

Food Cost Review 2022

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This publication attempts to provide more insight into the complex factors driving commodity and food prices. This is the 17th 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 April 2022, where possible.

EXECUTIVE SUMMARY

This report reflects on the significance of the agricultural sector amidst the challenges posed by climate change, infrastructure and logistics, rising inflation, escalating input costs such as fertilisers, energy costs, policy uncertainty and global supply disruptions of major field crops. Despite these challenges, the agricultural sector continues to make a noticeable contribution to the country's Gross Domestic Product (GDP) and employment creation. Primary agriculture contributed 2.5% to GDP in 2021 and employed, on average, 838 000 people. The three agriculture sub-sectors, namely crops, horticulture and livestock, contribute significantly to agricultural trade. For example, despite logistical challenges and trade measures imposed throughout the year, the horticultural sector has recorded a significant share of exports on global trade through exports from the pome and citrus industries. Similarly, trade in livestock has flourished, despite outbreaks of animal diseases like Avian Influenza (AI) and Foot-and-Mouth Disease (FMD), high feed prices and escalating input costs. Concerns over food availability attributable to the ongoing conflict between major exporting countries (Ukraine and Russia) have abated. The country has maintained sufficient available stocks for major crops, such as wheat and maize, being major staple foods in South Africa.

This report is categorised into three main sections. The first section presents an overview of food prices at domestic and global levels. Inflation levels on food and non-alcoholic beverages remain a concern in South Africa. The main drivers of inflation are plant oils, meat and cereal-based food. Increases in these agricultural commodities are influenced by the global prices, which filter through to the South African market, along with input-cost drivers, disruptions of supply, animal disease outbreaks, and trade distortions such as import bans imposed by major producing countries of wheat and palm oil.

The second section highlights market trends in agricultural input costs. Input costs, such as fertilisers, labour costs, energy costs and fuel costs, affect the profitability and income of farmers. Furthermore, rising input costs increase the risk of food shortages attributable to reduced production or lower yields. This is particularly dire for farmers in the rural areas who must transport their produce on poor road infrastructure. With 75% of the agricultural produce being transported by road, increase in costs, such as fuel, wages, licence fees, rates, excise duties, interest rates, tolls and taxation, place more pressure on the profit margins of farmers.

Section Three focuses on the three agricultural sub-sectors, namely livestock, crops and horticulture. Under each sector, descriptive accounts of market trends in global and local prices, production and consumption volumes, and trade performance for selected commodities are provided. Although the report does not provide in-depth analysis of the trends, it serves to flag potential drivers for escalating food prices, changes in food consumption patterns and production choices by farmers, as well as potential export markets. The report draws on data between 2016 and 2022.

KEY MESSAGES

Inflation

The NAMC food basket, consisting of 28 products, was measured at R1 047.05 in April 2022 and compared with the value of the basket in April 2017, registering an increase of 23% in value.

The cost of this food basket, expressed as a share of the average monthly income of the poorest 30% of the population, increased from 65.3% in April 2021 to 70.3% in April 2022. The cost of the food basket, expressed as a share of the average monthly income of the wealthiest 20% of the population, increased from 3.5% in April 2021 to 3.7% in April 2022.

INPUT COSTS

Fertiliser Prices

Between 2020 and 2021, the international prices of Urea, Di-Ammonium Phosphate (DAP), and Muriate of Potash (MOP) increased by 110.4%, 92.3% and 83.8%, respectively. The increases in fertiliser prices could be attributed to global events that affected the trade flows of fertilisers.

The domestic prices of fertilisers, Urea, MAP and KCL, increased by 435.3%, 420.8% and 316.4%, respectively, between 2001 and 2021.

Domestic fertiliser prices reached new highs in 2021, surpassing their peak levels of 2008. The prices of Urea, MAP and KCL increased by 55.8%, 53.7% and 38.5%, respectively, between 2020 and 2021.

Fuel Prices

Between 2001 to 2021, the domestic prices of 0.05 % sulphur diesel in Gauteng, 0.05 % sulphur diesel in the coastal areas, and crude oil (\$/barrel) increased by 357.8%, 354.9% and 181.8%, respectively.

Price trends for 0.05.% sulphur diesel in the coastal, 0.05% sulphur diesel in Gauteng and crude oil prices increased by 17.7% (R/l), 16.8% (R/l), 63.1% (\$/barrel), respectively between 2020 and 2021.

Electricity

Between 2004/05 and 2009/10, the residential sector registered the highest average price of 38.70 c/kWh and 63.98 c/kWh (c/kWh), compared with other sectors. In 2020/21, the agricultural sector utilised electricity at an average price of 187.91 c/kWh, and has remained one of the industries purchasing electricity at the highest price.

Wages

The minimum wage for farmworkers in 2008 was recorded as R1 090/month, but a significant increase of 51.2% was recorded between 2012 and 2013. In 2021, the minimum wage was reported to be R3 904.20/month.

LIVESTOCK

Poultry

Feed costs, changing consumption patterns, and animal disease outbreaks like AI are the main contributors to increases in poultry prices.

Between January 2017 and April 2022, the monthly average producer prices for chicken in frozen portions, fresh portions and Individual Quick Frozen (IQF) chicken portions increased by 27.4%, 23.5% and 22.2%, respectively.

Between 2017 and April 2022, the monthly average retail prices of IQF chicken portions (2kg), fresh whole chicken (per kg), and fresh chicken portions (per kg), increased by 39.4%, 33.9% and 22.4%, respectively.

On a year-on-year basis, retail prices for fresh whole chickens and fresh chicken portions were down by 7.0% and 2.3%, respectively, in April 2022, while IQF prices increased by 19.8%.

Beef

The monthly average producer prices for beef classes A2/A3, B2/B3 and C2/C3 increased by 34.9%, 33.1%, and 30.8%, respectively, between November 2018 to April 2022. The average monthly retail prices for beef offal, beef stew and brisket increased by 38.8%, 32.1% and 22.9%, respectively, between November 2018 and April 2022.

Livestock Trade Performance

South Africa is a net importer of pork because of lower production volumes and higher local demand (DALRRD, 2022). In 2021, South Africa exported pork meat worth R396.49 million, being a 12% increase from the value exported in 2020. Major export markets were Namibia, taking a share of 29%, Mozambique (27%), Zimbabwe (10.8%), Lesotho (8.9%) and Botswana (6.8%).

Imports originated from Brazil (31.7%), the Netherlands (22.6%), the United Kingdom (14.4%), Denmark (10.4%) and Spain (7.6%).

South Africa is a net exporter of dairy products. In 2021, South Africa exported dairy products worth R3.8 billion, being an increase of 7% as compared with 2020. Major exports markets were Botswana (21.8%), Mozambique (20%), Namibia (15.8%), Eswatini (11.1%) and Lesotho (7.4%).

On the other hand, imports of dairy products declined by 4% (from R3.1 billion in 2020 to R2.9 billion in 2021). Major suppliers were France and New Zealand, with each supplying 16.5%.

CROPS

South Africa has benefited from favourable weather, which aided the country's high levels of production of maize, wheat and soybeans. The maize crop produced in 2021 was the second largest, at 16 951 440 tons, and only 3% less than the record 17 551 000 tons produced in 2017. Good harvests contributed to exports of 3.2 million tons of maize, worth R11.15 billion, in 2021.

Wheat is the second most significant crop in South Africa. The Western Cape Province is South Africa's leading wheat-producing province, with an average crop production of 1 711 282 tons during the past decade.

Compared with the 2 130 000 tons produced in 2008, the wheat crop surpassed the 2 million-mark in 2020, reaching 2 120 000 tons. This could be attributed to better yielding cultivars and good agronomical practices.

Sunflower is mostly grown in the Free State and North West Provinces of South Africa. The 2020/21 sunflower production was 678 000 tons, down from 788 500 tons in 2019/20, and the area planted decreased from 500 300 ha to 477 800 ha. Sunflower seed harvests account for around 5% of South Africa's total grain production. Production levels have varied over the years owing to climatic conditions, production choices by farmers, and *Sclerotinia sclerotiorum* (a plant pathogenic fungus that forms white mould in favourable conditions).

Soybean is also a summer crop, mainly produced in the Free State, Kwa-Zulu Natal and Mpumalanga provinces under 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 10% of the total summer grains produced domestically.

Domestic soybean production for 2020/21 reached a record high of 1 897 000 tons, on the back of favourable climatic weather conditions and prices.

South Africa was a net exporter of field crops and products such as maize and sunflower seed oil in 2021. South Africa had a positive trade balance for maize, sunflower seed oil, maize seed for sowing, and soya bean seed for sowing in 2021.

Between 2020 and 2021, South Africa mainly imported wheat and meslin, soya bean oilcake, soya bean oil, and soya beans. Imported wheat amounted to R6.84 billion in 2021, while soya bean oilcake amounted to R3.29 billion, soya bean oil (R1.5 billion) and soya beans (R460.1 million). The growth rate of imported wheat declined in value by 15.1% between 2020 and 2021 because of lower imports, as the country was able to meet local demand.

HORTICULTURE

Between 2000/01 and 2020/2, the total volumes of onions, potatoes and tomatoes increased by 128.5%, 46.5% and 14.3%, respectively, while cabbage decreased by 11.0%. The volume produced for potatoes, onions, tomatoes and cabbages were 2 626 000 tons, 713 000 tons, 543 000 tons and 170 000 tons, respectively, in 2020/21.

From 2000/01 to 2020/21, the average volume of apples and oranges produced increased by 88.7% and 32.9%, respectively, while bananas decreased by 9.5%. The exports of oranges and apples were recorded at 1 168 875 tons and 584 644 tons, respectively.

From April 2015 to April 202, the total volumes of cabbage and onions sold increased by 13.8 % and 0.5%, respectively, while tomatoes and potatoes decreased by 12.1% and 3.2%, respectively, between 2020 and 2021.

The total volumes of oranges, bananas and apples sold increased by 14.0%, 10.1% and 3.1%, respectively, between 2020 and 2021. The total volumes of bananas, apples and oranges sold were recorded at 206 740 tons, 148 518 tons and 94 768 tons, respectively, in 2021.

Trade

Over the period 2016 – 2021, South Africa imported more bananas than any of the selected horticultural products. In 2021, bananas contributed about 75% to the total value of the selected horticultural imports, followed by onions with a 15% contribution. Similarly, in 2016, bananas and onions contributed about 71% and 20% to the total value of the selected horticultural imports, respectively.

For fruits, oranges and apples were the leading horticultural products exported by South Africa, contributing about 50% and 43%, respectively, followed by potatoes which contributed 3% in 2021. In 2016, oranges, apples and potatoes accounted for 48%, 44% and 4%, respectively.

In nominal terms, the average market prices, per ton, for tomatoes and potatoes increased by 10.4% and 4.7%, respectively, while the prices of onions and cabbages sold decreased by 22.9% and 19.1%, respectively, between 2020 and 2021.

The average market prices per ton of oranges and apples increased by 15.8% and 2.3%, respectively, while the average market price per ton of bananas decreased by 0.2% in 2021, as compared with 2020.

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Abbreviations/Acronyms

AAMP	Agriculture and Agro-processing Master Plan
AgriSETA	Agriculture Sector Education Training Authority
AI	Avian Influenza
AMT	Agrimark Trends
ASF	African swine fever
BFAP	Bureau for Food and Agricultural Policy
С	Cent
Coronavirus	COVID-19
CPI	Consumer Price Index
DALRRD	Department of Agriculture, Land Reform and Rural Development
DAP	Di-Ammonium Phosphate
DoL	Department of Labour
ED	Expenditure Deciles
EU	European Union
ESKOM	Electricity Supply Commission
FAO	Food and Agriculture Organization
Fertasa	Fertilizer Association of Southern Africa
FMD	Food and Mouth Disease
FPI	Food Price Index
FPM	Fresh Produce Market
Grain SA	Grain South Africa
GDP	Gross Domestic Product
HS	Harmonized System
HPAI	Highly Pathogenic Avian Influenza
ITC	International Trade Centre
IQF	Individually Quick Frozen
KCL	Potassium Chloride
ka	Kilogram
kWh	Kilowatt Hour
l	Litre
LDCs	Least Developed Countries
MAP	Mono-Ammonium Phosphate
ml	Millilitre
MOP	Muriate of Potash
MPO	Milk Producers' Organisation
NAMC	National Agricultural Marketing Council
NERSA	National Energy Regulator of South Africa
R	South African Rand
R&D	Agricultural Research and Development
SAFEX	South African Futures Exchange
SAGIS	South African Grain Information Service
SAPA	South African Poultry Association
SAPIA	South African Petroleum Industry Association
Senwes	Serves Limited
SSA	Suh-Saharan Africa
Stats SA	Statistics South Africa
	United Nations
	United Arab Emirates
	United States of America
	United States Dollar
	UTILEU SLALES DUILAI

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USDA WCDoA United States Department of Agriculture Western Cape Department of Agriculture

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1 OVERVIEW OF FOOD PRICES

1.1 Global food price trends

The Food and Agricultural Organization (FAO) of the United Nations (UN) publishes its Food Price Index (FPI) on a monthly basis. The FPI consists of five commodity group price indices, namely the Meat Price Index, the Dairy Price Index, the Cereals Price Index, the Oils Price Index, and the Sugar Price Index. These indices are weighted with the average export shares of each of the groups for 2014 to 2016. In total, 95 price quotations, considered by FAO commodity specialists as representing the international prices of the noted food commodities, are included in the overall index. **Figure 1** shows the overall monthly real (deflated) FAO FPI from 2016 to 2022, with April 2022 reaching an index level of 155.0 points, up 27.7% from April 2021.



Figure 1: International monthly real Food Price Index

Source: FAO (2022) *Note: including up to April 2022

Figure 2 shows the price indices in real terms for the five food categories. The monthly (April 2022 vs. March 2022) growth percentages indicated increasing trends for three of the five indices. The annual (April 2022 vs. April 2021) growth percentages indicated increasing trends of 44.0% for Oils Price Index, 32.1% for the Cereals Price Index, 21.5% for the Dairy Price Index and 19.8% for the Sugar Price Index, while the Meat Price Index reflected the smallest annual increase percentage of 14.9%.



Figure 2: International price indices for various food categories Source: FAO (2022)

The drought and the crude oil and export bans that caused global food inflation in the 2007/08 season also drove the 2021/22 food crisis, with the only difference being the war in Ukraine, which has triggered a chain of reactions throughout global food supply systems, from crude oil to food. The global food price index of the United Nations' Food and Agricultural Organization (FAO) decreased marginally (-0.8%) to 158.5 points in April 2022. However, it is still up 29.8%, year-over-year. Surprisingly, despite the current global market instability, vegetable oil prices, together with grains, led to the total price reduction. Sugar, meat and dairy prices, on the other hand, increased marginally. The sugar sub-index was up 3.3% at the end of April, owing to high ethanol prices from Brazil, which is a leading sugar exporter globally, and the strengthening of the Brazilian Real versus the US dollar, which supported global sugar prices in April 2022. Large supplies mainly from India, on the other hand, should keep prices stable and avoid further acceleration in the near future.

India's wheat export prohibition, which is currently already in limited supply, globally, is concerning. Global wheat ending stocks are expected to be 267 million tons by the end of May 2022, down from 278.4 million tons at the end of April 2022. India was expected to export a record of 10 million tons of wheat, which temporarily kept wheat prices moderate, but high. Regarding vegetable oil, although it appeared that the embargo on palm oil exports might be lifted, Indonesia has extended the prohibition for another month. Current global market events, particularly trade restrictions, will extend the current price volatility.

1.2 Local food prices: Inflation and the 28-item NAMC food basket

The South African headline and food and non-alcoholic beverages inflation rates reached 5.9% and 6.0%, respectively, in April 2022. **Figure 3** presents the food and non-alcoholic beverage index and the rate of change from April 2016 to April 2022.



Figure 3: Consumer Price Index (CPI) rate of change for food and non-alcoholic beverages Source: Stats SA (2022)

The indices for the different food CPI components are shown in **Figure 4**. Comparing April 2022 with April 2021, the following changes, in descending order, were reported: oils & fats (21.2%), meat (8.5%), processed foods (7.6%), other food items (7.1%), unprocessed foods (4.9%), bread & cereals (4.8%), fish (4.8%), milk, eggs & cheese (3.7%), sugary foods (3.5%), vegetables (0.2%) and fruit (-0.7%). The monthly percentage changes are also illustrated.



Figure 4: CPI for different food groups Source: Stats SA (2022)

Figure 5 shows the cost of the NAMC food basket¹ from April 2017 to April 2022. This basket consists of 28 products, and in April 2022, the NAMC food basket amounted to R1 047.05, revealing an increase of 7.8% or R75.95 from April 2021 and an increase of 23% (R195.65) since April 2017.

¹ Composition of the current food basket (revised in 2022) includes apples per kg, baked beans - tinned 410g, bananas per kg, beans - dried 500g, beef mince per kg, beef offal per kg, brick margarine 500g, cabbage each, Ceylon/black tea 250g, cheddar



Figure 5: Cost of the NAMC food basket, April 2017 to April 2022 Source: Stats SA (2022) and own calculations

The data collection methods utilised by Stats SA have changed, since April 2020, as previously mentioned. There were changes to consumers' buying patterns after the COVID-19 lockdown was put in place, and there were disruptions in various value chains through transport challenges, product availability, and weather conditions affecting production. All of these factors lead to increased retail prices, and consumers are negatively affected.

The cost of this food basket, expressed as a share of the average monthly income of the poorest 30% of the population, increased from 65.3% in April 2021 to 70.3% in April 2022. The cost of the food basket, expressed as a share of the average monthly income of the wealthiest 20% of the population, increased from 3.5% in April 2021 to 3.7% in April 2022. (**Figure 6**).



Figure 6: The cost of a typical consumer food basket for the period April 2018 to April 2022 Note: Expressed in nominal terms and as a share of the average income of the poorest 30% of households (Expenditure Deciles [ED] 1-3) and the wealthiest 20% of households (ED 9-10)

Sources: BFAP calculations, based on Stats SA monitored price data for urban areas, 2022

cheese per kg, chicken giblets per kg, eggs 1.5 dozen, fish excl. tuna - tinned 400g, full cream milk - long life 1ℓ, instant coffee 250g, IQF chicken portions 2kg, loaf of brown bread 700g, loaf of white bread 700g, maize meal 5kg, onions per kg, oranges per kg, peanut butter 400g, polony 1kg, potatoes per kg, rice 2kg, sunflower oil 750mℓ, tomatoes per kg, white sugar 2.5kg.

1.3 Conclusion

Year-on-year inflation in food and non-alcoholic beverages in South Africa was recorded at 6.0% in April 2022, mainly underpinned by significant inflation in plant oils, meat and cereal-based foods. The rise was mainly underpinned by rising agricultural commodity prices, globally, which filter through to the South African market, along with cost drivers that influence the broader supply chain. The major factors driving the rising agricultural commodity prices include:

- The ongoing war between Russia and Ukraine, which is adding to global supply concerns at a time when stock levels had been declining for consecutive years. Russia and Ukraine are major exporters of a number of commodities, including wheat, maize, barley, sunflower and sunflower oil.
- Weather conditions in the United States of America (USA) have been delaying plantings of summer grains and oilseeds, which further supported price gains.
- Weather conditions in key production regions remain a concern, with weaker harvests coming from South America in particular.
- Policy actions in response to surging prices in some major producing countries, e.g. a ban on palm oil exports from Indonesia and wheat exports from India.
- Animal disease outbreaks, e.g. Avian Influenza (AI) and Foot and Mouth Disease (FMD).

2 TRENDS IN AGRICULTURAL INPUT COSTS

This section provides an insight into historic and current trends on selected agricultural inputs, such as fertiliser prices in both domestic and international markets, energy prices, and labour costs. Global developments affect South Africa because it imports a significant amount of its agricultural production inputs and is a minor player, internationally. For instance, South Africa imports about 80% of its annual fertiliser consumption. Since South Africa is a net importer of fertilisers, it is fully exposed to global market forces. Fertilisers are the components that increase plant productivity and development. Fertilisers help to increase soil fertility, thereby promoting growth.

2.1 Fertiliser prices

International fertiliser prices

The purpose of fertilisers is to supplement the natural supply of soil nutrients and to build up soil fertility in order to satisfy the demand for crops. **Figure 7** illustrates the trend of international fertiliser prices between 2001 and 2021. There was a fluctuation in prices over the period under review, where Urea, Di-Ammonium Phosphate (DAP) and Muriate of Potash (MOP) increased by 406.7%, 322.0% and 293.6%, respectively. Between 2020 and 2021, the price of Urea, DAP and MOP increased by 110.4%, 92.3% and 83.8%, respectively. The increase in fertiliser prices was due to several events/policies that occurred internationally that impacted global trade flows of fertilisers. According to the International Fertilizer Association (2022), in October 2021, China froze its exports of fertilisers, Turkey also set export restrictions on DAP and Nitrogen, Phosphate and Potassium (NPK) fertilisers, while Vietnam set a 6% import duty on DAP. Furthermore, in November 2021, Russia also moved ahead with a six-month export quota on Nitrogen and Phosphate fertilisers.



Figure 7: International fertiliser prices (2001–2021) Source: Grain SA (2022)

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. According to the Fertilizer Association of Southern Africa (Fertasa, 2022), the domestic demand for fertiliser is estimated at 2.5 million tons. This amounts to approximately 762 000 tons of plant nutrients (N + P_2O_5 + K_2O).

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Table 1 shows South African fertiliser demand and the domestic production and import situation. **Table 1** shows that South Africa is a net importer of fertilisers. Thus, the domestic prices are significantly impacted upon by the international prices of raw materials and fertiliser, as well as by shipping costs and the rand/dollar exchange rate.

Nutrient	Demand (thou- sand tons)	Domestic produc- tion (thousand tons)	Imports (thousand tons)	Products
Nitrogen (N)	381	164	510	Mostly Urea
Phosphate (P ₂ O ₅)	249	234	153	Mostly DAP
Potassium (K ₂ O)	132	None	271	Mostly MOP

Table	1: South	African f	ertiliser	demand.	domestic	production	and im	ports
Table	1. Ooutin	Anticanti	CILINGCI	acmana,	uomesue	production		ροιτο

Source: FAO (2022)

Figure 8 sets out details of the analysis of the movement in South African fertiliser prices between 2001 and 2021. The domestic prices of fertilisers – Urea, Mono-Ammonium Phosphate (MAP) and Potassium chloride (KCL) – showed increases of 435.3%, 420.8% and 316.4%, respectively, between 2001 and 2021. 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, domestic fertiliser prices reached new highs in 2021, surpassing their peak levels of 2008. The prices of Urea, MAP and KCL increased by 55.8%, 53.7% and 38.5%, respectively, between 2020 and 2021.





Source: Grain SA (2022) and own calculations

2.2 Fuel and oil prices

Fuel makes a significant contribution to the variable costs of primary agricultural production and food distribution costs. The crude oil price and the 0.05 % sulphur diesel price trends in Gauteng and at the coast between 2001 and 2021 are illustrated in **Figure 9**. The movement of the international oil price, taxes and levies, and the instability of the exchange rate affect the domestic price of diesel. From 2001 to 2021, the domestic prices of 0.05 % sulphur diesel in Gauteng, 0.05 % sulphur diesel at the coast, and crude oil (\$/barrel) increased by 357.8%, 354.9% and 181.8%, respectively. In 2001, the average diesel price was recorded at the lowest, R3.19 at the coast and R3.31 in Gauteng. In addition, the average price of crude oil was recorded at its lowest, R24.89 in 2002. The average diesel price peaked

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in 2013 and 2014, when the average diesel price amounted to R11.86/*l* and R12.55/*l*, respectively, and again in 2018, 2019 and 2021. In 2021, the diesel price was recorded at R15.13 in Gauteng province, and at R14.53 at the coast.

Price trends for the items depicted between 2020 and 2021 were as follows: 0.05. % sulphur diesel at the coast and 0.05 % sulphur diesel in Gauteng increased by 17.7% (\mathbb{R}/ℓ) and 16.8% (\mathbb{R}/ℓ), respectively, while the crude oil price increased by 63.1% (\$/barrel), as shown in **Figure 9**.



Figure 9: Diesel prices in Gauteng and at the coast (2001–2021) Source: SAPIA (2022) and Grain SA (2022)

2.3 Energy prices

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 the rising electricity demand in South Africa (Eskom, 2022). **Figure 10** illustrates the average price (c/kWh) of electricity that Eskom transmits and distributes to industrial, mining, commercial, agricultural and residential customers and redistributors, as compared with 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 average prices of 38.70 c/kWh and 63.98 c/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 187.91 c/kWh in 2020/21.



Figure 10: Average price (c/kWh) sold to different sectors Source: Eskom (2022)

Figure 11 depicts the trend between the percentage change in the average Eskom price and the annual inflation rate between 2007 and 2021. 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 with 2010. The Eskom tariff increased from 8.8% in 2020 to 15.1% in 2021.



Figure 11: Eskom tariff changes Source: NERSA (2022) & Stats SA (2022)

2.4 Labour costs

Promoting and creating quality jobs is regarded as one of the key priorities for the South African economy. **Figure 12** 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 2021, the minimum wage was reported to be R3 904.20/month.



Figure 12: Minimum wages (2008–2021) Source: DoL (2022)

2.5 Conclusion

There are many factors outside of farmers' control that can affect profitability, such as fertilisers, labour costs, energy costs and fuel costs. Hence, agricultural production is characterised by uncertainty and risk. One area that has impacted upon producers in 2021 has been the continued rise in input prices. Initially fuelled by supply-chain disruptions from the sudden impacts of COVID-19, agricultural producers have been facing increased production costs on key inputs since 2020. These agricultural input price increases are critical to food production because they result in rising food prices and affect the livelihoods of the majority of South Africans. Rising input costs may squeeze producers' margins. This is particularly troubling for many smallholder farmers, who already struggle with high input costs. In addition, rising input prices raise the risk of further food shortages. As input prices rise, some farmers will be unable to buy them and will choose not to plant their desirable land, because they cannot afford inputs. This, in turn, reduces food availability, putting further upward pressure on prices and farmers' incomes.

The recent sharp increases in farm inputs have been a cause for concern. Agricultural Research and Development (R&D) investments will play a key role in improving productivity in agricultural production, food processing, and delivery to consumers. This requires public- and private-sector investments, as well as effective regulation of new technologies such as biotechnology and digital technologies. Innovation is only effective if new technologies are widely adopted, which requires education, training, and advisory systems. Noteworthy, there may be multiple barriers to obtaining and adopting new technologies by farmers because of their lack of access to credit, lack of reliable information, among other things.

3 MARKET TRENDS IN LIVESTOCK, FIELD CROPS & HORTICULTURE

3.1 Market trends in the livestock sector (poultry, beef, lamb, pork and dairy)

3.1.1 Global meat price trends

3.1.1.1 Introduction

According to the Food and Agriculture Organization (FAO), the global meat price index dropped by about 5% between 2020 and 2021. Each of a variety of factors played an important part. One of the main causes of the reported fall in the global meat prices was the COVID-19 epidemic, which contributed to a protracted supply-chain disruption and global economic issues that had an impact on consumer purchasing. Following these developments, the demand for meat decreased generally, as already noted. According to OECD-FAO data, from mid-2020 to mid-2021, the demand for poultry fell by 10%, followed by that for sheep, by 6%, and for pigs, by 4%. (OECD-FAO, 2021). The demand for beef experienced a 1% fall in volume for the same period.

The recovery in meat consumption in China, which fell in per capita terms by over 11% in 2020 from its historical peak in 2018, is projected to return to its longer-term trend by 2023, as the impact on domestic pig meat prices of African Swine Fever (ASF) abates. Long-term changes in meat consumption are continuing to favour poultry (OECD-FAO, 2022). This tendency can be attributed to a greater demand for white meats in high-income countries because they are easier to cook and are seen as healthier eating options. Additionally contributing to the growing tendency in low- and middle-income nations is the cheaper pricing of poultry, when compared with other meat types. By 2031, it is anticipated that the availability of protein in meat from chicken, pigs, beef, and sheep would increase by 16%, 17%, 8%, and 16%, respectively (OECD-FAO, 2022).

The demand for meat will rise as a result of high per-capita income development in Asian nations and rapid population growth in Sub-Saharan Africa. A move toward diets with higher amounts of animal products has resulted in continuously rising import demand in middle- and high-income Asian countries in recent years. The pressure on the world's pig markets, as they adjust to a post-ASF environment, will come from the anticipated drop in China's imports of pork. Although it will develop more slowly than in the previous ten years, the trade in other meats will nevertheless increase.

3.1.1.2 International poultry prices

Figure 13 shows the FAO Global Poultry Meat Price Index, the export price of chicken exported from Brazil, and the export price of broiler cuts and edible offal exported from the United States from 2012 to April 2022, on annual average. Despite significantly increasing in more recent months, the global Poultry Meat Price Index decreased by 3.1% between April 2022 and 2012, according to data from the FAO (2022). Brazil's poultry prices decreased by 5.4% during the same period, while US prices increased by 2.7%. On an annual basis, between 2020 and 2021, the global poultry price index escalated by 16.6%, while prices from the USA and Brazil increased by 20.9% and 15.5%, respectively.



Figure 13: International poultry price and index trends Source: FAO (2022)

3.1.1.3 International beef prices

International bovine (beef) price patterns from 2012 to April 2022 are shown in **Figure 14**. From 2020, the leading beef exporters' prices, globally, drove a significant increase in the global beef index. Based on the FAO data, between 2012 and April of 2022, the annual global beef meat price index escalated by 46.7%. During the same period, export prices from the USA, Australia and Brazil had increased by 62.4%, 53.1% and 20.0%, respectively.

On a year-on-year basis, from the global leading beef exporters, export prices from the United States, Australia and Brazil increased by 20.5%, 18.6% and 16.0%, respectively, from 2020 to 2021. For the same period, the global beef price index increased by 18.7%.



Figure 14: International beef price and index trends Source: FAO (2022)

3.1.1.4 International sheep (ovine) prices

Global lamb prices from New Zealand experienced a stable trend in 2018, then a dip in 2019, before recovering in 2021 and then remaining at their highest level since 2012. International pricing from 2012 through to April 2022 is shown in **Figure 15**. Based on the data from the FAO, the international lamb price index increased by 24.0% between 2012 and 2022, and by 19.8% between 2020 and 2021. However, when comparing 2021 with April 2022, the index was 1.8% lower. Australian and New Zealand lamb prices have been driving the surge, but from 2020 to 2021, New Zealand prices have increased by 23.7%, compared with Australia's 16.3%. However, from the start of 2022 to April, the global lamb index has declined, possibly driven by prices in Australia, which have declined by 3.4% during that time.



Figure 15: Annual averages for international Ovine (lamb) Price and Index trends Source: FAO (2022)

3.1.1.5 International pork prices

Owing to sustained low purchases, primarily by China, which had a negative impact on global pork pricing, several major importers appeared to have increased their imports of pork meat, giving the impression that prices had marginally recovered. However, the overall picture shows that prices are significantly lower now, after modestly rising, on average, during 2021. The global pork price index and export prices from 2012 to April 2022 are shown in **Figure 16**. Brazil, Germany and the United States saw the largest declines in the international pork price index over this time, at 19.2%, 18.2% and 10.7%, respectively. For the same period, the global pork price index declined by 14.2%.

On a year-on-year basis, between 2020 and 2021, the international pork price index slightly increased by 0.2%, while prices from the USA and Brazil increased by 7.3% and 2.6%, respectively. Germany saw lower export prices, falling by 9.8%, which can be linked to the ban in exports following a reasonably lengthy period of African Swine Fever (ASF) disease outbreaks.



Figure 16: Annual averages for international Pork Price and Index trends Source: FAO (2022)

3.1.2 Domestic meat production and consumption trends

3.1.2.1 Introduction

This sub-section gives an overview of South Africa's trends in meat production and consumption, per species, as well as the retail and producer prices of certain meat products. Livestock production in South Africa contributes substantially to food security, with about 70% of agricultural land in South Africa being utilised for livestock and game species production. South Africa produces about 21.4% of the meat consumed on the continent of Africa, although it is only a modest producer of meat for the global market, making up just 1% of the total global market (AgriSETA, 2022). A significant portion of South Africa's total agricultural output comes from the meat and livestock sector. It is a significant employer and offers the population of the country a dependable source of protein.

The broader agricultural sector in South Africa is known for its dualistic setting, which cut across to almost all subsectors, including the meat industry. For instance, this dualism can be observed in the poultry, beef and pork industries, where the commercial sector often operates at a larger scale and has high levels of mechanisation and infrastructure, thanks to extremely intensive investments. Then, there is the smallholder sector, which is typically vulnerable to disease outbreaks, such as ASF in the case of the pork industry, because of poor infrastructure and minimal investments, which expose farmers' animals to the disease.

3.1.2.2 Poultry production and consumption

AgriSETA (2022) states that the poultry industry in South Africa is the largest sector of the agricultural industry, accounting for more than 20% of its Gross Domestic Product (GDP) share and 43% of animal products. Through its value chain, it employs approximately 110 000 people directly and indirectly, offers a solid foundation for rural development, and serves as the primary source of protein for human consumption. Like the rest of the world, South Africa is seeing an increase in poultry consumption. According to a recent assessment by the United States Department of Agriculture (USDA, 2022), increased demand will cause Sub-Saharan Africa (SSA) to import the most poultry, worldwide. Brazil, the USA and the European Union (EU) are said to have increased their chicken production as a result. Another country under pressure to increase production is South Africa, although the local industry's

production development is being restricted by high feed costs, issues with electricity generation, and disease outbreaks.

Based on data from the South African Poultry Association (SAPA), between 2020 and 2021, domestic poultry production increased by 1.2%, year-on-year, while poultry consumption declined by 0.9% (see **Figure 17**). It is worthwhile to note that both these figures were experienced in the previous years, and that the circumstances for 2022 changed. Although production was reported by SAPA to be improving early in 2022, that production was possibly held back by production issues, which are mentioned above. On the other hand, poultry consumption is likely to have picked up owing to economic challenges that are pushing consumers towards the most affordable animal protein source.



Figure 17: Poultry production and consumption Source: SAPA (2022)

3.1.2.3 Beef production and consumption

Because of a poorer feed conversion to meat, beef production takes longer for beef to be ready for market than chicken production does for chicken products. Additionally, producers cannot raise beef cattle on small areas of land, since cattle require larger areas. For farmers in developing countries and growing markets, such as South Africa, these are some of the drawbacks that make beef production more difficult and expensive than poultry and pork production. However, beef output has been positive ever since South Africa became a net exporter, supporting both domestic consumption and exports. The beef sector in South Africa experienced its fair share of ups and downs in 2021, battling the fall-out from COVID-19, such as severe supply-chain backlogs, greater pressure on pricing (pushing it upwards), and ongoing disease management burdens, like Foot-and-Mouth Disease outbreaks (Senwes, 2022). **Figure 18** shows the marketing seasons from 2013/2014 through to 2020/21. Beef production expanded more quickly throughout this time than the consumer demand did. About 982 600 tons of beef were produced in South Africa during the 2013/14 season, while 981 100 tons were consumed, leaving a little amount for exports. However, since then, 1.06 million tons of beef have been produced, an 8.2% rise, while 1.04 million tons of beef have been consumed, a 6.1% increase.



Figure 18: Beef production and consumption Data source: DALRRD Abstract (2022)

3.1.2.4 Sheep, lamb and goat production and consumption

The sheep, lamb and goat meat production and consumption figures, from the 2013/2014 marketing season to the 2020/21 marketing season, are shown in **Figure 19**. Production and consumption both fell throughout the depicted period. According to the Department of Agriculture, Land Reform and Rural Development (DALRRD) data (2022), between the marketing seasons of 2013/14 and 2020/21, the production of sheep, lamb and goat meat decreased by 3.7%, from 166 300 tons to 160 200 tons. On the other hand, consumption fell from 188 000 tons in the 2013/14 season to 166 000 tons in the 2020/21 season, a decrease of 11.7%. While both production and consumption have decreased, consumption remains higher than production, meaning that South Africa produce less than it consumes.



Figure 19: Sheep, lamb and goat production and consumption Data source: DALRRD Abstract (2022)

3.1.2.5 Pork production and consumption

According to the latest data from Statistics SA, the Limpopo and North West provinces were the largest producers of pork, accounting for 24% and 21%, respectively. The Western Cape and Gauteng followed with a share of 11% each, while KwaZulu-Natal accounted for 10%. The province with lowest pig production is the Northern Cape, with a 1% share (Stats SA, 2022).

Both pork production and consumption have significantly increased over the years among the main meats in South Africa. However, profit margins continue to fluctuate owing to a number of reasons,

including rising feed prices and recent outbreaks of ASF, domestically and globally. Trends in pork production and consumption from the 2013/2014 marketing season through to the 2020/21 marketing season are shown in **Figure 20**. Production increased over this time, rising from 224 200 tons for the 20213/14 season to 310 700 tons for the 2020/21 season, a 38.6% increase. Despite a considerable increase in production, South Africa continues to import pork on a net basis. However, there was a 36.0% growth in pork consumption, from 236 000 tons in the 2013/14 season to 321 000 tons in the 2020/21 season.



Figure 20: Pork production and consumption Source: DALRRD (2022)

3.1.3 Domestic price trends in the meat sector

3.1.3.1 Domestic poultry prices

Figure 21 shows the producer and retail pricing for various poultry products from January 2017 to April 2022. The monthly average producer prices for chicken in frozen portions, fresh portions and Individual Quick Frozen (IQF) chicken portions increased during this time by 27.4%, 23.5% and 22.2%, respectively. Producer prices for chicken fresh portions per kg increased from R25.30 in 2017 to R31.20 in April 2022, while producer prices for chicken frozen and chicken-IQF portions per kg increased from R23.70 to R30.21 and R23.20 to R28.41 for the same period, respectively. Chicken fresh portions per kg producer prices increased by 14.6%, year-on-year, in April 2022 compared with April 2021, while chicken frozen and chicken-IQF prices increased by 9.9% and 8.1%, respectively.

Between 2017 and April 2022, the monthly average retail prices of IQF chicken portions (2kg), fresh whole chicken (per kg) and fresh chicken portions (per kg), escalated by 39.4%, 33.9% and 22.4%, respectively. For the same period, the IQF chicken portions, fresh chicken portions and fresh whole chickens sold for R61.47/kg, R56.04/kg and R43.69/kg, respectively, in January 2017, and then R85.68, R68.60 and R58.50, respectively, in April 2022. On a year-on-year basis, retail prices for fresh whole chickens and fresh chicken portions were down by 7.0% and 2.3%, respectively, in April 2022, while the IQF prices increased by 19.8%. Feed costs, rising poultry consumption globally, and AI are three major causes contributing to the increase in poultry prices.



Figure 21: Poultry producer and retail price trends Data Source: AMT and Stats SA (2022)

3.1.3.2 Domestic beef prices

Figure 22 shows the producer and retail prices for the various grades of beef from November 2018 to April 2022. Based on the AMT data, the monthly average producer prices for beef classes A2/A3, B2/B3 and C2/C3 escalated by 34.9%, 33.1% and 30.8%, respectively, during this period. The producer price for A2/A3 increased from R45.36 in 2018 to R61.16 in April 2022, whereas the producer prices for B2/B3 and C2/C3 increased from R40.61 in 2018 to R54.04 and from R35.86 in 2018 to R46.91 in April 2022, respectively. Annually, in April 2022, A2/A3 producer prices increased by 17.3%, while B2/B3 and C2/C3 producer prices had increased by 13.9% and 9.8%, respectively.

The retail price of beef rump and offal decreased after March 2022, as can be seen in **Figure 22**, although rump continues to be the priciest beef product, and offal the least expensive. The average monthly retail prices for beef offal, beef stew and brisket escalated by 38.8%, 32.1% and 22.9%, respectively, between November 2018 and April 2022. After the COVID-19 lockdown was put in place in March and April 2020, meat prices generally climbed and have continued to fluctuate. As a result, consumers have been compelled to switch to less expensive beef items, such as beef offal, stew and brisket, in order to meet their spending needs. Prices for these products have consequently increased, noticeably. Beef offal, stew and brisket had increases of 19.3%, 16.4% and 11.6%, respectively, year-on-year, in April 2022.



Figure 22: Retail and producer price trends for different beef cuts Source: AMT and Stats SA (2022)

3.1.3.3 Domestic lamb prices

Figure 23 shows the monthly average producer and retail prices for the various lamb grades and selected cuts, from November 2018 through to April 2022. Lamb class A2/A3 producer prices escalated by 25.0% between 2018 and April 2022, while classes B2/B3 and C2/C3 also increased by 17.5% and 7.5%, respectively, for the same period. When comparing April 2022 with the same period the previous year, class C2/C3 saw an average increase of 18.4% (from R49.45 in April 2021 to R58.55 in April 2022), followed by class B2/B3 at 11.5% (from R66.94 in April 2021 to R74.66 in April 2022). Class A2/A3 lamb producer prices for the same period showed the least growth, at 7.5%, from R84.43 to R90.77.

From November 2018 to March 2020, when the COVID-19 lockdown began, the retail price of lamb cuts exhibited a consistent trend. For the lamb chops shown in **Figure 23**, prices are still high, as was seen with beef pricing. Figure 11 displays the pricing patterns for retail lamb cuts from November 2018 to April 2022. Prices for sheep offal climbed by 27.3% over this time, on average, similar to increases seen for beef offal price trends recently. This was followed by increases for mutton stew (20.7%), neck (17.5%), rib chops (16.0%) and loin chips, which showed the lowest increases of 9.7%. In April 2022, mutton offal and neck prices increased by 30.0% and 20.3%, respectively, when compared with the same period in 2021, while stew, rib chops and loin chops declined by 3.7%, 3.6% and 0.8%, respectively.



Figure 23: Lamb retail and producer price trends Source: AMT and Stats SA (2022)

3.1.3.4 Domestic pork prices

The retail and producer price patterns for pork from November 2018 to April 2022 are shown in **Figure 24**. Based on data from the Agricultural Markets Trends (AMT), throughout this time, the producer prices for porkers (a 20 to 55kg pig) and baconers (a 66 to 80kg pig) declined by 11.1% (from R30.06/kg in 2018 to R26.73/kg in April 2022) and 8.6% (from R28.20/kg in 2018 to R25.77/kg in April 2022), respectively (2022). Annually, producer prices for porkers declined by 12.3% from R30.47 in April 2021 to R26.73, while baconer producer prices declined by 11.3% from R29.05 to R25.77 for the same period.

Retail pork chop prices increased by 6.0% between November 2018 and April 2022, from R78.34/kg to R83.02 in April 2022, whereas pork rib prices increased by 21.1% within the same time period, from R76.65/kg in 2018 to R92.84 in April 2022. On annual comparison, the retail price of pork chops decreased by 24.0% from R109.19/kg in April 2021 to R83.02 in April 2022, while the price of pork ribs increased by 2.0%, from R91.06/kg in April of the previous year to R92.84 in April 2022.



Figure 24: Pork retail and producer price trends Source: AMT and Stats SA (2022)

3.1.4 Meat and dairy trade

Figure 25 illustrates the performance (exports and imports) of South Africa's pork in the international markets between 2012 and 2021. It is evident that South Africa is a net importer of pork owing to a lower production volume than what the country consumes (DALRRD, 2022). In 2021, South Africa exported R396.49 million value of pork, which is about a 12% increase, as compared with the 2020 exported values. According to 2021 figures, Namibia constituted the largest share of exports, at about 29%, followed by Mozambique (27%), Zimbabwe (10.8%), Lesotho (8.9%) and Botswana (6.8%). On the other hand, imports of pork continued to increase, with about a 48% growth in value being realised between 2020 and 2021. Brazil accounted for 31.7%, followed by the Netherlands (22.6%), the United Kingdom (14.4%), Denmark (10.4%) and Spain (7.6%).



Figure 25: South Africa's imports and exports of pork Source: Trade Map (2022)

Figure 26 indicates that South Africa does not produce sufficient poultry products to meet demand, and accordingly, South Africa imports poultry products from other countries. The industry suffers numerous challenges, which are exacerbated by increased competition from imports (Trade Map, 2022). Poultry imports into South Africa declined from 2018 to 2021, where a 4% growth in value was realised, as compared with 2020 figures. More than 60% of the poultry imported originated from Brazil, followed by the USA (17%), Spain (13.8%), Argentina (5%) and Canada (2.4%). During the last year under review, SAPA attempted to control the rate at which imports were coming into the country through the implementation of anti-dumping duties, but this did not yield positive results. On the export side, South Africa's exports continued to be insufficient in reaching international markets, although trends show that Africa is a principal market for the industry. In 2021, approximately R1 135 billion in value of poultry was exported, which is a decline of 6% as compared with the 2020 exported value. Lesotho is a principal market for South Africa's poultry exports, constituting about 50.7% in 2021, followed by Namibia (19.4%), Mozambique (15%), Botswana (4.6%) and Eswatini (4.4%).



Figure 26: South Africa's imports and exports of poultry Source: Trade Map (2022)

The dairy cow industry in South Africa is one of the largest agricultural industries in the country, employing more than 50 000 people. Recently, the number of milk producers in South Africa declined by 46% from January 2015 to January 2022, however, milk production has continued to increase by 7.2%. Therefore, this indicates increased output per cow and significantly greater numbers of cows per producer (WCDoA, 2022).

Figure 27 highlights South Africa's export and import performance regarding dairy products between 2012 and 2021. It is noticeable that South Africa exports more dairy products than it does imports (resulting in a positive trade balance). In 2021, South Africa exported R3.8 billion in value of dairy products to the international markets (an increase of 7% as compared with the 2020-exported value). Major dairy products were destined for Botswana (21.8%), followed by Mozambique (20%), Namibia (15.8%), Eswatini (11.1%), and Lesotho (7.4%). It is evident that African countries are critical for South Africa's dairy products. On the other hand, South Africa experienced a decline in dairy products imports by 4%, from R3.1 billion in 2020 to R2.9 billion in 2021. Both France and New Zealand were the principal exporters of dairy products to South Africa, with each of them having exported a 16.5% share in value of dairy products. Germany was ranked third, constituting a 9.1% share value, followed by Poland (7.9%) and the Netherlands (7.2%).



Figure 27: South Africa's imports and exports of dairy

Source: Trade Map (2022)

South Africa currently exports 4% of its beef production, which clearly indicates that there is an opportunity for the country to grow its beef exports. The local beef producers were hoping to unlock increased trade volumes for South Africa to key markets like the United Arab Emirates (UAE) in 2022. **Figure 28** illustrates South Africa's beef export and import performances in the international markets. It is obvious that South Africa had been exporting larger values of beef than it imported in the period under review, with the exception of 2012 and 2013. In 2021, South Africa exported R2.4 billion in value of beef to the global markets, with 23.4% of the total beef being destined for markets in China. Kuwait was ranked as the second largest market destination, constituting about 16.3%, followed by the UAE (12.3%), Jordan (10.6%) and Mozambique (8%). South Africa's total beef imports increased by 61%, from R10.6 billion in 2020 to R170.9 billion in 2021. Botswana was ranked as the leading supplier of beef to South Africa, constituting about a 34.6% share value, followed by Namibia (25.5%), Uruguay (14.7%), Australia (12%) and the United Kingdom (5.2%).



Figure 28: South Africa's imports and exports of beef Source: Trade Map (2022)

Sheep and lamb are slaughtered in abattoirs that are distributed all over South Africa. Slaughtering that occurs outside the abattoirs is not easy to record. Most of the mutton produced in South Africa is consumed locally (DALRRD, 2020). Figure 29 below shows that South Africa had been importing more lamb from 2012 until 2020n when a positive trade balance was realised. According to the latest data, South Africa exported R239.4 billion in value of lamb in 2021, which was an improvement of 63%, as compared with the 2020-exported value. Qatar and the UAE continue to remain critical markets for South Africa's lamb, constituting 33.8% and 32.2%, respectively. The import trends show a decrease over the period under review, although an 18% growth in value was experienced between 2020 and 2021. Australia is the world's largest exporter of lamb, and it constitutes about a 90% share in the value of total lamb imported to South Africa. Namibia and New Zealand exported the remaining shares of 10%, collectively.



Figure 29: South Africa's imports and exports of lamb Source: Trade Map (2022)

3.1.5 Conclusion

The drought experienced in the major grain-producing regions, from the second half of 2021, and feed prices are among the issues underpinning the rise in the global meat prices, in general. Almost all major grains and oilseeds traded globally were negatively affected, thus creating a knock-on effect on prices, notably of maize and soybeans. This was further exacerbated by export limitations placed on grains and oilseeds, the conflict in Ukraine, supply chain issues experienced amid COVID-19 related problems, and sporadic crude oil prices. Disease outbreaks, such as the Highly Pathogenic Avian Influenza (HPAI) virus in poultry, African Swine Fever (ASF) in pork (pigs), Foot and Mouth Disease (FMD) for beef, have all weighed on the global meat industries, with South Africa included. Consumer preferences, based on various circumstances, and factors such as income and prices determine the "what" that consumers will consume, and in what quantities.

Poultry prices have been negatively impacted on by the ongoing HPAI virus outbreaks, worldwide supply chain issues, and high shipping costs, with the conflict compounding an already dire scenario. A rise in poultry demand is anticipated, according to the United States Department of Agriculture (USDA). Considering the interaction of these variables, it is expected that chicken prices may remain high, unless the global market experiences some boosts in production in the upcoming months, something that applies to South Africa as well because of rising demand.

The global pork sector has been heavily impacted on by the ASF, which has forced the suspension of imports from various countries that previously imported pork, including South Africa. Germany, a major

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exporter of pork, has felt the effects of this particularly strongly because the AFS epidemic made it illegal to export pork internationally. Due to the excess on the German market, pork prices had plummeted, which had a detrimental effect on farmers' profits. Exports from Brazil and the USA suffered as a result of China's domestic supply recovery, particularly because the USA is subject to tariff rates in China. These outbreaks and the continued decline in demand, particularly from China, a significant global consumer of pork, may have caused prices to drop. In reaction to the aforementioned considerations, some of which are specific to South Africa, pork prices have remained lower thereof.

Broadly speaking, South Africa continues to be a net importer of pork and poultry, which is ascribed to strong local demand and limited supply. Profit margins are still uncertain because, although production is still going well, exports are suffering because of the ASF, which restricts the country's ability to export. This could result in the supply being substantially higher than usual, and the profit margins for pork being lower. Pork imports averaged 25 000 tons from 2017 to 2021, compared with 515 000 tons, on average, for poultry for the same period. While the production of chicken and, to a considerable extent, of pork has increased over time, there is still room for growth, which is now being met by imports to support domestic consumption.

South Africa is a net exporter of beef, with end-of-2021 exports being valued at R2.4 billion. At least 23.4% of all beef exported in 2021 was destined for China. With a market share of almost 16.3%, Kuwait was listed as the second-largest market destination, followed by the UAE (12.3%), Jordan (10.6%), and Mozambique (8%). Between 2012 and 2021, imports rose as well, with Botswana accounting for around 34.6% of the total value of imports, followed by Namibia (25.5%), Uruguay (14.7%), Australia (12%) and the United Kingdom (5.2%).

From 2012 until 2020, when a positive trade balance was reached, South Africa imported more lamb than it exported. The most recent data indicates that South Africa exported lamb valued at nearly R239.4 billion in 2021, being an increase of 63% over the value shipped in 2020. With respective market shares of 33.8% and 32.2%, Qatar and the United Arab Emirates continue to be important markets for lamb from South Africa. About 90% of the total value of lamb imported by South Africa was from Australia. Imports from Namibia and New Zealand account for the final 10% of total imports.

Despite its few obstacles, the domestic dairy business nevertheless performs effectively in several ways. South Africa is a net exporter of dairy goods, with R3.8 billion in exports. On a year-over-year basis, this represented an increase of 7%. African countries continue to be a vital market for dairy products from South Africa. With 21.8% of the dairy export market of South Africa, Botswana is the largest market, followed by Mozambique (20%), Namibia (15.8%), Eswatini (11.1%) and Lesotho (7.4%).

Fluctuation in demand and supply of almost all meat products remains a fundamental factor that affects prices. The need to increase output will remain in the short to medium terms across the world in order to meet the rising demand, otherwise, South Africa's existing meat imports are likely to increase, which could have an impact on the competitiveness of the local industries.

For many South Africans living in rural and peri-urban areas, the livestock industry is a substantial source of income and a means of providing a living. However, ongoing outbreaks of foot-and-mouth disease, African swine fever, Avian Influenza, and other diseases, as well as the livestock industry's inability to export red meat products to high-value markets in the European Union (EU), the United Kingdom (UK) and the United States of America (USA), have a negative economic impact on the livestock industry at large. This reality results in significant financial losses for the industry and restrains the subsector's expansion, first for the players who are commercial and export-focused, and then for the small livestock keepers who may otherwise profit from the uptick in demand through more exports.

3.2 Market trends in the field crop sector (maize, wheat, sunflower seed and soybeans)

This section provides an overview of local production, consumption, and price trends for maize, wheat, sunflower seed and soybeans, as well as trade data for grains and oilseeds. South Africa has benefited from favourable weather, which has aided the country's high levels of production of maize, wheat and soybeans. The maize crop produced in 2021 was the second largest, at 16 951 440 tons, and only 3% less than the record of 17 551 000 tons produced in 2017. In contrast to the 2 130 000 tons produced in 2008, the wheat crop surpassed the 2-million mark in 2020, reaching 2 120 000 tons. It is encouraging to see that grain production is rising, particularly in light of the growing population and the importance placed on ensuring food security.

In addition to having an excellent production season, South Africa had a great year in terms of exports in 2021, exporting 3.2 million tons of maize, worth R11.15 billion.

3.2.1 Maize trends

Maize is South Africa's most important and commonly grown crop, consisting primarily of white maize for human consumption and yellow maize for animal consumption. The Free State, North West and Mpumalanga Provinces produce nearly all the country's maize, accounting for about 80% of total production. Figure 30 illustrates the production and area planted for maize. During the season under review, total maize production reached 16 951 440 tons, up 7% from the 2019/20 crop (15 843 545 tons), and favourable weather conditions, improved agronomical practices and higher yielding cultivars have all contributed to this growth.

Furthermore, maize production in 2020/21 was the second highest on record, only 3% lower than the previous high of 17 551 000 tons harvested in 2016/17. The amount of maize cultivated has fluctuated over time, which could be attributed to a shift to more profitable crops. Unlike the fluctuations seen in previous drought-stricken years, the past two seasons have benefited substantially from good weather conditions. Please note that the 2020/21 production season coincides with 2021/22 marketing season. Maize has a marketing year that runs from May 1 to April 30.



Figure 30: Maize production and area planted Source: SAGIS (2022)

Figure 31 reflects the imports and exports for maize. South Africa is a net exporter of maize; nevertheless, there are some years when the country is compelled to import maize because of unfavourable 26

weather conditions that result in a small crop, making it impossible for the country to meet the total demand requirements. During the season under review, South Africa imported 7 583 tons of white maize from Zambia, and all the imports were non-GMO. Furthermore, a sizable crop and market availability contributed to total maize exports (whole maize and products), reaching a record high of 4 135 211 tons in 2021/2022.



Figure 31: Maize Imports and Exports Source: SAGIS (2022)

A picture of the overall supply and demand for white maize is depicted in **Figure 32**. During the season under review, total white maize supplied was 8 057 886 tons, up by 4.75% from 2020/21, on the back of good yields attributable to favourable climatic weather conditions. Total white maize demand was 8 057 886 tons, up 4% from 2020/21, owing to white maize processed for human consumption, exports, and considerable increases in feed demand.



Figure 32: White maize total supply and demand Sources: SAGIS (2022)

White maize is mostly utilised for human consumption; however, when white maize trades at a lower price than yellow maize does, feed manufacturers will incorporate white maize in their feed rations. Approximately 80% of white maize production is processed in the form of maize meal. **Figure 33** depicts

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the composition of white maize consumption, exports, and population. Processed white maize for human consumption decreased from 5 073 886 tons to 4 697 765 tons in the 2021/22 season. The decrease in consumption is possibly attributable to the waning effects of the COVID-19 pandemic, affording consumers the opportunity to switch to other food products. The South African human population in 2021 was recorded at 60 143 000, an increase from 59 622 000 recorded in 2020. White maize processed for animal and industrial use increased by 81.5%, from 1 325 959 tons in 2020/21 to 2 407 049 tons, as a result of white maize trading at a discount to yellow maize. Total white maize exports for 2021/22 amounted to 924 435 tons, down by 29% from levels exported in 2020/21 (1 304 475 tons), owing to a rebound in production for traditional African markets. The 2021/22 white maize export destinations were Botswana, Italy, Namibia, Mozambique, Lesotho, Angola, Zimbabwe and Eswatini (previously called Swaziland).



Figure 33: White maize human consumption, animal consumption, exports, and population Sources: SAGIS (2022); Stats SA (2022)

The overall supply and demand for yellow maize is depicted in **Figure 34**. A total of 7 911 017 tons was supplied to the commercial market, while the yellow maize demand was 7 252 335 tons. When comparing 2021/22 with 2020/21, the overall yellow maize demand grew by 805 675 tons, which can be attributed to yellow maize being used for animal, industrial, and to a lesser extent, human consumption, as well as a considerable increase in export levels.





Yellow maize is mainly utilised in the animal feed industry, while an estimated 10% is used for human consumption. **Figure 35** shows that animal and industrial uses of yellow maize decreased to 3 490 822 tons in 2021/22, from 4 201 690 tons in 2020/21. Please keep in mind that price disparities between white and yellow maize accounted for the discrepancies in animal and industrial utilisation. Owing to a rebound in production and market availability, export levels increased from 1 563 315 tons in 2020/21 to 3 210 777 tons in 2021/22. The 2021/22 yellow maize export destinations were Japan, the Republic of Korea, Spain, Taiwan, Vietnam, Eswatini (Swaziland), Namibia, Mozambique, Italy, Angola, and Botswana.



Figure 35: Yellow maize consumption and exports Sources: SAGIS (2022)

Figure 36 illustrates the trends of the spot price for white maize in South Africa from May 2017 to 30 April 2022. The average spot price for white maize began to decrease around May and June 2017 owing to a favourable season. On average, the local price in 2020 was R3 041/ton, while in 2021 it increased to R3 277/ton.



Figure 36: South African Futures Exchange (SAFEX) white maize price Source: Grain SA (2022)

Figure 37 illustrates the trends of the South African spot price for yellow maize for the 2017/18 to 2021/22 marketing year, against import and export parity prices from the Gulf of Mexico to Randfontein.

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It is also notable that where yellow maize was imported from Argentina, the average price difference for the 2020/21 marketing season was R157, with a maximum of R511/ton. Hence, it is sometimes cheaper to import from the Gulf of Mexico than from Argentina.

The average spot price for yellow maize closely followed the trend for white maize, and began to decrease around June 2017 to export parity levels. The spot prices traded slightly above export levels, as depicted in **Figure 37** below, and eased lower towards the end of May 2021. The average spot price for 2021 was R3 430/ton, with the highest price on 28 December 2021 at R3 990/ton, and the lowest price on 10 September 2021 at R3 0978/ton.



Figure 37: Import parity, export parity and SAFEX yellow maize price Sources: Grain SA (2022)

3.2.2 Wheat trends

Figure 38 depicts the long-term trends in wheat production. Wheat is the second most significant crop in South Africa. The Western Cape Province is South Africa's leading wheat-producing province, with an average crop production of 1 711 282 tons over the last ten years. A total of 2 120 000 tons were produced during the 2020/21 production season, breaking the 2-million-ton barrier for the first time since 2008, with a total area planted of 509 800 hectares, compared with 748 000 hectares in 2008, which could be attributed to better-yielding cultivars and good agronomical practices. Wheat has a marketing year that extends from October 1 to September 30.



Figure 38: Wheat production and area planted

Sources: SAGIS (2022)

The vast majority of wheat produced in South Africa is for human use (bread, breakfast cereal, pasta, biscuits and so on) with only a small quantity utilised for animal feed. The graph only depicts the 2020/21 marketing year because, as of the time of writing, the 2021/22 marketing year is still underway. The average total wheat demand over the last ten years was 3 390 911 tons. In the 2020/21 marketing season, South Africa's wheat consumption was 3 347 677 tons, a decrease compared with the 3 414 402 tons for the 2019/20 marketing season. This decrease was attributable to a substitution effect from bread to maize meal and other starches, following the financially challenging pandemic year.

Owing to insufficient supply to fulfil local demand, South Africa is a net importer of wheat. Despite the increase in production, South Africa will still need to import wheat to meet commercial demand, although the numbers imported will be lower than in previous years with lower harvests. On the back of a rebound in output, import volumes were 1 516 995 tons in 2020/21, down from 1 889 868 tons the previous year, as illustrated in **Figure 39**.



Figure 39: Wheat production, imports, and human consumption Source: SAGIS (2022)

Domestic wheat prices, import and export parity prices are depicted in **Figure 40**. The domestic wheat price trades very close to import parity, indicating that South Africa is a net importer of wheat, since local production does not meet local demand, as shown in the graph below. As a result, changes in exchange rates and global wheat prices arising because of economic structural changes/market forces will be reflected promptly in the domestic wheat price. During the 2020/21 marketing season (October 2020 to September 2021), the domestic wheat price averaged between R5 154/ton and R6 084/ton.



Figure 40: Import parity, export parity and SAFEX wheat price Source: Grain SA (2022)

3.2.3 Sunflower seed trends

Sunflower seed is a summer crop that is typically planted between October and mid-January. Sunflower is mostly grown in the Free State and North West Provinces of South Africa. Sunflower seed accounts for around 5% of South Africa's total grain production. Sunflower oil is one of the products made from sunflower seeds that have been processed. Sunflower oilcake is a by-product that is mostly used in the animal feed business. Production levels have varied over the years, owing to climatic conditions, as well as a shift to other crops. Sunflower seed producers continue to face a challenge from Sclerotinia sclerotiorum (a plant pathogenic fungus that forms white mould in favourable conditions). The 2020/21 sunflower production was 678 000 tons, down from 788 500 tons in 2019/20, and the area planted decreased from 500 300 ha to 477 800 ha, as illustrated in **Figure 41**. Sunflower seed has a marketing year that extends from March 1 to February 28/29.



Figure 41: Sunflower production and area planted Source: SAGIS (2022)

Figure 42 illustrates the commercial production and processed sunflower seed for consumption. Producer deliveries and processed sunflower seeds (for human and animal consumption, and crushed for oil and oilcake) have been fluctuating over the years, especially during drought-stricken years. During the season under review, processed sunflower seeds amounted to 724 949 tons, a decrease of 15.8% from the 861 295 tons the previous year, on the back of a 14% decrease in production from the previous year.



Figure 42: Commercial production and processed for human & animal consumption, oil & oilcake

Sources: SAGIS (2022)

Figure 43 illustrates domestic SAFEX sunflower prices. The average domestic sunflower price increased by 32% from December 2020 (R8 616/ton) to December 2021 (R11 383/ton). This increase in the domestic price of sunflower seeds could be attributed to the increase in demand and a decline in local production. The retail price of sunflower oil (750ml) increased by 19% from December 2020 (R25.37/750 ml) to December 2021 (R30.22/750 ml) owing to tight supplies.



Figure 43: Domestic sunflower seed and retail price of sunflower oil (750 ml) Source: SAGIS (2022); Stats SA (2022)

3.2.4 Soybean trends

Soybean is also a summer crop, mainly produced in the Free State, Kwa-Zulu Natal and Mpumalanga provinces under 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 10% of the total summer grains produced domestically.

Domestic soybean production for 2020/21 reached a record high of 1 897 000 tons, on the back of favourable climatic weather conditions and prices, as indicated in **Figure 44**. The total area planted in 2020/21 (827 100 ha) increased by 17% from the area planted in 2019/20 (705 000 ha).



Figure 44: Soybean production and area planted Source: SAGIS (2022)

In the 2021/22 marketing year, domestic soybean demand was approximately 1 764 175 tons. About 167 480 tons were processed as feed and full-fat soya, a 15% decrease from the previous 2020/21 season. In 2021/22, soybean processed for oil/oilcake increased by 21.7% from 2020/21, on the back of a record crop (1 897 000 tons), as illustrated in **Figure 45**.



Figure 45: Total demand and soybean processed for animal feed (full-fat soya) and crushed for oil and oilcake

Source: SAGIS (2022) and own calculations

Figure 46 illustrates the domestic (SAFEX) import and export parity prices at Randfontein for soybeans. The average domestic price decreased by 8.9% from December 2020 (R8 501/ton) to December 2021 (R7 743/ton). The import parity price increased by 20% over the same period, while export parity increased by 22%.



Figure 46: Soybean SAFEX, import and export parity prices in SA Source: Grain SA (2022) and own calculations

3.2.5 Grain and oilseed trade trends

South Africa was a net exporter of field crops such as maize and sunflower seed oil in 2021. South Africa had a positive trade balance for maize, sunflower seed oil, maize seed for sowing, and soya bean seed for sowing in 2021. Table 2 depicts South Africa's exports, trade balance and annual growth of selected field crops for 2020 and 2021. The trade balance for maize was R11.14 billion in 2021, followed by sunflower seed oil worth R1.09 billion, while maize seed for sowing amounted to R756.17 million. The country's largest exports among these commodities were maize, followed by wheat and meslin, crude soya bean oil, sunflower/safflower oil, soya bean oilcake, maize seed for sowing, soya bean oil, etc. South Africa exported 3.2 million tons of maize in 2021, to the value of R11.15 billion. Wheat followed, with an exported 257 986 tons in 2021, worth a total amount of R1.36 billion, while crude soya bean oil was worth R1.18 billion (53 507 tons) and sunflower seed oil was worth R1.18 billion (47 621 tons). The largest export growth in value between 2020 and 2021 was noted to have exponentially increased for soya bean oilcake, with an over 141 444% increase in the period. The other commodities that experienced a positive growth in value were maize, at 36.4%, wheat (63.2%), and crude soya bean oil (79.1%), to mention a few. The growth was supported by the positive growth in production experienced in the 2020/21 season. South Africa mainly exported maize to Asian countries in 2021. The country exported 23.8% of its maize to Japan, while 12.4% went to Chinese Taipei and 12% to the Republic of Korea. Wheat, on the other hand, was exported to other African countries, namely Zimbabwe (18.3%), Botswana (17.8%) and others (44.9%). Crude soya bean oil went to Zimbabwe (59.4%), Zambia (25.7%), Eswatini (9.4%), and others (5.5%). Generally, the largest market for South Africa's field crops comprises the African continent.

Product label	Export value	Export quantity	Export value	Export quantity	Trade balance 2021	Annual growth in value 2020 to 2021	Annual growth in quan- tity 2020 to 2021
	R' Bil- lion	Tons	R' Bil- lion	Tons	R' Bil- lion % p.a.		% n.a.
	2020	2020	2021	2021			•
Maize (excluding seed for sowing)	8.19	2 375 055	11.17	3 222 298	11.15	36.4	35.7
Wheat and meslin (ex- cluding seed for sowing, and durum wheat)	0.83	176 166	1.36	257 986	-5.48	63.2	46.4
Crude soya-bean oil, whether or not degummed	0.66	40 323	1.18	53 507	-0.06	79.1	32.7
Sunflower-seed or saf- flower oil and their frac- tions, whether or not re- fined, but not chemically 	1.00	53 508	1.18	47 621	1.09	18.0	-11.0
Oilcake and other solid residues, whether or not ground or in the form of pellets, resulting	0.00	109	1.04	137	-2.25	141 444.4	25.8
Maize seed for sowing	1.04	210 102	0.78	104 948	0.76	-25.6	-50.0
Soya-bean oil and its fractions, whether or not refined (excluding chemi- cally modified and	0.24	12 858	0.35	14 294	-1.16	45.0	11.2

Product label	Export value	Export quantity	Export value	Export quantity	Trade balance 2021	Annual growth in value 2020 to 2021	Annual growth in quan- tity 2020 to 2021
	R' Bil- lion	Tons	R' Bil- lion	Tons	R' Bil- lion	% p.a.	% p.a.
	2020	2020	2021	2021			
Soya beans, whether or not broken (excluding seed for sowing)	0.02	2 266	0.26	26 931	-0.20	1 257.5	1 088.5
Crude sunflower-seed or safflower oil	0.16	8 143	0.19	7 324	-1.32	18.9	-10.1
Soya bean seed, for sow- ing	0.04	913	0.13	12 392	0.13	233.2	1 257.3

Source: Trade Map (2022)

South Africa's imports of selected grains and oilseeds for 2020 and 2021 are represented in **Table 3**. It can be noted that South Africa mostly imported wheat and meslin, soya bean oilcake, soya bean oil, and soya beans, to mention a few. Imported wheat amounted to R6.84 billion in 2021, while soya bean oilcake amounted to R3.29 billion, soya bean oil (R1.5 billion) and soya beans (R460.1 million). The growth rate of imported wheat, in value, declined by 15.1% between 2020 and 2021 owing to lower imports, as the country had produced more than in the previous year. South Africa also recorded a negative growth for soya bean oil (4.2%), crude sunflower seed oil (4.2%), and crude soya bean oil (49.3%), to mention a few. South Africa mainly imported wheat from Australia in 2021 (30.2%), as well as Lithuania (23.5%), Latvia (16.1%), and others (30.2%). The country also imported soya bean oilcake from Argentina (95.4%), Zambia (3.7%) and Malawi (0.8%). Soya bean oil was imported from the Netherlands (61.2%), Argentina (31.2%), Uruguay (7.1%), and others (0.5%). Although South Africa's imports of soya bean oilcake and soya beans have halved over the last 10 years because of higher production, the country still imports some 400 000 tons of soya bean oilcake annually from the rest of the world, which could mean that greater capacity is still needed for the country to become fully self-sufficient.

Product label	Import value	Import quantity	Import value	Import quantity	Annual growth in value 2020 to 2021	Annual growth in quantity 2020 to 2021
	R' Bil- lion	Tons R' Bil- lion		Tons	% p.a.	% p.a.
	2020	2020	2021	2021	•	•
Wheat and meslin (exclud- ing seed for sowing, and du- rum wheat)	8.06	2 214 397	6.84	1 710 469	-15.1	-22.8
Oilcake and other solid resi- dues, whether or not ground or in the form of pellets, re- sulting	2.29	400 893	3.29	496 194	43.6	23.8

 Table 3: South African imports of grains and oilseeds

Product label	Import value	Import quantity	Import value	Import quantity	Annual growth in value 2020 to 2021	Annual growth in quantity 2020 to 2021
	R' Bil- lion	Tons	R' Bil- lion	Tons	% p.a.	% p.a.
	2020	2020	2021	2021		
Soya-bean oil and its frac- tions, whether or not refined (excluding chemically modi- fied and	1.58	124 581	1.51	81 620	-4.2	-34.5
Soya beans, whether or not broken (excluding seed for sowing)	0.33	61 599	0.46	67 671	38.7	9.9
Crude sunflower-seed or safflower oil	1.58	247 798	1.51	65 542	-4.2	-73.6
Crude soya-bean oil, whether or not degummed	2.46	25 979	1.25	17 055	-49.3	-34.4
Maize seed for sowing	0.39	3 781	0.44	11 584	11.4	206.4
Maize (excluding seed for sowing)	0.20	78 485	0.02	8 654	-89.2	-89.0
Sunflower-seed or safflower oil and their fractions, whether or not refined, but not chemically	0.21	14 869	0.09	4 272	-58.7	-71.3
Sunflower seeds, whether or not broken	0.01	737	0.03	2 113	180.9	186.7

Source: Trade Map, 2022

3.2.6 Conclusion

Increases in maize and wheat production are largely seen as positive in terms of preserving food security in South Africa, with food availability being a high priority because of the country's growing population. The production of maize reached its second-highest level ever in 2021, totalling 16 951 000 tons. Because of the rise in production, the total amount of maize exported also hit a record high of 4 135 211 tons. The 2020 wheat production season was remarkable, surpassing 2 million tons and resulting in low import volumes. Improved cultivars and good agronomical practices also played a role in the significant improvements in harvest.

Consumers were compelled to choose low-cost maize products owing to budget restrictions experienced during the financially difficult pandemic year (2020/21), resulting in record high levels of human consumption of both white and yellow maize. However, the waning effects of the COVID-19 pandemic may have then enabled consumers to choose other food products, as human consumption levels in 2021/22 eased up to 4 697 765 tons from the high levels recorded the previous year (5 073 886 tons).

Soybeans comprised another crop that recorded high production levels, reaching a record high 1 897 000 tons, which resulted in a 21.7% increase in soybeans crushed for oil and oilcake from the previous year.

However, the production of sunflower seeds fell short, falling by 14% from the 2020 crop (788 500 tons), which put pressure on the price of sunflower oil. The primary causes of the decline were difficulties experienced with sclerotinia and a transition to other crops.

3.3 Market trends in the horticultural sector (cabbage, onion, tomato, potato, apple, banana and orange)

3.3.1 Introduction

This section illustrates the market trends in the horticultural sector, that is, the volumes of selected vegetable produce, exports and what is sold in the fresh produce markets. Since South Africa is a key producer and net exporter of agricultural products, and with horticultural products being in the forefront of exports, it is important to monitor the trends of horticultural products. The demand for fruits and vegetables in the country is further driven by increasing income, rapid urbanisation, and a shift in consumers' diet preferences toward nutritional food. The South African agricultural market has matured considerably since the deregulation of the marketing of agricultural produce. Producers, traders, and other intermediaries interact freely in the marketing of their produce. The government of South Africa also gives the freedom to the farmers to choose the market at which they want to trade their produce, and hence, if the farmers do not get desirable prices for their production, they can then trade their commodities in the international market.

3.3.2 Production volumes and Fresh Produce Market (FPM) sales

Figure 47 depicts the volumes of selected fresh vegetables produced from 2000/01 to 2020/21. The total volumes produced of onions, potatoes and tomatoes increased by 128.5%, 46.5% and 14.3%, respectively. However, cabbage production decreased by 11.0% during the same period. The volumes produced of potatoes, onions, tomatoes and cabbages were 2 626 000 tons, 713 000 tons, 543 000 tons and 170 000 tons, respectively, in 2020/21.



Figure 47: Volume of selected vegetables produced Source: DALRRD (2022)

The volumes of production and export trends for selected fresh fruits from 2000/01 to 2020/21 are shown in **Figure 48**. From 2000/01 to 2020/21, the average volumes of apples and orange produced increased by 88.7% and 32.9%, respectively. On the other hand, banana production decreased by 9.5%, during the same period. The exports of oranges and apples were recorded at 1 168 875 tons and 584 644 tons, respectively.



Figure 48: Volumes of selected fruits produced and exported Source: DALRRD (2022)

Figure 49 depicts the volumes of selected fresh vegetables sold at the national fresh produce markets from April 2015 to April 2022. The total volumes of cabbage and onions sold increased by 13.8 % and 0.5%, respectively, while tomatoes and potatoes sold decreased by 12.1% and 3.2%, respectively, between 2020 and 2021.



Figure 49: Volume of selected vegetables sold at fresh produce markets Source: DALRRD (2022) and own calculations

Figure 50 depicts the volumes of selected fresh fruits sold at the national fresh produce markets from April 2015 to April 2022. The total volumes of oranges, bananas and apples sold increased by 14.0%, 10.1% and 3.1%, respectively, between 2020 and 2021. The total volumes of bananas, apples and oranges sold was recorded at 206 740 tons, 148 518 tons and 94 768 tons, respectively, in 2021.



Figure 50: Volume of selected fruits sold at fresh produce markets Source: DALRRD (2022) and own calculations

3.3.3 Trade performance of selected horticultural products

This subsection presents an analysis of the trade performance of South Africa's selected horticultural products, namely cabbages, onions, tomatoes, potatoes, apples, bananas and oranges. Data aggregated at Harmonized System-Level four (HS-4) was extracted from the Trade Map database of the International Trade Centre (ITC). **Figure 51** shows South Africa's trade performance in the selected horticultural products for the period from 2016 to 2021, measured in thousands of Rands. South Africa recorded positive trade performance in terms of the selected horticultural products, hence being a net exporter. In 2021, South Africa's total value of exports for the selected horticultural products was R23 801.2 million compared with the value of R1 018.2 million for the imported selected horticultural products. On the other hand, in 2016, the total value of exports and imports for these horticultural products were worth R18 482.9 million and R604.5 million, respectively.



Figure 51: South Africa's trade performance of selected horticultural products. Source: Trade Map (2022)

Figure 52 illustrates the percentage contributions of each horticultural product to the total value of imports of the selected commodities. Over the period in review (2016 – 2021), South Africa imported more 42

bananas than any of the selected horticultural products considered in this analysis. In 2021, bananas contributed about 75% to the total value of the selected horticultural imports, followed by onions, with a 15% contribution. Similarly, in 2016, bananas and onions contributed about 71% and 20% to the total value of the selected horticultural imports, respectively.



Figure 52: Percentage contribution to the total value of the selected horticultural imports Source: Trade Map (2022)

Figure 53 shows the percentage contributions of each horticultural product to the total value of horticultural product exports. In contrast to imports (**Figure 52**), oranges and apples were the leading horticultural products exported by South Africa, contributing about 50% and 43%, respectively, followed by potatoes, which contributed 3% in 2021. The same products (oranges, apples and potatoes) accounted for 48%, 44% and 4%, respectively, in 2016.



Figure 53: Percentage contributions to the total value of the selected horticultural exports Source: Trade Map (2022)

The results presented in **Table 4** show the value of each selected horticultural product imported by South Africa and the corresponding percentage growth rate from 2016 to 2021. For the selected horticultural products, South Africa recorded an overall import growth rate in value of 68% between 2016

and 2021. While the overall growth rate was positive during this period, imports of apples declined by 38%, followed by oranges (31%) and cabbages (13%). On the other hand, the values of imports of tomatoes, bananas, and onions increased by 919%, 78% and 27%, respectively. The observed increases in imports of these products might be attributable to the dwindling production of onions, which cannot meet the domestic demand. For tomatoes, there are very few producers who can sustainably provide supply to meet the high demand, coupled with the high variability in weather conditions to which tomatoes are very sensitive. On the contrary, potatoes recorded a 0% growth rate in the value of imports between 2016 and 2021.

HS Code	Product	Value of imports in R' Million						Growth Rate (%)
		2016	2017	2018	2019	2020	2021	2016-2021
0703	Onions	120.37	122.26	101.46	115.41	187.89	152.93	27%
0704	Cabbages	4.35	0.97	2.59	6.99	3.84	3.81	-13%
0702	Tomatoes	6.67	7.40	20.41	19.62	43.32	67.97	919%
0701	Potatoes	5.48	2.09	0.50	3.16	4.63	5.46	0%
0808	Apples	7.77	8.79	7.70	8.82	3.68	4.80	-38%
0803	Bananas	426.05	495.30	535.16	634.95	684.12	760.04	78%
080510	Oranges	33.78	22.51	16.80	18.13	20.12	23.20	-31%
TOTAL		604.5	659.3	684.6	807.1	947.6	1 018.2	68%

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Source: Trade Map (2022)

The results presented in **Table 5** show the value of each selected horticultural product exported by South Africa and the corresponding percentage growth rate from 2016 to 2021. In terms of exports, South Africa recorded a positive growth rate in value of about 29% between 2016 and 2021. Oranges exported recorded the highest increase in growth rate in value, by 35%, followed by bananas (34%), apples (26%), cabbages (16%), potatoes (8%), and tomatoes (4%). In contrast, the export value of onions declined by 3% within the same period.

Table F. Calastad basticultural .		here Constitution Admittana la admissione	
Table 5: Selected horticultural	products exported I	by South Africa betwee	en 2016 and 2021.

HS Code	Product	Value of exports in R' million						Growth Rate (%)
		2016	2017	2018	2019	2020	2021	2016-2021
0703	Onions	524.77	417.64	465.06	505.26	486.34	510.86	-3%
0704	Cabbages	80.12	85.92	83.57	101.32	91.03	93.29	16%
0702	Tomatoes	122.62	129.03	132.97	120.45	128.56	127.96	4%
0701	Potatoes	699.72	731.21	673.95	660.61	699.45	758.16	8%
0808	Apples	8 068.75	7 642.91	7 661.89	8 040.11	9 803.97	10 178.1	26%
0803	Bananas	147.96	150.08	171.75	180.39	176.88	198.52	34%
080510	Oranges	8 838.94	10 030.1	10 785.3	9 627.7	13 048	11 934.3	35%
TOTAL		18 482.9	19 186.9	19 974.5	19 235.8	24 434.2	23 801.2	29%

Source: Trade Map (2022)

3.3.4 Price trends – FPM prices and retail prices

The FPM price trends for selected fresh vegetables from April 2015 to April 2022 are shown in **Figure 54**. In nominal terms, the average market prices, per ton, of tomato and potatoes increased by 10.4% and 4.7%, respectively, while the prices of onions and cabbages sold decreased by 22.9% and 19.1%, respectively, between 2020 and 2021.



Figure 54: Market price trends for selected fresh vegetables Source: DALRRD (2022) and own calculations

The market price trends for selected fresh fruits from April 2015 to April 2022 are shown in **Figure 55**. The average market prices per ton of oranges and apples increased by 15.8% and 2.3%, respectively, while the average market price per ton of bananas decreased by 0.2% in 2021, as compared with 2020.



Figure 55: Market price trends for selected fresh fruits Source: DALRRD (2022) and own calculations

Figure 56 illustrates the nominal retail price trends for selected fresh vegetables from April 2015 to April 2022. The prices for fresh tomatoes and cabbages per kg increased by 13.5% and 8.13%, respectively,

while the prices for fresh onions and potatoes per kg decreased by 15.4% and 1.6%, respectively, between 2020 and 2021.



Figure 56: Retail price trends for selected fresh vegetables

Sources: Stats SA (2022) and own calculations

Figure 57 depicts the retail price trends for selected fruits from April 2015 to April 2022. The average prices, per kg, of oranges, bananas and apples were 42.2 %, 25.6% and 8.9 % lower, respectively, in 2021, as compared with 2020.



Figure 57: Retail price trends for selected fresh fruit Source: Stats SA (2022) and own calculations

3.4 Conclusion

South Africa's total value of exports for the selected horticultural products was R23 801.2 million compared with the value of R1 018.2 million for imports of the selected horticultural production in 2021.

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South Africa recorded an overall import growth rate in value of 68% between 2016 and 2021 for the selected horticultural products. The overall growth rate was positive during this period, as imports of apples declined by 38%, followed by oranges (31%) and cabbages (13%), while, the value of imports of tomatoes, bananas and onions increased by 919%, 78% and 27%, respectively.

The total volumes produced of the selected vegetables (onions, potatoes and tomatoes) increased between 2000/01 and 2019/20. However, the volume of cabbage produced decreased. The total volumes of cabbage and onions sold on the FPM increased, while the volumes of tomatoes and potatoes sold decreased between 2021 and 2022.

The prices for fresh tomatoes and cabbages per kg increased, while the prices for fresh onions and potatoes per kg decreased between 2020 and 2021. The average retail prices per kg for selected fruits – oranges, bananas and apples – decreased by 42.2%, 25.6% and 8.9%, respectively, in 2021, as compared with 2020.

South Africa should implement measures contained in the Agriculture and Agro-processing Master Plan (AAMP) which are design to boost domestic production. These include investments in the irrigation infrastructure, fresh produce markets, and enhancing research and development to produce better yielding varieties and control of plant diseases, among others. Parallel to upscaling domestic production, the AAMP encourages government and industry players to deepen their efforts in negotiating and opening new export markets. Given its natural endowments, South Africa is capable to produce sufficient quantities of fruits and vegetables to meet domestic and export demand, thus helping the country generates foreign earnings from international markets.

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