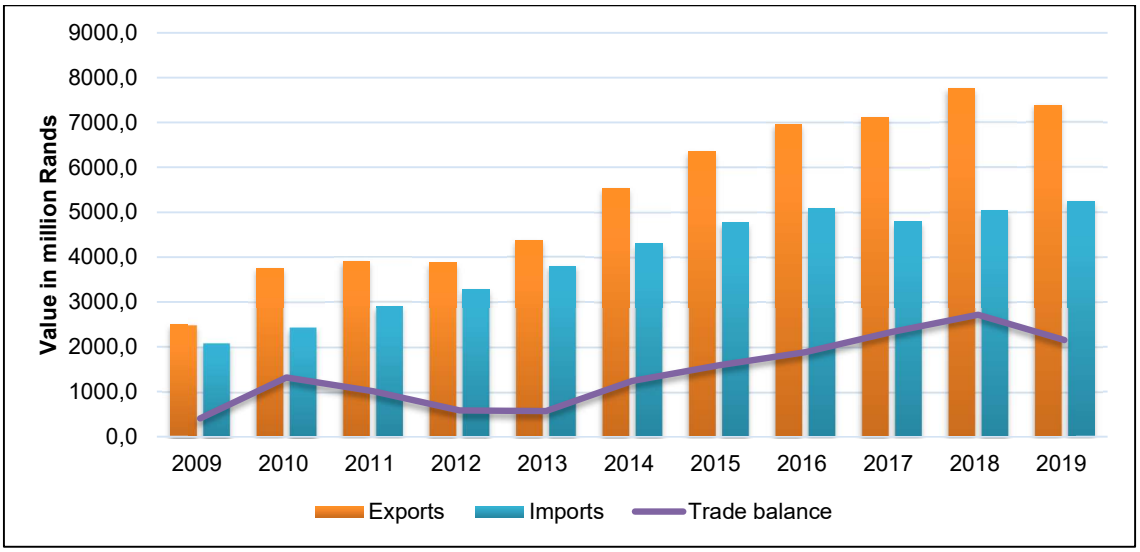

Figure 7: **South Africa's unprocessed forestry trade performance**
Source: GTA (2020)

About R7 386 million worth of primary forestry products in South Africa were exported to the international markets. **Table 9** highlights the primary forestry products exported over the past three years. It can be observed that coniferous wood is ranked as a principal product exported in 2019, constituting about 5.4 %, followed by pine wood (3.3 %), waterboard (1.93 %), other coniferous wood (1.82 %) and non-coniferous wood Nesoi (1.62 %) respectively. The importing markets play a critical role in the export performance of forestry products. Most of South Africa's primary forestry products are destined to Japan, constituting about 30.19 % of total exports, followed by Botswana (11.45 %), Namibia (7.83 %), China (6.31 %), and Mozambique (5.57 %) respectively. About seven African countries are listed in the top ten leading market destinations.

Table 9: South Africa's exports of unprocessed forestry products

HS code	Product description	Value exported			Share value %			
		2017	2018	2019	2017	2018	2019	2018/2019
Unprocessed forestry		7123.8	7748.2	7386.3	100	100	100	-4.67
440311	Coniferous Wood In Teh Rough, Treated W Paint/Etc	380	415	399	5.33	5.36	5.40	**-3.98**
440322	Wood In The Rough Of Pine,	25	157	244	0.35	2.03	3.30	**54.96**
441019	Waferboard And Similar Board, Of Wood, Nesoi	107	128	143	1.50	1.65	1.93	**11.48**
440719	Other Conif Wood, Sawn/Chiped Lentgw, Thkns	134	135	134	1.88	1.74	1.82	**-0.30**
440799	Nonconiferous Wood Nesoi, Sawn, Sliced Etc, Ov 6Mm	101	102	120	1.42	1.32	1.62	**17.20**
440399	Nonconiferous Wood In The Rough Nesoi, Not Treat	168	144	97	2.35	1.86	1.31	**-32.66**
440321	Wood In The Rough Of Pine, X-Sec 15Cm Or More	20	96	93	0.28	1.23	1.26	**-2.51**
440111	Coniferous Fule Wood, In Logs, Billets Or Similar	91	82	93	1.28	1.06	1.26	**13.41**
441899	Builders' Joinery And Carpentry Of Wood, Nesoi	63	74	75	0.88	0.96	1.02	**1.62**
440326	Other Coniferous Wood In The Rough, Nesoi	93	88	75	1.31	1.14	1.01	**-15.53**

Source: GTA (2020)

South Africa imported R5.2 billion of primary forestry products destined from the global markets, and less primary products were imported compared to the exports. Table 10 highlights the main unprocessed forestry products imported into the country from global markets. Pinewood sawn is indicated as the principal imported product, representing a share of 15.18 % of imports. Non-coniferous fuelwood is ranked as the second leading product with a share of 6.77 %, followed by fibreboard (6.20 %), red meranti (5.86 %), parts of wood (5.49 %) and plywood (5.04 %) respectively. The majority of primary forestry products are imported from non-African countries; however, Swaziland is ranked as the leading supplier with a share of 27.49 %, followed by China (13.61 %), Malaysia (8.58 %), Brazil (7.47 %), France (5.70 %) and Indonesia (5.19 %) respectively. China, Malaysia and Germany experienced a negative growth rate between 2018 and 2019.

Table 10: South Africa's imports of unprocessed forestry products

HS code	Product description	Value exported			Share value %			
		2017	2018	2019	2017	2018	2019	2018/2019
Unprocessed forestry		4797	5036	5242	100	100	100	4.10
440711	Pine Wood Sawn/Chipped Lngtw, Thickness Gt 6Mm	531	639	736	11.07	12.69	14.04	**15.18**
440112	Nonconiferous Fuel Wood, In Logs, Billets, Etc	235	273	355	4.90	5.42	6.77	**30.04**
441192	Fiberboard, Of A Density Exceeding 0.8 G/Cm3 Nesoi	259	239	325	5.40	4.75	6.20	**35.98**
440725	Dark/Light Red Meranti & Meranti Bakau Etc, Lumber	285	306	307	5.94	6.08	5.86	**0.33**
441600	Casks, Barrels, Vats, Etc. And Parts, Of Wood	257	280	288	5.36	5.56	5.49	**2.86**
441239	Plywood, Exc Bamboo, Lt=6 Mm Thk, Coniferous Nesoi	260	265	264	5.42	5.26	5.04	**-0.38**
440290	Wood Charcoal (Inc Shell Or Nut), Exc Bamboo	146	191	245	3.04	3.79	4.67	**28.27**
441299	Plywood, Veneer Panels & Similar Lam Wood, Nesoi	231	195	192	4.82	3.87	3.66	**-1.54**
442199	Other Articles Of Wood, Nesoi	134	158	191	2.79	3.14	3.64	**20.89**
440729	Other Tropical Wood,Wood Sawn/Chipped Lngthwse Etc	211	224	187	4.40	4.45	3.57	**-16.52**

Source: GTA (2019)

Forestry products' processing is critical because it increases its value and gains greater returns in foreign markets. It is important to note that South Africa trades more processed forestry products than unprocessed products, indicating an improvement in the agro-processing capacity. **Figure 8** illustrates South Africa's trade performance of forestry goods between 2009 and 2019. In 2019, South Africa exported about R18 billion of processed products and imported about R19.4 billion. Over the past few years, South Africa has been experiencing a positive trade balance (net exporter) in trading secondary forestry products, with the exception of the 2019 period when a negative trade balance of R1.2 billion was experienced. The total exports of secondary forestry products declined by 20.54 % between 2018 and 2019 while imports improved by 2.33 % in the same period.

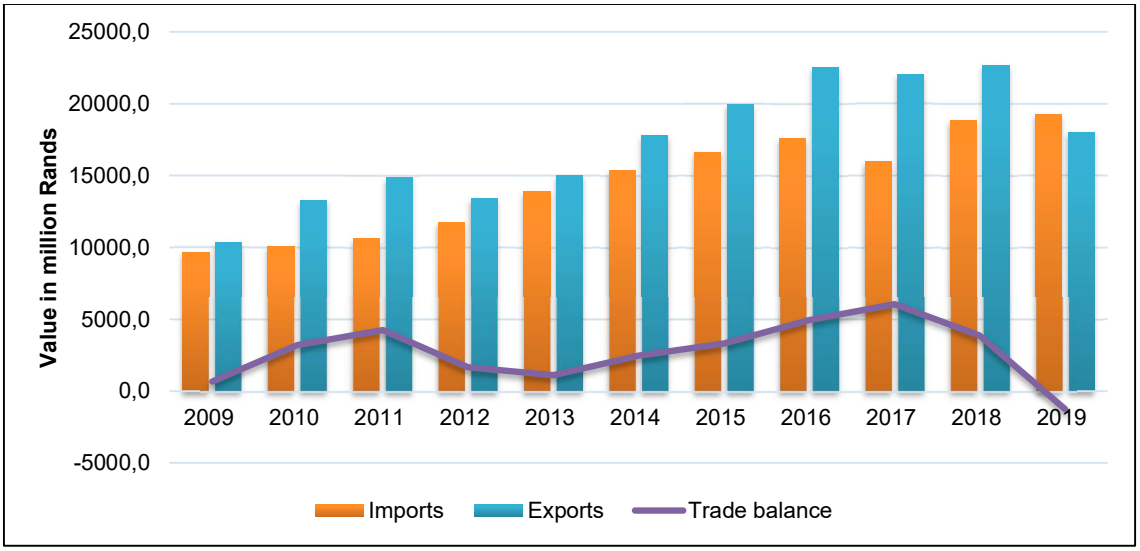

Figure 8: South Africa's processed forestry trade performance 2009 – 2019
Source: GTA (2020)

Table 11 shows the value of secondary forestry exports – the top 10 exported products in the 2019 period. Paper and paperboard were the main exported processed product, at an exported value of R260 billion, followed by paper and paperboard uncut (R255 billion), folding cartons (R252 billion), kraftline (R236 billion), newsprint (R198 billion) and sacks and bags (R191 billion) respectively. African countries serve as a major market destination for secondary products exported from South Africa. India and China were the main market destinations for South Africa's exports with a value of R2.7 billion and R2.09 billion, respectively. Namibia was the third-largest importer of secondary products with a share of 7.30 %, followed by Zimbabwe, Indonesia, Botswana and Zambia constituting a share of 6.98 %, 6.85 %, 5.45 % and 4.94 % respectively. Overall, South Africa's processed forestry imports showed a growth of 3.1 % between 2017 and 2018.

Table 11: South Africa's exports of processed forestry goods

HS code	Product description	Value exported R'Million			Share value %			Share %
Processed forestry exports		2017	2018	2019	2017	2018	2019	2018/2018
		22001	22672	18015	100	100	100	25.85
482110	Paper And Paperboard Labels Of All Kinds, Printed	219	224	260	1.00	0.99	1.44	-13.85
480269	Ppr/Brd,Unct,Nesoi,>10% By Wt Mech. Fibers, Nesoi	174	246	255	0.79	1.09	1.42	-3.53
481920	Folding Cartons, Boxes Etc, Noncor Paper & Paperbd	220	242	252	1.00	1.07	1.40	-3.97
480411	Kraftliner, Uncoated Unbleached In Rolls Or Sheets	265	232	236	1.20	1.02	1.31	-1.69

HS code	Product description	Value exported R'Million			Share value %			Share %
Processed forestry exports		2017	2018	2019	2017	2018	2019	2018/2018
		22001	22672	18015	100	100	100	25.85
480100	Newsprint, In Rolls Or Sheets	275	427	198	1.25	1.88	1.10	115.66
481940	Sacks And Bags Nesoi, Incl Cones, Of Paper Etc,	137	191	191	0.62	0.84	1.06	0.00
480524	Testliner,Unct,Rl/St,Wt<150G/M2,N t Ft Wk Ch48-Nte3	141	208	180	0.64	0.92	1.00	15.56
482190	Paper And Paperboard Labels, All Kinds, Not Print	174	186	176	0.79	0.82	0.98	5.68
480511	Semichemical Flutng Ppr (Corrugatng Med) Unctd Rll	424	301	168	1.93	1.33	0.93	79.17
491110	Trade Advertising Material, Commercial Catalog Etc	145	180	165	0.66	0.79	0.92	9.09

Source: GTA (2020)

Between 2018 and 2019, processed forestry imports showed a growth share of 2.33 %. **Table 12** illustrates the top 10 processed forestry products imported into South Africa from international markets. Paper and paperboard coat were the biggest contributor to this growth, with an imported value R1.5 billion, followed by printed books (7.28 %), chemical wood pulp (5.49 %), paper cellulose (4.57 %) and paper krift clay coat (3.98 %). Germany was ranked as the leading supplier of secondary products with a share of 13.12 %, followed by China (12.79 %), Brazil (8.34 %), US (8.06 %), Finland (7.20 %) and UK (4.62 %) respectively.

Table 12: South Africa's imports of processed forestry goods

HS code	Product description	Value exported R'Million			Share value %			Share %
Processed forestry imports		2017	2018	2019	2017	2018	2019	2018/2018
		15944	18822	19260	100	100	100	-2.27
481159	Ppr/Pbrd Coat/Impg/Cvr W/ Plastic, Nesoi	1249	1473	1542	7.83	7.83	8.01	-4.47
490199	Printed Books, Brochures, Etc., Nesoi	1411	1401	1403	8.85	7.44	7.28	-0.14
470321	Chemical Woodpulp, Soda Etc. N Dis S Bl & Bl Conif	732	1345	1057	4.59	7.15	5.49	27.25
481190	Paper, Paperbd, Cellulose Wadd Etc, Coat Etc Nesoi	731	902	880	4.58	4.79	4.57	2.50
481092	Ppr/Pbrd Ex Krft/Grphc Clay Coatd Multi-Ply Rl/Sht	626	682	767	3.93	3.62	3.98	-11.08
481141	Gummed/Adhesive Ppr & Ppboard,Pressure-Sensitive	708	705	762	4.44	3.75	3.96	-7.48
480421	Sack Kraft Paper Uncoated Unbleached, Rolls/Sheets	490	655	691	3.07	3.48	3.59	-5.21
480257	Paper&Ppb,<10% Fbr Fm Mech.Prcs, Wt 40-150G/M2,Nes	662	676	687	4.15	3.59	3.57	-1.60
481029	Ppr/Pbrd Ex Lit-Wgh Writng Etc Clay Ctd Ov 10% Mec	612	687	668	3.84	3.65	3.47	2.84
480261	Paper & Paperboard, Uncoated, >10% Mech.Fib.,Rolls	501	595	616	3.14	3.16	3.20	-3.41

Source: GTA (2020)

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., farmers' prices for their output, divided by the prices paid for farm inputs. The terms of trade at the primary agricultural level

have deteriorated significantly over time, as illustrated in **Figure 9**. There was, however, some relief during the commodity price boom from 2005 to 2007. The terms of trade for primary agriculture reached a peak in 2007, then decreased drastically up to 2010.
The increase from 2013 continued during 2014, 2015 and 2016. The terms of trade for primary agriculture declined by 4.1 % in 2019 compared to 2018.

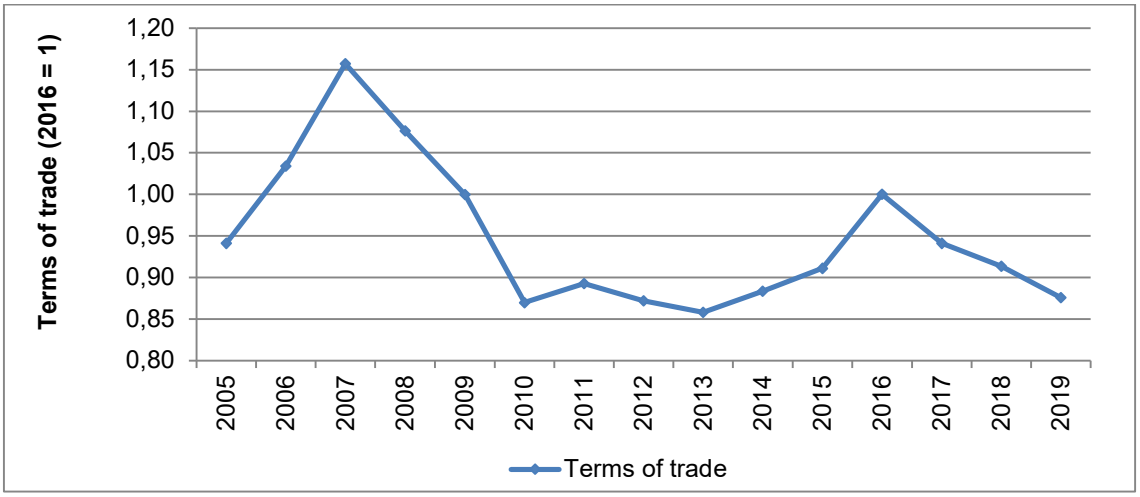

Figure 9: Terms of trade (2005–2019)
Source: DAFF (2020) and own calculations

The overall financial position of primary producers is constantly under pressure. **Figure 10** shows the real gross income, the real expenditure on intermediate goods and services, and the real net farming income from 1995 to 2019. Over the depicted period, the real net farming income increased by 253.6 %, expenditure on intermediate goods and services by 183.3 %, and gross income by 141.2 %. Between 2018 and 2019, the real expenditure on intermediate goods and services increased by 1.6 %, while real net farm income and the real gross income decreased by 17.9 % and 5.4 % respectively.

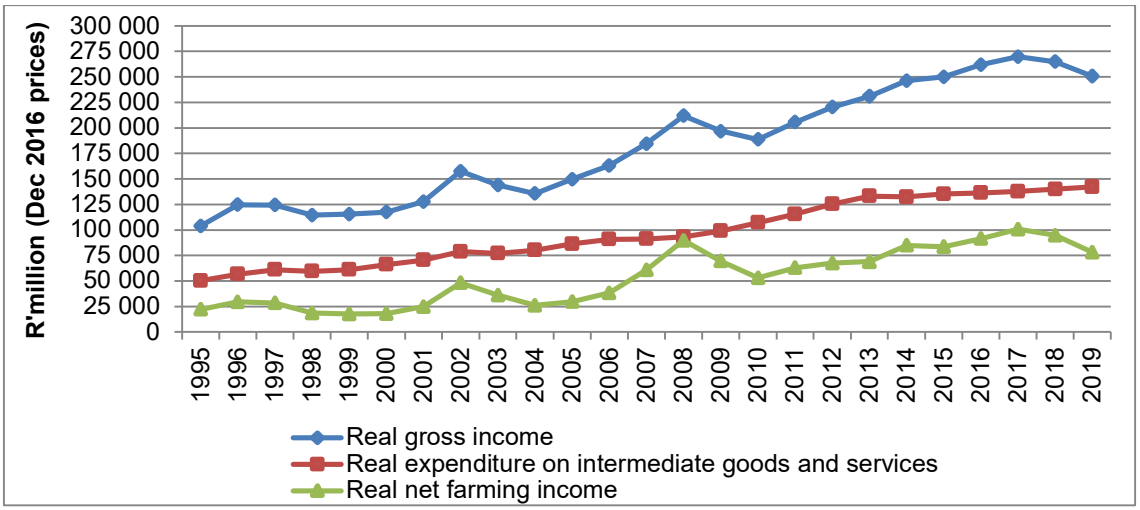

Figure 10: Real gross income, expenditure on intermediate goods and services, and farming income (1995–2019)
Source: DAFF (2020), Stats SA (2020) and own calculations

3.2. Producer Price Index (PPI) trends

The cost of food manufacturing is influenced not only by the price of raw commodities as inputs, but also by non-food inputs. Among these are the costs of diesel, packaging material, electricity and labour. The PPI (as calculated by 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, and forestry and fisheries.

The PPI is measured at production stages and is a weighted average index to indicate the production inflation of the economy. **Figure 11** shows the PPI for the different stages of production. From 2012 to 2019, the PPI of electricity and water, mining, final manufactured goods (headline PPI), intermediate manufactured goods, and agriculture, forestry and fisheries increased by 85.1 %, 49.2 %, 46.1 %, 38.6 %, and 31.6 % respectively. During 2019, increasing trends were realised for mining (17.4 %), electricity and water (11.4 %), final manufactured goods (4.6 %) and intermediate manufactured goods (2.6 %), while agriculture declined by 1.8 % compared to 2018.

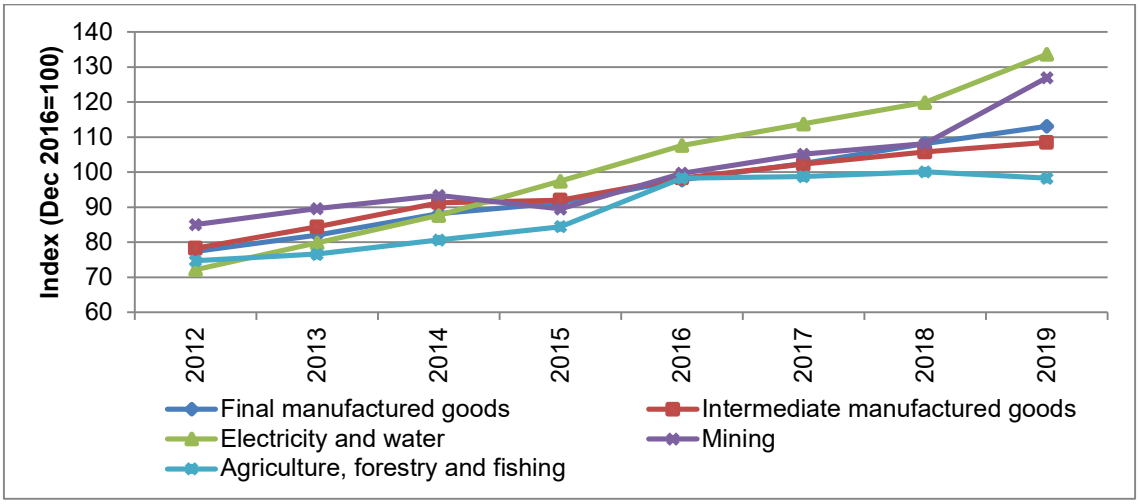

Figure 11: **PPI for selected industry groups (2012–2019)**
Source: Stats SA (2020)

Figure 12 shows the PPI for intermediate manufactured goods. These items are not industry specific but indicate price trends to industry on the input side. From 2012 to 2019, the PPI of sawmilling and wood increased by 41.7 %, rubber products by 36.2 %, basic and fabricated metals by 34.6 %, and glass and glass products by 33.3 %.

Price trends between 2018 and 2019 for the items depicted were as follows: basic and fabricated metals increased by 5.3 %, rubber products by 2.5 %, sawmilling and wood by 2.3 %, and glass and glass products by 0.7 %.

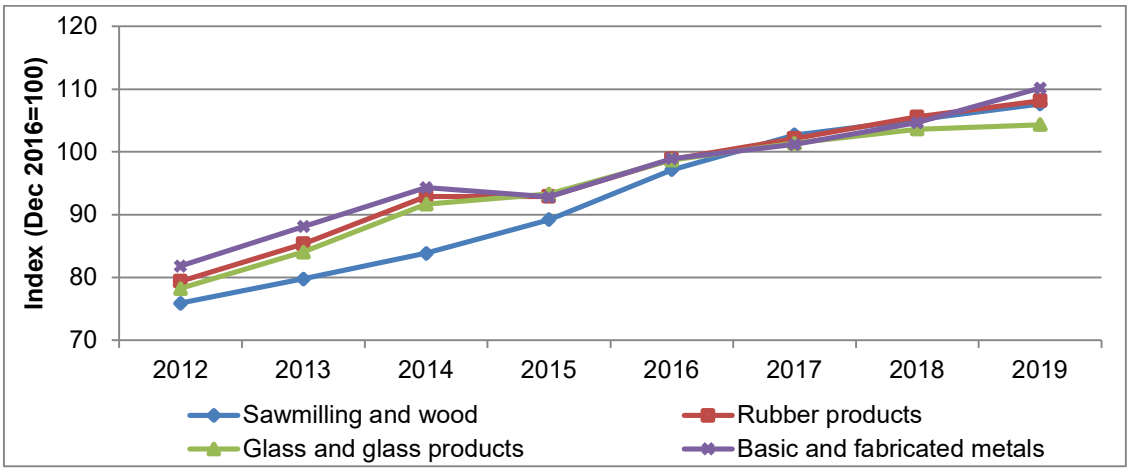

Figure 12: **PPI for selected input items (2012–2019)**
Source: Stats SA (2020)

3.3. Trends in the cost of selected inputs

3.3.1. Fertiliser prices

3.3.1.1. International fertiliser prices

The purpose of fertilisers is to supplement the natural supply of soil nutrients and build up soil fertility in order to satisfy the demand for crops. According to the International Fertilizer Industry Association (IFA, 2019), world fertiliser supply in 2019 was affected by a number of production curtailments and ongoing industry restructuring. Several plants have been shut down around the world, leading to slower global net capacity growth in 2019 overall. Lower natural gas prices marked global fertiliser market conditions in Europe and the US and weakening currencies in some fertiliser-importing countries such as Turkey, Argentina and Pakistan.

Preliminary forecasts for 2020 suggested a 1.3 % growth in global fertiliser use to 192.9 million tons based on expectations of higher crop prices and average crop conditions. South Asia, East Asia (excluding China), Latin America and Eastern Europe and Central Asia (EECA) would lead to fertiliser demand. World fertiliser demand was predicted to pick up in 2020, expanding at 1.9 % after a year in which there was a reduction in consumption levels (-0.2 % decline in 2019 based on preliminary estimates), whereas the global supply of primary raw materials (ammonia, phosphoric acid and potash) for all uses in 2020 would grow by 2.2 % to 260 million tons nutrients (IFA, 2019).

Figure 13 illustrates the trend of international fertiliser prices between 2002 and 2019. There was a fluctuation of prices over the period under review, where MOP, urea and DAP increased by 157.52 %, 143.9 % and 110.4 % respectively. Between 2018 and 2019, the price of MOP and DAP increased by 7.2 % and 3 % respectively, while urea decreased by 1.5 %.

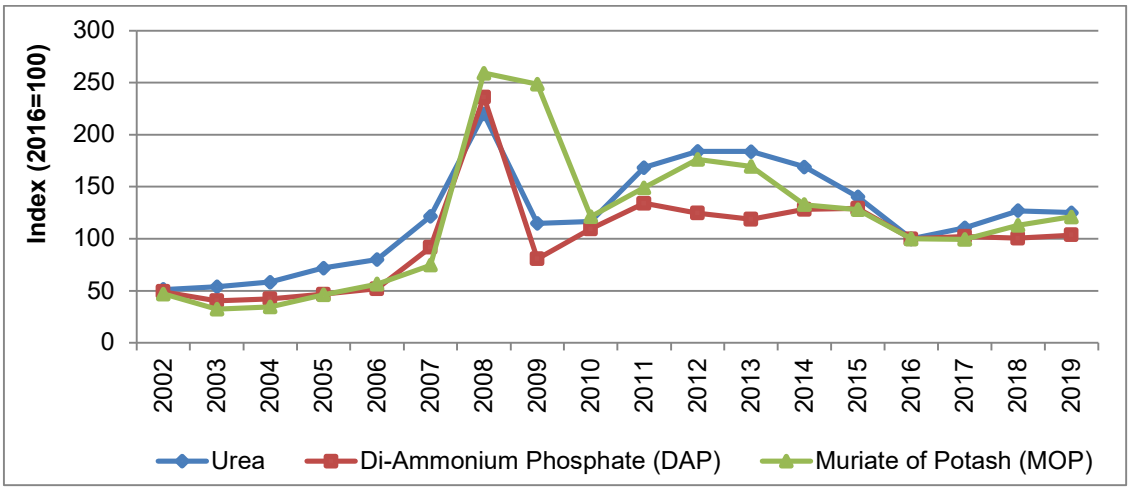

Figure 13: International fertiliser prices (2002–2019)
Source: Grain SA (2020)

3.3.1.2. Domestic fertiliser prices

The South African fertiliser industry is fully exposed to world market forces in a totally deregulated environment, with no import tariffs or government-sponsored protection measures. The local demand for fertiliser is in the region of 2 million physical tons. This amounts to approximately 731 000 tons of plant nutrients (N + P_2O_5 + K_2O). **Table 13** shows South African fertiliser demand and the domestic production and import situation.

Table 13: South African fertiliser demand, domestic production and imports

Nutrient	Demand (thousand tons)	Domestic production (thousand tons)	Imports (thousand tons)	Products
Nitrogen (N)	403	167	637	Mostly Urea
Phosphate (P_2O_5)	208	233	133	Mostly DAP
Potassium (K_2O)	120	None	381	Mostly MOP

Source: FAO (2019)

According to the Fertilizer Association of Southern Africa (Fertasa, 2020), South Africa imported 2.2 million tons of overall fertiliser and exported 567.5 tons of fertiliser in 2019. This means that South Africa is a net importer of fertilisers. Thus, the domestic prices are significantly impacted by the international prices of raw material and fertiliser, as well as by shipping costs and the rand/dollar exchange rate. **Figure 14** details the analysis of movement in South African fertiliser prices between 2002 and 2019. The prices of local fertilisers – mono-ammonium phosphate (MAP), urea granular (46) and potassium chloride (KCL) – showed increases of 187.6 %, 181.5 % and 145.6 % respectively between 2002 and 2019. Furthermore, on average, price movements were generally sideways and with some smaller fluctuations until the end of 2007, after which they escalated during 2008 with decreases during 2009, with the exception of KCL. During the period under review, MAP and urea granular (46) reached their peaks in 2008, while KCL had the highest price in 2009. The prices of KCL increased by 2.2 % while MAP and urea granular (46) decreased by 7.1 % and 2.5 %, respectively, between 2018 and 2019.

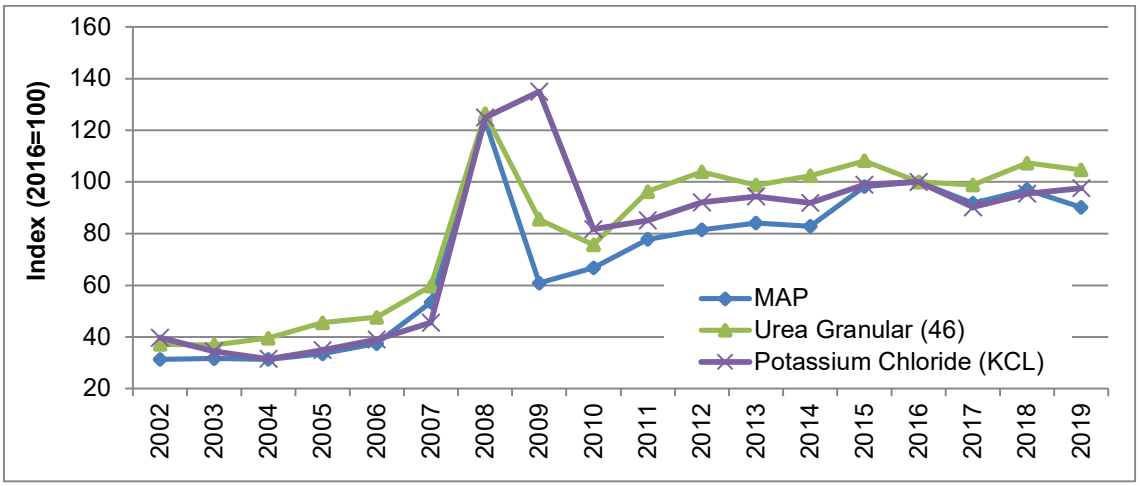

Figure 14: Local fertiliser price trends (2002–2019)
Source: Grain SA (2020) and own calculations

3.3.2. 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, sanitation fees, refuse removal, water, electricity and paraffin);
- Transport (petrol, public transport – trains, motor licences and motor vehicle registration);
- Communication (telephone fees, postage, cellphone calls);
- Recreation and culture (television licence);
- Education (school fees and university, technikon and college fees); and
- Restaurants, hotels and hostels (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); and
- Communication (telephone fees, postage, cellphone calls).

3.3.2.1. Transport

International crude oil prices

Crude oil is not only the primary feedstock for fuels that transport everything around the globe, but is also a feedstock to many items along the supply chain. 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) and food distribution. Therefore, trends in the crude oil price are an important indicator of trends in prices throughout the food value chain.

The movement of the crude oil price from 2002 to 2019 is illustrated in **Figure 15**. Crude oil was valued at USD24.89/barrel in 2002, after which it increased at a decreasing rate until it rocketed in the early

part of 2007 and reached an average price of USD97.55/barrel in 2008. However, crude oil prices decreased significantly by 36.7 % to USD61.80/barrel in 2009, as compared to 2008.

The International Energy Agency (IEA, 2009) reported that the price of oil depends on many global economic factors, such as economic growth, the future demand and supply of oil, and speculation in the oil market. Tighter credit availability, the slowdown in economic activity due to the global financial and economic crises, and less speculation in the oil market were the reasons provided by the IEA for the significant drop in oil prices since mid-2008. Nevertheless, this downward trend did not continue during 2011 and the crude oil price increased by 79.9 % on an average annual basis from 2009 to 2011. During the same year, 2011, the average crude oil price surpassed the peak of USD111.15/barrel. According to the IEA (2013), supply shortfalls during 2012 that were caused by the Libyan civil war, international sanctions against Iran, and unplanned non-OPEC output stoppages forced the price past the 2008 peak.

The situation has improved in the levels of supply from the USA and Iraq, and this includes some recovery in Libyan supply during 2012. On the demand side, the global economic recovery lost momentum and there are signs that China's demand is reducing. During 2013, the crude oil price decreased by only 0.9 %. In 2014, the price of crude oil saw a slight decrease of 1.4 %. The combination of robust world crude oil supply growth and weak global demand contributed to rising global inventories and falling crude oil prices. The influx of US oil meant that major exporters, including Saudi Arabia, Nigeria and Algeria, had to compete for new markets. This led to producers being forced to discount prices in the new competitive landscape. The world oil supply stayed higher than world oil demand throughout 2015 after similar conditions started at the beginning of 2014. This led to further decreases in the oil price. Demand slowed down in Europe, China and the US.

The crude oil price increased by 156.2 % between 2002 and 2019. The crude oil price showed a decrease of 11.7 % from 2018 to 2019. The price decreases during 2018 and 2019 mainly reflected a slowdown in oil demand as the US-China trade war weakened the global economy. The average value of crude oil was USD63.77/barrel in 2019.

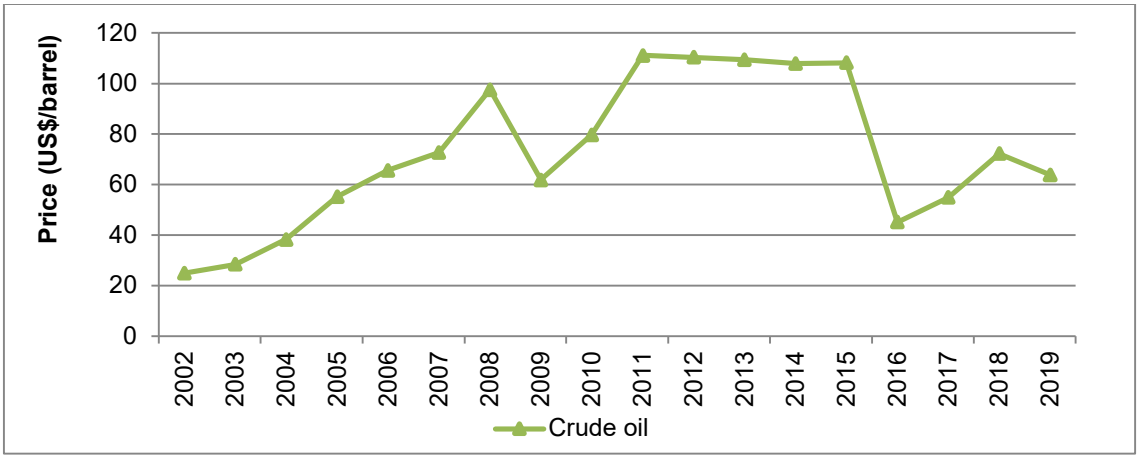

Figure 15: Crude oil price (2002–2019)
Source: Grain SA (2020)

Domestic fuel and transport costs

Fuel makes a significant contribution to the variable costs of primary agricultural production and food distribution costs. The crude oil price and 0.05 % sulphur diesel price trends in Gauteng and at the coast between 2002 and 2019 are illustrated in **Figure 16**. The movement of the international oil price,

taxes and levies, and the instability of the exchange rate affect diesel's local price. From 2002 to 2019, the local prices of 0.05 % sulphur diesel in Gauteng, 0.05 % sulphur diesel at the coast, and crude oil ($/barrel) increased by 302 %, 301.4 % and 156.2 % respectively. The diesel price peaked in 2008, achieving an average price of R9.27/ℓ, with R9.34/ℓ in Gauteng and R9.20/ℓ at the coast. The average diesel price, however, decreased significantly during 2009 (-29.5 %). Over the same period, the crude oil price decreased by 36.7 %. These peaks in diesel price were surpassed during 2013 and 2014 when the average diesel price amounted to R11.86/ℓ and R12.55/ℓ respectively. During 2019, the diesel price reached new record levels, at R14.39, in Gauteng province and R13.91 at the coast, on the back of higher oil prices attributable to the slowdown of the global economy, supply situations in Venezuela (among others) and the ongoing trade war between the USA and China.

Price trends for the items depicted between 2018 and 2019 were as follows: 0.05. % sulphur diesel in Gauteng and 0.05 % sulphur diesel at the coast increased by 3.2 % (R/ℓ) and 3.2 % (R/ℓ) respectively, while the crude oil price decreased by 11.7 % ($/barrel).

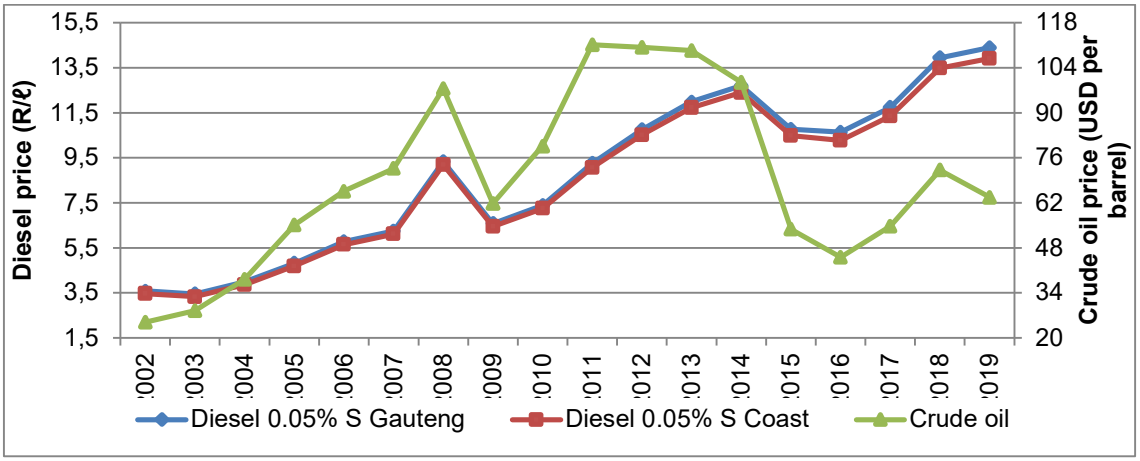

Figure 16: Diesel prices in Gauteng and at the coast (2002–2019)
Source: SAPIA (2020) and Grain SA (2020)

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 high fuel prices drive up food prices, but never come down when fuel prices drop. Cognisance should be taken of the fact that other cost drivers 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.

Figures 17, 18 and 19 illustrate the vehicle cost composition over time for different sized vehicles[1].
Fixed costs include depreciation, cost of capital, licences, 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.

[1] 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.

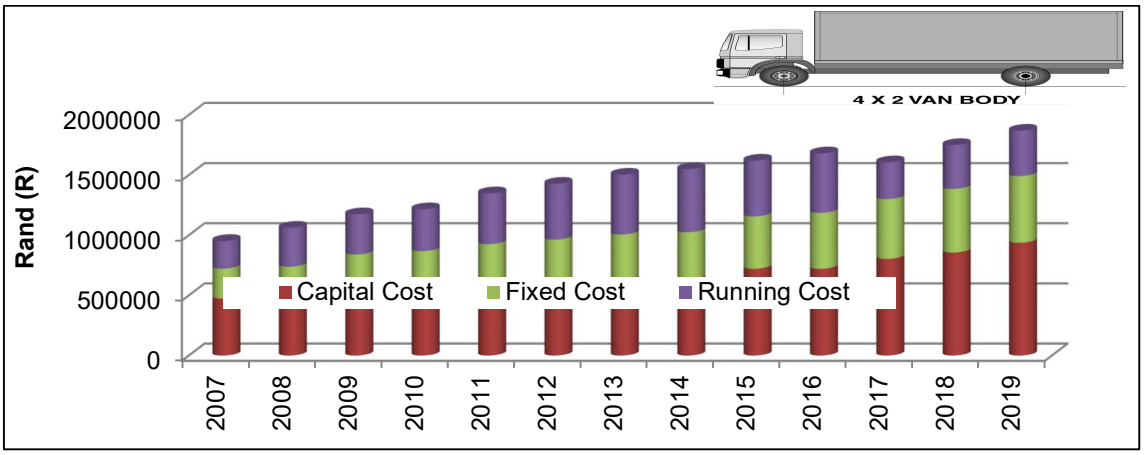

Figure 17: Vehicle costs over time for a 4 x 2 vehicle (2007–2019)
Source: FleetWatch (2020)

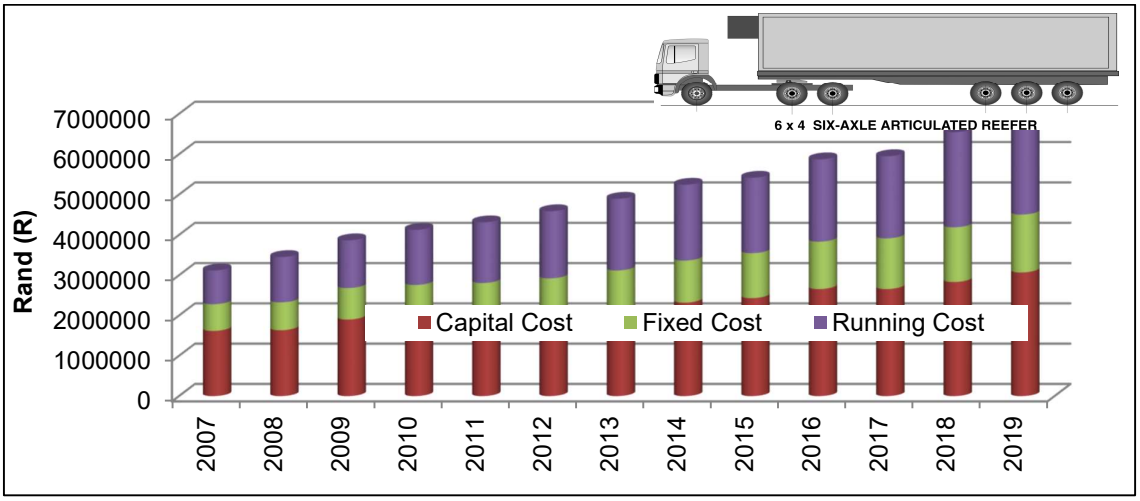

Figure 18: Vehicle costs over time for a 6 x 4 six axle vehicles (2007–2019)
Source: FleetWatch (2020)

1.2.2.2.

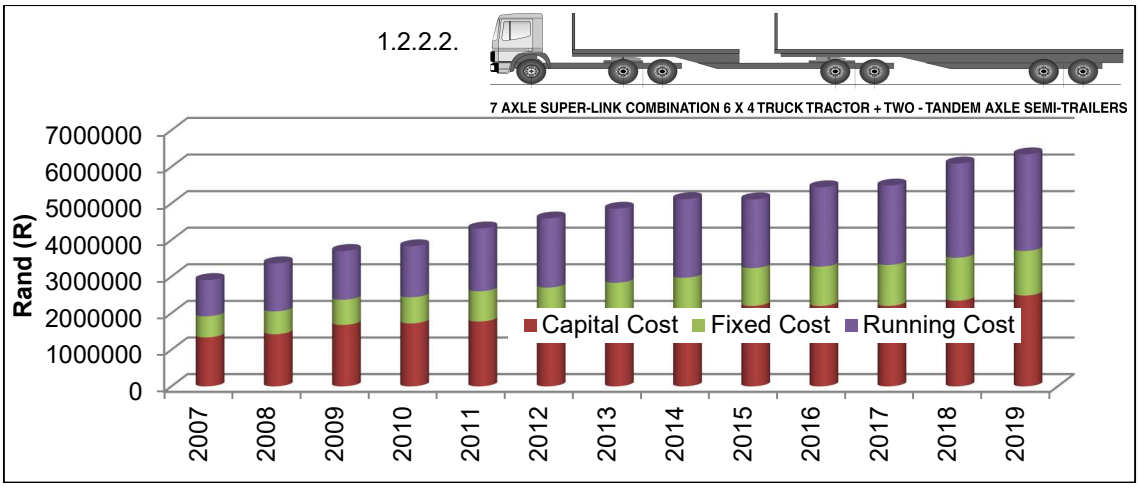

Figure 19: Vehicle costs over a 7 axles super link vehicles (2007–2019)
Source: FleetWatch (2020)

Table 14 below illustrates the vehicle cost changes between 2007 and 2019.

Table 14: Vehicle cost changes from 2007 to 2019

2-axle vehicles	6-axle vehicles	7-axle vehicles
Capital cost: 97.8% **Fixed cost: 112.9%** **Running cost: 64%**	**Capital cost: 89.7%** **Fixed cost: 116.8%** **Running cost: 189%**	**Capital cost: 85.6%** **Fixed cost: 111.1%** **Running cost: 166.2%**

Source: Own calculations, based on FleetWatch (2020)

3.3.2.2. Energy

Eskom is not only the major energy supplier in South Africa but also in Africa at large. Eskom generates, transmits and distributes electricity to industrial, mining, commercial, agricultural and residential customers and redistributors. Additional power stations and major power lines are being built to meet rising electricity demand in South Africa (Eskom, 2020). **Figure 20** illustrates the average price (c/kWh) of electricity that Eskom transmits and distributes to industrial, mining, commercial, agricultural and residential customers and redistributors compared to the average price at the international level. Between the financial years of 2004/05 and 2009/10, the average price (c/kWh) in the residential sector was the most expensive or highest, compared with other sectors. The residential sector utilised electricity at an average price of 38.70c/kWh and 63.98c/kWh from 2004/05 to 2009/10, respectively. During 2010/11, the agricultural sector overlapped the residential sector. Since then, the agricultural sector has remained the industry that purchases electricity at the highest price. The agricultural sector utilised electricity at an average price of 149.79c/kWh in 2018/19.

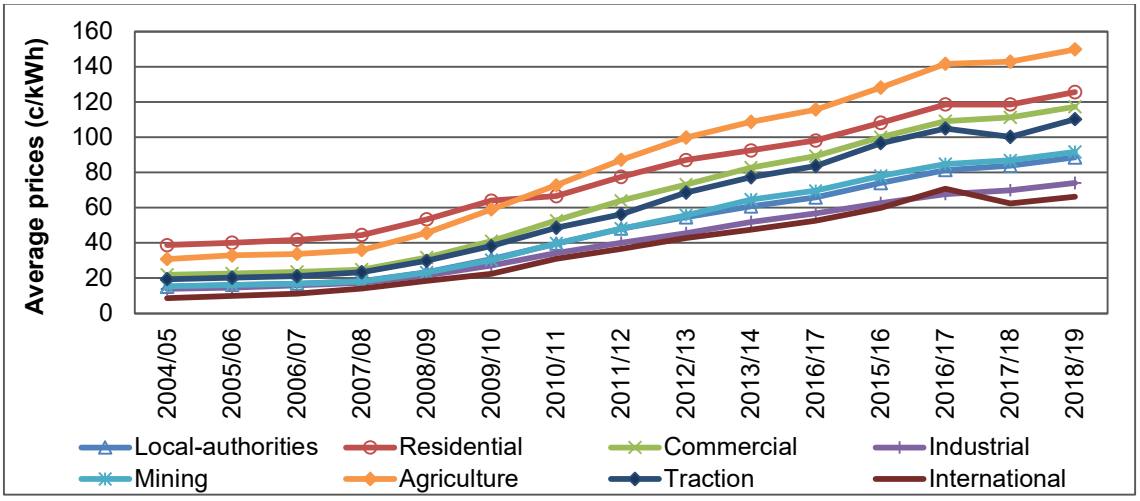

Figure 20: Average price (c/kWh) sold to different sectors
Source: Eskom (2020)

Figure 21 depicts the trend between the percentage change in average Eskom price and annual inflation rate between 2007 and 2019. There was a fluctuation movement between the two variables – tariff and CPI headline during the period under review. In 2011, Eskom tariffs increased by 31.6 %, compared to 2010. In 2019, the Eskom tariff increased by 9.4 % compared to 2018, which was above inflation.

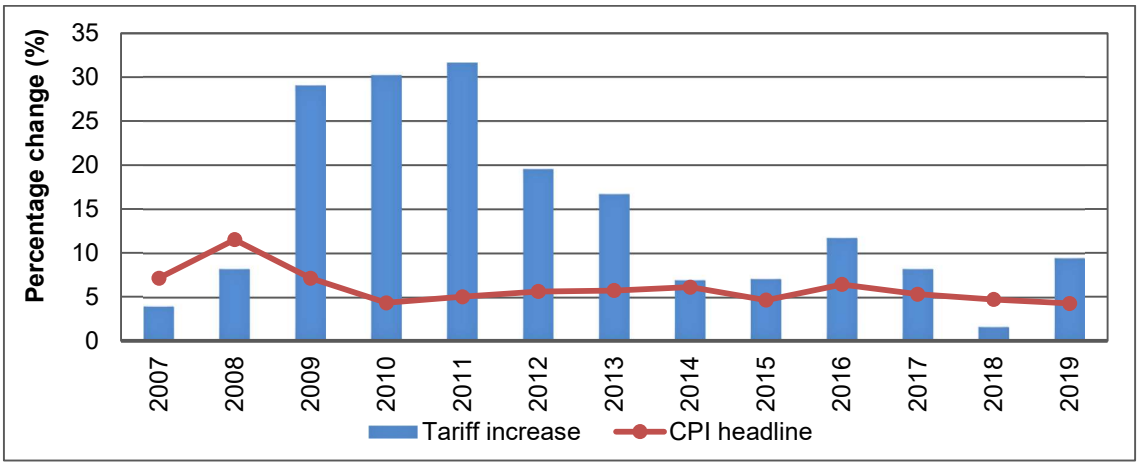

Figure 21: Eskom tariff changes
Source: NERSA (2020) & Stats SA (2020)

3.3.2.3 Labour

Promoting and creating quality jobs is regarded as one of the key priorities for the South African economy. **Figure 22** illustrates the regulated minimum wages for primary agriculture in South Africa. This minimum wage is always revised during March of each year. The minimum wage for farmworkers in 2008 was recorded as R1 090/month. Since 2012, it has increased slightly, although the minimum wage from 2012 to 2013 increased drastically, by 51.2 %. In 2019, the minimum wage was reported to be R3 240/month.

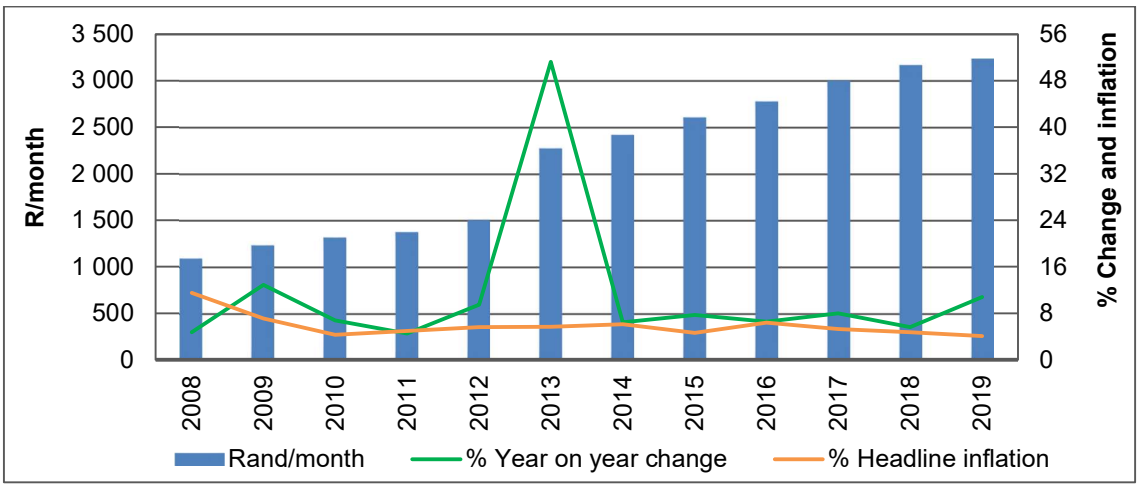

Figure 22: Minimum wages (2008–2019)
Source: DoL (2020)

4. INFLATIONARY TRENDS FOR SELECTED FOODSTUFFS

4.1. Food and non-alcoholic beverages

The South African headline and food and non-alcoholic beverages inflation rates reached 4.1 % and 4.2 % respectively in March 2020. **Figure 23** presents the food and non-alcoholic beverage index and the rate of change from January 2015 to March 2020.

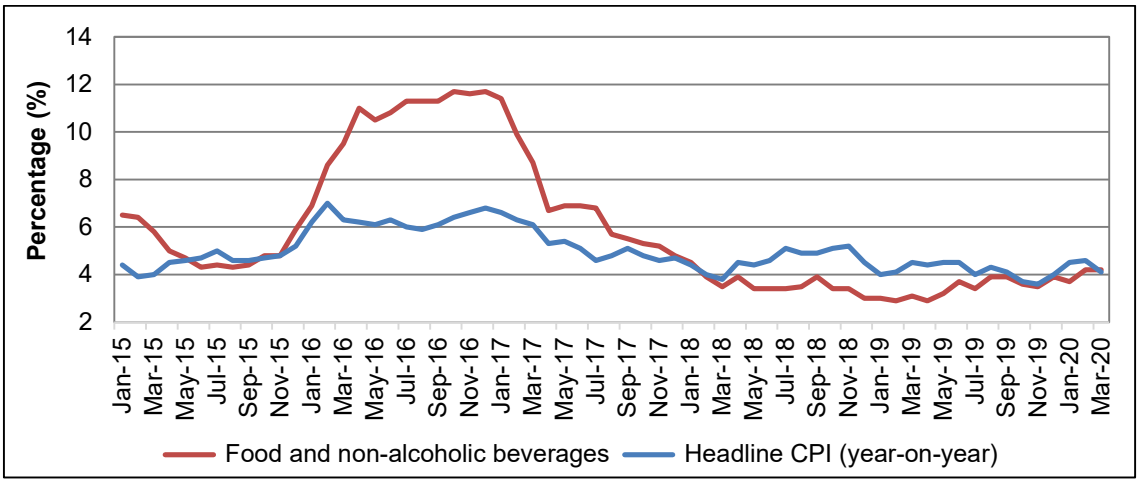

Figure 23: **CPI rate of change for food and non-alcoholic beverages**
Source: Stats SA (2020)

The food price inflation per province is illustrated in **Figure 24**. t The Western Cape Province experienced the highest annual food inflation increase (4.8 %) between March 2019 and March 2020. This was followed by the Northern Cape (4.1 %) and Gauteng (4.1 %) provinces.

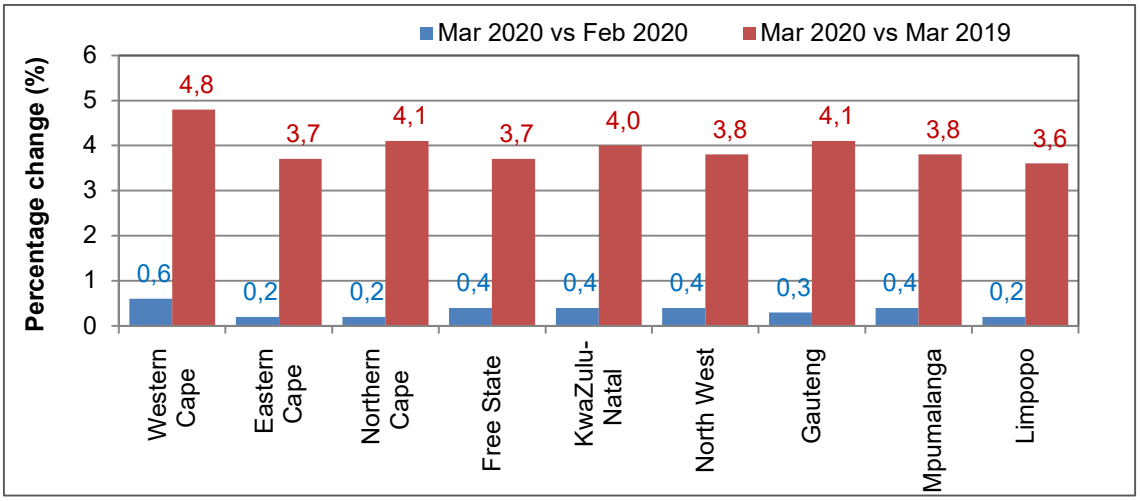

Figure 24: CPI for food and non-alcoholic beverages in the various provinces of South Africa
Source: Stats SA (2020)

The indices for the different food CPI components are shown in **Figure 25**. The fruit and sugary categories had the highest percentage increases of 7.1 % and 6 % respectively between March 2019 and March 2020.

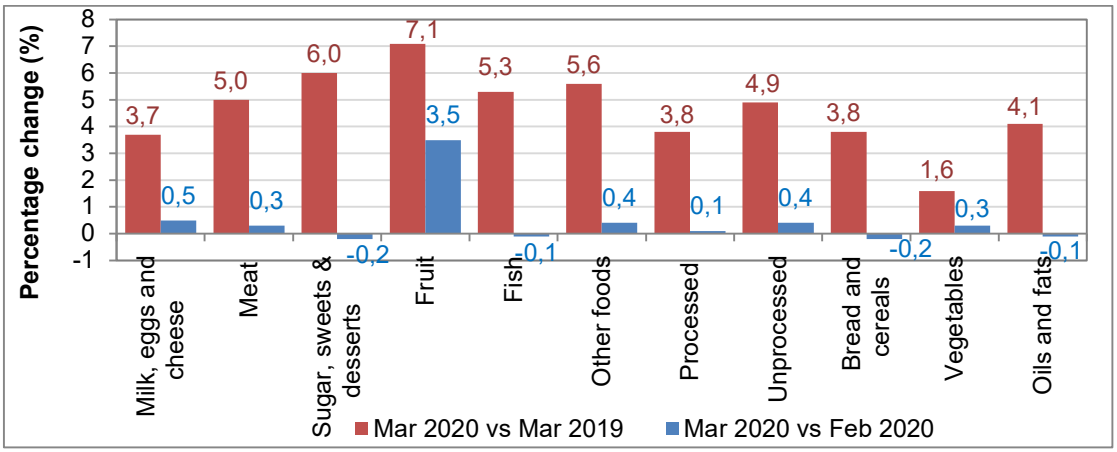

Figure 25: CPI for different food groups
Source: Stats SA (2020)

4.2. Urban food price trends

Tables 15 to 24 provide insights pertaining to the average retail prices of specific food items in urban areas for 2019 and how they compared with the retail prices of the period from 2017 to 2018. Selected retail prices for wheat products are shown in **Table 15**. On average, the retail price of wheat products increased by 4.8 % between 2018 and 2019. The price of a 700g loaf of brown bread increased by 7.2 % and that of a 700g loaf of white bread by 3.9 %. Producer prices (R/ton) increased by 11.8 % during the same period.

Table 15: Average annual retail prices for certain wheat products

	Price Level			Percentage Change	
Wheat Products	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Cake flour 1kg	12,71	12,50	12,44	-0,5%	-1,7 %
Cake flour 2.5kg	26,01	25,50	25,82	1,2%	-2,0 %
Cake flour 5kg	55,19	54,60	53,26	-2,5%	-1,1 %
Instant noodles 73g	4,77	4,97	5,29	6,5%	4,2 %
Instant noodles 75g	4,34	4,50	5,13	14,0%	3,6 %
Instant noodles 78g	4,54	4,68	5,05	7,9%	3,0 %
Instant noodles 85g	3,87	3,97	4,19	5,6%	2,6 %
Loaf of brown bread (each)	11,43	9,54	8,50	-10,9%	-16,5%
Loaf of brown bread 600g	6,86	7,04	7,48	6,2%	2,7 %
Loaf of brown bread 700g	12,10	11,67	12,51	7,2%	-3,6 %
Loaf of brown bread 800g	15,26	13,91	14,66	5,3%	-8,9 %
Loaf of white bread (each)	10,90	11,68	10,89	-6,8%	7,2 %
Loaf of white bread 600g	7,88	8,03	8,34	3,9%	1,9 %
Loaf of white bread 700g	13,24	13,05	13,74	5,3%	-1,5 %
Macaroni 1kg	26,34	26,51	27,54	3,9%	0,6 %
Macaroni 3kg	63,85	61,44	74,49	21,2%	-3,8 %
Macaroni 500g	12,59	11,94	12,67	6,1%	-5,2 %
Pasta 1kg	33,83	36,63	39,22	7,1%	8,3 %
Pasta 500g	17,45	17,32	18,03	4,1%	-0,7 %
Spaghetti 1kg	25,77	25,09	27,18	8,3%	-2,7 %
Spaghetti 500g	12,85	12,51	13,38	7,0%	-2,7 %
Average				**4,8%**	**-0,8 %**
Wheat (R/ton)	**4 213,59**	**4 026,62**	**4 499,81**	**11,8%**	**-4,4 %**

Source: Stats SA (2020)

Selected retail prices for maize products are shown in **Table 16**. On average, the retail price for 2.5kg special maize increased by 13.7 % between 2018 and 2019. The average price of 2.5kg super maize increased by 10 %. Producer prices (R/ton) of yellow and white maize increased by 21.7 % and 29.2 % respectively during the same period.

Table 16: Average annual retail prices of maize products

	Price Level			Percentage Change	
Maize Products	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Special maize 10kg	77,07	59,01	61,51	4,2 %	-23,4 %
Special maize 1kg	10,00	7,58	8,95	18,1 %	-24,2 %
Special maize 2.5kg	22,85	18,35	20,87	13,7 %	-19,7 %
Special maize 5kg	43,85	34,25	39,16	14,3 %	-21,9 %
Super maize 10kg	11,60	10,17	10,93	7,4 %	-12,3 %
Super maize 2.5kg	25,64	21,51	23,65	10,0 %	-16,1 %
Super maize 5kg	45,98	37,17	40,97	10,2 %	-19,1 %
Average				**11,1 %**	**-19,5 %**
Yellow maize (R/ton)	**2 164,60**	**2 213,49**	**2 693,42**	**21,7 %**	**2,3 %**
White maize (R/ton)	**2 107,36**	**2 168,61**	**2 801,63**	**29,2 %**	**2,9 %**

Source: Stats SA (2020)

Table 17 shows the retail prices for oils and fats between 2017 and 2019. Margarine spread (500g) decreased by 0.5 % between 2018 and 2019, compared with the increase of 2.3 % reported between 2017 and 2018. Sunflower oil (750ml) decreased by 0.9 % between 2018 and 2019. Producer prices (R/ton) increased by 9.8 % from 2018 to 2019.

Table 17: Average annual retail prices of sunflower products

	Price Level			Percentage Change	
Sunflower Products	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Brick margarine 125g	8,39	7,91	8,02	1,5 %	-5,8 %
Brick margarine 1kg	43,08	44,14	44,62	1,1 %	2,5 %
Brick margarine 250g	14,02	13,58	14,06	3,6 %	-3,2 %
Brick margarine 500g	22,24	22,33	22,04	-1,3 %	0,4 %
Margarine spread 1kg	40,63	40,94	40,52	-1,0 %	0,7 %
Margarine spread 500g	26,50	27,12	26,99	-0,5 %	2,3 %
Sunflower oil 2ℓ	41,87	39,28	41,34	5,2 %	-6,2 %
Sunflower oil 4ℓ	84,59	79,76	85,18	6,8 %	-5,7 %
Sunflower oil 500mℓ	14,63	15,02	22,35	48,7 %	2,7 %
Sunflower oil 750mℓ	22,19	22,35	22,16	-0,9 %	0,7 %
Average				**6,3 %**	**-1,1 %**
Sunflower seed (R/ton)	**4 694,07**	**4 880,37**	**5 360,78**	**9,8 %**	**4,0 %**

Source: Stats SA (2020)

Table 18 shows the retail prices for processed vegetables between 2017 and 2019. Tinned baked beans (410g) increased by 7.5 % between 2018 and 2019. Dried beans (1kg) decreased by 5.5 % during the same period.

Table 18: Average annual retail prices of processed vegetable products

	Price Level			Percentage Change	
Processed Vegetables	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Baked beans - tinned 410g	9,42	9,89	10,62	7,4%	5,0%
Beans - dried 1kg	39,04	37,22	35,19	-5,5%	-4,7%
Beans - dried 2kg	63,03	58,91	60,00	1,8%	-6,5%
Beans - dried 500g	19,63	19,28	19,11	-0,9%	-1,8%
Average				**0,7%**	**-2,0%**

Source: Stats SA (2020)

Table 19 shows the average retail prices for selected fresh vegetables. Fresh beetroot per kg recorded the largest price increase of 16.4 %. Fresh cabbage per kg increased by 7.8 %, with tomatoes per kg increasing by 13 % between 2018 and 2019.

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

	Price Level			Percentage Change	
Fresh Vegetables	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Beetroot - fresh per kg	12,64	10,74	12,49	16,4 %	-15,1 %
Broccoli - fresh per kg	33,04	41,96			27,0 %
Cabbage - fresh each	13,75	13,95	15,40	10,4 %	1,5 %
Cabbage - fresh per kg	12,13	12,63	13,62	7,8 %	4,1 %
Carrots - fresh per kg	9,75	9,32	9,78	5,0 %	-4,4 %
Cauliflower - fresh per kg	35,06	42,41	46,21	9,0 %	21,0 %
Onions - fresh per kg	11,80	14,36	14,46	0,7 %	21,7 %
Potatoes - fresh per kg	11,66	11,99	12,72	6,1 %	2,8 %
Pumpkin - fresh per kg	11,87	11,20	12,29	9,7 %	-5,7 %
Potatoes - fresh per kg	18,48	18,15	18,01	-0,8 %	-1,8 %
Tomatoes - fresh per kg	16,65	18,07	20,43	13,0 %	8,5 %
Average				**7,7 %**	**5,4 %**

Source: Stats SA (2020)

Table 20 shows the retail prices of selected processed and unprocessed meat products between 2017 and 2019. On average, the retail prices for meat decreased by 0.7 % between 2018 and 2019. The average retail price of beef chuck per kg decreased by 2.5 % between 2018 and 2019. The average retail price of fresh chicken portions and whole chicken per kg increased by 4.5 % and 4.8 % respectively during the same period.

Table 20: Average annual retail prices for certain items of processed and unprocessed meat

	Price Level			Percentage Change	
Processed & Unprocessed Meat	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Bacon 250g	34,11	36,06	38,46	6,7 %	5,7 %
Bacon per kg	110,87	135,72	89,99	-33,7 %	22,4 %
Beef brisket - fresh per kg	80,16	85,83	83,77	-2,4 %	7,1 %
Beef chuck - fresh per kg	82,04	87,41	85,22	-2,5 %	6,5 %
Beef fillet - fresh per kg	189,27	192,41	185,07	-3,8 %	1,7 %
Beef mince - fresh per kg	76,21	83,82	83,85	0,0 %	10,0 %
Beef offal - fresh per kg	42,60	36,68	35,21	-4,0 %	-13,9 %
Beef rump steak - fresh per kg	124,98	126,37	126,55	0,1 %	1,1 %
Beef sirloin - fresh per kg	129,32	136,56	130,98	-4,1 %	5,6 %
Beef stew - fresh per kg	73,54	77,08	74,83	-2,9 %	4,8 %
Beef T-bone - fresh per kg	97,61	103,74	103,25	-0,5 %	6,3 %

	Price Level			Percentage Change	
Processed & Unprocessed Meat	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Chicken giblets per kg	33,72	34,80	34,00	-2,3 %	3,2 %
Chicken portions - fresh per kg	56,70	59,34	62,03	4,5 %	4,6 %
Chicken portions frozen non IQF average	46,59	48,07	48,13	0,1 %	3,2 %
Chicken portions frozen non IQF per kg	44,64	47,80	48,13	0,7 %	7,1 %
Corned beef 300g	23,31	22,64	22,48	-0,7 %	-2,9 %
Ham 500g	36,21	37,48	38,34	2,3 %	3,5 %
IQF chicken portions – 1.5kg	57,09	64,56	66,35	2,8 %	13,1 %
IQF chicken portions – 1.8kg	54,49	58,01	56,44	-2,7 %	6,5 %
IQF chicken portions – 1kg	20,55	39,53	43,23	9,4 %	92,4 %
IQF chicken portions – 2kg	63,06	66,85	65,87	-1,5 %	6,0 %
IQF chicken portions – 4kg	146,85	142,27	143,25	0,7 %	-3,1 %
IQF chicken portions – 5kg	158,95	167,57	165,32	-1,3 %	5,4 %
Lamb - fresh per kg	129,15	141,95			9,9 %
Lamb - leg per kg	128,76	137,13	134,94	-1,6 %	6,5 %
Lamb - loin chops per kg	145,77	159,36	155,39	-2,5 %	9,3 %
Lamb - neck per kg	106,36	119,68	119,32	-0,3 %	12,5 %
Lamb - offal per kg	44,06	50,11	49,41	-1,4 %	13,7 %
Lamb - rib chops per kg	141,25	155,49	153,40	-1,3 %	10,1 %
Lamb - stew per kg	98,49	110,83	110,41	-0,4 %	12,5 %
Polony per kg / 1kg	42,59	41,89	46,35	10,7 %	-1,7 %
Pork - ribs per kg	81,94	76,85	77,89	1,4 %	-6,2 %
Pork chops - fresh per kg	79,66	77,36	77,33	0,0 %	-2,9 %
Sausage 500g	45,26	46,75	47,47	1,5 %	3,3 %
Whole chicken - fresh per kg	44,25	46,26	48,47	4,8 %	4,5 %
Average				**-0,7 %**	**7,7 %**

Source: Stats SA (2020)

Table 21 below indicates that the retail prices of eggs and dairy products increased by 1 % between 2018 and 2019, with long-life low-fat milk (2ℓ) showing the largest annual increase of 27.2 %.

Table 21: Average annual retail prices for certain food items in the eggs and dairy group

	Price Level			Percentage Change	
Eggs and Dairy Products	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Cheddar cheese per kg	103,06	104,81	105,79	0,9 %	1,7 %
Eggs 0.5 dozen	14,95	17,08	16,74	-2,0 %	14,2 %
Eggs 1 dozen	22,33	22,99	22,00	-4,3 %	3,0 %
Eggs 1.5 dozen	39,06	44,09	40,75	-7,6 %	12,9 %
Eggs 2 dozen	43,41	53,73	52,24	-2,8 %	23,8 %
Eggs 2.5 dozen	54,07	61,08	54,14	-11,4 %	13,0 %
Full-cream milk - fresh 1ℓ	13,80	14,28	14,72	3,1 %	3,5 %
Full-cream milk - fresh 250mℓ	6,59	6,75	6,94	2,8 %	2,4 %
Full-cream milk - fresh 2ℓ	25,74	25,97	27,34	5,3 %	0,9 %
Full-cream milk - fresh 500mℓ	10,01	10,43	10,86	4,1 %	4,3 %
Full-cream milk – long life 1ℓ	13,94	13,91	14,47	4,0 %	-0,2 %
Full-cream milk - long life 500mℓ	8,80	8,73	9,01	3,2 %	-0,7 %
Full-cream milk - long life 6x1ℓ	75,53	74,24	77,43	4,3 %	-1,7 %
Low-fat milk - fresh 1ℓ	15,20	15,47	15,96	3,1 %	1,8 %
Low-fat milk - fresh 2ℓ	26,21	26,69	27,71	3,8 %	1,8 %
Low-fat milk - long life 1.5ℓ	19,33	20,00	20,30	1,5 %	3,5 %
Low-fat milk - long life 1ℓ	13,81	13,79	14,43	4,7 %	-0,2 %

	Price Level			Percentage Change	
Eggs and Dairy Products	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Low-fat milk - long life 2ℓ	24,03	22,99	29,24	27,2 %	-4,3 %
Low-fat milk - long life 6x1ℓ	82,83	85,04	79,16	-6,9 %	2,7 %
Powdered milk 250g	37,99	40,68	40,21	-1,2 %	7,1 %
Powdered milk 400g	63,27	65,25	57,78	-11,4 %	3,1 %
Powdered milk 500g	53,88	54,59	56,37	3,3 %	1,3 %
Powdered milk 900g	137,66	138,60	138,33	-0,2 %	0,7 %
Average				**1,0 %**	**4,1 %**

Source: Stats SA (2020)

As shown in **Table 22**, apples' average retail prices increased by 11.6 %, with bananas increasing by 10.8 %, between 2018 and 2010.

Table 22: Average annual retail prices of fruit

	Price Level			Percentage Change	
Fruits	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Apples - fresh per kg	18,56	19,67	21,95	11,6 %	6,0 %
Bananas - fresh per kg	15,18	13,76	15,25	10,8 %	-9,3 %
Naartjies - fresh per kg	21,84	25,96	24,49	-5,6 %	18,8 %
Nectarines - fresh per kg	36,94	35,92	34,66	-3,5 %	-2,7 %
Oranges - fresh per kg	17,90	17,94	18,53	3,3 %	0,2 %
Peaches - per kg	34,40	31,41	30,57	-2,7 %	-8,7 %
Pears - per kg	18,78	20,93	20,72	-1,0 %	11,5 %
Average				**1,8 %**	**2,2 %**

Source: Stats SA (2020)

The prices of selected fish products between 2017 and 2019 are presented in **Table 23**. The retail price of 400g tinned fish (excluding tuna) increased by 6.1 %. The average retail price of tinned tuna (170 g) increased by 2.8 % during the same period.

Table 23: Average annual retail prices of certain food items in the fish group

	Price Level			Percentage Change	
Fish Products	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Fish (excl. tuna) - tinned 155g	10,61	10,81	11,95	10,5 %	1,9 %
Fish (excl. tuna) - tinned 215g	13,61	13,92	14,92	7,2 %	2,3 %
Fish (excl. tuna) - tinned 400g	17,57	18,26	19,38	6,1 %	3,9 %
Tuna - tinned 170g	17,94	20,04	20,61	2,8 %	11,7 %
Average				**6,7 %**	**4,9 %**

Source: Stats SA (2020)

Various other food items are listed in **Table 24**. The average retail price of 2kg white sugar increased by 14.2 % between 2018 and 2019.
The retail price of instant coffee 500g increased by 3.3 % between 2018 and 2019.
The retail price of 62.5g Ceylon/black tea increased by 5.7 % during the same period. .

Table 24: Average annual retail prices of certain other food items

	Price Level			Percentage Change	
Other Products	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Cold cereals 375g	35,56	38,68	39,99	3,4 %	8,8 %
Cold cereals 400g	34,62	39,00	42,26	8,3 %	12,7 %

	Price Level			Percentage Change	
Other Products	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Cold cereals 450g	25,61	25,03	26,45	5,7 %	-2,3 %
Cold cereals 500g	32,60	33,76	36,21	7,2 %	3,6 %
Cold cereals 750g	44,72	45,86	49,98	9,0 %	2,6 %
Ceylon/black tea 125g	24,82	26,73	28,99	8,4 %	7,7 %
Ceylon/black tea 200g	17,46	20,48	18,96	-7,4 %	17,3 %
Ceylon/black tea 250g	31,56	34,38	36,36	5,8 %	9,0 %
Ceylon/black tea 500g	55,58	64,48	65,91	2,2 %	16,0 %
Ceylon/black tea 62.5g	14,31	15,42	16,30	5,7 %	7,8 %
Instant coffee 100g	26,98	24,98	24,86	-0,5 %	-7,4 %
Instant coffee 200g	80,94	78,33	78,75	0,5 %	-3,2 %
Instant coffee 250g	35,54	35,82	35,67	-0,4 %	0,8 %
Instant coffee 500g	54,89	58,32	60,28	3,3 %	6,2 %
Instant coffee 750g	78,59	77,04	76,77	-0,3 %	-2,0 %
Peanut butter 250g	20,06	20,49	22,18	8,2 %	2,2 %
Peanut butter 400g	27,61	27,98	29,59	5,8 %	1,3 %
Peanut butter 800g	50,91	51,98	54,56	5,0 %	2,1 %
Rice 10kg	113,90	120,48	119,82	-0,5 %	5,8 %
Rice 1kg	18,62	18,74	19,53	4,2 %	0,6 %
Rice 2kg	26,04	25,55	26,65	4,3 %	-1,9 %
Rice 500g	8,21	8,34	8,77	5,1 %	1,6 %
Rice 5kg	65,86	65,68	72,17	9,9 %	-0,3 %
White sugar 10kg	159,11	156,82	166,30	6,0 %	-1,4 %
White sugar 1kg	18,62	18,76	19,71	5,1 %	0,7 %
White sugar 2.5kg	38,65	37,57	39,88	6,2 %	-2,8 %
White sugar 250g	5,48	6,00	6,34	5,7 %	9,4 %
White sugar 2kg	28,99	26,87	30,68	14,2 %	-7,3 %
White sugar 500g	10,19	10,33	11,02	6,7 %	1,4 %
White sugar 5kg	81,12	79,02	83,76	6,0 %	-2,6 %
Average				**4,8 %**	**2,9 %**

Source: Stats SA (2020)

4.3. Rural food price trends

Tables 25 to 36 provide insight into the average prices of specific food items in rural areas from 2017 to 2019. **Table 25** shows that in 2019, consumers in rural areas paid 6 % more, on average, for a loaf of brown bread (700g) and 6.9 % more for a loaf of white bread (700g) than they did in 2017.

Table 25: Average annual retail prices of wheat products in rural areas

	Price Level			Percentage Change	
Wheat Products	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Loaf of white bread 600g	10,06	10,26	10,60	3,3 %	2,0 %
Loaf of white bread 700g	11,49	11,70	12,51	6,9 %	1,9 %
Loaf of brown bread 600g	10,43	10,53	10,89	3,5 %	1,0 %
Loaf of brown bread 700g	12,44	12,73	13,49	6,0 %	2,3 %
Average				**4,9 %**	**1,8 %**

Source: Stats SA (2020)

Selected rural retail prices for maize products are shown in **Table 26**. On average, the rural retail price for 5kg special maize increased by 10.4 % between 2018 and 2019. The price of 5kg super maize increased by 3.3 % during the same period.

Table 26: Average annual retail prices of maize products in rural areas

	Price Level			Percentage Change	
Maize Products	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Special maize 1kg	10,17	9,13	9,46	3,6 %	-10,3 %
Special maize 2.5kg	23,14	18,32	19,82	8,2 %	-20,8 %
Special maize 5kg	39,86	31,48	34,74	10,4 %	-21,0 %
Super maize 1kg	12,06	10,71	11,04	3,1 %	-11,2 %
Super maize 2.5kg	25,60	21,57	22,48	4,2 %	-15,8 %
Super maize 5kg	47,63	39,38	40,69	3,3 %	-17,3 %
Average				**5,5 %**	**-16,1 %**

Source: Stats SA (2020)

The average prices of 750mℓ sunflower oil increased by 3.1 %, while 500g margarine spread and 500g brick margarine decreased by 1.3 % and 1.6 %, respectively, between 2018 and 2019 (**Table 27**).

Table 27: Average annual retail prices of oils and fats in rural areas

	Price Level			Percentage Change	
Sunflower Products	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Brick margarine 125g	9,35	9,43	9,77	3,5 %	0,9 %
Brick margarine 250g	14,65	14,69	14,62	-0,5 %	0,3 %
Brick margarine 500g	22,48	21,83	21,48	-1,6 %	-2,9 %
Margarine 1kg	39,95	39,03	39,61	1,5 %	-2,3 %
Margarine 250g	14,45	15,00			3,8 %
Margarine 500g	24,42	27,93	27,57	-1,3 %	14,4 %
Sunflower oil 2ℓ	40,25	37,92	38,81	2,3 %	-5,8 %
Sunflower oil 500mℓ	14,63	14,44	14,45	0,1 %	-1,3 %
Sunflower oil 750mℓ	17,67	17,75	18,30	3,1 %	0,5 %
Average				**0,9 %**	**0,8 %**

Source: Stats SA (2020)

Consumers in rural areas paid 3.5 % and 4 % more for full-cream fresh (1ℓ) and full-cream long-life (1ℓ) milk respectively. The price of half a dozen eggs increased by 1.9 % between 2018 and 2019 (**Table 28**).

Table 28: Average annual retail prices of dairy products in rural areas

	Price Level			Percentage Change	
Dairy Products	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Eggs 0.5 dozen	9,67	11,70	11,93	1,9 %	21,0 %
Full-cream milk - fresh 1ℓ	13,11	13,76	14,24	3,5 %	4,9 %
Full-cream milk - fresh 2ℓ	26,07	26,23	26,69	1,7 %	0,6 %
Full-cream milk - fresh 500mℓ	9,90	10,16	10,40	2,3 %	2,7 %
Full-cream milk - long life 1ℓ	14,54	14,68	15,26	4,0 %	1,0 %
Full-cream milk - long life 500mℓ	10,24	10,28	10,42	1,4 %	0,3 %
Low-fat milk - fresh 1ℓ	15,11	14,72	16,62	12,9 %	-2,6 %
Low-fat milk - fresh 2ℓ	27,07	28,27	28,71	1,6 %	4,4 %
Average				**3,7 %**	**4,0 %**

Source: Stats SA (2020)

Table 29 shows the prices of Ceylon/black tea and instant coffee paid by consumers in rural areas from 2017 to 2019. On average, the price of 250g Ceylon/black tea increased by 6.2 %.

Table 29: Average annual retail prices of tea and coffee in rural areas

	Price Level			Percentage Change	
Tea and Coffee	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Ceylon/black tea 125g	20,34	20,88	22,08	5,7 %	2,7 %
Ceylon/black tea 200g	27,45	33,20	34,00	2,4 %	20,9 %
Ceylon/black tea 250g	28,72	30,76	32,69	6,2 %	7,1 %
Ceylon/black tea 62.5g	12,20	12,58	13,04	3,6 %	3,1 %
Instant coffee 100g	19,15	19,68	19,86	1,0 %	2,7 %
Instant coffee 250g	37,62	37,63	37,31	-0,9 %	0,0 %
Instant coffee 750g	79,40	79,46	81,42	2,5 %	0,1 %
Average				**2,9 %**	**5,2 %**

Source: Stats SA (2020)

Table 30 shows the average retail prices of dried beans paid by consumers in rural areas from 2017 to 2019. The price of 1 kg of dried beans decreased by 1.3 % during the depicted period.

Table 30: Average annual retail prices of beans in rural areas

	Price Level			Percentage Change	
Beans	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Beans dried 1kg	32,46	30,21	29,81	-1,3 %	-6,9 %
Beans dried 2kg	49,78	51,78	52,37	1,1 %	4,0 %
Beans dried 500g	16,60	16,09	16,38	1,8 %	-3,1 %
Average				**0,5 %**	**-2,0 %**

Source: Stats SA (2020)

The retail prices of sugar in the rural areas increased by 2.2 % and 2.7 % for 1kg and 2.5kg white sugar between 2018 and 2019, as illustrated in **Table 31.**

Table 31: Average annual retail prices of sugar in rural areas

	Price Level			Percentage Change	
Sugar	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
White sugar 1kg	19,00	19,07	19,48	2,2 %	0,4 %
White sugar 2.5kg	41,48	41,22	42,32	2,7 %	-0,6 %
White sugar 500g	89,74	91,05	85,32	-6,3 %	1,5 %
Average				**-0,5 %**	**0,4 %**

Source: Stats SA (2020)

The average retail prices of meat and fish in rural areas increased by 2.5 % between 2018 and 2019, as illustrated in **Table 32.**

Table 32: Average annual retail prices of meat and fish in rural areas

	Price Level			Percentage Change	
Meat and Fish	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Beef brisket - fresh per kg	78,00	83,25	84,16	1,1 %	6,7 %
Beef chuck - fresh per kg	78,03	83,47	83,99	0,6 %	7,0 %
Beef fillet - fresh per kg	144,89	154,24	152,88	-0,9 %	6,5 %
Beef rump steak - fresh per kg	105,80	114,23	122,19	7,0 %	8,0 %
Beef T-bone - fresh per kg	92,62	99,36	100,43	1,1 %	7,3 %
Chicken portions - fresh per kg	17,94	35,55			98,2 %
Fish (excl. tuna) - tinned 155 g	10,82	10,96	11,50	4,9 %	1,3 %

	Price Level			Percentage Change	
Meat and Fish	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Fish (excl. tuna) - tinned 425 g	18,17	17,33	18,00	3,8 %	-4,6 %
Average				**2,5 %**	**16,3 %**

Source: Stats SA (2020)

On average, the rural retail price of various rice packages increased by 2.8 % between 2018 and 2019, as illustrated in **Table 33**.

Table 33: Average annual retail prices of rice in rural areas

	Price Level			Percentage Change	
Rice	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Rice 1kg	15,82	15,77	15,99	1,4 %	-0,3 %
Rice 2kg	25,47	25,78	26,87	4,3 %	1,2 %
Rice 500g	8,78	8,74	8,99	2,9 %	-0,4 %
Average				**2,8 %**	**0,1 %**

Source: Stats SA (2020)

On average, the rural retail price of peanut butter (270g) increased by 2 % between 2018 and 2019, as illustrated in **Table 34**.

Table 34: Average annual retail prices of peanut butter in rural areas

	Price Level			Percentage Change	
Peanut Butter	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Peanut butter 270g	23,11	23,75	24,22	2,0 %	2,8 %
Peanut butter 400g	29,26	29,66	30,95	4,3 %	1,4 %
Peanut butter 800g	53,57	53,71	56,52	5,2 %	0,3 %
Average				**3,8 %**	**1,5 %**

Source: Stats SA (2020)

Table 35 shows that the average rural retail prices of sorghum meal between 2018 and 2019.

Table 35: Average annual retail prices of sorghum meal in rural areas

	Price Level			Percentage Change	
Sorghum Meal	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Sorghum meal (e.g. Mabella) 1kg	18,57	18,59			0.1 %
Average					**0.1 %**

Source: Stats SA (2020)

As shown in **Table 36**, the average retail prices of fresh apples and bananas per kg increased by 4.5 % and 8.2 % respectively between 2018 and 2019. The retail price of fresh potatoes per kg increased by 1.7 % between 2018 and 2019.

Table 36: Average annual retail prices of fruit and vegetables in rural areas

	Price Level			Percentage Change	
Fruit and Vegetables	**2017**	**2018**	**2019**	**2018–2019**	**2017–2018**
Apples - fresh per kg	18,23	19,78	20,74	4,8 %	8,5 %
Bananas - fresh per kg	14,73	13,56	14,68	8,2 %	-8,0 %
Onions - fresh per kg	12,32		16,99		
Cabbage - fresh per kg	11,36	12,76	12,18	-4,5 %	12,3 %
Oranges - fresh per kg	17,45	18,74	18,64	-0,5 %	7,4 %
Potatoes - fresh per kg	11,72	11,69	11,89	1,7 %	-0,2 %
Potatoes - fresh 10kg	54,70	60,41	68,94	14,1 %	10,5 %
Tomatoes - fresh per kg	17,65	18,75	20,18	7,6 %	6,2 %
Average				**4,5 %**	**5,2 %**

Source: Stats SA (2020)

4.4. Comparison between rural and urban food prices

Figure 26 compares urban and rural prices from January 2015 to March 2020. On average, the cost of an urban food basket was higher in most months than that of the rural food basket. This basket consists of 11 products, including full-cream milk – long life (1ℓ), a loaf of brown bread (700g), a loaf of white bread (700g), special maize meal (2.5kg), super maize meal (2.5kg), margarine spread (500g), peanut butter (400g), rice (2kg), sunflower oil (750mℓ), Ceylon/black tea (62.5g), and white sugar (2.5kg).

In March 2020, the urban and rural baskets (11 products) amounted to R256.14 and R250.71 respectively.

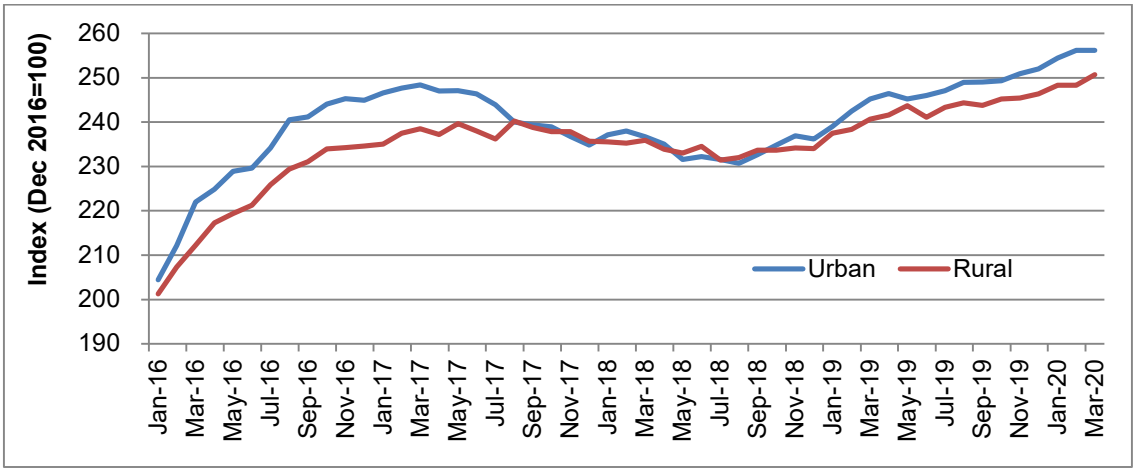

Figure 26: **Comparison between rural and urban food prices, January 2016 to March 2020**
Source: Stats SA (2020)

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 greater 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-Spread (FTRPS) of various industries.

In order to better understand the margin between farm-gate and retail prices, the farm values of selected products and the FTRPS will be calculated. The farm value share is the value of the farm product's equivalent in the final food product purchased by the consumer. The FTRPS is the difference between what the consumer pays for the food product at the 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.

5.2. Price trends in the meat sector

5.2.1. Poultry industry

Figure 27 illustrates the FAO Poultry Meat Price Index, Brazil, export value for chicken, and the USA export unit value of broiler cuts. According to the FAO (2020b), the Poultry Meat Price Index increased by 3.1 % between 2018 and 2019. During the first three months of 2020, the Poultry Meat Price Index decreased by 0.6 % compared to 2019.

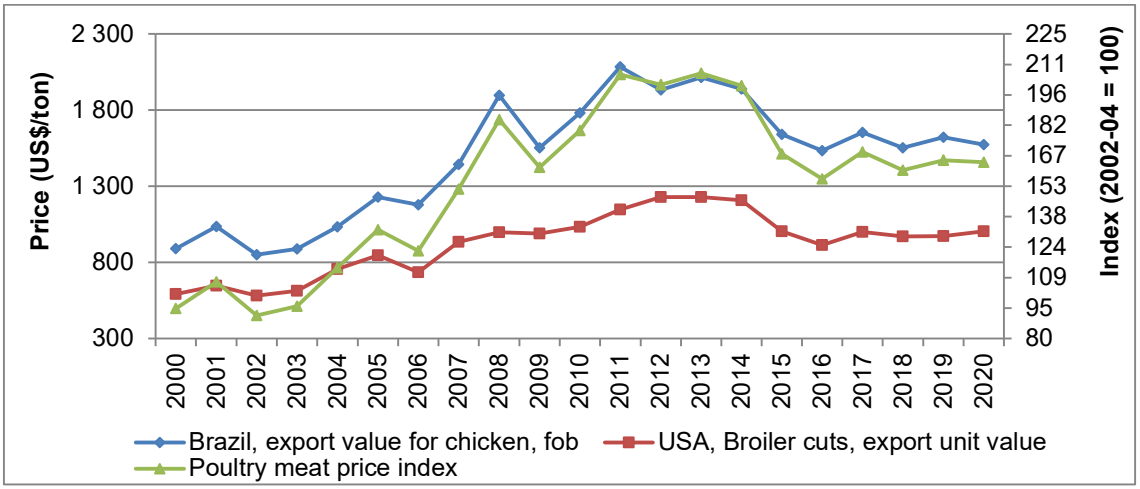

Figure 27: International poultry price trends
Source: FAO (2020b)

The retail prices for selected poultry products are shown in **Figure 28**. The annual average retail prices of fresh chicken portions (per kg), fresh whole chickens (per kg), and individually quick frozen (IQF) chicken portions (1kg) were R62.03/kg, R48.47/kg and R43.23/kg respectively in 2019. In real terms, the annual average retail prices for fresh chicken portions, fresh whole chickens and IQF chicken portions were R55.28/kg, R43.20/kg and R38.53/kg respectively.

In real terms, from 2018 to 2019, the increases in the prices for IQF chicken portions, fresh whole chickens, and fresh chicken portions were 5.18 %, 0.61 % and 0.8 % respectively.

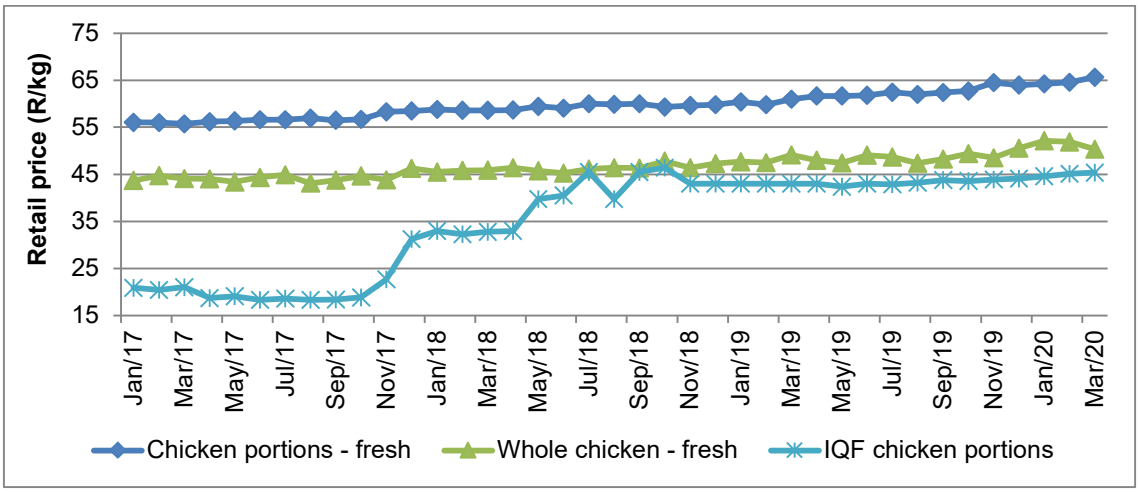

Figure 28: **Poultry retail price trends**[2]
Source: Stats SA (2020)

Figure 29 shows the trends in the producer prices of poultry. The annual average producer price of fresh chicken increased by 1.1 % (from R26.34/kg in 2018 to R26.62/kg in 2019), and frozen chicken increased by 0.3 % (from R25.51/kg in 2018 to R25.60/kg in 2019). The annual average producer price of IQF chicken decreased by 0.6 % (from R23.87/kg to R23.74/kg between 2018 and 2019). Compared with 2010 price levels, the 2018 annual average prices of IQF chicken, frozen and fresh chickens increased by 87.8 %, 76.8 % and 40.4 % respectively.

In real terms, IQF chicken, frozen and fresh chicken producer prices decreased by 4.6 %, 3.7 % and 3 %, respectively, between 2018 and 2019. When compared with 2010, the real producer prices of IQF and frozen chicken increased by 18.3 % and 11.5 % respectively, while fresh chicken decreased by 11.6 %.

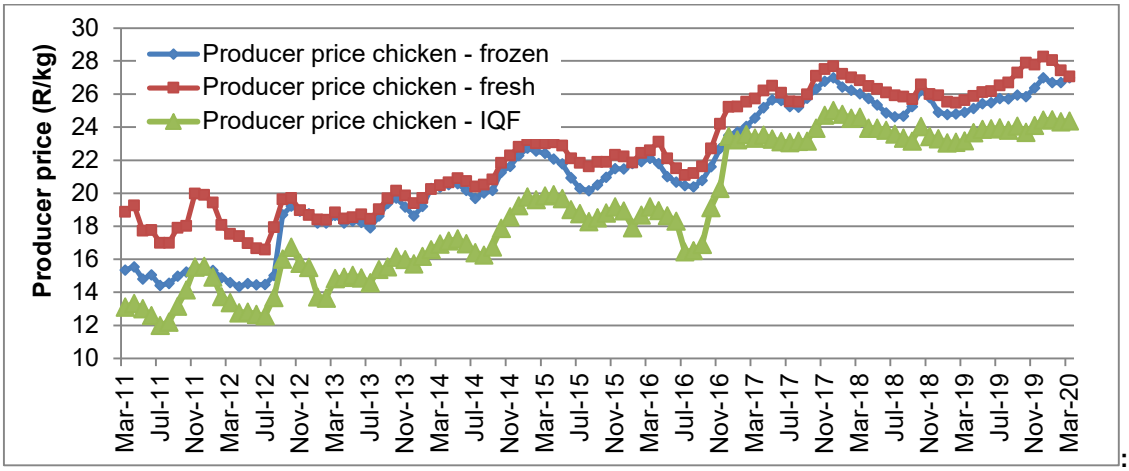

Figure 29: Poultry producer price trends
Source: AMT (2020)

[2] Note: Stats SA introduced additional products as from January 2017 and excluded some of the pre-January 2017 products. Due to the limitation of data, the trend for retail prices will start from January 2017.

The real FTRPS and farm value share of fresh whole chicken are shown in **Figure 30**. The real FTRPS of fresh whole chicken increased, on average, by 5.4 % between 2018 and 2019 and during the same period, the farm value share of fresh whole chicken decreased by 3.6 %. The average farm value share for fresh whole chicken per kg in 2019 was 54.9 %.

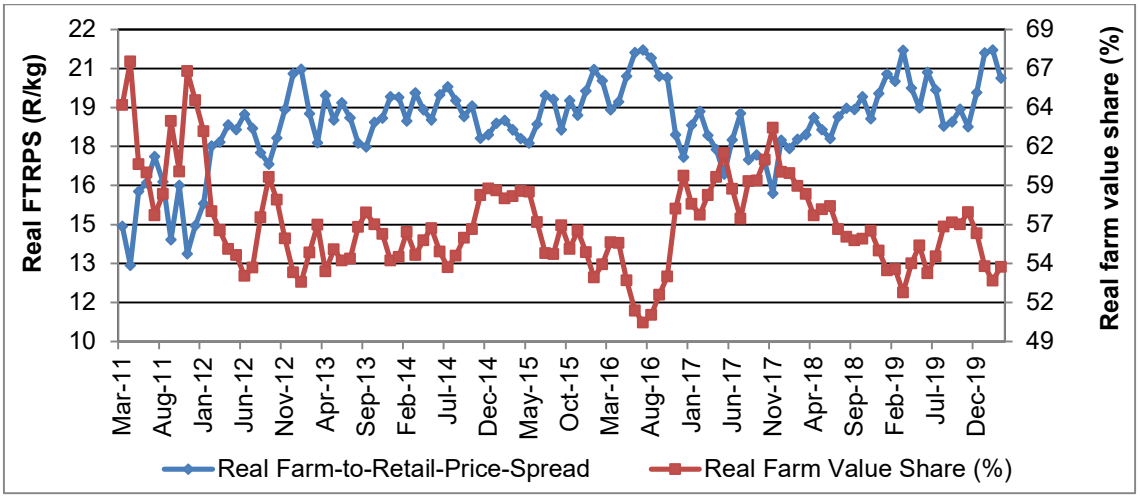

Figure 30: Real FTRPS and farm value share of poultry
Source: AMT (2020), Stats SA (2020) and own calculations

5.2.2. Beef

Figure 31 depicts international beef price trends. According to the FAO Bovine Meat Price Index, the annual average international beef price increased by 6.4 % between 2018 and 2019. During the first three months of 2020, the Bovine Meat Price Index increased by 0.2 % compared to 2019. When comparing the figures for 2000 and 2019, the average international beef price increased by 109.8 %.

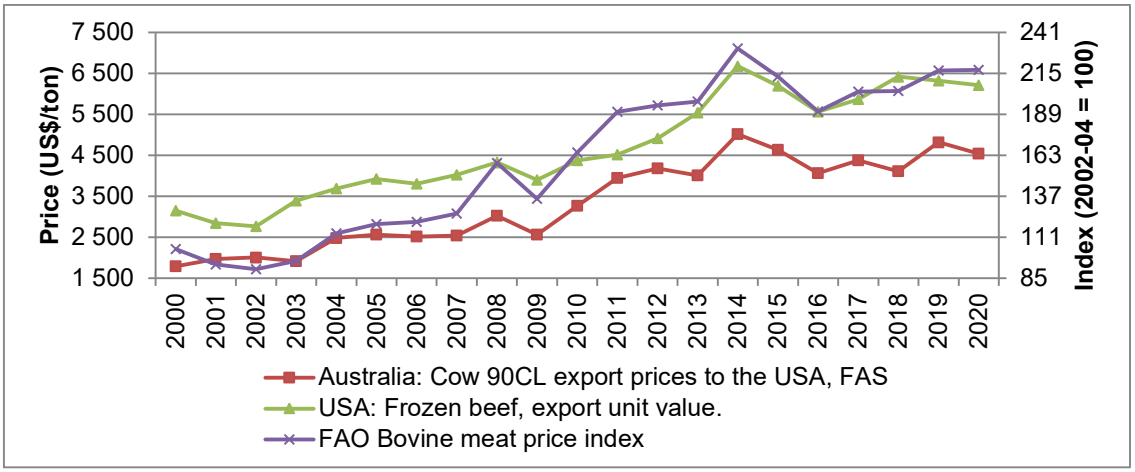

Figure 31: International beef price trends
Source: FAO (2020b)

The retail price of beef continued mostly sidewise throughout the period under review, except for rump steak, which followed a downward trend (**Figure 32**). The average annual retail prices for chuck, brisket and T-bone decreased by 2.5 %, 2.4 %, and 0.5 % respectively between 2018 and 2019. The average annual retail prices for beef rump steak and mince increased by 0.14 % and 0.03 % respectively during the same period.

In real terms, the average annual retail prices for chuck, brisket, T-bone, mince and rump steak decreased by 6.4 %, 6.3 %, 4.4 %, 3.9 % and 3.9 % respectively between 2018 and 2019.

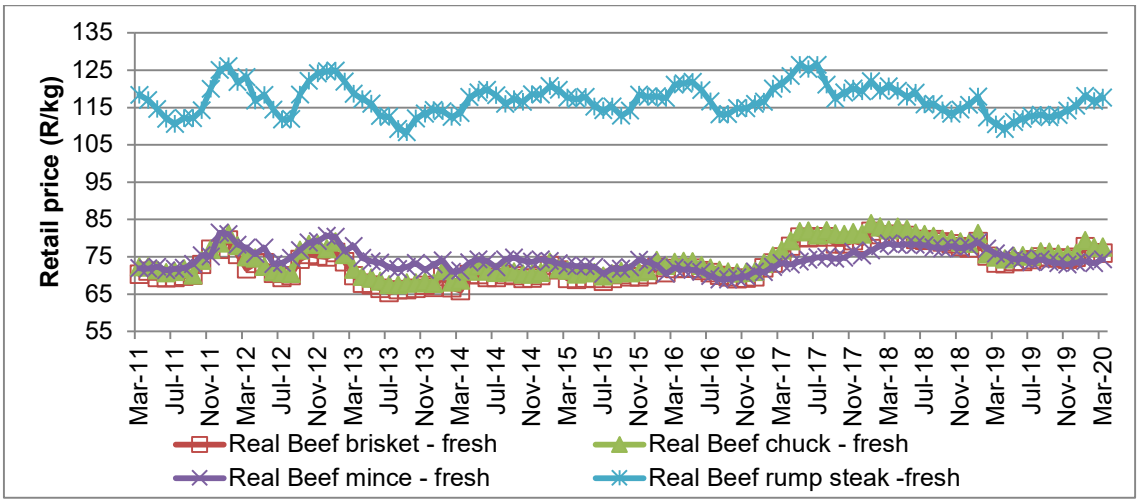

Figure 32: Retail price trends for different beef cuts
Source: Stats SA (2020)

The producer prices for the different classes of beef are shown in **Figure 33**. The annual average producer prices of beef classes B2/B3, C2/C3, and A2/A3 decreased by 9.6%, 9.1% and 5.9%, respectively, between 2018 and 2019. In real terms, beef producer prices showed an increasing trend over the longer term but the annual average real producer prices of classes B2/B3, C2/C3, and A2/A3 decreased by 13.2%, 12.8% and 9.7%, respectively, between 2018 and 2019.

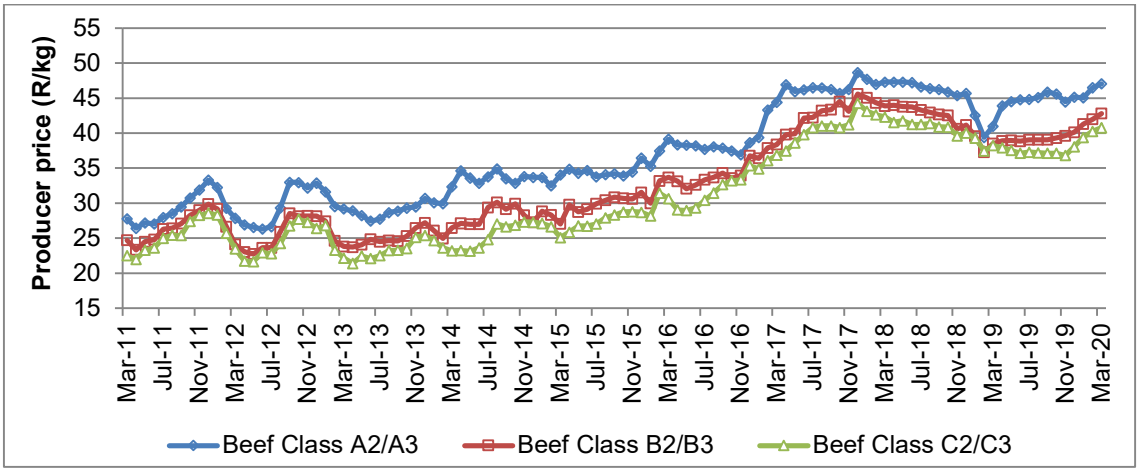

Figure 33 : **Beef producer price trends**
Source: AMT (2020)

The real FTRPS and the farm value share of beef are shown in **Figure 34** below. The average real FTRPS of beef decreased by 1.95 % between 2018 and 2019 and reached R37.09/kg in 2019, and its real farm value share decreased by 3.8 % between 2018 and 2019. The real farm value share of beef was 51.4 % in 2019.

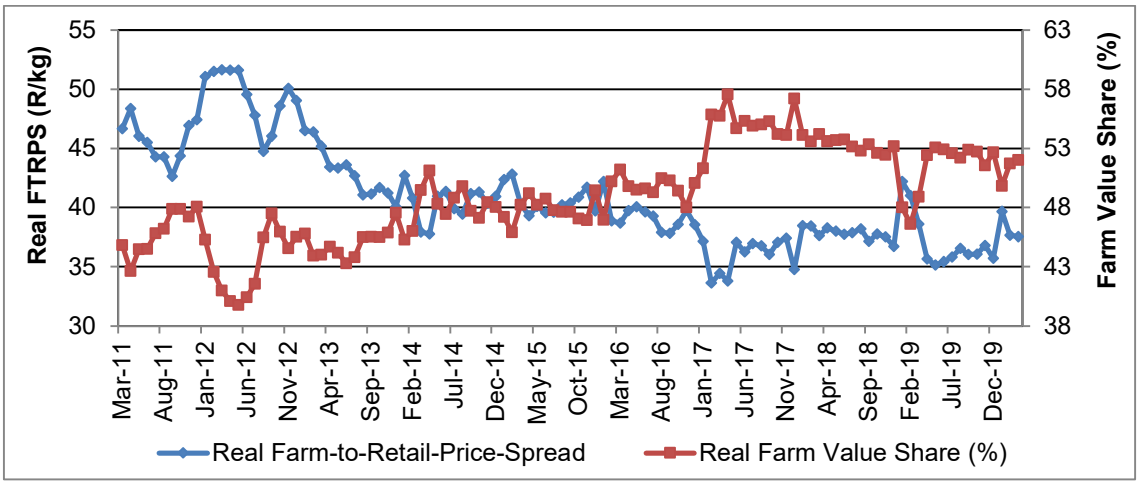

Figure 34: Real FTRPS and farm value share for beef
Source: AMT (2020), Stats SA and own calculations

5.2.3. Lamb

International lamb prices continued their upward trend during 2016, after some declines during 2014 and 2015 (**Figure 35**). According to the FAO, international lamb prices decreased slightly by 2.2 % between 2018 and 2019. During the first three months of 2020, the Ovine Meat Price Index decreased noticeably by 10.2 % in comparison to 2019.

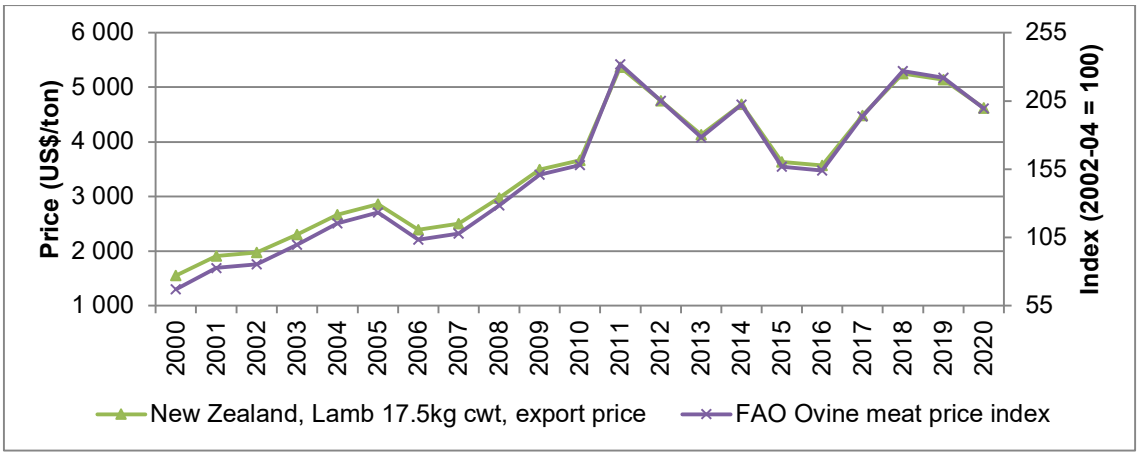

Figure 35: International lamb price trends
Source: FAO (2020b)

The domestic retail prices of lamb cuts showed an increase during 2014, followed by a decline in 2015, and continued with the long-term increasing trend (**Figure 36**). These increases continued during 2017 and 2018. The average annual retail prices of loin chops, lamb leg, rib chops, and lamb neck decreased by 2.5 %, 1.6 %, 1.4 % and 0.3 % respectively between 2018 and 2019. During the first three months of 2020, the prices recovered slightly.

In real terms, the average annual retail prices of loin chops, lamb leg, rib chops, and lamb neck decreased by 6.4 %, 5.5 %, 5.3 % and 4.2 % respectively between 2018 and 2019.

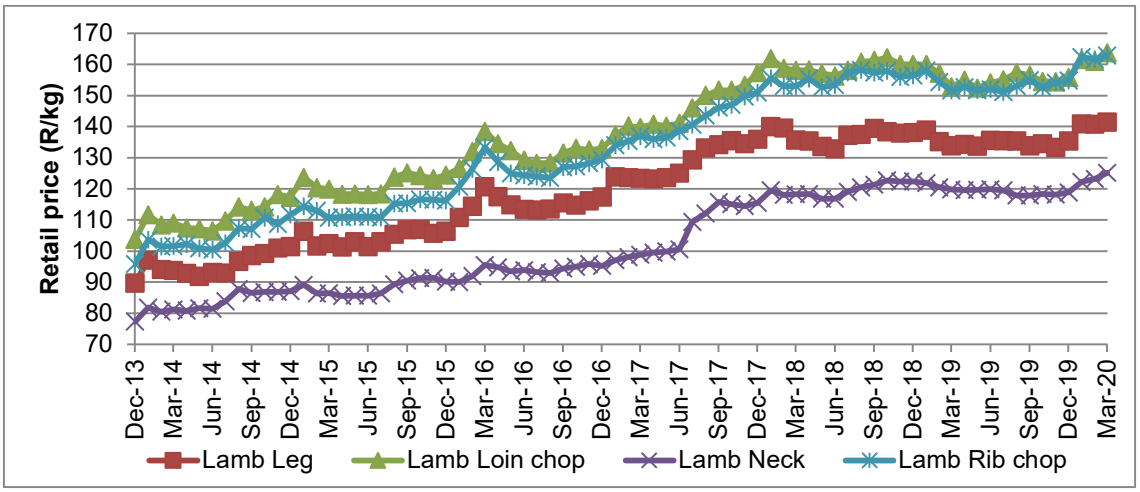

Figure 36: **Lamb retail price trends**
Source: Stats SA (2020)

Figure 37 shows that the producer prices for the different lamb classes continued with an increasing trend during 2017 and 2018, after a noticeable decline during 2012 and 2013. The prices did not continue with the increasing trend during 2019, and the average producer price of class B2/B3 decreased by 16.5 % between 2018 (R58.95/kg) and 2019 (R47.30/kg). The annual average producer prices for class C2/C3 and class A2/A3 decreased by 15.3 % and 8.2 % respectively between 2018 and 2019.

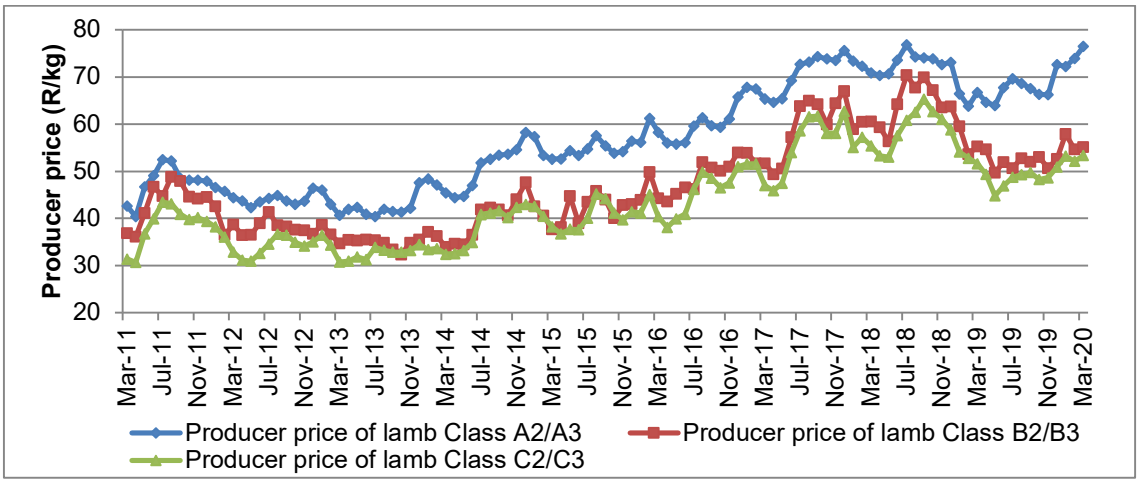

Figure 37: Lamb producer price trends
Source: AMT (2020)

The real FTRPS and the farm value share of lamb are depicted in **Figure 38.** The real FTRPS of lamb increased by 1. 2% between 2018 and 2019, and was R63.51/kg, on average, during 2019. The real farm value share of lamb decreased by 6.6 % between 2018 and 2019.

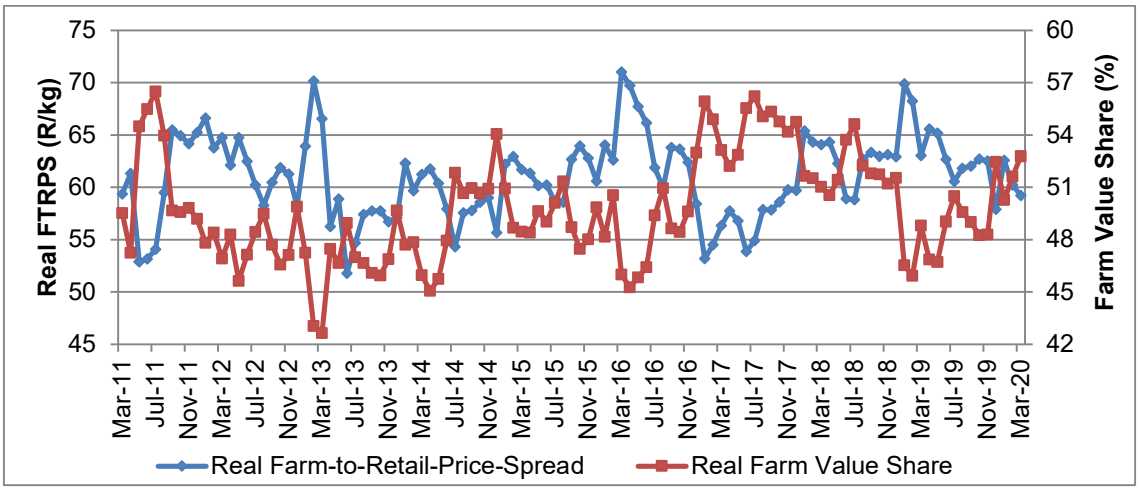

Figure 38: Real FTRPS and farm value share of lamb
Source: AMT (2020), Stats SA (2020) and own calculations

5.2.4. Pork

According to the FAO Pig Meat Price Index, the annual average international pork price increased by 8.9 % between 2018 and 2019 (**Figure 39**). During the first three months of 2020, the Pig Meat Price Index increased by 9.6 % compared to 2019. The annual average US frozen pork price decreased by 7.3 % between 2018 and 2019.

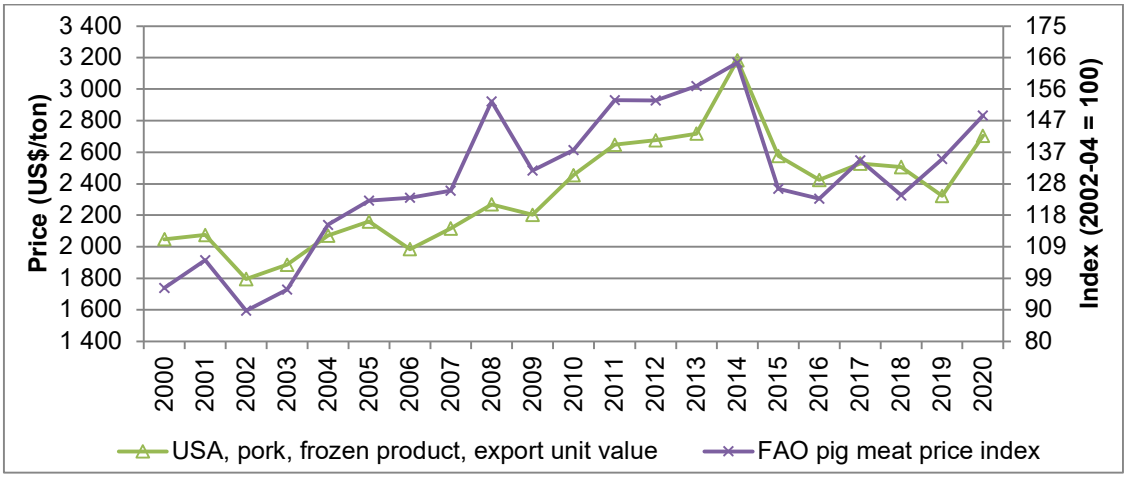

Figure 39: International pork price trends
Source: FAO (2020b)

Figure 40 shows the retail price trends of fresh pork chops. The retail price of pork chops decreased by 0.04 % between 2018 (R77.36/kg) and 2019 (R77.33/kg). In real terms, the average retail price of pork chops decreased by 4.04 % during the period under review.

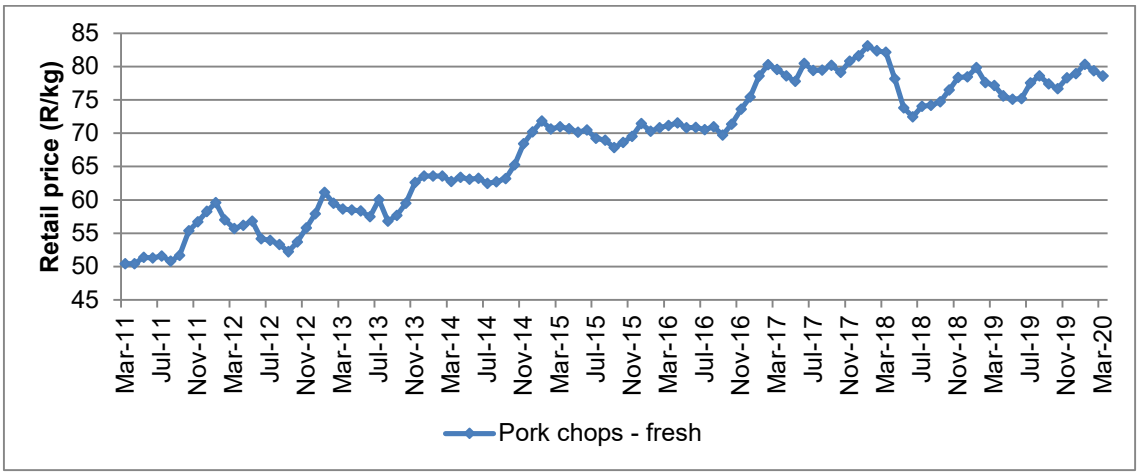

Figure 40: **Pork retail price trends**
Source: Stats SA (2020)

Figure 41 shows that porkers and baconers' producer price experienced much more volatility after the end of 2011. The annual average producer price of baconers and porkers increased by 3.6 % and 0.3 % respectively between 2018 and 2019. During 2019, the annual average real producer prices decreased by 3.7 % and 0.5 % for porkers and baconers respectively.

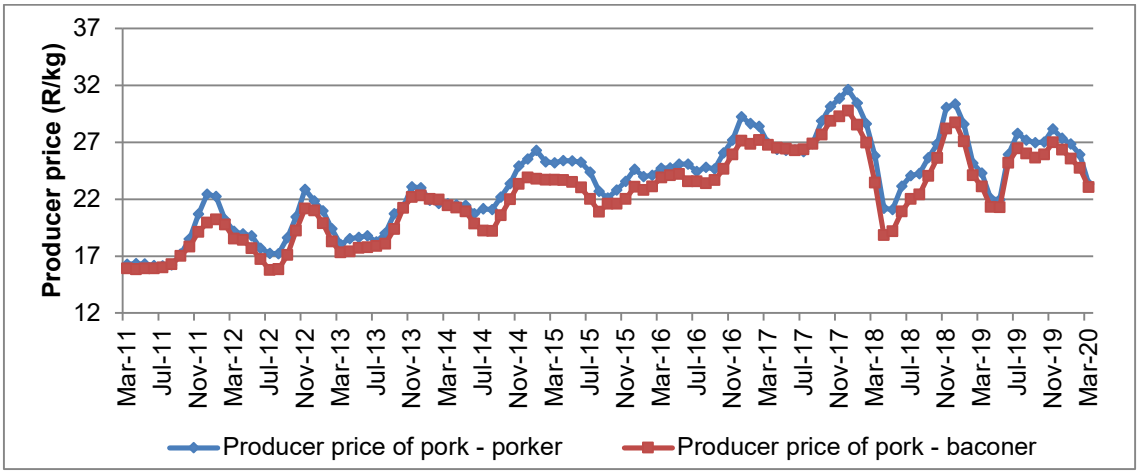

Figure 41: **Pork producer price trends**
Source: AMT (2020)

Figure 42 shows the real FTRPS and farm value share of pork chops. The average real FTRPS decreased from R47.67/kg in 2018 to R45.80/kg in 2019 (3.9 %). The real farm value share increased by 0.2 % on average between 2018 and 2019 and was 33.6 % on average during 2019.

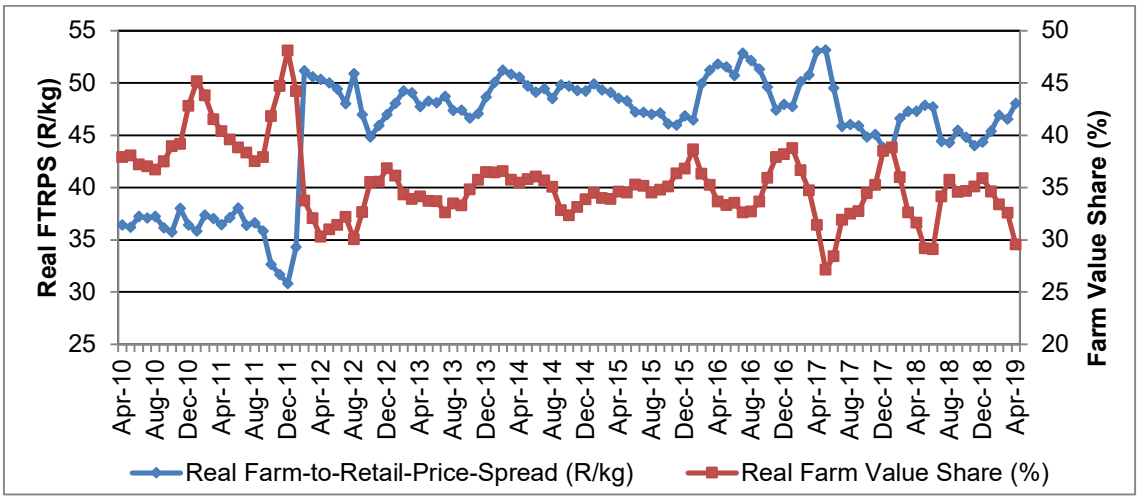

Figure 42: Real FTRPS and farm value share of pork
Source: AMT (2020), Stats SA (2020) and own calculations

5.3. Price trends in the dairy sector

5.3.1. Milk

Figure 43 shows the trends in the raw milk price and retail values for fresh full-cream (1ℓ) and low-fat milk (1ℓ) between January 2015 and March 2020. The average retail prices between March 2019 and March 2020 were R14.90/ℓ and R15.98/ℓ for fresh full-cream (1ℓ) and low-fat milk (1ℓ) respectively. When compared with the period from March 2018 to March 2019, fresh full-cream (1ℓ) and low-fat milk (1ℓ) prices were, on average, R14.37/ℓ and R15.62/ℓ. Between March 2019 and March 2020, the prices increased on average by 3.7% for fresh full-cream (1ℓ) and by 2.3% for fresh, low-fat milk (1ℓ). The calculated raw milk price using data from the South African Milk Processors' Organisation (SAMPRO) and the Milk Producers' Organisation (MPO), increased from R4.68/ℓ in March 2019 to R4.76/ℓ in March 2020 (7 %).

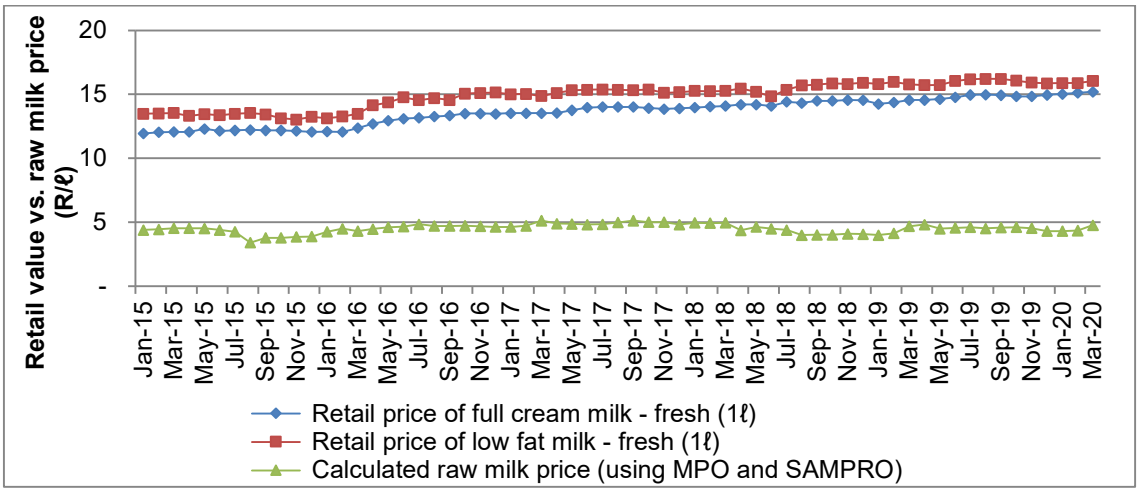

Figure 43: Raw milk price and the retail values for full-cream and low-fat milk, sachets (R/ℓ)
Sources: MPO (2020), SAMPRO (2020), Stats SA (2020) and own calculations

In order to explain the relationship between the raw milk price and the price of packaged, standardised pasteurised milk, a high number of assumptions should be made regarding factors such as the fat

content of milk produced in South Africa, the price of cream, the production, packaging, administration, marketing and management cost of cream, and the quantity of each fat class of milk (fat-free, low fat and full cream) sold (SAMPRO, 2020). Due to the complex nature and process and the number of assumptions that should be addressed, the rest of this section will only discuss the farm value share and price spread of full-cream milk.

Figure 44 shows the farm value share as a percentage of the real retail value for fresh full-cream milk (1ℓ), between January 2015 and March 2020. From March 2018 to March 2019, the average real farm value share of fresh full-cream milk (1ℓ) reached 30.4 %. The real farm value share (%) for fresh full-cream milk (1ℓ) decreased to reach a trough of 27.7 % in October 2018, after peaking at 37.9 % during March 2017. In March 2020, the real farm value share (%) for fresh full-cream milk (1ℓ) reached 31.3 %.

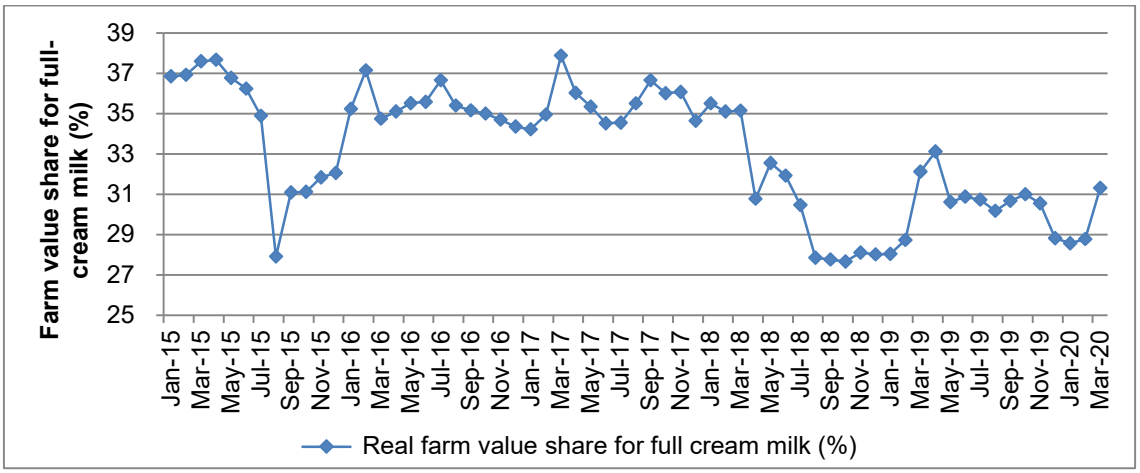

Figure 44: Real farm value shares for full-cream milk, sachets (R/ℓ)
Sources: Stats SA (2020), MPO (2020), SAMPRO (2020) and own calculations

Figure 45 shows the trends in the real FTRPS for fresh full-cream milk (1ℓ) between January 2015 and March 2020. In January 2015, the spread was R8.48/ℓ, reaching a peak of R9.61/ℓ during September 2018. The average annual real FTRPS decreased from R9.31/ℓ (between March 2018 and March 2019) to R9.14/ℓ (between March 2019 and March 2020) (-1.8 %).

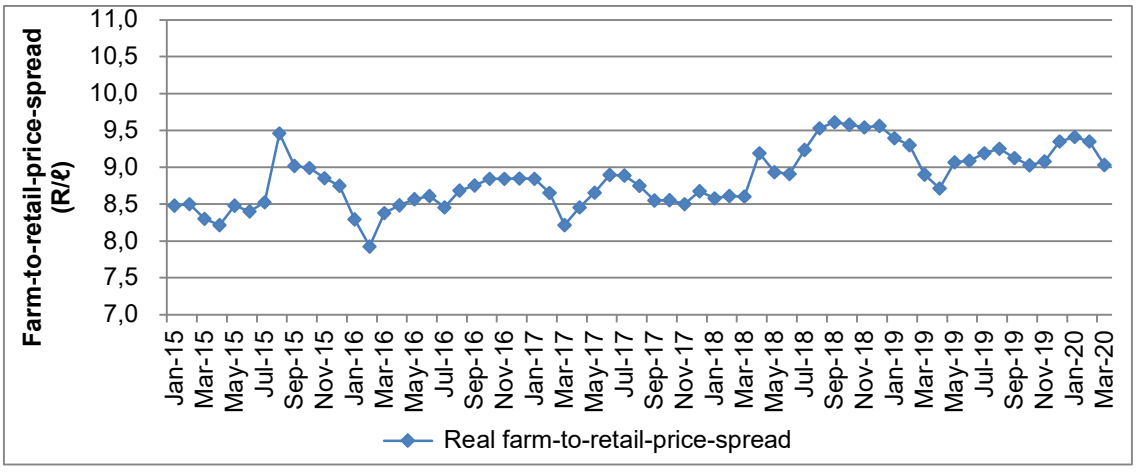

Figure 45: Real FTRPS for full-cream milk, sachets (R/ℓ)
Sources: MPO (2020), SAMPRO (2020), StatsSA (2020) and own calculations

5.3.2. Powdered milk

Figure 46 shows the trends in the powdered milk retail prices for 250g and 500g packets between January 2015 and December 2019. The average retail price for 250g powdered milk between January 2019 and December 2019 was R40.21/250g, compared to the R40.68/250g reached between January 2018 and December 2018 (-1.2 %). From January 2019 to December 2019, 500g powdered milk, on average, reached R56.37/500g, compared to the R54.59/500g reached between January 2018 and December 2018 (3.3 %).

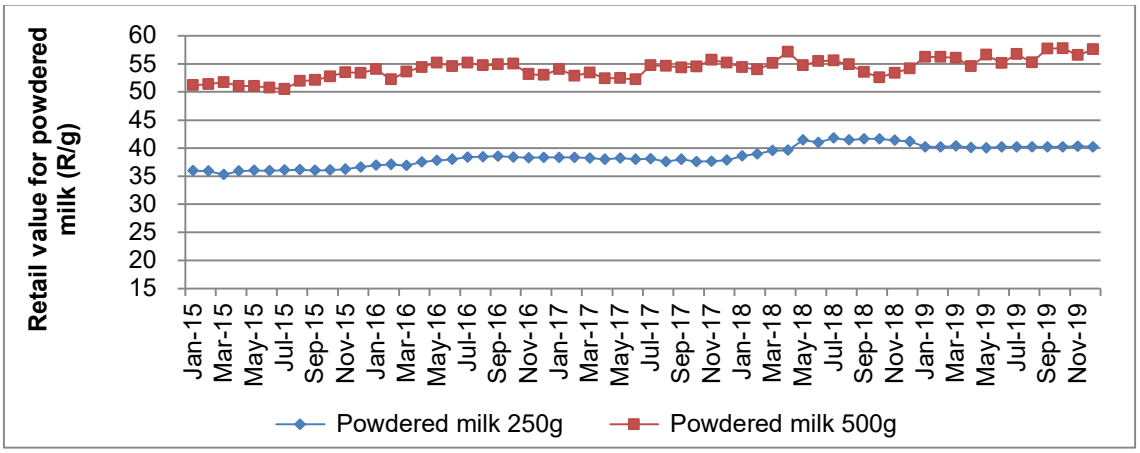

Figure 46: **Retail price of powdered milk**
Source: Stats SA (2020)

5.3.3. Milk, cheese and margarine

Figure 47 shows the trends in the retail prices for fresh full-cream milk (R/ℓ), fresh, low-fat milk (R/ℓ), cheddar cheese (R/kg), and margarine (R/kg) between January 2015 and March 2020. The average retail prices between March 2019 and March 2020 were R14.90/ℓ (3.7 %), R15.98/ℓ (2.3 %), R106.35/kg (1.9 %) and R44.20/kg (-0.5 %) respectively.

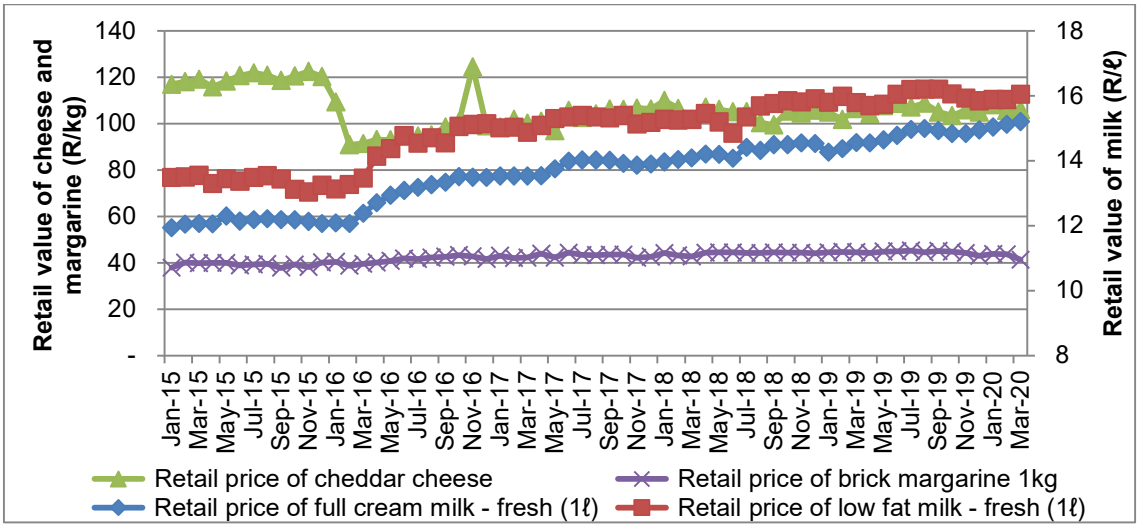

Figure 47: Retail price of milk, (R/ℓ), cheddar cheese and butter (R/kg)
Sources: Stats SA (2020)

5.4. Maize sector

5.4.1. Production, stock levels and consumption of white maize

In South Africa, white maize is mainly produced for human consumption and yellow maize for animal consumption. About 80 % of white maize production is processed in the form of maize meal. Both white and yellow maize are summer crops, planted annually in the same season. The maize marketing season runs from 1 May until 30 April. **Figure 48** indicates the total supply and demand for white maize. During the season under review, total white maize supplied was 8 738 997 tons – down by 1 149 184 tons due to late plantings and unpredictable climatic conditions. Although total white maize supplies were down, the total demand of 6 939 999 tons was still sustained.

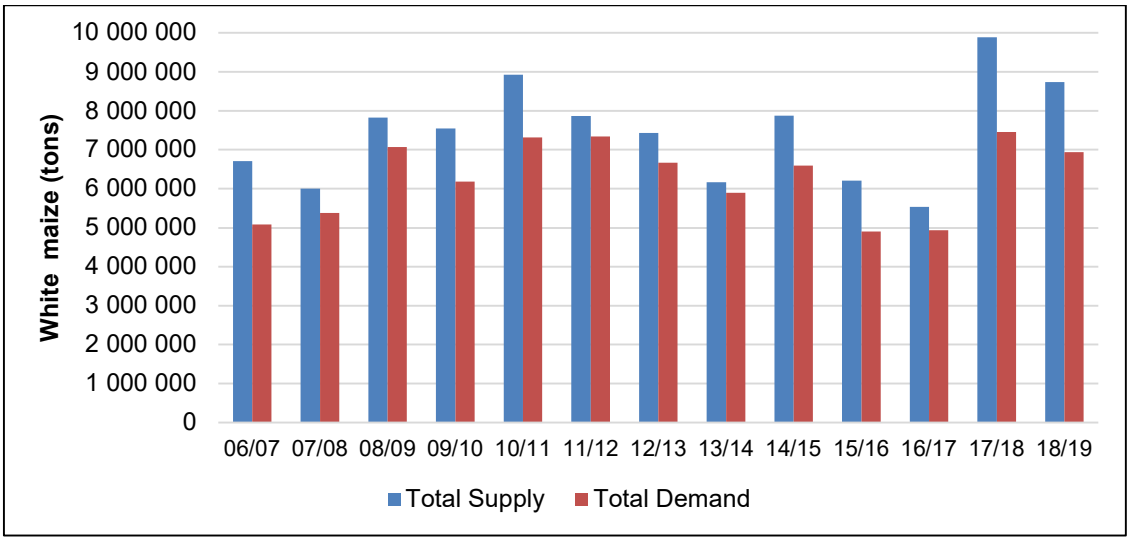

Figure 48: Domestic maize production, consumption and area harvested (white maize)
Source: SAGIS (2020)

Figure 49 indicates the stock levels of white maize for the 2018/19 marketing season. Ending stock levels were down by 629 655 tons compared to the previous marketing year of 2017/18, due to the decline in total supply and a slight drop in total demand. South Africa's maize stocks for 2018/19 post the end of the marketing season using the pipeline requirements (45-day stock) were 774 656 tons. Total white maize exports decreased slightly during the season under review by 235 318 tons on the back of the decline in total supply. The 2018/19 white maize export destinations were Botswana, Ethiopia, Italy, Lesotho, Mozambique, Namibia, Spain and Eswatini (Previously known as Swaziland).

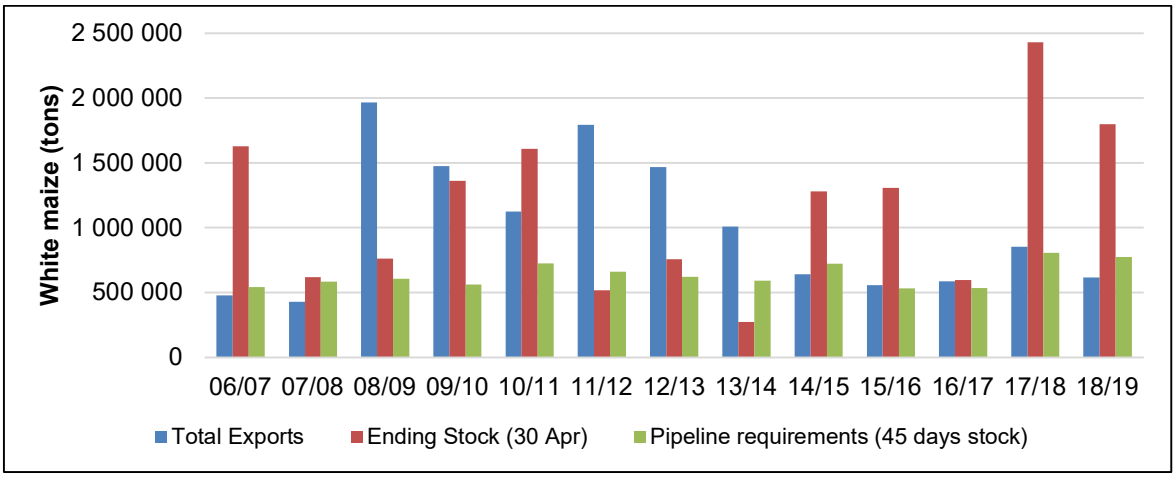

Figure 49: Total exports and pipeline requirements, carried out as a % of total domestic demand (white maize)
Source: SAGIS (2020)

White maize is predominately used for human consumption and yellow maize is used for animal feed. In some instances, that results in certain short-term shocks in the economy. This consumption pattern can change, depending on the price difference between white and yellow maize. If white maize trades below the price of yellow maize, feed manufacturers then tend to use white maize in their feed rations. If yellow maize trades below the price of white maize, the same tendency occurs in the market. **Figure 50** illustrates the breakdown of consumption patterns for the 2018/19 marketing season. Processed white maize for human consumption increased from 3 526 000 tons in 2006/07 to 4 594 000 tons in the 2018/19 season. This increase in processed maize for human consumption is possibly attributed to the growth in the human population over the years. The South African human population in 2018/19 was recorded at 57 730 000 million heads.

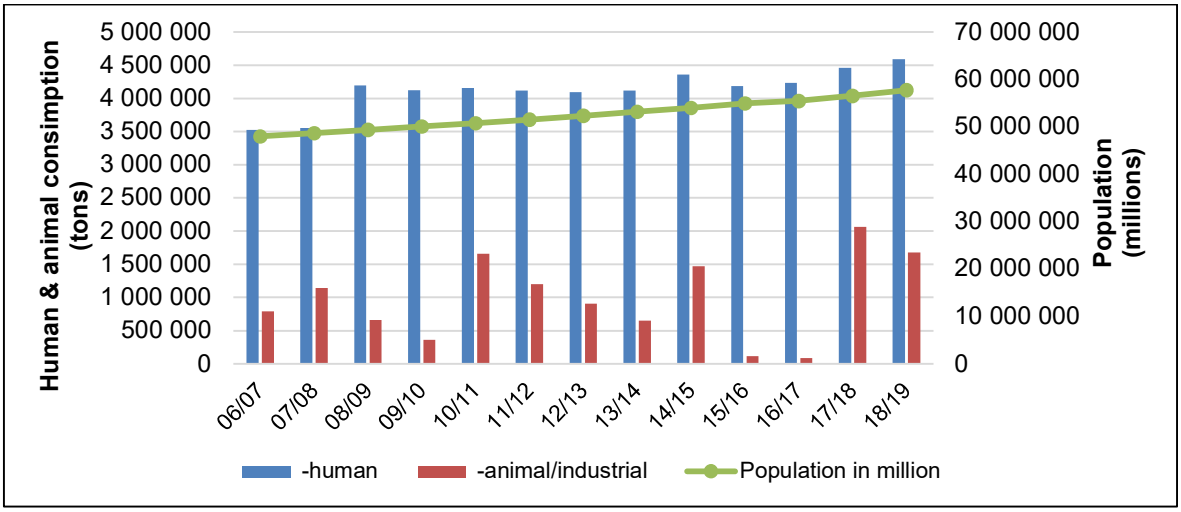

Figure 50: Domestic maize production, consumption and area harvested (white maize)
Source: SAGIS (2020), Stats SA (2020) and own calculations

5.4.2. Production, stock levels and consumption of yellow maize

Yellow maize is primarily used in the animal feed industry, while an estimated 10 % is used for human consumption. **Figure 51** indicates total yellow maize supplies and total demand in South Africa during the 2018/19 season. A total of 7 128 126 tons were supplied to the commercial market, while the yellow maize demand was 6 264 038 tons. Total yellow maize demand comparing 2017/18 and 2018/19 increased by 643 065 tons, which can be attributed by an increase in yellow maize used for animal and industrial use and exports.

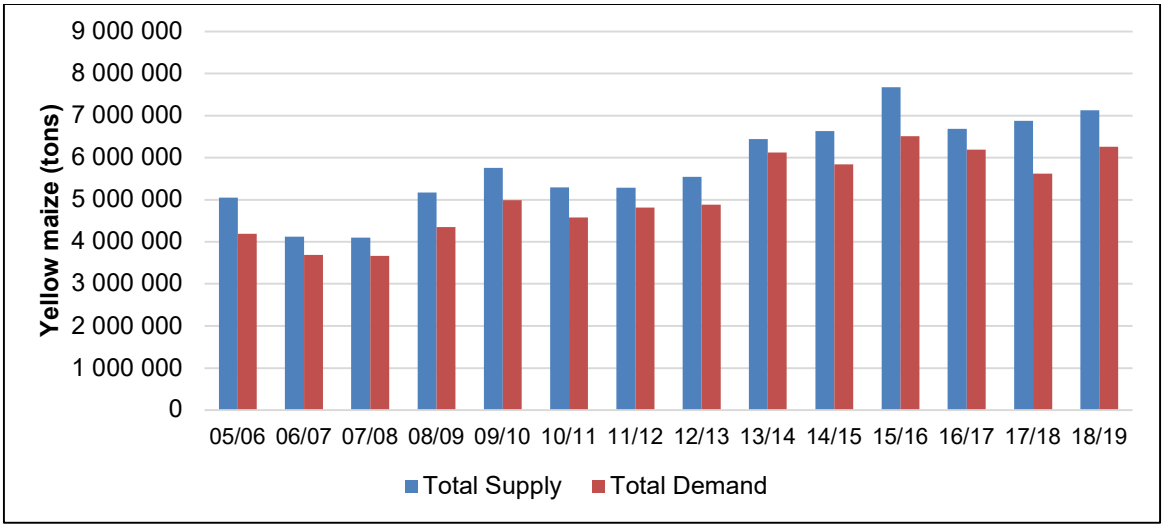

Figure 51: Domestic maize production, consumption and area harvested (yellow maize)
Sources: SAGIS (2020), Grain SA (2020) and own calculations

Figure 52 illustrates the carryover stocks of yellow maize required in the pipeline (consumption for 45 days) of 543 410 tons. Ending stock levels of yellow maize were lower than in the previous season, while exports increased from 1 629 739 tons to 1 667 407 tons in 2018/19 marketing season.

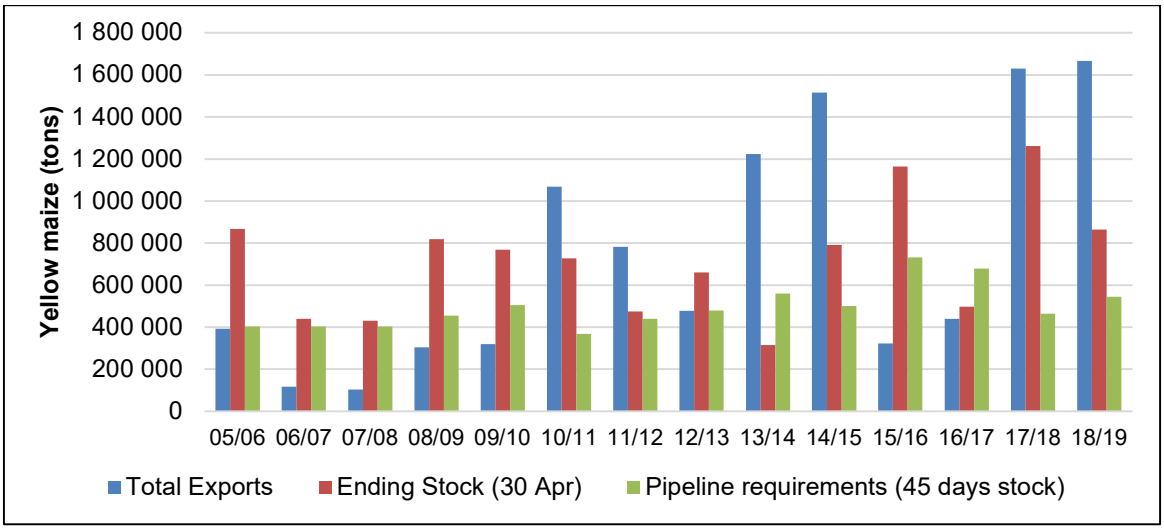

Figure 52: **Total exports, pipeline requirements, carry out as a % of total domestic demand (yellow maize)**
Sources: SAGIS (2019), Grain SA (2019)

Table 37: South African maize balance sheet for 2018/19 season

	White Maize	Yellow Maize	Total Maize
Marketing season	**2018/19**	**2018/19**	**2018/19**
	tons	**tons**	**tons**
CEC (Crop Estimate)	6 540 000	5 970 000	12 510 000
CEC (Retention)	0	0	0
SUPPLY			
Opening stock (1 May)	2 428 653	1 260 823	3 689 476
Producer deliveries	6 308 941	5 674 911	11 983 852
Imports	0	171 622	171 622
Early deliveries (Net)*	0	0	0
Surplus	1 403	20 770	22 173
Total Supply	**8 738 997**	**7 128 126**	**15 867 123**
DEMAND			
Processed for the local market	**6 283 320**	**4 407 657**	**10 690 977**
- human	4 594 123	566 649	5 160 772
- animal and industrial	1 677 236	3 829 944	5 507 180
- gristing	11 961	11 064	23 025
Withdrawn by producers	12 844	51 420	64 264
Released to end-consumers	22 946	128 697	151 643
Net receipts(-)/disp(+)	74 238	8 857	13 095
Deficit	0	0	0
Local demand	**6 323 348**	**4 596 631**	**10 919 979**
Exports	**616 651**	**1 667 407**	**2 284 058**
- products	72 280	141 312	213 592
- whole maize	544 371	1 526 095	2 070 466
Total Demand	**6 939 999**	**6 264 038**	**13 204 037**
Closing Stock (30 Apr)	**1 798 998**	**864 088**	**2 663 086**
- processed p/month	523 610	367 305	890 915
- months' stock	3,4	2,4	3,0
- days' stock	**105**	**72**	**91**

Source: NAMC (2020)

Note: Crop Estimates Committee (CEC)

5.4.3. White maize price trends

Figure 53 illustrates the trends of white maize's spot price in South Africa from November 2015 to 30 April 2020, against import and export parity from the Gulf of Mexico to Randfontein. The average spot price for white maize started to decrease in December 2016 to export parity levels due to a very favourable season. The spot prices start to increase above export parity at the end of 2018, and trade above the export parity level through 2019. The average spot price for 2019 was R2805, with the highest price on 17 Jan 2019 of R3250 and the lowest price on 9 May at R2518.

Prices declined below export price from the beginning of March 2016 and throughout 2017. The local price in 2017 on average was trading at R2161.00/ton, while in 2018 it improved to R2214.00/ton.

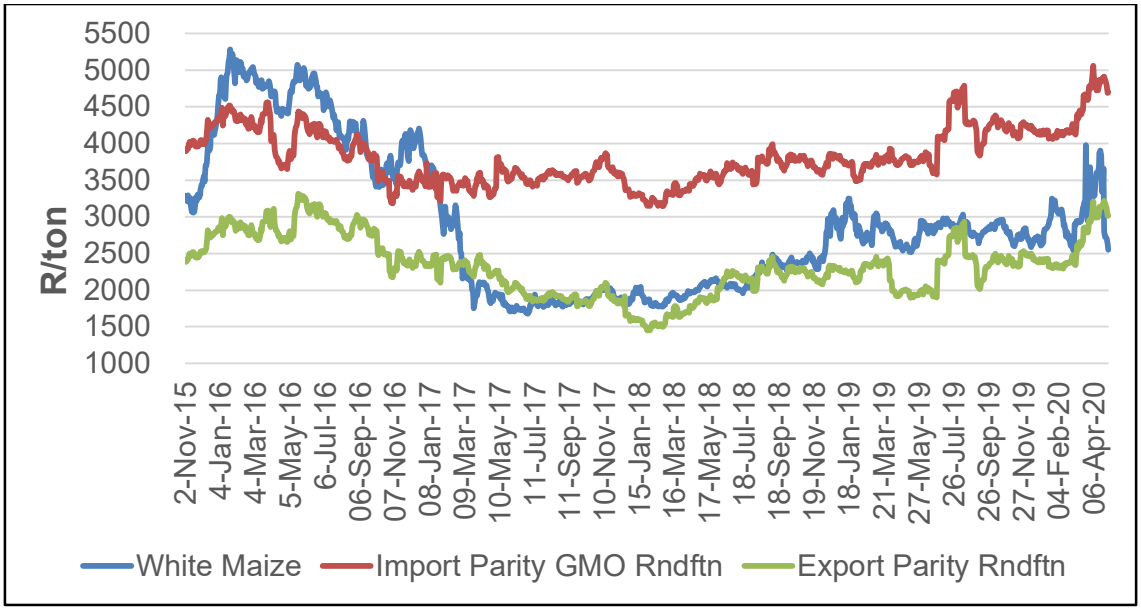

Figure 53: Import parity, export parity and South African Futures Exchange (SAFEX) for white maize price

Source: Grain SA (2020)

5.4.4. Yellow maize price trends

Figure 54 illustrates the trends of the South African spot price of yellow maize for the 2015/16 to 2019/2020 marketing year, against import and export parity prices from the Gulf of Mexico to Randfontein. It is also notable that if yellow maize was imported from Argentina, the average price difference for the 2019/20 marketing season was R86.6, with a maximum of R246/ton. Sometimes it is cheaper to import from the Gulf of Mexico than from Argentina.

The average spot price for yellow maize closely followed the trend of white maize and started to decrease in December 2016 to export parity levels. The spot prices trade slightly above export levels, as can be depicted in **Figure 54** below. The average spot price for 2019 was R2 697 with the highest price on 12 August 2019 of R2896 and the lowest price on 9 May at R2475.

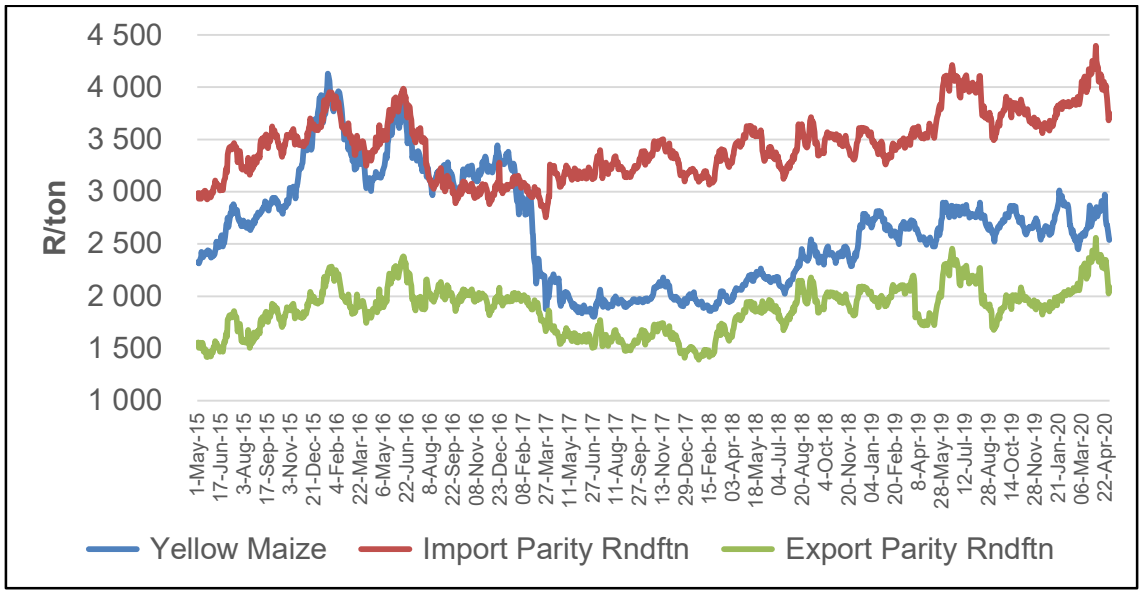

Figure 54: Import parity, export parity and SAFEX yellow maize price
Source: Grain SA (2020)

5.4.5. Real farm value of super maize meal

Due to the data limitation for monitoring an average retail price for special maize meal (5kg) by Stats SA for the period February 2015 to December 2018, this section will only include the spread for super maize meal (5kg).

Figure 55 shows the trend in the real farm value and real retail value of super maize meal between January 2015 and July 2020. The real farm value of super maize meal increased from R2 520/ton in January 2015 to R7 532/ton in Jul 2016 and decreased to R2 162/ton in October 2017, showing a much lower volatile growth to R3 816 toward July 2020.

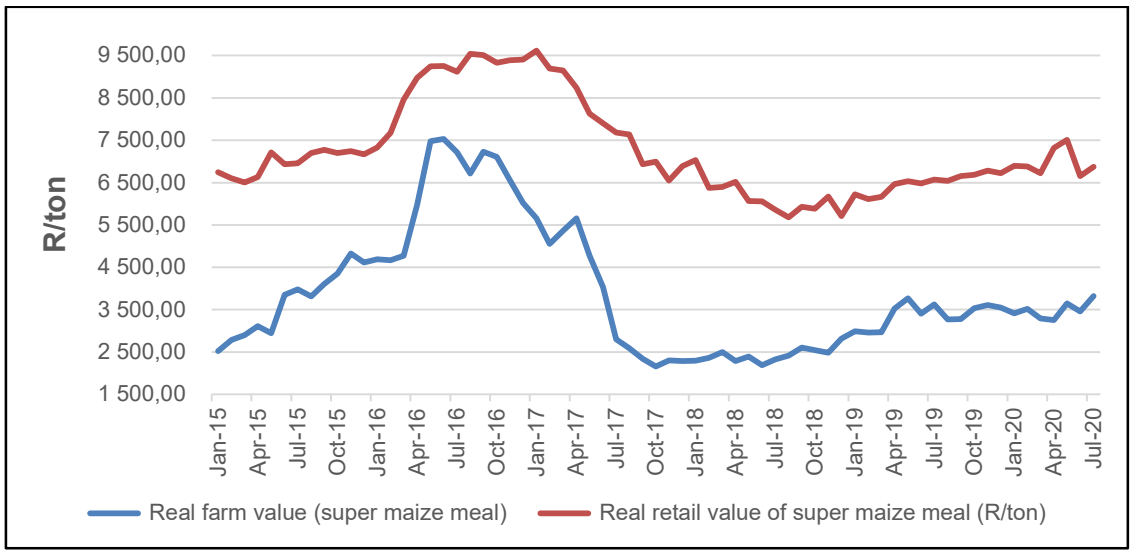

Figure 55: Real retail value and farm value of super maize meal
Sources: SAFEX (2020), Stats SA (2020) and own calculations

Figure 56 illustrates the difference between the real retail value and real farm value of super maize meal and white maize. It is clear that when stock levels become low and white maize prices increase, the differences between the real retail value of super maize meal and the real value of white maize get smaller, i.e. the percentage of the real value of white maize against the real value of super maize meal is much higher.

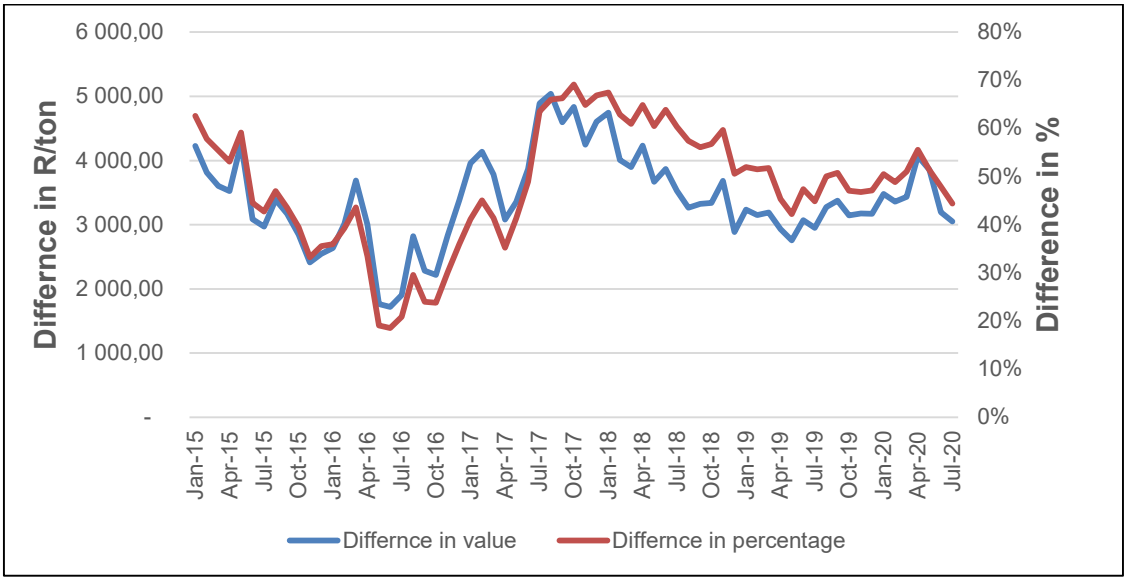

Figure 56: Difference in the real farm value of white maize and the real retail value of super maize meal.

Sources: SAFEX (2020) and own calculations

Figure 57 shows the trends in the farm value shares for super maize meal from January 2015. The farm value share of super maize increased and reached a high of 74 % in July 2016. The farm value share further decreased to 31 % in October 2017 and steadily increased to 58 % towards May 2019 and moved sideways to 53 % towards July 2020.

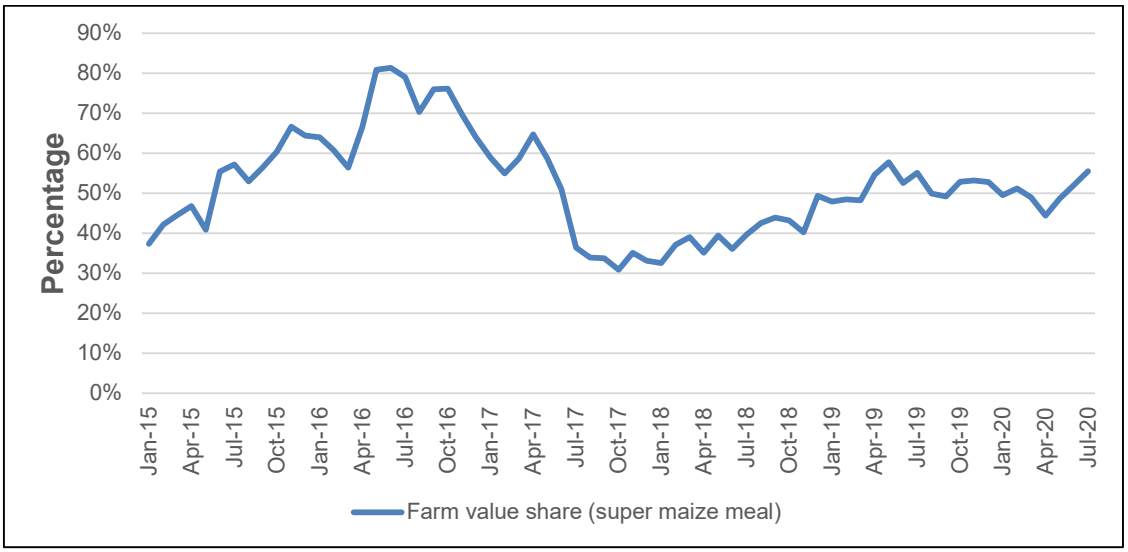

Figure 57: Real farm value share of super maize meal

Source: SAFEX (2019), Stats SA (2019) and own calculations

Figure 58 shows the FTRPS for super maize meal between January 2015 and July 2020. The FTRPS showed high instability as a result of a substitution effect between special and super maize meal. When prices change, a likelihood that arises is that consumers tend to switch to an affordable option of maize meal as pressure on disposable income is realised. The FTRPS of super maize meal between 2015 and 2020 fluctuated between R1 720/ton and R5 037/ton.

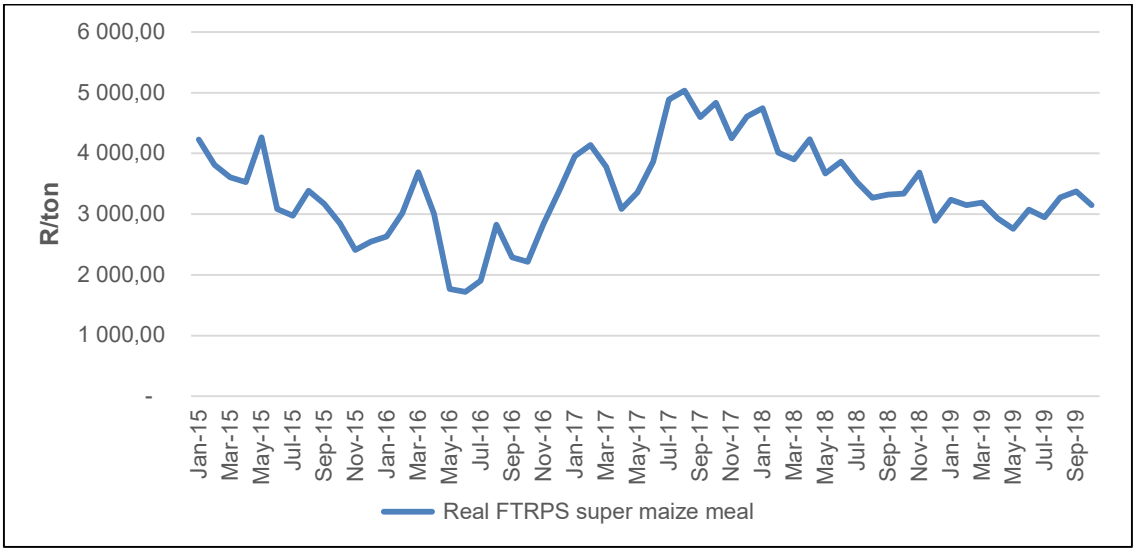

Figure 58: Real FTRPS of super maize meal
Sources: SAFEX (2019), Stats SA (2019) and own calculations

5.5. Wheat sector

5.5.1. Production and imports

The Western Cape Province is the dominant wheat producer in RSA, with an average crop production of 1 690 000 tons being realised over the past ten years. During the 2018/19 marketing season (October to September), a total of 1 847 171 were produced. Wheat imports for RSA dropped from 2 173 000 tons in 2017/18 to 1 368 097 tons in 2018/19 as illustrated in **Figure 59**.

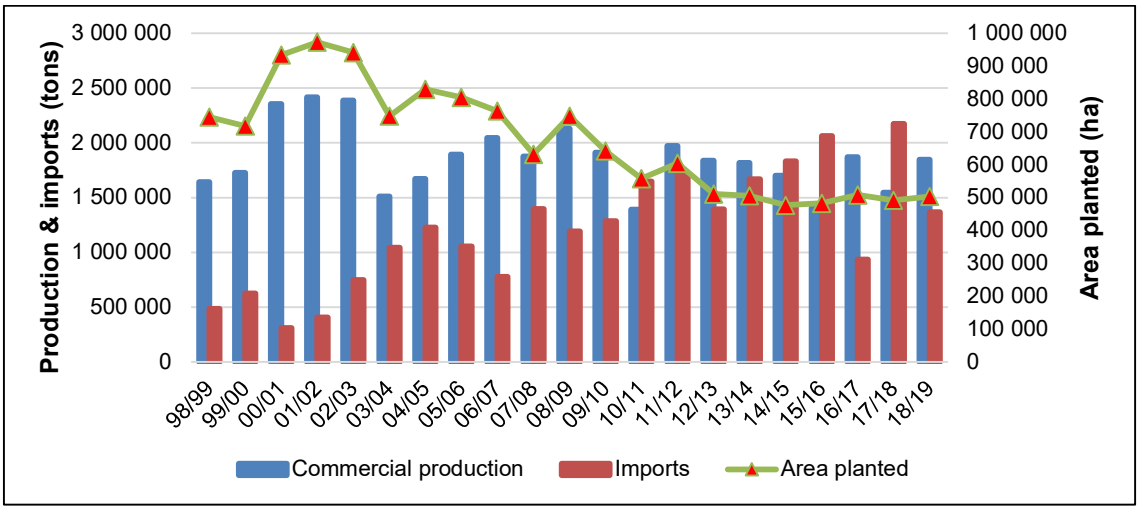

Figure 59: Area planted, production and imports of wheat (tons)
Sources: CEC (2020), SAGIS (2020)

5.5.2. Consumption

Figure 60 illustrates domestic wheat consumption and production for the past 20 years. A large quantity of wheat produced locally is used for human consumption. Approximately less than 1 % of wheat is used for the animal feed industry. South Africa's wheat consumption in the 2018/19 marketing season was at 3 409 171 tons, which was a slight increase when compared to the 3 346 744 tons of the 2017/18 marketing season. This increase was due to a substitution effect from bread to maize meal and other starches.

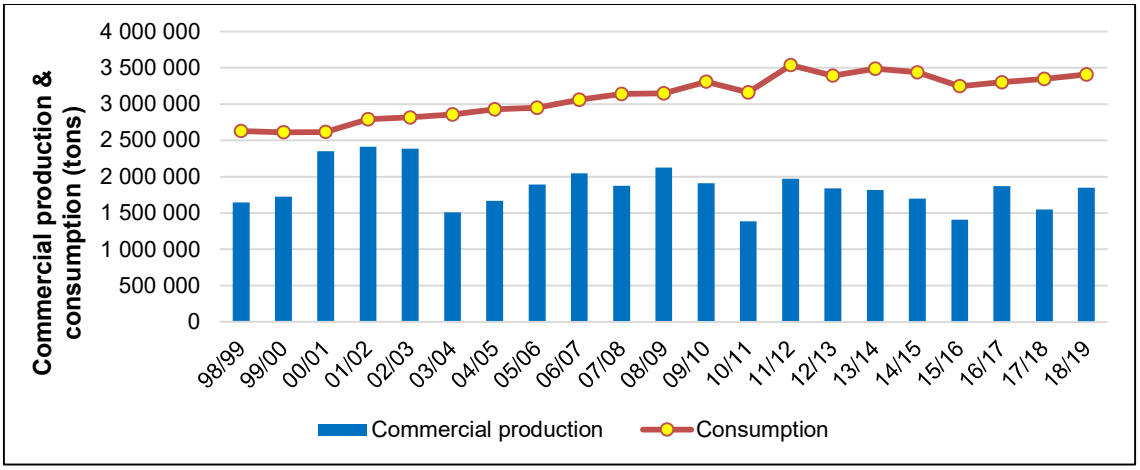

Figure 60: Wheat consumption and production
Source: SAGIS (2020)

5.5.3. Price trends

Figure 61 shows domestic wheat prices with import and export parity. From the movement of trends below, it can be seen that the domestic wheat price trades closely to import parity, which implies that South Africa is a net importer of wheat, as local production does not meet local demand. Therefore, changes in exchange rates and global wheat prices due to structural changes in the economy will be immediately noted in the domestic wheat price. The domestic wheat price traded between R4 369/ton and R4 528/ton in the 2018/19 or (Oct 2018 – Sep 2019) marketing season.

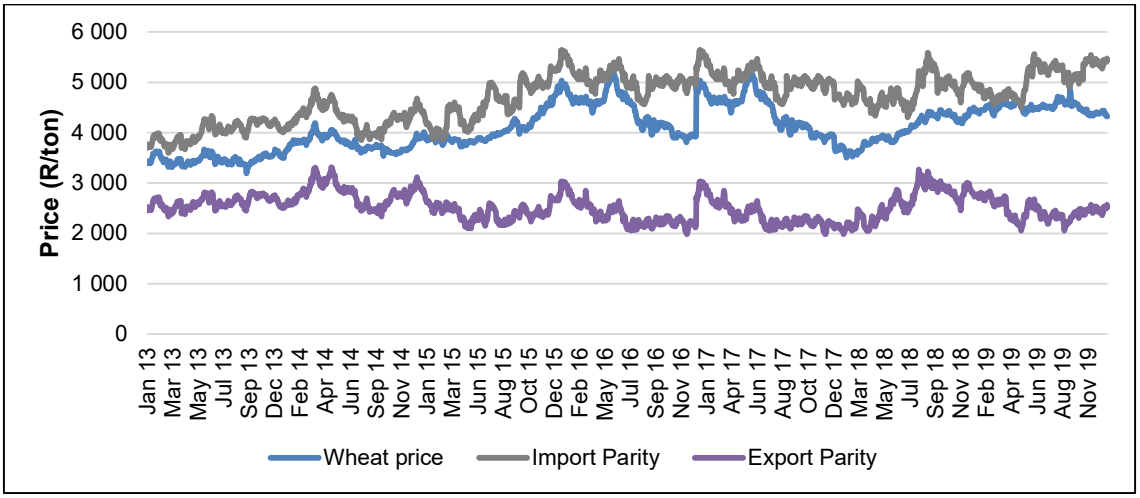

Figure 61: Import parity, export parity and SAFEX wheat price
Source: GRAIN SA (2020)

5.5.4. Real farm-gate and retail prices of brown and white bread[3]

Figure 62 represents the real farm-gate price of wheat per ton, lagged by four months, compared with brown and white bread retail prices. The average real farm-gate price of wheat (lagged by four months) increased by 10.8 % from R3 231/ton in 2018 to R3 583/ton in 2019. The retail price of white bread sliced increased by 1.15 %, while brown bread sliced increased by 2.95 % from 2018 to 2019. Total supply, including production, imports and carry-over stocks was at 3 948 000 tons, while local demand was at 3 409 000 tons.

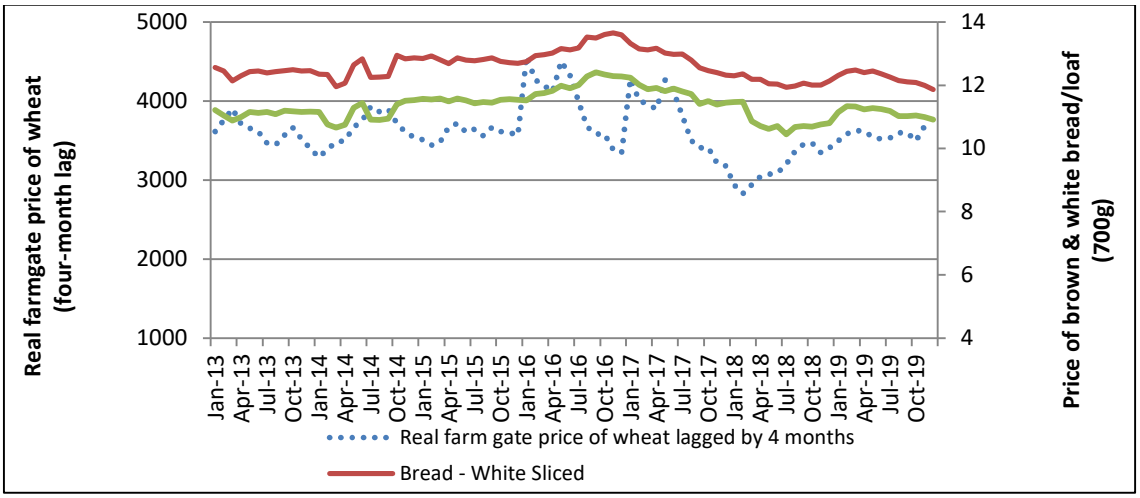

Figure 62: Real farm-gate price of wheat and real retail prices of brown and white bread
Sources: GRAIN SA (2020), Stats SA (2020) and own calculations

Figure 63 illustrates the percentage of differences in real prices between white and brown bread from 2014. On average, during 2019, white bread was 9.84 % more expensive than brown bread. Brown bread is zero-rated for value-added tax (VAT), while 15 % VAT was charged on white bread in 2019.

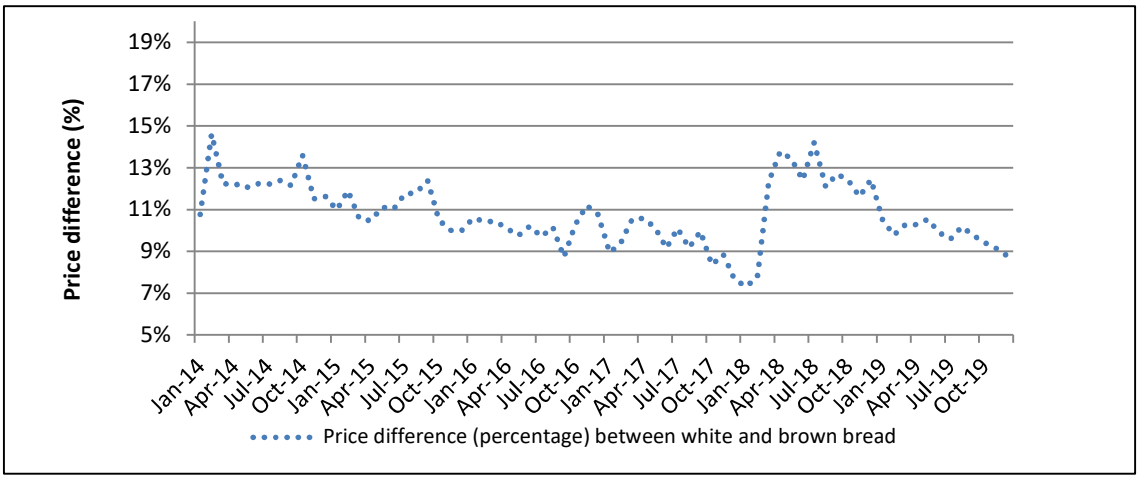

Figure 63: Price difference between white and brown bread
Source: Stats SA (2020) and own calculations

[3] In order to calculate the real farm value and real retail value of a ton of flour used for a 700g 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 464g of flour is needed to bake a 700g loaf of white bread and 440g to bake a 700g loaf of brown bread.

5.5.5. Real farm value share of brown and white bread

Figure 64 shows that the real farm value shares for brown and white bread were between 18 % for 2018. The averages in 2019 were 18% respectively for both brown and white bread.

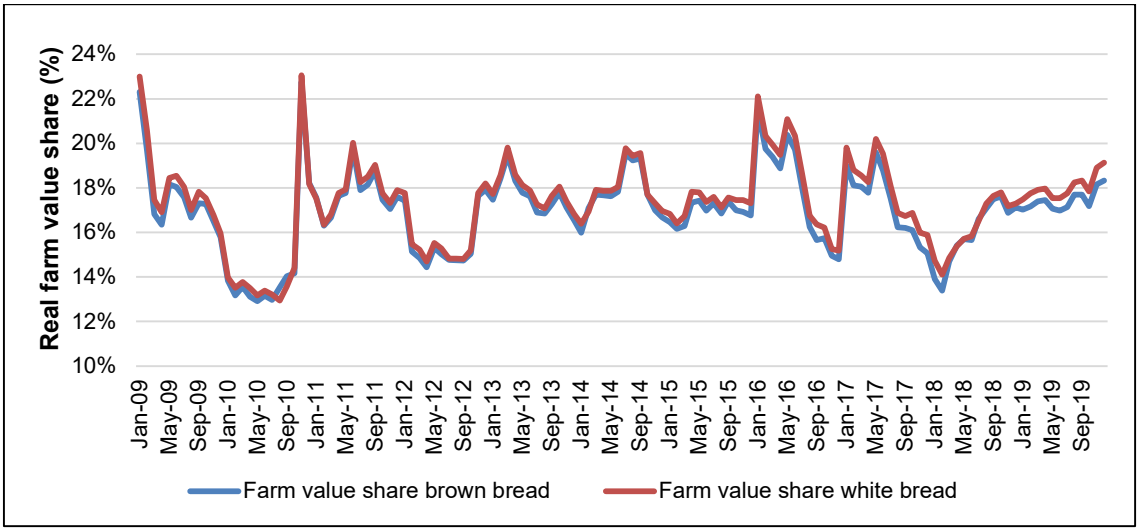

Figure 64: Real farm value share of brown and white bread
Sources: GRAIN SA (2020), Stats SA (2020) and own calculations

5.5.6. Real farm-to-retail-price-spread (FTRPS) of white and brown bread[4]

Figure 65 shows the real FTRPS for brown and white bread. On average, the FTRPS for brown bread was R20 941/ton of flour in 2019, while the white bread average FTRPS was R21 432/ton of flour in 2019.

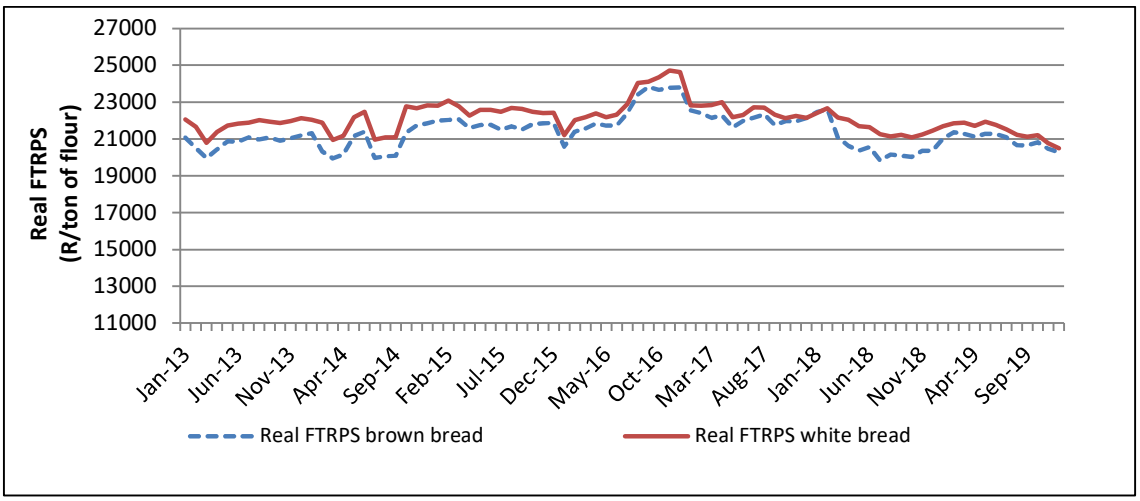

Figure 65: Real FTRPS of brown and white bread
Sources: GRAIN SA (2020), Stats SA (2020) and own calculations

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

5.6. Sunflower seed

Sunflower seed is a summer grain which is usually planted around October to mid-January. Sunflower is mainly produced in the Free State and North West provinces. Sunflower seed constitutes about 5 % of the total grains produced in South Africa. Sunflower oil is one of the products manufactured from processed sunflower seed. The by-product of sunflower is oilcake which is mainly used in the animal feed industry. The husk is used as bedding in the broiler industry or as an energy source at processing plants. The marketing year for sunflower seed runs from 1 March – 28/29 February.

5.6.1. Production and consumption of sunflower seed

Figure 66 indicates area planted, producer deliveries and processed sunflower seed for consumption. Sunflower area planted between the year 2001 and 2019 decreased from 521 695 to 515 350 ha. A farmer's decision to plant sunflower is generally dependent on various factors, including the price of substitute products such as maize, and the climatic conditions for that specific planting season. Sunflower adapts well under South African climatic conditions. Sunflower has the advantage to be produced when planting conditions are not suitable for other crops, especially maize. Over the past ten years, average yields (tons/ha) have varied between 0.95 and 1.55 tons

per ha. Producer deliveries and processed sunflower seeds (for human and animal consumption, and crushed for oil & oilcake) have been fluctuating over the past years with high crops and low harvested crops, especially during drought-stricken years. Processed sunflower seeds decreased by 26.2 % from December 2018 (900 045 tons) to December 2019 (664 029 tons) due to a decrease in the total local crop, which was at 678 000 tons. Between 2018 and 2019, the sunflower area planted declined by 14.3 % from 601 500 to 515 350 ha.

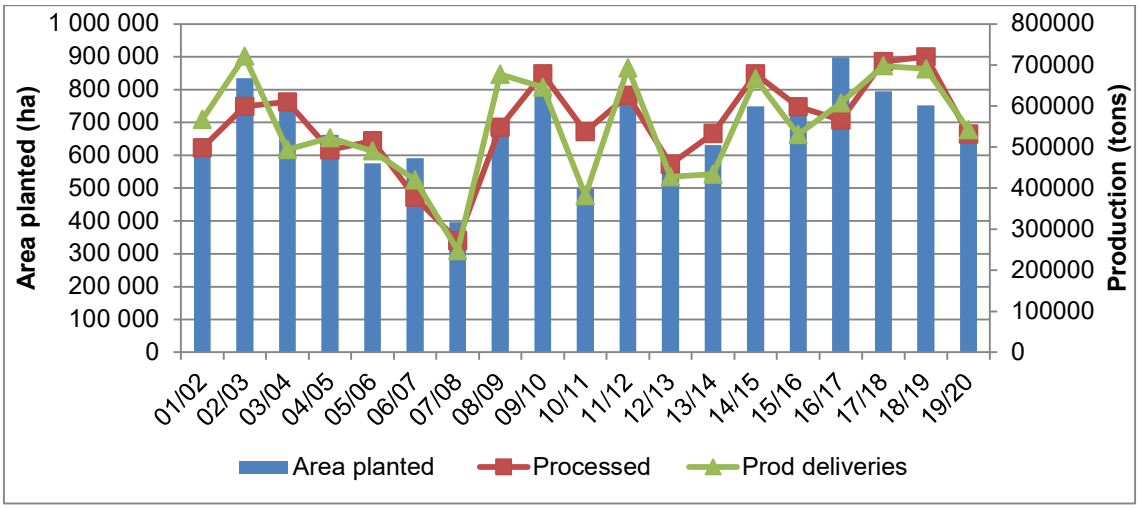

Figure 66: **Area planted, production deliveries and processed sunflower seeds for consumption**

Source: SAGIS (2020) and own calculations

5.6.2. Price trends for sunflower seed

Figure 67 illustrates domestic SAFEX sunflower prices. The average domestic sunflower price increased by 25 % from December 2018 (R5538/ton) to December 2019 (R5727/ton). This increase in sunflower seed's domestic price could be attributed to the increase in demand and the slight decline in

local production. The retail price of sunflower oil (750ml) decreased by 4.4 % from December 2018 (R22.88/ 750ml) to December 2019 (R21.87 / 750ml) due to lower demand.

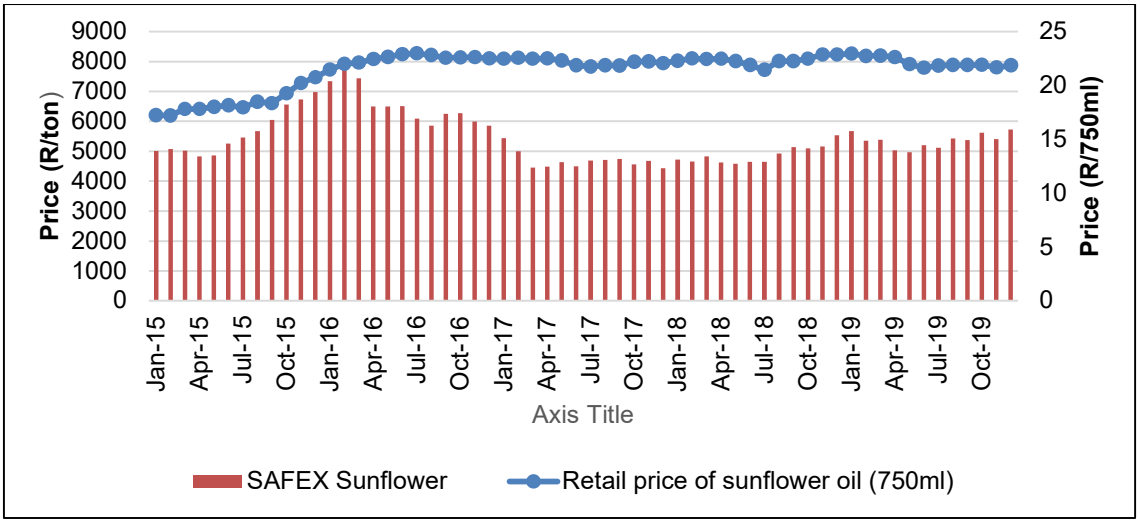

Figure 67: **Domestic sunflower seed and retail price of sunflower oil (750ml)**
Sources: SAGIS (2020), Stats SA (2020)

5.7. Soybean

Soybean is also a summer crop which is mainly produced in the Free State, Kwa-Zulu Natal and Mpumalanga provinces under both dry-land and irrigation systems. These provinces account for approximately 85 % of soybeans produced in the country, with a recent growth in production from the North West Province. Soybeans are estimated to constitute about 9 % of the total summer grains produced domestically.

5.7.1. Soybean production

Domestic soybean production for the 2018/19 marketing season was estimated at 1 502 976 tons, as indicated in **Figure 68**. This was a 16.4 % increase from the previous season of 2017/18. The total area planted in 2018/19 increased by 37 % from 2017(573 950ha) to 2018 (787 200 ha). Planting soybeans in 2018/19 marketing season proved to be profitable when compared to sunflower and maize.

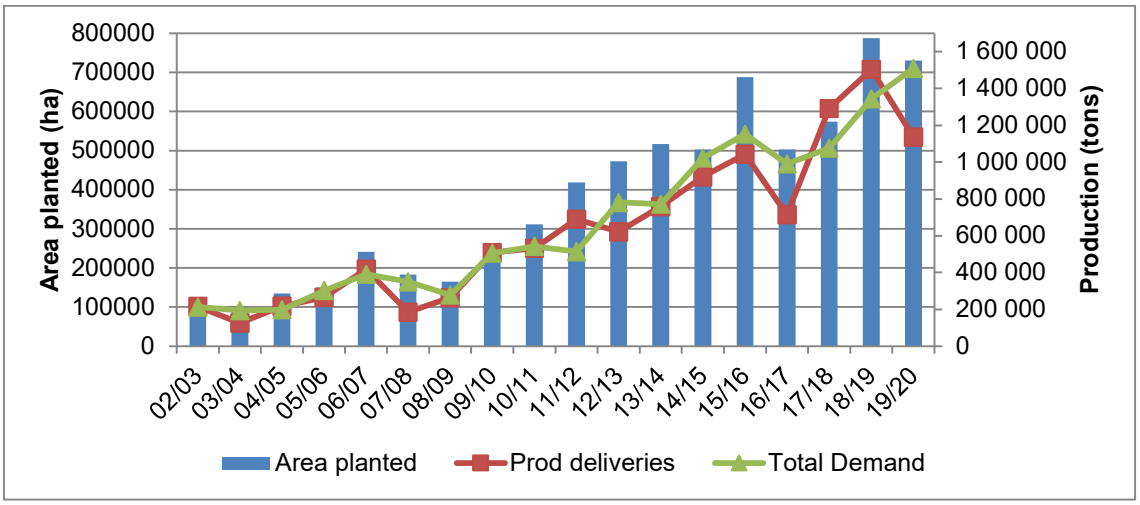

Figure 68: **Area planted, production deliveries and processed soybean seed for consumption**
Source: SAGIS (2020) and own calculations

5.7.2. Soybean Consumption

In the 2019/20 marketing year, domestic soybean demand was approximately 1 507 915 tons. About 191 323 tons were processed as feed and full-fat soybean meal, a 13 % decrease from the previous 2018/19 season. In 2019/20, soybean production for human consumption was estimated at 25 005 tons, as illustrated in **Figure 69**.

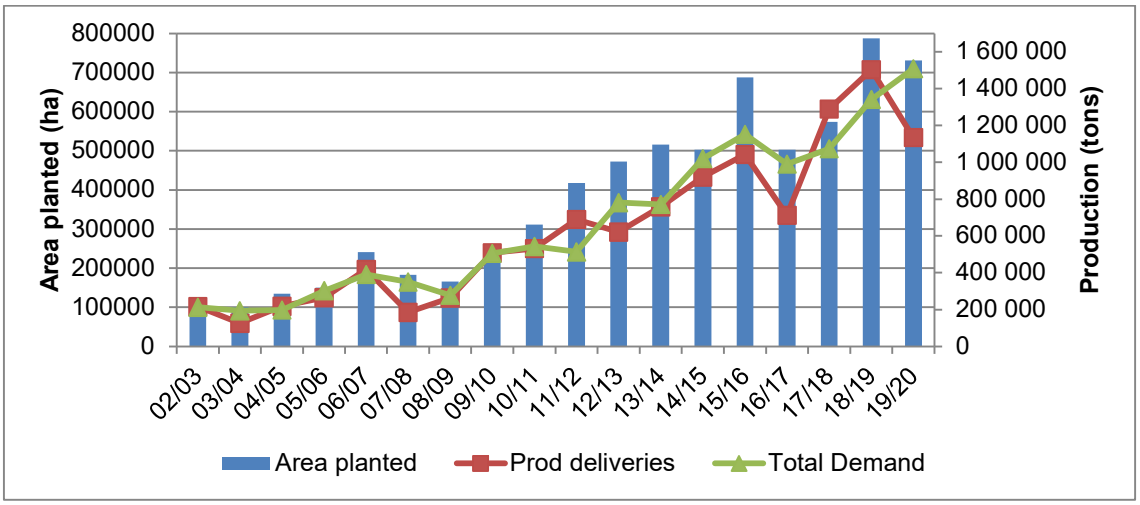

Figure 69: **Feed and full-fat soya, crushed for oil and oilcake, total domestic demand and consumption of soybean seed**
Source: SAGIS (2020) and own calculations

5.7.3. Price trends for soybeans

Figure 70 illustrates the domestic (SAFEX), import and export parity prices at Randfontein for soybeans. The average domestic price increased by 25.2 % from December 2018 (R4 917/ton) to

December 2019 (R6 157/ton). The import parity price increased by 6.8 % over the same period, while export parity also increased by 3.7 %.

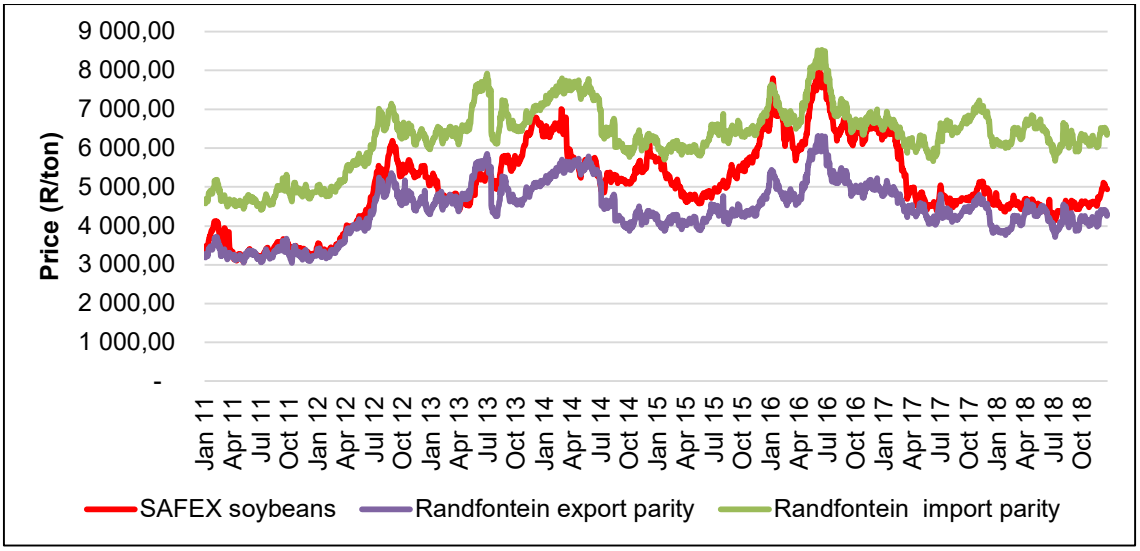

Figure 70: **Soybean SAFEX, import and export parity prices in SA**
Source: Grain SA (2020) and own calculations

5.8. Vegetable sector

Figure 71 depicts the volumes of selected fresh vegetables sold at the national fresh produce markets from April 2015 to April 2020. The total volumes of cabbage sold increased by 3.4%, whereas tomatoes, onions and potatoes sold decreased by 6.4 %, 2.7 % and 1.9 % respectively between 2018 and 2019.

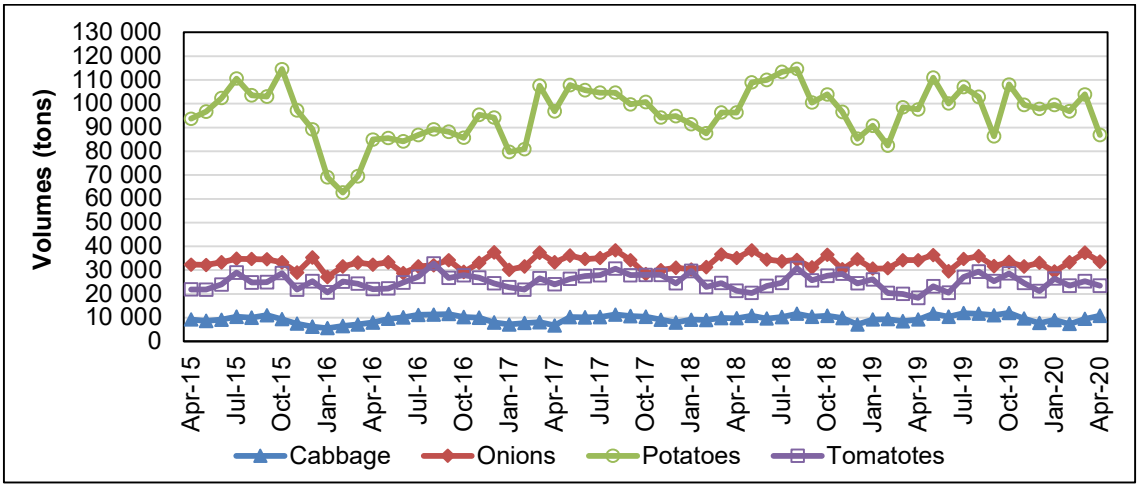

Figure 71: **Volume of selected vegetables sold at fresh produce markets**
Source: DAFF (2020) and own calculations

The market price trends for selected fresh vegetables from April 2015 to April 2020 are shown in **Figure 72**. The market prices for selected vegetables were, on average, higher in 2019, when compared with 2018. In nominal terms, the average increases in market prices, per ton, cabbages, tomatoes, and

potatoes were 9.6 %, 8.2 %, and 6.9 % respectively in 2019 compared to 2018. The average market price of onions was 8.8 % lower in 2019 compared to 2018.

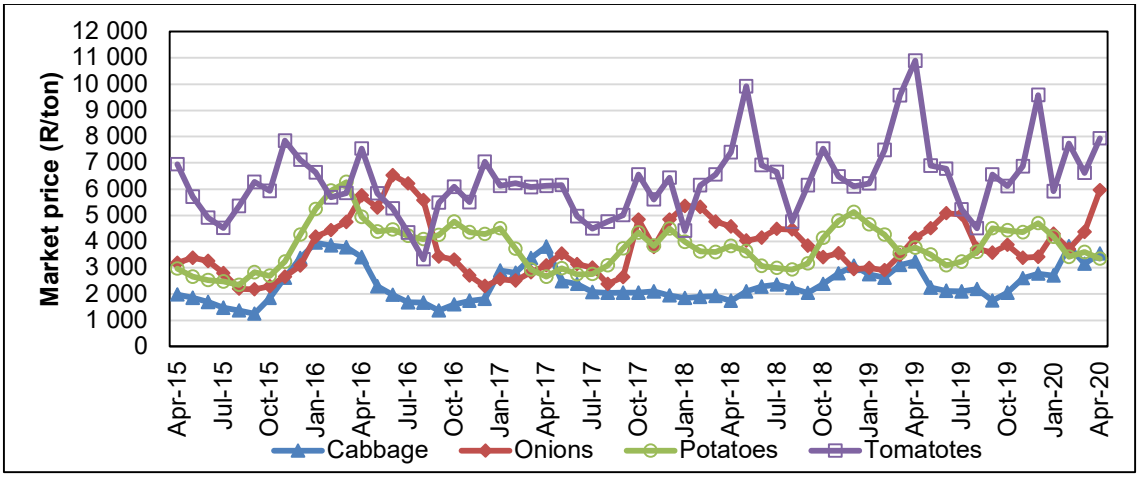

Figure 72: **Market price trends for selected fresh vegetables**
Source: DAFF (2020) and own calculations

Figure 73 illustrates the nominal retail price trends for selected fresh vegetables from March 2011 to March 2020. The prices for fresh tomatoes, cabbage, potatoes and onions per kg increased by 13 %, 7.8 %, 6.1 % and 0.7 % respectively between 2018 and 2019.

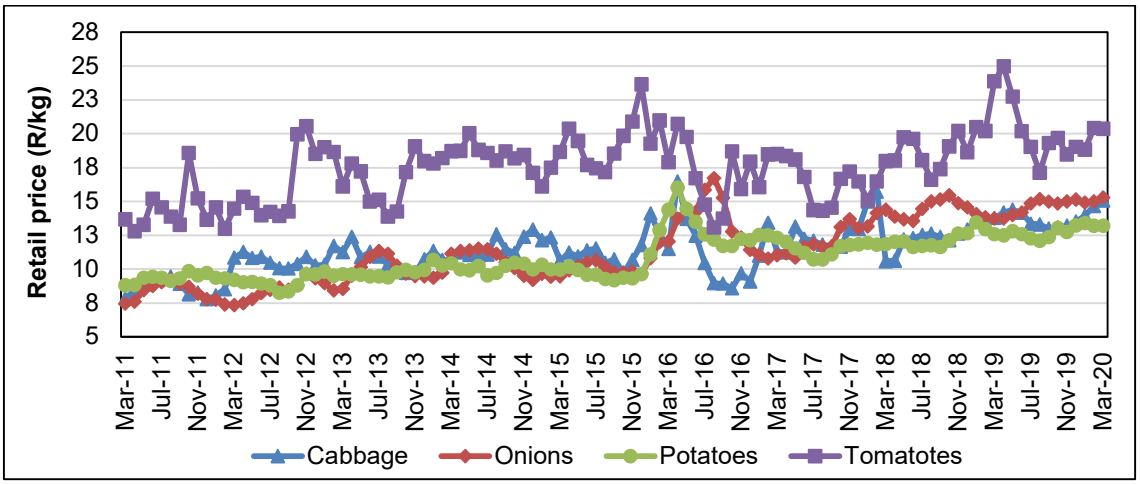

Figure 73: **Retail price trends for selected fresh vegetables**
Sources: Stats SA (2020) and own calculations

5.9. Fruit sector

Figure 74 depicts the volumes of selected fresh fruits sold at the national fresh produce markets from April 2015 to April 2020. The total volumes of apples sold increased by 4.2 %, while bananas and oranges sold decreased by 8.9 % and 5. 7% respectively between 2018 and 2019. The total volumes of bananas, apples and oranges sold were 242 735 tons, 149 776 tons and 94 560 tons respectively in 2019.

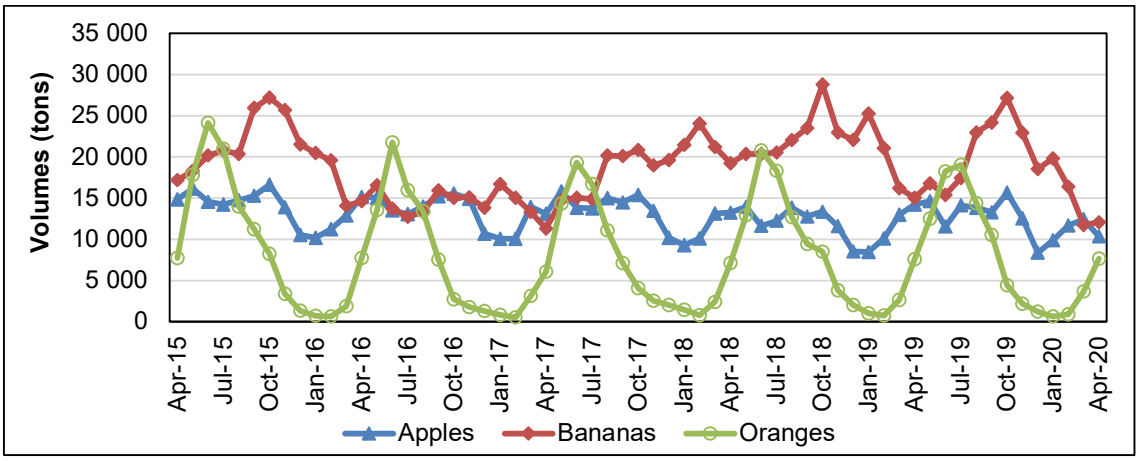

Figure 74: **Volume of selected fruits sold at fresh produce markets**
Source: DAFF (2020) and own calculations

The market price trends for selected fresh fruit from April 2015 to April 2020 are shown in **Figure 75**. The market prices for selected fruits were, on average, higher in 2019 when compared with 2018. The average market prices per ton of bananas, oranges and apples were 9.3 %, 8.3 % and 5.1 % respectively higher in 2019 than in 2018.

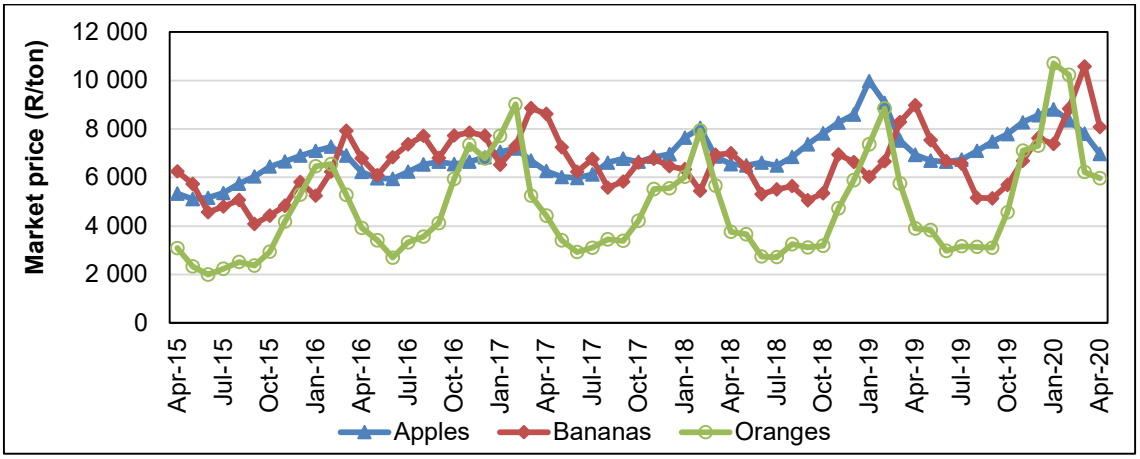

Figure 75: **Market price trends for selected fresh fruits**
Source: DAFF (2020) and own calculations

Figure 76 depicts the retail price trends for selected fruits from March 2011 to March 2020. On average, the retail prices for the selected fruits were higher in 2019 when compared with 2018. The average prices, per kg, of apples, bananas and oranges were 11.6 %, 10.8 % and 3.3 % higher respectively in 2019 than in 2018.

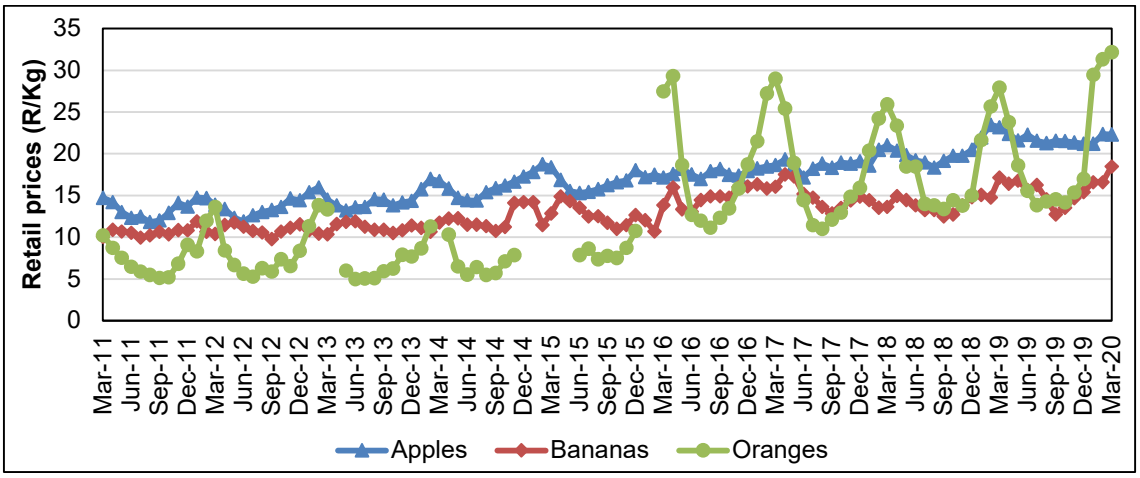

Figure 76: **Retail price trends for selected fresh fruit**
Source: Stats SA (2020) and own calculations

6. SELECTED TOPICS

6.1. Impact of COVID-19 on South Africa's imported staple foods

The COVID-19 virus has caused a lot of doubtfulness in relation to food supplies both domestically and internationally, especially for rice and wheat, of which South Africa is a net importer. The country imports at least 50 % of its wheat, meaning that global prices directly affect domestic prices. Due to COVID-19, a drastic increase in global wheat prices was observed, and as a result, domestic prices were negatively affected because the country relies on global supplies. At the beginning of the year, global prices declined with record stocks globally for wheat of over 740 million tons fuelling the decrease price (IGC, 2020). Simultaneously, with prices going down, COVID-19 was rapidly spreading across the world, and countries started putting measures in place to control it from spreading further. In preparing for the lockdown, countries began to import more wheat stocks for reserve in fear and demand. An increase of 9 % in wheat prices during March 2020 as demand escalated was observed (USDA, 2020). Black Sea countries such as Russia, Ukraine, Romania and Bulgaria began to limit their exports to countries outside Asia and Europe, with Kazakhstan and Russia imposing export quotas for wheat and flour (World-Grain, 2020).

Figure 77 presents domestic wheat prices after a sharp increase in global wheat prices. In response to global prices, towards the end of March 2020, a sharp increase in domestic prices was observed. The lockdown and strict rules to control COVID-19 from spreading significantly exacerbated domestic prices. Nonetheless, with relaxations in policies from key global wheat suppliers in Europe, especially in the Black Sea area, a slight decrease in global wheat prices was observed, which positively affected domestic prices. As shown in **Figure 77** below, prices started to decline at the end of May 2020.

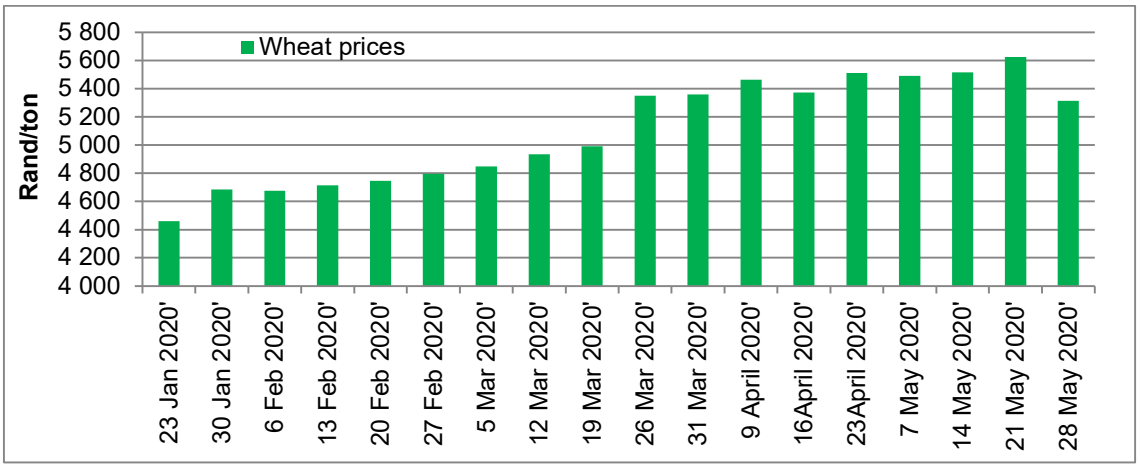

Figure 77: **Domestic wheat prices between January and May 2020**
Source: SAGIS (2020)

South Africa is also a net importer of rice as it only produces 3 000 tons on average per year (FAO, 2020b). Normally the country consumes close to 1 million tons of rice annually. After some drought spells and floods which negatively affected grain production regionally and thus prices, particularly for maize, a noticeable increase in grain prices including rice, was observed to complement other grain commodities. The COVID-19 persistence added more pressure on prices as a significant increase in rice prices was observed from the global market due short-term policies such as temporary bans on exports by key rice exporters from Asia and restrictions on human movements.

These measures had direct implications for the domestic market, as the country imports above 90 % of its rice consumption, hence slightly exacerbating domestic prices. **Figure 78** presents countries which supply South Africa, quantities imported and prices between January and March 2020. South Africa imports millions of tons of rice and re-exports to a number of countries in Sub-Sahara Africa. For example, 739 058 tons of rice (in the husk alone) was exported to Zambia in 2019. Other countries include Namibia, Angola, Mozambique, etc. (SAGIS, 2020). Normally Thailand, Vietnam and India are the main suppliers of rice, with Thailand contributing +60 % of imports; however, due to complications related to COVID-19, the global supply was negatively affected and prices increased drastically in Thailand and Vietnam. As an alternative, South Africa had a look elsewhere, and Pakistan, India and Paraguay were among the alternative suppliers, as their prices were relatively lower than Should Africa's regular major suppliers.

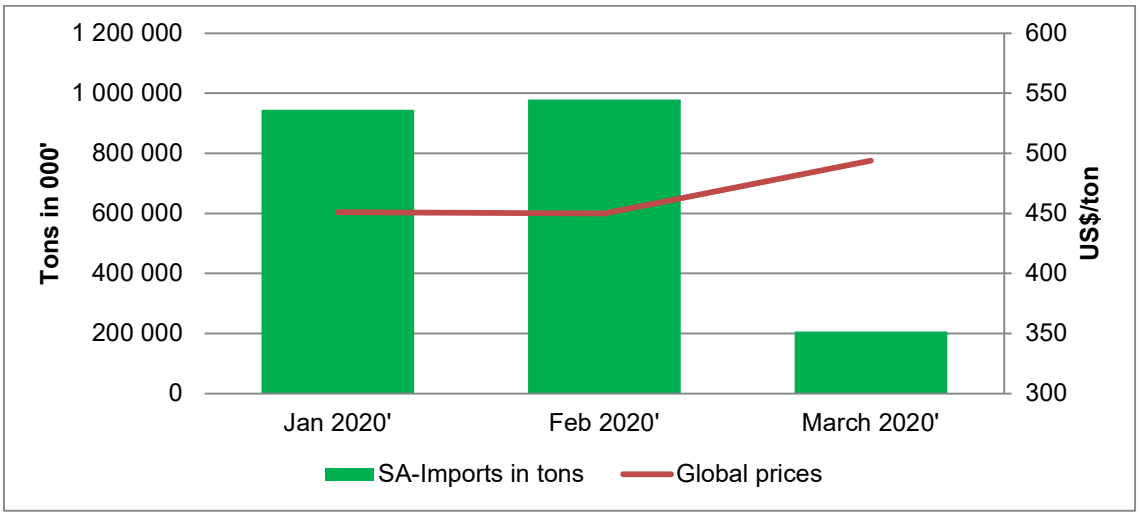

Figure 78: South African rice imports
Source: IGC (2020), SAGIS (2020)

6.2. Global and local economy at high risk due to COVID-19

6.2.1. Introduction

First discovered in the 1960s, coronavirus is the collective term used for seven viruses belonging to the genus *coronavirus* and whose genome comprises a single strand of DNA. COVID-19 was first detected in China on 31 December 2019, and earlier this year the World Health Organization declared it as a global pandemic. Globally, by 27 May 2020, the pandemic had taken a toll of more than 5,709,551 confirmed cases of COVID-19 reported and over 352,757 deaths recorded, with 2,451,229 recoveries (Worldometer, 2020). On that date, the worst affected countries in terms of cases recorded were the United States of America (1,725,808), Brazil (394,507), Russia (370,680) and Spain (282,370), which imposed lockdowns to minimise further spread of the virus as health services sought ways to cope (Worldometer, 2020). Other countries have followed suit. In the Southern African region, South Africa has the highest number of infected people with more than 21,343 confirmed cases of COVID-19 on 24 May 2020 (Shaban, 2020; Worldometer, 2020).

6.2.2. Effect of COVID-19 on the global economy

COVID-19 has been predicted to have major negative impacts on the global economy, many of which are evident. Productivity (man-hours) in the primary, secondary and tertiary economic activities have been harmed or halted partly due to the high infection and death rates and the resulting lockdowns in regions worldwide. Air, road and water transportation of financial, material and human resources across international borders were prevented by travel bans and restrictions, stifling global trade and investment (Olander, 2020). Health sectors have been greatly strained by the high numbers of individuals infected by COVID-19 needing treatment, which resulted in increased state expenditure. Educational institutions were also affected by the lockdown , thereby delaying graduates' supply to firms and economies (Qukula, 2020). The impact of COVID-19 on commerce has reduced product sales and company profits. The virus has also caused company closures, especially among small- to medium-sized enterprises (SMEs), resulting in job losses, lower gross domestic product figures and economic decline in global economies (Shaban, 2020).

6.2.3. Effect of COVID-19 on the African and South African economies

COVID-19 will continue to substantially hamper African economies and worsen the widespread poverty in the continent. Africa, which rely on on exporting commodities for foreign earnings, will lose or have limited access to key foreign markets, including China (Olander, 2020). Kenya and Morocco, which are heavenly dependent on exporting their products to the European markets, experienced a drastic loss due to export restrictions that were imposed (Bizcommunity, 2020). Employment creation efforts will be delayed, and this is combined with widespread company closures, joblessness rates in formal economies are expected to soar (Coleman, 2020). Even informal economic sectors, which have been increasingly important contributors to continental economic growth, will suffer from lower consumer demand, inhibiting their own growth. Africa's inter- and intra-continental trade will also reduce as a result of COVID-19. Countries on the continent are also expected to enjoy significantly less foreign investment from Western, Asian and other multinational corporations. The global economic decline will lead to lower demand for African raw materials (Shaban, 2020). Overall, African nations can anticipate a general economic decline in 2020 because of the COVID-19 outbreak.

The global and continental impact of COVID-19 will likely continue to be experienced by South Africa. Africa's largest economy is likely to witness increasingly slower economic growth and development for the duration of the pandemic, with South Africa's economy projected to decline by 4.5 % in 2020. Two of the major economic sectors, mining and tourism, are anticipated to be especially hurt by the pandemic (BusinessTech, 2020; Shaban, 2020). The high unemployment level, around 29 % (Bronkhorst, 2020), is expected to rise further during this period, up to 50 % (BusinessTech, 2020). Some foreign investment has been delayed or cut to minimise financial losses from COVID-19.

Agriculture has been hit hard by the pandemic. Farmers in all locked-down regions have massive agricultural commodities that they will be unable to export to local and foreign markets due to the ban on the required forms of transportation. China, the source of COVID-19, has represented a major new market for South African agricultural output, particularly horticultural produce and wool (Coleman, 2020). Some farmers have been left with no option but to slaughter their livestock in large numbers. This situation will create massive food shortages, both domestically and abroad.
Moreover, farmers, unable to generate sufficient profits, will have to retrench some of their workers (Bronkhorst, 2020; Coleman, 2020). According to Stats SA (2020), amongst other food products that increased in April, the products that registered a massive price increase in April were cheese, eggs, and milk by 2.9 %, hot beverages (2.7 %), and oils and fats (2.3 %). However, prices for bread and cereal declined by 0.6%, showing a percentage change of negative 0.5% in the last week of the month.

With unemployment growing from COVID-19, urban and rural poverty is expected to rise nationally, putting pressure on the country's social security programme, thereby utilising substantial public funds. Consumer demand for products and services has declined on account of restricted or banned movements of suppliers, retailers and buyers to mitigate the spread of COVID-19 (Qukula, 2020). Nevertheless, the pandemic will complicate South Africa's attempts to emerge from the economic recession that it entered in the fourth quarter of 2019 (Shaban, 2020).

COVID-19 has caused ill health among many workers, putting more pressure on healthcare facilities and health workers. The ill workers due to COVID-19 will result in lost hours of productivity, thus affecting GDP and economic growth. Another health implication will result because of travel restrictions due to the lockdown, where farmers and retailers are selling expired food due to the fear of losing profits. The national lockdown has reduced agricultural production, resulting in shortages of food, which has led to supermarkets limiting the quantities of certain foods that customers are allowed to buy. This results in fewer sales and profits for retailers and farmers. In terms of health, consumers have less access to healthy food (The Poultry Site, 2020).

The national government has taken drastic steps to counter the COVID-19 pandemic. Declaring the outbreak a national disaster, President Cyril Ramaphosa announced the immediate closure of schools, a travel ban on foreign nationals from high-risk countries, the shutting down of national land ports, the prohibition of non-essential foreign travel by government officials and staff and domestic travel by citizens, the prevention of gatherings of more than 100 people, the cancellation of all mass celebrations for upcoming public holidays, state funding to support critical economic sectors affected by the outbreak, and planned improvement of screening and testing at local international airports (Qukula, 2020; Shaban, 2020). These measures have helped to curb the spread of COVID-19 both locally and globally.

6.3. Impact of farmers of disruptions caused by COVID-19 on food supply chains

Since the onset of the COVID-19 pandemic, agricultural supply chain disruption has received the least attention. Some of the characteristics of agricultural products include seasonal production, perishability and long waiting periods. Farmers both locally and internationally have been hit the hardest by the lockdown regulations due to the disruption of the supply chain and millions worth of produce gone to waste, with farmers unable to get their produce to the market. For instance, in the United States, the disruption to supply chains due to COVID-19 caused farmers to dump out as many as 3.7 million gallons (14 million litres) of milk every day. Most think that donation would be the best alternative, but the harvesting, processing, packaging and transportations costs are an additional cost to be incurred by farmers who are already making losses. On the other hand, with the closure of restaurants, farmers, processors and other suppliers were already experiencing low demand for fresh produce and other perishable goods, meaning that their profits were suppressed.

6.3.1. South African perspective

South Africa's major agricultural exports include corn, fruits, sugar, and wool. However, it has been reported that South Africa is unlikely to run out of food, as there are prospects for an abundant harvest of staple grains and fruit this year, which will increase the local supplies. There is no doubt that since the global alarm of the COVID-19 pandemic was declared, the demand for citrus has remained strong and prices are still on the rise. Citrus fruits, especially lemons and limes, are becoming important complementary products, along with garlic and ginger being consumed in most parts of the world as immune system boosters against COVID-19. An increase in the demand for lemons and other citrus fruits and other fresh produce can be expected. After COVID-19, there is a high probability that people will recognise the value of eating healthily and will continue to do so. It is commendable that the South African citrus industry is the second biggest global exporter in the world, and the industry is thriving and is expected to continue doing so.

The 2020 export season has shown a strong increase in the global demand for citrus. Currently, South Africa's export volumes of lemons are double that of 2019. The Citrus Growers' Association (CGA, 2020) reported that lemon packing and shipping started early in 2020 and at the time of writing this report, 12 million cartons had been packed, which is almost 45 % of the predicted total. The increased global demand for lemons has resulted in 9.5 million 15kg equivalent cartons exported, which is more than double the 4 million 15kg equivalent cartons exported in 2019, with the bulk of shipments having been exported to the Middle East (49%). A total of 4.7 million cartons of soft citrus have already been packed, while 3,1 million cartons of soft citrus have been exported, with the bulk destined for the United Kingdom (47 %), Europe (20 %) and Russia (14 %).
On the other hand, 7.5 million cartons of grapefruit have been packed with a total of 3.8 million cartons exported to date. Europe and South East Asia were the major importers of South Africa's grapefruit, constituting 48 % and 16 % respectively, with a small percentage going to other parts of the world.

Despite the increase in global demand for citrus, many factors are affecting the 2020 export season in South Africa, which are costly to many farmers – one of them being the disruption caused by the COVID-19 pandemic due to the cost of harvesting, handling and packaging, given all the mobility restrictions and hygiene measures implemented to prevent the spread of the disease. As COVID-19 persists domestically and internationally, labour shortages are expected, which will coincide with harvesting season of the winter crops. Workers are less available, reflecting both disruptions in transportation systems and restriction.

Logistics in food value chains include all activities that enable the flow of agricultural inputs, outputs, and agriculture-related services, such as transportation, warehousing, procurement, packaging and inventory management. The efficacy of logistics is critical for the agri-food sector, in particular in times of crisis. Disruptions in supply chains can cause adverse effects on food quality, its freshness and safety, and can impede access to markets and affordability. Furthermore, logistical challenges within supply chains, particularly cross-border and domestic restrictions of movement, have led to disruptions in food supplies, undermining informal workers' food security. Informal food markets play an essential role in ensuring food security in many countries, both as a source of food and as a place for smallholder farmers to sell their products.

6.3.2. Concluding remarks

The duration and the level of impact posed by the COVID-19 pandemic are uncertain, and agriculture might be the solution to the economic burden – not only during this pandemic period but also after the pandemic. South Africa's agriculture needs to start thinking, post-COVID-19, what strategies can maximise economic opportunities. Food demand is certain during these uncertain times. Securing global supply, increasing health and hygiene, and increasing digitisation is futuristic thinking. As we advance, technology is increasingly a key enabler for farmers wanting to meet the challenge of global food supply, as technology can improve the variety, availability, quantity, and quality of food supply. However, South Africa's agricultural workforce needs to be upskilled to adjust to digitalised work expectations.

6.4. Consumers demand products that are climate friendly: Climate change discussion within the context of agricultural product prices

6.4.1. Introduction

Agricultural production, for any of the product systems, depends mostly on climatic conditions. These climatic conditions include, but are not limited to, rainfall patterns that determine the year-to-year production of many extensive crops and animal production practices; the intensity and frequency of unpredictable temperature variations, as well as the intensity and frequency of storms, disease and pest outbreaks that affect production. To a larger extent, all these factors lead to disturbances in the predictability of production and ultimately seasonal price variations and predictability. This section outlines that the agricultural marketing environment needs to be understood in the context of the climate change phenomenon. Reference will be made to a project in which the National Agricultural Marketing Council (NAMC) is involved, which is being that is piloted in the two districts of the Free State Province. The project is funded by the United Kingdom (UK) government's Global Research Fund (GRF) through the University of Leeds and the Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN) research partnership, of which the NAMC is a leading local collaborator.

6.4.2. Agricultural and Food-System Resilience: Increasing Capacity and Advising Policy (AFRICAP)

FANRPAN, along with its country node hosting institution in South Africa, the NAMC, is implementing the Agricultural and Food-system Resilience: Increasing Capacity and Advising Policy (AFRICAP)

project. The project is being implemented in four African countries, namely Malawi, Tanzania, Zambia and South Africa. The project aims to make agriculture and food production in Sub-Saharan Africa (SSA) more productive, sustainable and resilient to climate change. The programme is focused on generating evidence-based policy to transform agriculture and food systems in Africa. AFRICAP aims to improve farming systems' productivity and their resilience to shocks emanating from climate change impacts. Working with local organisations, farmers and governments, the project is creating an evidence base to underpin new country-specific policies in agriculture and food production. In South Africa, the project is implemented in two district municipalities, Thabo Mofutsanyane and Lejweleputswa in the Free State Province, where commercial farms are close to smallholder farmers and the province all the identified commodity products (soybeans, maize, potatoes and livestock). One of the unique advantages of the Free State is that it borders on almost all the provinces, and the locations of the districts provide for the optimisation of the geographic advantage. Therefore, all local municipalities and district municipalities of the neighbouring provinces are part of this project.

6.4.3. AFRICAP activities delayed due to COVID-19

6.4.3.1. AFRICAP Household Survey Feedback Workshop

In 2019, South Africa conducted a household survey, which gathered information about farming systems, including crop cultivation and livestock systems and information on how farmers respond to unexpected weather conditions. The findings of this exercise were due to be presented to farmers, government and other relevant stakeholders in the Free State in April 2020. However, due to the COVID-19 pandemic, which led to South Africa being in lockdown, the SA AFRICAP team postponed the feedback workshops for the survey findings. However, through the node communication team, the node is currently compiling feedback pamphlets, videos and articles, which will be shared with the farmers and the relevant stakeholders electronically. The workshops will be conducted in the future when regulations allow.

6.4.3.2. Partner Institutional Viability Assessment (PIVA)

As part of the GCRF-AFRICAP project's implementation, the four-country nodes involved in AFRICAP conducted PIVA as part of capacity development for the nodes. The process was done in the form of exchange visits between the nodes. The review was a peer exercise by the four-country nodes implementing the project, which was guided by following six competency areas: Governance and Leadership, Operations and Management Systems, Human Resources Development, Financial Management Systems, Programmes and Service Delivery, and External Relations and Advocacy. Furthermore, this exercise came with some key findings on each node institution, e.g. a need to work on regional collaborations, increase resource mobilisation, exchange learning programmes, etc. However, these findings' implementation will depend on the relaxation regulation around movement between the four countries.

6.4.3.3. Ecological Work

In order to effectively identify adaptation practices or introduce new farming practices to mitigate the adverse effects of climate change, fieldwork is supposed to be underway in the two districts, in the Free State undertake AFRICAP research work in South Africa. Through local stakeholder partnerships, the project has several fieldworkers who are undertaking ecology research work. The pandemic has affected the ecology work, through restrictions of movement of some researchers involved in the ecology work. This mainly affects the researchers based in Europe, who are unable to come and conduct ecology research work in the identified areas. This has also impacted negatively on the second phase of field sampling, which was supposed to begin in April. Taking cognisance of the health and safety of the fieldworkers, going to the farms for ecological sampling, it was then resolved that they would work from home in this regard by doing some laboratory preparation-related ecology work, which involves sorting and identifying specimens.

6.4.3.4. Integrated Future Estimator for Emissions and DIETS (iFEED)

As part of the AFRICAP programme, climate change impact modelling is designed to be as holistic as possible in order to influence national-level climate-smart agricultural policy design and implementation. AFRICAP's integrated assessment framework is a new tool that brings together state-of-the-art crop and climate modelling with trade and nutrition analyses, expert knowledge, and stakeholder-driven research agendas in order to map pathways to desirable futures. Crop modelling as part of iFEED will be used to project the impacts of climate change on a range of agricultural commodities and examine possible future land use patterns in order to explore implications for future nutrition security and climate-smart agriculture through AFRICAP iFEED in-country taskforces. Due to COVID-19 remote engagements for iFEED have been proposed following the recent cancellation of national face-to-face meetings in Tanzania, Malawi, South Africa and Zambia. To mitigate this, in South Africa's engagements will be conducted remotely. South Africa has identified taskforce members for iFEED and they have indicated their availability for the engagements electronically, including farmer organisations that have been identified for iFEED.

6.4.4. Concluding remarks

The South African household survey gathered information about farming systems in the Free State, including crop cultivation and livestock systems and information on how farmers respond to unexpected weather conditions. It was revealed that some farmers had changed their farming practices and other farmers were willing to change. The farmers who had changed their farming practices employed boreholes, bought more tanks, bought feed for livestock, or delayed planting. Natural disasters such as climate change, leading to drought, have a dire effect on agricultural production. Agriculture relies on climate and water availability to thrive; thus it is easily impacted by natural events and disasters. Like many other things, COVID-19 has delayed implementation of some of the AFRICAP in-country activities, as mentioned above. The modelling work will play a critical role in feeding into the other AFRICAP work. All of the above will generate evidence-based policy advice (to all stakeholders – especially government) to improve agricultural productivity and resilience to shocks emanating from climate change.

ISBN (print version): 978-0-620-90672-2
ISBN (electronic version): 978-0-620-90673-9

Published by the NAMC, Private Bag X935, Pretoria, 0001. Tel: +27 12 341 1115, Fax: +27 12 341 1811.

This publication attempts to provide more insight into the complex factors driving commodity and food prices. This is the 15th publication of the *South African Food Cost Review*, emanating from the recommendations of 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 up to March 2020, where possible.

7. REFERENCES

Amadeo, K. 2019. Why food prices are rising, recent trends, and 2019 forecast. *The Balance*, 25 June 2019. Available online at: https://www.thebalance.com/why-are-food-prices-rising-causes-of-food-price-inflation-3306099.

AMT (Agrimark Trends). 2020. *Selected commodity price information*. North-West University: Agrimark Trends.

Bizcommunity. 2020. *Agriculture, horticulture and forestry*. Available online at: https://www.bizcommunity.africa/Article/410/358/202761.html.

BusinessTech. 2020. *South Africa's unemployment rate could hit 50%: report*. Available online at: https://businesstech.co.za/news/business/394654/south-africas-unemployment-rate-could-hit-50-report/.

Bronkhorst, Q. 2020. *South Africa's unemployment rate unchanged at 29.1%.* Available online at: https://businesstech.co.za/news/government/372994/south-africas-unemployment-rate-unchanged-at-29-1/.

CEC (Crop Estimates Committee). 2020. *The final production estimate for summer crops for 2019/20*. Available online at: www.sagis.org.za/CEC:Crop Estimates.

CGA (Citrus Growers' Association). 2020. Available online at: http://www.cga.co.za.

Coleman, A. 2020. *Coronavirus fallout for South Africa's agriculture sector*. Available online at: https://www.farmersSouth Africaekly.co.za/agri-news/south-africa/coronavirus-fallout-for-south-africas-agriculture-sector/

DAFF (Department of Agriculture, Forestry and Fisheries). 2009. State of the forests report (2007 – 2009). Published by DAFF. Available online at: https://www.nda.agric.za/doaDev/sideMenu/ForestrySouth web/South Africabapp/Documents/State of the forests report_South Africab.pdf.

DAFF (Department of Agriculture, Forestry and Fisheries). 2019. *Agro-processing support*. Website link available at: https://www.daff.gov.za/daffSouth Africab3/branches/economic-development-trade-marketing/agro-processing-support.

DAFF (Department of Agriculture, Forestry and Fisheries). 2020. *Abstract of Agricultural Statistics 2020.* Pretoria: DAFF.

Daya MY. 2014. *South African agricultural exports: Trends, composition, direction and potential*. Compiled by Directorate: International Trade. Department of Agriculture.

DoL (Department of Labour). 2020. *Department of Labour [home page].* Available online at: http://www.labour.gov.za.

Eskom. 2020. *Eskom [home page].* Available online at: http://www.eskom.co.za.

FAO (Food and Agriculture Organisation). 2020a. *Responding to the impact of the COVID-19 outbreak on food value chains through efficient logistics.* Available online at: http:www.fao.org/3/CA8466en/CA8466EN.pdf.

FAO (Food and Agriculture Organisation). 2020b. *World Food Situation – FAO Food Price Index.* Available online at: http://www.fao.org/worldfoodsituation/foodpricesindex/en/ .

Fertasa (Fertiliser Association of Southern Africa). 2020. *Fertasa [home page].* Available online at: http://www.fertasastats.co.za/pages/

FleetWatch. 2020. *FleetWatch Magazine*. Available online at: http://www.fleetwatch.co.za.

FP&M SETA (Fibre Processing and Manufacturing Sector Education and Training Authority). 2014. *A profile of the forestry and wood products subsector: Forestry and wood products sector.* Available online at: https://www.fpmseta.org.za/downloads/FPM_sub-sector_forestry_wood_final.pdf.

GTA (Global Trade Atlas). 2020. *Agricultural, forestry and fisheries trade statistics.* Database accessed (29 April 2020). Available online at: www.gtis.com/gta/secure/default.cfm.

Grain SA (Grain South Africa). 2020. *Grain SA [home page].* Available online at: http://www.grainsa.co.za.

IEA (International Energy Agency). 2009. *International Energy Agency [home page]*. Available online at: http://www.iea.org.

IEA (International Energy Agency). 2013. *International Energy Agency [home page].* Available online at: http://www.iea.org.

IFA (International Fertilizer Association). 2019. Short-term outlook for fertilizers and raw materials: 2019-2020. Market Intelligence and Agriculture Services. France. *International Fertilizer Association [home page].* Available online at: http://www.fertilizer.org.

IGC (International Grain Council). 2020. *Export Prices*. Available online at: https://www.igc.int/en/markets/marketinfo-prices.aspx.

Indexmundi. 2020. *Commodity Prices: Rice*. Available online at: https://www.indexmundi.com/commodities/?commodity=rice&months=60

Moss, B. 2020. Global food commodity prices drop in April. *Agrifocus African Markets.* Available online at: https://agrifocusafrica.com/2020/05/08/global-food-commodity-prices-drop-in-april/.

MPO (Milk Producers' Organisation). 2020. *Personal communication.* Pretoria.

NAMC. 2008. The South African Food Cost Review: 2007. Available online at: http://www.namc.co.za/category/research-publications/publications/food-cost-review/.

NERSA (National Energy Regulator of South Africa). 2020. *National Energy Regulator of South Africa [home page].* Available online at: http://www.nersa.org.za/.

Olander, E. 2020. *Coronavirus: Economic consequences to hit Africa hard*. Available online at: https://www.theafricareport.com/22684/coronavirus-economic-consequences-to-hit-africa-hard/.

Politico. 2020. *Coronavirus may undercut China's phase-one farm purchases*. Available online at: https://www.politico.com/newsletters/morning-agriculture/2020/03/10/coronavirus-may-undercut-Chinas-phase-one-farm-purchases-785967.

Qukula, Q. 2020. *10 interventions announced by President Cyril Ramaphosa to curb the COVID 19 spread.* Availabe online at: http://www.capetalk.co.za/articles/377878/10-interventions-announced-by-president-cyril-ramaphosa-to-curb-covid-19-spread.

SAFEX (South African Futures Exchange). 2020. *South African Futures Exchange [home page].* Available online at: http://www.jse.co.za/Markets/Commodity-Derivatives-Market/commodity-Deriva-tives-physicaldelivery-info.aspx.

SAGIS (South African Grain Information Service). 2020. *South African Grain Information Service [home page]*. Available online at: http://www.sagis.org.za.

SAMPRO (South African Milk Processors' Organisation). 2020. *Personal communication*. Pretoria.

S&DEC (Supply & Demand Estimates Committee). 2020. *South African Supply and Demand Estimates Report.* Available online at: https://www.namc.co.za/category/research-publications/supply-demand-estimates/.

SAPIA (South African Petroleum Industry Association). 2020. *South African Petroleum Industry Association [home page].* Available online at: http://www.sa-pia.org.za/.

Shaban, A.R.A. 2020. *South Africa counts economic impact of coronavirus*. Available online at: https://www.africanews.com/2020/03/16/south-africa-counts-economic-impact-of-coronavirus//.

Stats SA (Statistics South Africa). 2020. *Statistics South Africa [home page].* Available online at: http://www.statssa.gov.za/.

TIPS (Trade and Industrial Policies Analysis). 2020. The role of plantation forestry for promoting sustainability in South Africa. https://www.google.com/search?q=Establishing+plantation+forestry+requires+identifying+and+securing+land+rights+in+areas+of+existing+and+proposed+plantation+forest+coverage.+Indeed%2C+additional+land+suitable+for+growing+and+maintaining+plantation+forests+is+principally+in+the+Eastern+Cape+(60+000+hectares+available+and+10+000+hectares+of+wattle+forest+available+for+conversion)+and+KwaZulu-Natal+(40+000+hectares+available)&rlz=1C1GCEU_enZA943ZA943&oq=Establishing+plantation+forestry+requires+identifying+and+securing+land+rights+in+areas+of+existing+and+proposed+plantation+forest+coverage.+Indeed%2C+additional+land+suitable+for+growing+and+maintaining+plantation+forests+is+principally+in+the+Eastern+Cape+(60+000+hectares+available+and+10+000+hectares+of+wattle+forest+available+for+conversion)+and+KwaZulu-Natal+(40+000+hectares+available)&aqs=chrome..69i57.2178j0j9&sourceid=chrome&ie=UTF-8

Trade Map. 2020. Data available online at: https://www.trademap.org/.

Tweeten, L.; Barone, E. & Wolfson, E. 2020. *A timeline of how the Wuhan coronavirus has spread—and how the world has reacted*. Available online at: https://time.com/5774366/how-coronavirus-spread-China/.

The Conversation. 2020. The coronavirus will delay agricultural exports surges promised in trade deal with China. Retrieved from: https://theconversation.com/the-coronavirus-will-delay-agricultural-export-surges-promised-in-trade-deal-with-China-132227.

The Economist. 2020. *Covid-19 is making it harder to grow food in China*. Available online at: https://www.economist.com/China/2020/03/14/covid-19-is-making-it-harder-to-grow-food-in-China.

The Poultry Site. 2020. *Panic buying forces South African supermarkets to ration food*. Available online at: https://thepoultrysite.com/news/2020/03/panic-buying-forces-south-african-supermarkets-to-ration-food.

USDA (United States Department of Agriculture). 2020. *Commodities: Grain and Feed: Rice*. Available online at: https://www.fas.usda.gov/commodities/rice.

WHO (World Health Organization. 2020. *Coronavirus.* Available online at: https://www.who.int/health-topics/coronavirus#tab=tab_1.

World-Grain. 2020. *World-Grain [home page].* Available online at: https://www.world-grain.com/.

Worldometer. 2020. *COVID-19 coronavirus pandemic*. Available online at: https://www.worldometers.info/coronavirus/.