Agricultural Outlook
Spring Edition
2017/2018

kenya zambia weather vegetables citrus avocados macadamias pecans game ostriches

ABSA

Contents

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Foreword

Jacobus Wells, head of Absa AgriBusiness Africa

As head of Absa AgriBusiness Africa, it is my pleasure to present Absa's outlook for spring 2017/2018.

Written and compiled by Absa's internal team of agricultural economists, as well as external specialists in their respective fields, this outlook has been written for Absa's clients, who are involved in the day-to-day operation of the country's economy.

The purpose

This outlook provides an overview of the global, South African, Kenyan, and Zambian agricultural economies, as well as their impact on farmers and producers.
Its purpose is to inform producers of changing trends in the short term, so that these producers can be vigilant of possible changes in the near future, and adapt accordingly.

It also provides an outlook of the weather, game, ostrich, citrus (including oranges, lemons, grapefruit and soft citrus), vegetables (including potatoes, tomatoes, onions and carrots), and subtropical fruit and nuts such as avocado, and macadamia and pecan nuts. The outlook also provides calculated opinions on the future of the South African and agriculture sector economies, as well as that of the selected commodities and products mentioned above.

Spanning over one to five years in the future, this outlook also focuses on future trends that may deviate from a true baseline, depending on the product and commodity.

The outlook also highlights changing trends, risks and opportunities for those involved in the production of the commodities listed above.

Contributors

Wessel Lemmer: This Absa senior agricultural economist writes weekly columns on topical issues for agricultural magazine, *Landbouweekblad*. He also informs and advises clients, and gives presentations on challenges facing the economy through print, radio and television.
Karabo Takadi: Also an Absa agricultural economist, Takadi provides weekly Agritrends updates on the livestock market, as well as weekly cattle prices sent through texts to clients. She also provides monthly contributions on the state of agriculture in Africa for *Landbouweekblad*, and the Red Meat Producers' Organisation magazine. Moreover, she is a biweekly contributor to English agriculture magazine, *Farmer's Weekly*, providing information on current trends in various agriculture sectors.
Conce Moraba: An agricultural economist at Absa, Moraba is responsible for the weekly Agritrends updates that focus on the grain and oilseed markets. She is also a biweekly contributor to *Farmer's Weekly*.
Johan van den Berg: Known for his weather outlooks, Van den Berg provides perspective on the impact of future weather scenarios on agriculture. He focuses on specific regions and the commodities they produce, and how the weather will impact production in these regions.
Dr Flippie Cloete: Head of Terratek at Suidwes Landbou and **Ernst Janovsky,** a well-known agricultural economist involved with Absa Botswana, assisted in analysing the latest game auction data and price trends.

The outlook also includes contributions from other Absa agricultural economists in the different commodity producing regions of South Africa, and includes the insights and perspectives of these economists in the regions where they work and interact with Absa's clients, the producers.

They share their opinions on the future production, import, consumption, export and projected prices of these respective commodities.

I have no doubt that this outlook, and its future publications, will assist not only the primary producer, but also all other role players and stakeholders in the agriculture value chain in devising short-term objectives and determining long-term business strategies.

I would also like to thank everyone involved in the writing and publication of this outlook, and hope that you, our business partners, find it invaluable.

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Sources

Absa AgriBusiness
Absa Research
Barclays Bank of Kenya
Barclays Bank Zambia Plc
Business Monitor International
Citrus Growers' Association of Southern Africa
Food and Agriculture Organization of the United Nations
Fresh Plaza
Golden Peanut
Hortgro
International Monetary Fund
International Nut and Dried Fruit Council Foundation
Klein Karoo International
Mosstrich
Ostrich Business Chamber
Quantec EasyData
Santam Agriculture
South African Department of Agriculture, Forestry & Fisheries: Abstract of Agricultural Economics
South African Revenue Service
South African Pecan Nut Association
South African Avocado Growers' Association (SAAGA)
Southern African Macadamia Growers' Association (SAMAC)
Subtrop
Technofresh
The Economist
Trade Map
US Department of Agriculture: Economic Research Service
US Department of Agriculture: Foreign Agricultural Service
Westfalia Fruit

SECTION 1:
ECONOMY & WEATHER

Economy

Wessel Lemmer, senior agricultural economist at Absa AgriBusiness

Global economic perspective

The growing demand for food

The world's population is expected to grow from 7,4 billion people in 2017, to 7,8 billion in 2022.

The average annual increase in the world's population is around 88 million people. In other words, every year, the world's population grows by more than the total population of Germany, with a population of 83 million people. China is the world's most populated country, with 1,39 billion people. India follows with 1,33 billion people, then the US with 325,7 million people and Indonesia with 261 million people. Brazil, with 207,7 million inhabitants, is the most populated country in South America. At 56,8 million people, South Africa is ranked the 24th most populous country in the world out of 191 countries, thereby indicating the importance of the domestic market for the producer. However, in 2022, South Africa is expected to move up to 23rd place.

Future export destinations

In order to gain the most from export markets, South Africa should not direct future agricultural exports and bilateral agreements to only the world's most populous countries. Instead, it should identify countries with the highest expected GDP growth per capita in constant prices.

In Asia, the countries in which consumer wealth is expected to most rapidly increase on an annual basis are Myanmar (3rd), India (4th) and Bangladesh (5th). African countries, such as Ethiopia (ranked 7th), Mozambique (11th), Rwanda (17th) and Tanzania (18th), are also expected to show a relatively sharp increase in GDP growth per capita at constant prices. In the Far East, China and Vietnam ranked 9th and 10th as countries where consumer wealth is expected to rapidly increase, while Sri Lanka ranked 22nd and Indonesia 28th. This is interesting, particularly in comparison with the US, which is ranked 137th, and Germany, which ranked 136th. Angola is an important destination for South African vegetable exports. However, Angola may incur a negative GDP growth per capita for the next five years. This is also the case with Zimbabwe.

World economic growth (GDP per capita constant prices)

Since the financial crisis of 2007 to 2009, global economic growth increased from 0,13% at real GDP in 2009 to 3,23% in 2017.

It is expected that the world economy will continue to grow at 3,23% per year from 2017, to 3,59% per annum in 2022. Global productivity is also expected to increase.

Countries expected to demonstrate the greatest economic growth per capita GDP until 2022 are China and India. However, it is expected that China's economic growth will decline from 6% in 2017, to 5,1% in 2022, while India's will increase from 5,8% in 2017, to 6,7% in 2022.

Economic growth in the northern hemisphere will remain low, but should improve in Africa. However, it is expected that Angola and Nigeria will experience negative real GDP growth until 2022. South Africa's real GDP growth will likely remain negative during 2017 and 2018, after which the country should begin experiencing positive real GDP growth from 2019 onwards.

Local economic perspective

Population growth and quantitative easing

South Africa's population increased to 55,9 million people in 2016, at an average annual rate of 1,8%.

In order to create jobs, South Africa's economy must grow by at least 5% every year.

The financial crisis of 2007 to 2009 severely impacted South Africa's economic growth, which led to a decline in growth from 5% prior to the crisis, to the expected economic growth of 0,5% in 2017.

The quantitative easing programmes, adhered to by developed countries, did not improve South Africa's economic growth, and the need for quantitative easing is currently higher than at the peak of the financial crisis to prevent the depreciation of assets.

In order to limit the negative consequences of quantitative easing on economic growth, South Africa needs to increase its productivity. However, South Africa's economy is also impacted by the challenges arising from policy uncertainty, and in order to improve productivity, producers need to know how to direct their businesses through these turbulent times until the end of 2019, and how to create wealth and employment.

Steering your farming business through difficult times

Wealth creation is best achieved through a capitalist system that incentivises economic growth within an environment of trust. Therefore, South Africans

must respect the Constitution, strengthen the efficiency of its judiciary and ensure the independence of the Reserve Bank. This will ensure that South Africa's citizens are informed on the critical aspects important for good service delivery and governance.

While South Africa ranks first amongst developed countries, such as Norway, Sweden, the US and Australia, in terms of national budget transparency and accountability, the efficient allocation and implementation of the budget remains a challenge.

Moreover, good education is crucial for improved productivity and to meet the needs of the growing population. Unfortunately, South Africa's education system remains in a poor state.

Despite this, South Africa has excellent financial institutions, as well as a world-class stock exchange, which act as a foundation to nurture domestic and export-led business growth. Furthermore, South Africa has access to a well-developed business environment, which provides producers with the latest global technology.

National food security

The global competitiveness of South Africa's producers guarantees that the country has national food security, which ensures that its citizens have access to food that is amongst the cheapest available in the world.

Even with food inflation at a record high in 2016, *The Economist*'s Big Mac Index still ranked food prices in South Africa as 4th lowest amongst 56 countries in terms of affordability.

According to the World Food Programme, South Africa ranks amongst developed countries, such as the US and Australia, in terms of national food security and hunger.

However, South Africa's main challenges are the growing population, and food security for those households without sources of income to purchase food, despite its affordability.

The impact of credit downgrades

Credit agencies focus on changes in policy and certainty, government debt and economic growth. Should South Africa's economic growth not improve, the probability of further credit downgrades by ratings agencies increases, which will weaken the rand against other global currencies.

The Reserve Bank would then hike interest rates to fulfil its mandate to keep inflation under 6%, and to protect the value of the local currency.

However, as the agriculture sector is largely export-driven, it is, to an extent, hedged against the negative impact of a major credit downgrade. As such, further investment in agriculture during such times of uncertainty should not be disregarded.

Agri economy

The drought in South Africa's summer and winter rainfall regions, as well as a weakening rand, will have a significant impact on the gross production value of agriculture.

The expected increase in the crude oil price will impact negatively on production costs, while the global surplus in commodities may lead to lower producer prices globally.

Weak global economic growth will also impact the South African economy, and local policy uncertainty, as well as weak economic growth locally, may lead to unintended consequences if further credit downgrades should follow. Net farm income and profit margins will remain under pressure as input costs and debt levels increase.

However, it is expected that the agricultural economy will recover significantly after the general election in 2019.

Advice

In order to limit the consequences of quantitative easing and low global economic growth on South Africa's agricultural industries, producers should adhere to the following guidelines:

- Keep abreast of international trend changes in the relevant export markets. With the Trump administration focusing on the weakening US dollar and aiming to increase the manufacturing of goods in the US, it is expected that the US will become increasingly export driven. This is in contrast to China, whose economic strategy is more import-led.

These kinds of developments may force South Africa's industries to adapt and lobby for improved preferential market access in new destinations, such as the rest of Africa and Asia, which may result in South Africa competing with more established suppliers with greater market access.

- Strive to access and adopt the latest agricultural technology available to improve productivity.

South African producers do not have the benefit of accessing public sources to subsidise production, and thus need to plan accordingly in a high-risk production environment.

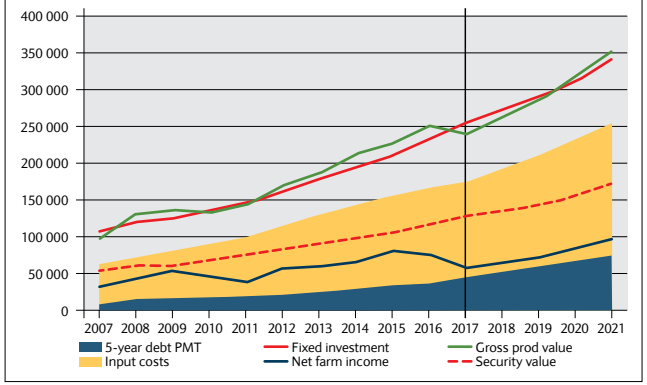
Despite this, South Africa's producers perform outstandingly well, considering the country receives only 495mm of rain, on average, compared with the global average of 1 035mm per annum.

- Limit unnecessary exposure to debt, and become increasingly self-sufficient in terms of financing operations.

Discard unproductive assets, while improving financial efficiency, and increase financial capacities and leverage new debt to your advantage and prosperity.

The agricultural experts at Absa AgriBusiness can assist with this.

Graph 1: Capital flow and fixed investment in agriculture (R/m)



Appendix A: Economy tables

Table 1: Estimated economic trends for the world from 2017 to 2022

	2017	2018	2019	2020	2021	2022
GDP constant prices (% pa)	3,23	3,39	3,53	3,74	3,69	3,59
GDP constant prices per capita (% pa)	2,27	2,77	3,08	3,21	3,36	3,38
Population (in billions)	7,40	7,49	7,58	7,67	7,76	7,85

Table 2: Estimated economic trends for South Africa from 2017 to 2022

	2017	2018	2019	2020	2021	2022
GDP current prices (% pa)	0,6	1,1	1,7	1,9	1,9	1,9
Inflation: average consumer prices (% pa)	5,2	5,0	5,6	5,6	5,6	5,6
Unemployment rate as a percentage of the labour force	27,4	27,67	27,79	27,83	27,85	27,86
Population (in millions)	56,82	57,75	58,69	59,65	60,62	61,61
Total investment (% of GDP)	19,25	19,27	19,44	19,59	19,74	19,90
Change in volume quantity (as %) of imported goods	1,13	2,83	3,29	3,12	3,04	3,04
Change in volume quantity (as %) of exported goods	1,34	2,43	3,39	3,39	3,39	3,39
General government revenue (% of GDP)	29,65	29,86	29,93	30,02	30,12	30,22
General government total expenditure (% of GDP)	33,15	33,23	33,29	33,18	32,99	32,78
General government gross debt (% of GDP)	52,35	53,98	54,47	54,53	54,28	53,71
Current account balance (US$/billions)	-10,82	-11,69	-12,85	-13,32	-13,88	-14,52
Current account (% of GDP)	-2,5	-3,0	-3,4	-3,6	-3,6	-3,6

Table 3: Changes in world GDP constant prices per capita from 2017 to 2022 (in percentages)

	2017	2018	2019	2020	2021	2022
World	2,3	2,8	3,1	3,2	3,4	3,4
China	6,0	5,5	5,4	5,3	5,2	5,1
India	5,8	6,3	6,4	6,5	6,7	6,7
Botswana	2,9	3,0	3,1	3,1	2,9	2,8
Namibia	2,6	4,0	3,4	3,0	2,8	2,8
Kenya	2,4	2,9	3,3	3,7	3,6	3,7
Mozambique	1,7	2,7	3,2	3,7	3,7	11,9
Japan	1,6	1,0	1,3	0,6	1,2	1,0
US	1,5	1,7	1,3	1,0	0,9	0,9
Russia	1,4	1,5	1,6	1,6	1,7	1,7
UK	1,3	0,8	0,9	1,3	1,3	1,3
Germany	1,3	1,2	1,2	1,2	1,2	1,2
Turkey	1,2	2,3	2,4	2,8	2,8	2,5
Argentina	1,1	1,2	1,3	1,8	2,0	1,9
Chile	0,6	1,3	1,6	1,8	2,1	2,2
Zambia	0,4	0,9	0,9	1,4	1,4	1,5
Zimbabwe	-0,5	-4,0	-2,5	-1,6	-1,7	-1,7
Brazil	-0,6	1,0	1,2	1,3	1,3	1,4
South Africa	-0,8	-0,1	0,6	0,6	0,6	0,6
Angola	-1,6	-1,4	-1,6	-1,4	-1,6	-1,5
Nigeria	-1,9	-0,8	-0,9	-0,9	-0,9	-0,9

*GDP is expressed in constant national currency per person.
Data has been derived by dividing constant price GDP by the total population.

Table 4: Real GDP growth per capita in constant prices in country-specific currencies

	2017	2018	2019	2020	2021	2022
Chile	8 069 142	8 170 161	8 303 451	8 455 350	8 629 273	8 817 105
Japan	4 177 485	4 218 222	4 271 995	4 299 752	4 353 379	4 396 641
World	1 298 355	1 334 374	1 375 435	1 419 554	1 467 249	1 516 831
Russia	432 104	438 692	445 769	453 101	460 703	468 591
Nigeria	367 160	364 097	360 978	357 650	354 364	351 121
India	98 028	104 191	110 850	118 077	125 971	134 474
Kenya	96 721	99 508	102 794	106 567	110 454	114 500
Angola	60 688	59 820	58 886	58 034	57 105	56 232
China	57 163	60 334	63 579	66 937	70 405	73 982
South Africa	54 500	54 467	54 771	55 079	55 387	55 710
US	52 331	53 240	53 955	54 521	55 009	55 520
Botswana	42 289	43 544	44 891	46 277	47 608	48 962
Germany	34 680	35 108	35 541	35 974	36 411	36 840
UK	28 829	29 049	29 321	29 689	30 071	30 458
Namibia	23 506	24 443	25 271	26 037	26 778	27 538
Turkey	19 930	20 388	20 887	21 480	22 089	22 637
Mozambique	16 515	16 963	17 509	18 159	18 836	21 079
Argentina	16 325	16 518	16 734	17 040	17 376	17 707
Zambia	7 731	7 800	7 873	7 987	8 102	8 222
Brazil	5 532	5 588	5 657	5 732	5 809	5 889
Zimbabwe	850	816	796	783	770	757

Source: IMF

*GDP is expressed in constant national currency per person.
Data has been derived by dividing constant price GDP by the total respective population.

Table 5: UN Human Development Index, March 2017 report

Country	Ranked	Human Development Index (HDI)	Inequality Adjusted Human Development Index (IHDI)	Gender Inequality Index (GII)
Norway	1	0,95	0,90	0,05
Australia	2	0,94	0,86	0,12
US	10	0,92	0,80	0,20
Chile	38	0,85	0,69	0,32
Argentina	45	0,83	0,70	0,36
Russia	49	0,80	0,72	0,27
Turkey	71	0,77	0,65	0,33
Brazil	79	0,75	0,56	0,41
China	90	0,74		0,16
Botswana	108	0,70	0,43	0,44
South Africa	119	0,67	0,44	0,39
India	131	0,62	0,45	0,53
Zambia	139	0,58	0,37	0,53
Mozambique	181	0,42	0,28	0,57

Weather

Johan van den Berg, weather specialist at Santam Agriculture

The 2016/2017 summer season started with exceptional production conditions, with rainfall occurring timeously, except for a drier spell in March. This is in contrast to the drought and subsequent poor summer crop yield of previous seasons. The El Niño-related weather conditions experienced in 2016 changed to weak La Niña-related weather conditions in 2017, resulting in more frequent rainfall and excellent production conditions in various regions across the country.

Overview

Leftover nutrients in the soil from previous seasons, together with favourable rainfall, resulted in record-high dryland yields for maize and soya bean in 2017.

Moreover, extensive grazing conditions, as well as dam levels, also improved, with many large storage dams overflowing or nearing full capacity. However, the Western Cape has experienced adverse conditions, with many regions in the province receiving below-average rainfall during its traditional winter rainfall season. Furthermore, the cumulative effect of drier conditions first experienced in 2015 also intensified the effects of the drought. Unfortunately, current data suggests that this is unlikely to change within the next few months.

Long-term trends

When considering historic rainfall data for different regions in South Africa, it becomes apparent that the country often experiences a semi-cyclical effect with alternating dry and wet periods that last for more than one season. The length of dry and wet spells differ from region to region, with drought lasting up to eight years in regions such as the Western and Northern Cape, and shorter spells of two to three years in KwaZulu-Natal and Mpumalanga. These cycles are 'disturbed' by seasonal factors such as the El Niño and La Niña phenomena, Indian Ocean sea surface anomalies (deviations) and other known and unknown factors. The more stable cycle is most likely the sunspot cycle, which includes about five years of increasing and five years of decreasing activity. Over time, variations in sunspot activity result in differing energy levels reaching Earth.

Historic rainfall analyses indicate that the most severe droughts in the summer rainfall region of South Africa were associated with decreasing sunspot activity, while improved rainfall conditions were associated with increased sunspot activity.

The severe droughts of 1933, 1942, 1966, 1983, 1995, 2007 and 2016 were all recorded during decreased sunspot activity. However, above-average rainfall in the late 1950s, the mid-1970s, 1988, 1990, and 2010 to 2012 were all recorded during increased sunspot activity.

Forecasts show that the new sunspot cycle (Cycle 25) will commence in 2019, with Cycle 24 now beginning to bottom out.

This is good news for the longer-term rainfall trend for the summer rainfall region.

The 2017/2018 summer season

More medium-term or seasonal effects, such as those from the El Niño and La Niña phenomena, can now play an important role in determining rainfall conditions for the next season, with the negative effect of sunspot activity less prominent. September and October are months with a relatively high predictability for ENSO (El Niño Southern Oscillation). The current ENSO status is neutral, with sea surface temperatures within the normal +-0,5°C range, but there are strong indications of the development of a La Niña phenomenon from about November 2017. The change from neutral status to La Niña is very significant for this time of year.

Provided the Indian Ocean does not move into a positive state of the Indian Ocean Dipole Index (IOD), the development of La Niña conditions can improve rainfall for the summer rainfall region. The IOD is less predictable than the ENSO phenomenon as more rapid changes are possible. Forecasts currently favour neutral conditions for the IOD, but towards the positive side of neutral. (Positive IOD conditions are usually associated with a higher frequency of tropical cyclones and depressions closer to the African coastline).

Expected production conditions

Very little or no rain occurred over the summer rainfall region from about April to the end of September 2017. This is not unusual, and may be a positive sign for good rainfall later in summer. The possible development of La Niña towards mid-summer may improve the probability of rain in the central and western parts of the country from November 2017 onwards, as well as the possibility that weather systems can develop towards the far western parts of the country before turning south-east.

This may result in summer rainfall occurring over the very dry south-western parts of the Northern Cape, and even the Western Cape and towards the east. However, with the band of rain during La Niña usually directed more towards the west, the development of this weather phenomenon poses a risk of drought in the extreme eastern parts of the country.

Summary

- Longer-term trends suggest that the summer rainfall region is likely entering a wetter phase, with the sunspot cycle now very close to the lower turning point, and entering the increasing activity phase from 2019.
- In contrast to earlier forecasts, there is now a high probability for the development of the La Niña phenomenon. Implications of La Niña include average to above-average rainfall for the central to western parts of the country, with weather systems stretching very far west, which may result in rainfall for the western parts of the Northern and Western Cape. Lower rainfall conditions, however, may occur over the eastern production areas.

Kenya

Thapelo Moleleki, manager of agricultural financial solutions RoA at Barclays Africa Group
Beatrice Githinji, agricultural specialist at Barclays Bank Kenya

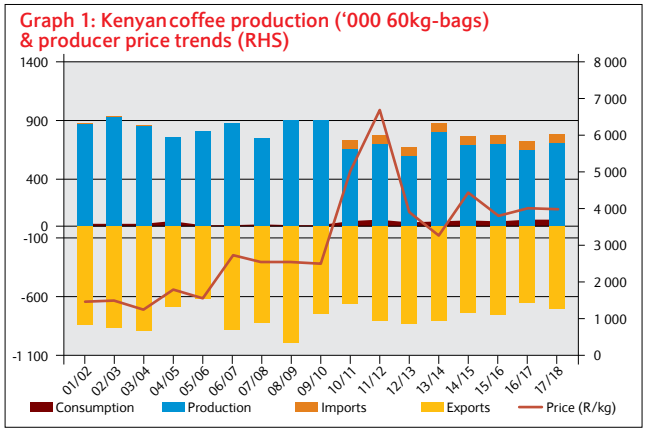
Overview

The agriculture sector contributes a significant portion to Kenya's GDP, as well as employing a substantial number of people, and the country's climate allows for the production of a wide variety of products, including coffee, tea, grains and sugar.

Government's financial support of farmers and producers, the widespread use of genetically modified (GM) seeds, and the increase in population and per capita income, present the country's economy with great potential for growth in the near future.

However, drought conditions and the possibility of an El Niño weather phenomenon in 2018 are expected to have a severe impact on crop yields, particularly those of grains, in the short term. Moreover, trade, which is largely dependent on the exports of agricultural products such as tea and flowers, is under threat due to subdued demand from European markets. Kenya's real GDP growth for 2017 was down to 5,2%, from 5,9% the previous year. However, GDP is expected to grow at an annual average of 5,5% until 2020.

Graph 1: Kenyan coffee production ('000 60kg-bags) & producer price trends (RHS)



Coffee

Coffee production in 2017 is estimated to reach 61,75 million 1kg-bags, and is expected to grow 16% to 71,6 million 1kg-bags by 2021. While coffee production will be affected by drought in the short term, production is expected to increase in the long term, due to financial support from government, which enables producers to utilise more drought- and disease-resistant varieties.

Local coffee consumption will increase from the current 6,3 million 1kg-bags consumed in 2017, to 7,61 million 1kg-bags by 2021. This is largely driven by the increasing affordability of coffee, which is the result of the opening of retail stores across the country.

Kenya remains one of Africa's largest coffee-exporting countries after Ethiopia, and this trend is expected to continue in the long term.

Maize and wheat

Maize production is expected to grow 34% from 2,9 million tons in 2017, to 3,9 million tons by 2020/2021. This is a result of the widespread use of GM seeds, as well as improving agricultural practices, and increased local demand derived from the livestock industry.

Wheat production dropped from 420 000t in 2016, to 380 000t in 2017 due to drought, but production is estimated to grow 12% by 2021.

This expected growth is attributed to yield improvements derived from the widespread use of GM seeds, as well as improved agricultural practices.

Local maize and wheat consumption is expected to increase as local production and demand from the livestock industry improves. However, Kenya will remain in a production deficit in the short and long terms.

Sugar

Local sugar production is currently at 523 000t, and will marginally increase to 535 000t over the next three years. This is largely because Kenya's sugar industry is considered uncompetitive, and investors are not investing in this industry.

Moreover, many sugar cane producers are now also opting to plant or produce other products.

The European export quota, which is expected to lapse by the end of September 2017, will also have a negative effect on the long-term production trend.

A slight increase in local sugar consumption is expected due to the increase in income levels and low international sugar prices. Kenya will remain a net importer of sugar for the foreseeable future.

Tea and other crops

Domestic issues, such as the labour disputes in July 2016 when a court ruled to increase tea pickers' wages by 30%, led to a 9% increase in the cost of tea production.

The export volumes of cut flowers, fruits and vegetables rose 8,9%, 5,4% and 13,1% respectively in 2016. A flat rise in export volumes is expected until 2021.

Summary

- Kenya's agricultural sector has been severely affected by drought, and the possibility of an El Niño event in 2018 poses a threat to the sector and the economy in the short term.
- Despite its challenges and inefficiencies, government's financial support of farmers allows for the utilisation of new technology, which bodes well for agriculture in the long term.
- The more widespread use of GM seeds has led to improved yields, and will continue to do so in the long term.
- An increasing population and per capita income levels are all indications of a stable agricultural sector, which will likely remain so for the foreseeable future.

Zambia

Thapelo Moleleki, manager of agricultural financial solutions RoA at Barclays Africa Group
Remmy Kantumoya, agricultural specialist at Barclays Bank Zambia Plc

Overview

Zambia's GDP is largely driven by the mining and agriculture sectors. While structural challenges remain, economic indicators suggest that the country's economy has been on the road to recovery since 2017.

While some of Zambia's agricultural industries have suffered due to a lack of power, electricity generation, primarily produced by hydroelectric plants, improved significantly in 2017 due to sufficient rainfall received earlier in the year, which has led to improved production.

Over the next five years, Zambia's economic growth will rely on increased exports, supported by improved mining and agricultural output. In 2017, copper production doubled along with realised copper prices, which has also supported the local economy.

Zambia also recorded good production yields for maize and soya bean. Inflation in 2017 has remained at around 6,7%, and is expected to remain largely unchanged for the rest of the year.

The Bank of Zambia also reduced policy lending from 12,4% to 9,5%, which is expected to unlock further economic potential once commercial banks reduce their lending interest rates.

Although weak, Zambia's currency has been generally stable for most of 2017, which has assisted role players in agriculture to plan their operations accordingly.

Zambia's GDP is expected to grow at an average of 5,1% over the next five years. Growth for 2017 currently stands at 4,1%, up from the 3% achieved in 2016.

However, fall armyworm will continue to pose a serious threat to crops and the agricultural economy if not managed correctly.

Wheat

Maize and wheat are largely produced by commercial farmers in the farm blocks of Mkushi, Mpongwe, Nansanga, Mazabuka, and other areas such as Choma and Kalomo. Since 2015, wheat production has suffered due to a lack of electricity and water.

However, vast improvements were observed during the 2016/2017 season, with most commercial farmers able to plant a full crop.

In 2016, farmers produced about 214 000t of wheat, compared with the 202 000t and 270 000t produced in 2014 and 2015 respectively. Local production is expected to remain flat in the short term, and will be exceeded by the local demand of around 360 000t.

Zambia's wheat supply is usually milled to produce flour and animal feed, which further increases the local supply and demand deficit.

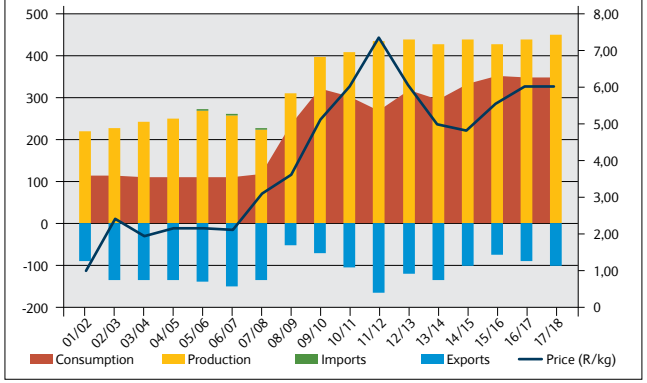
Maize

It is expected that maize production and prices will increase over the next five years due to high demand from neighbouring countries. Over the years, Zambia has become increasingly self-sufficient in maize production. Maize production is expected to grow 12,5% from 3,4 million tons in 2017, to 3,9 million tons over the next five years as a result of favourable weather conditions, higher regional demand and improved yields.

Table 1: Zambian maize and wheat production from 2013 to 2021

	2013	2014	2015	2016	2017	2018	2019	2020	2021
Wheat production (t)	254 000	274 000	202 000	214 000	215 000	215 000	215 000	215 000	210 000
Wheat consumption (t)	270 000	300 000	322 000	332 000	349 000	366 000	384 000	403 000	421 000
Maize production (in million tons)	2,57	3,38	2,62	2,9	3,48	3,58	3,69	3,8	3,92
Maize consumption (in million tons)	2,3	2,5	2,5	2,25	2,56	2,64	2,75	2,88	3,06

Graph 1: Zambian sugar production (t) & price trends (RHS)



Soya bean

High soya bean prices in the 2014/2015 and 2015/2016 seasons resulted in many small-scale maize farmers opting to grow soya bean instead of maize.

This, along with the carry-over crop from 2016, has been the driving factor behind reduced soya bean prices on the local market in 2017. Production further increased in 2017, with farmers producing 351 416t, compared with the 267 490t produced in 2016.

This trend is expected to continue over the next five years.

Sugar

A weakened currency and electricity shortages will limit growth in sugar production in the short term.

Zambia's government has introduced a fortification policy, which requires that vitamin A be added to sugar sold on the local market. This is expected to restrain new entrants into the sugar industry, due to the inevitable increase in production costs.

Moreover, local consumption will also be suppressed due to higher prices. Despite this, Zambia remains a competitive export market for sugar.

Sugar production is expected to steadily grow to about 490 000t by 2021, from the 435 000t produced in 2017.

Summary

- Zambia's agricultural and food outlook for the next five years remains positive, with the economy set to recover during 2017 and 2018.
- An increase in the local consumption of agricultural commodities such as maize and wheat is expected in the short term. This is largely driven by the recovering agriculture sector.

SECTION 2:
VEGETABLES & FRUIT

Vegetables

Conce Moraba & JG Horn, agricultural economists at Absa AgriBusiness

Potatoes

Potatoes that traded on the fresh produce markets for the 2016/2017 marketing year were valued at R2,9 billion. Potatoes are the most traded commodity on South Africa's fresh produce markets. The five largest markets in the country sold about 654 535t of potatoes from January until October 2017, a decline of 1,9% from the corresponding period in 2016, with a recorded 667 735t in sales.

Due to favourable weather conditions in the 2016/2017 season, production increased, and greater volumes of potatoes were delivered to markets, putting pressure on prices. In the first quarter of 2016, potatoes were selling at a record price of R5,67/kg. However, as supply increased, the price dropped to R3,08/kg in the third quarter of 2017. Since March 2017, more than 10 million 10kg-bags were sold on a monthly basis; the first time more than 10 million 10kg-bags were sold on the markets was in June 2015. Thus, due to increased supply, market prices for January to August 2017 were 35% lower compared with the corresponding period last year. The fresh produce markets also increased potato sales by more than 14 million 10kg-bags during January to August 2017, compared with the corresponding period last year.

Trade

It is expected that potato chip imports will increase, as a result of lower prices in the EU, supported by good production.

In 2017, South Africa exported 63% of its processed crop to Spain, 19,4% to Namibia, 4,8% to Italy, 4,1% to China and 3,2% to Egypt.

Outlook

The biggest challenge for new season production is weather conditions for the rest of the year, particularly in terms of temperature and not rainfall, as most potato production is under irrigation. Due to drought and below-average dam levels, the Sandveld region in the Western Cape may encounter irrigation restrictions. However, production in Limpopo has been good, due to favourable weather conditions and warm winter temperatures in 2017. Increased yield is expected for this province. Improved yield is also anticipated for KwaZulu-Natal. This may result in increased production, which will put pressure on prices, and cap possible price increases to below the record prices achieved in 2016. However, should warm temperatures affect the perishability of the crop, as well as the rate at which the produce is marketed, prices may increase.

Meanwhile, low economic growth in South Africa may limit demand. As such, farmers must monitor their production costs in the coming season, as these are likely to increase, which may negatively impact profits. In the 2017/2018 season, potato prices will likely remain at price levels seen during the 2016/2017 season, and a similar price trend as experienced in 2016/2017 is expected, with prices increasing towards the end of 2017, slightly declining again in early 2018, and moving sideways from April. Prices are likely to increase again towards the end of 2018. However, major trend shifts may occur if adverse weather conditions arise.

Tomatoes

Tomatoes that traded on the fresh produce markets for the 2016/2017 season were valued at R1,34 billion. Tomatoes are the second-largest traded vegetable commodity on South Africa's fresh produce markets, after potatoes. The five largest markets in South Africa sold 179 062t of tomatoes from January until October 2017, a 16% decline from the 213 971t sold for the corresponding period in 2016.

Production costs such as fertiliser, pesticides and labour costs will, unfortunately, continue to increase, and may have a negative effect on producers' profit margins.

Trade

Of its tomato imports, South Africa imported 94,5% from Namibia and 4,4% from Swaziland. At 35%, Botswana imported the majority of South Africa's export crop, followed by Lesotho at 20%, Mozambique at 17,8%, Namibia at 14% and Swaziland at 4,3%.

Outlook

Good weather conditions and warmer temperatures during the 2016/2017 season led to an increase in supply on the fresh produce markets, which put downward pressure on prices. Increasing growth in the production of processing tomatoes in the northern production regions of the country added to the increase in local supply. Prices are expected to remain sideways in 2018, with slow economic growth suppressing growth in demand for the commodity. A stronger rand would, however, lower production costs and thus tomato prices.

Prices may marginally increase over the next two months as production will cease during the very hot months of October, November and December, and dip again near winter in 2018.

Producers in the Western Cape planted 40% less for the 2017/2018 season, which will support prices from November to May 2018. It is expected that supply will remain relatively low and prices will average R7/kg.

Onions

Onions that traded on the fresh produce markets for the 2016/2017 season were valued at R922 million.

Onions are the third most traded vegetable commodity on South Africa's fresh produce markets.

The five largest markets in South Africa sold 254 210t of onions from January to October 2017, for a 3,5% increase compared with the 245 528t sold during the corresponding period last year. Over the past two years, persisting unfavourable weather conditions in South Africa's second-largest onion-producing region, the Western Cape, and crop damage in its third-largest production region, the Northern Cape, resulted in onion prices increasing in 2017.

Poor weather conditions in South Africa's largest onion-producing regions, namely Limpopo and North West, also supported prices.

Continuous poor weather in regions such as the Western Cape has resulted in government-imposed water restrictions, and many producers are planting fewer hectares to onions this season as a consequence. Thus, fewer plantings will result in limited supply in the long term, which will support prices, especially if local demand continues to increase. Moreover, excessive rain received earlier this year in the Northern Cape has resulted in crop damage. However, onions planted early in the season are of good quality, and the crop estimate for the 2017/2018 season is thus higher than for the previous two years, during which onion quality and yield suffered. This may thus result in stagnant price levels from now until December.

Producers in the Western Cape are expected to plant only between 1 000ha and 1 400ha to onions in the 2017/2018 season as a result of the drought. This is only 30% to 40% of the average plantings of 3 000ha for the region. Growers in the Eastern Cape, another one of South Africa's largest onion-producing regions, have planted only 2 000ha to onions for the upcoming season, which is 500ha fewer than the usual 2 500ha, while some producers have not planted at all, preferring to use their water for permanent crops. Moreover, producers are expected to yield only 50% of this, due to the drought. Decreased plantings will lead to an increase in onion prices from January to July 2018, with prices likely to begin increasing from December 2017, until they peak in May and July 2018. Furthermore, prices are expected to remain relatively high until September 2018.

Trade

Lower economic growth in the Southern African Development Community has resulted in a marginal decline in demand, leading to a decline in export volumes. However, due to consumer demand for staple food products, demand is not expected to decline significantly.

Mozambique is South Africa's biggest export market for onions, and imports 41% of the total export crop, followed by Angola at 21%, Zambia at 12%, Botswana at 10% and Namibia at 7%.

Outlook

During January and February 2017, South Africa's largest onion-producing regions, Limpopo and North West, experienced excessively dry weather conditions, which resulted in fewer plantings. In March and April, these regions finally received rain, which resulted in late plantings that initially led to an onion shortage from May to July, which supported prices. However, since August 2017, with the harvesting of the full crop, prices have significantly declined. Currently, the market price for onions is R50/10kg-bag, with quality produce receiving premium prices. It is expected that the price will remain at R50/10kg-bag from November 2017 until March 2018, and will average R60/10kg-bag from April until October 2018. However, consumer resistance is expected should prices increase to more than R85/10kg-bag, and prices may increase to R120/10kg-bag in 2018 if weather conditions continue to decline.

Carrots

Carrots sold on South Africa's fresh produce markets during the 2016/2017 season were valued at R364 million. The five largest fresh produce markets sold 86 026t from January to October 2017, for a 12% decline compared with the 97 626t sold for the corresponding period in 2016. The highest price of R7,74/kg for carrots was achieved in 2014. Since then, prices have declined, with the price in the fourth quarter of 2017 at R6,37/kg. Production has increased year-on-year since 2014, and is anticipated to further increase in 2018 as a result of favourable weather conditions. However, the expansion in production has increased more rapidly than consumer demand. This will likely result in a decline in prices. Furthermore, good weather conditions in the Highveld, which produces more than 50% of the local crop, will likely result in increased supply, which will add further downward pressure on prices.

Trade

Exports to other African countries have declined, due to low economic growth and an increase in local production in these countries. The current protectionist policies of SA's neighbouring countries will result in excess supply on the local market, and thus a further decline in prices. South Africa's biggest export markets for carrots are Botswana, Angola, Mozambique and Namibia.

Outlook

Trade in Africa will continue to stimulate the local industry's growth, while increasing populations in Africa, and growing consumer demand, will support production in the long term.

Citrus

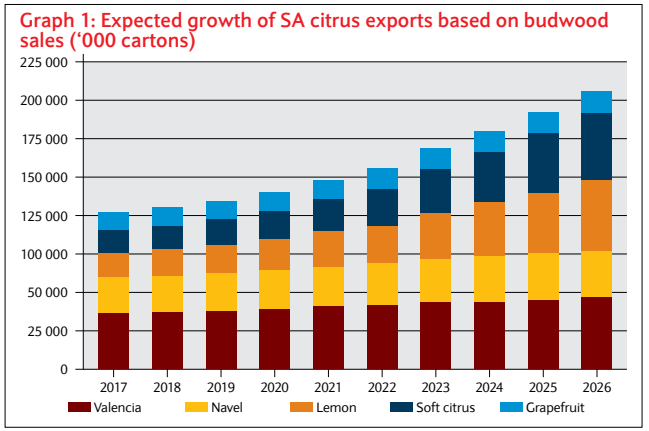
Wessel Lemmer, senior agricultural economist at Absa AgriBusiness
Jer Nortje, agricultural economist at Absa AgriBusiness

The relatively stronger rand in 2017, compared with 2016, resulted in a decline in revenue generated through citrus exports.

While South Africa's subdued economic growth and policy uncertainty could lead to a weaker rand in 2018, this would result in higher income returns from exports for producers, as the increasing world population will support the growing global demand for citrus fruit.

However, the recent increase in budwood sales is of concern, as increased production and a lack of export market expansion may result in supply outweighing demand, and thus a decline in prices. Data based on budwood sales of soft citrus and lemons in South Africa suggests that produce available for the export markets may increase 3,3% in 2018 to reach a high of 9,7% in 2023.

Graph 1: Expected growth of SA citrus exports based on budwood sales ('000 cartons)



Lemons

Over the past five years, the average growth in lemon exports was 10,4% per year. At 40,5%, lemon budwood sales were the second highest in budwood sales of all citrus varieties in South Africa, with 2,3 million sales in 2016.

Thus, annual lemon budwood sales have doubled over the past five years from the 767 233 recorded sales in 2010. Total citrus budwood sales were at 5,67 million in 2016. Based on this, lemon exports are expected to increase 51,8% from the 17,7 million cartons exported in 2017, to 26,88 million cartons in 2022, at an average growth of 10,3% per annum.

As such, it is anticipated that South Africa will produce a surplus of lemons over the next five years.

Should export markets not expand, the lemon surplus will exceed demand, thus impeding the profitability of local producers.

Moreover, the US recently eased its restrictions on citrus imports from Argentina, and Argentina is thus expected to increase its lemon production, further increasing global supply and putting pressure on prices.

Soft Citrus

Over the past five years, the average growth in soft citrus exports was 14,1% per year.

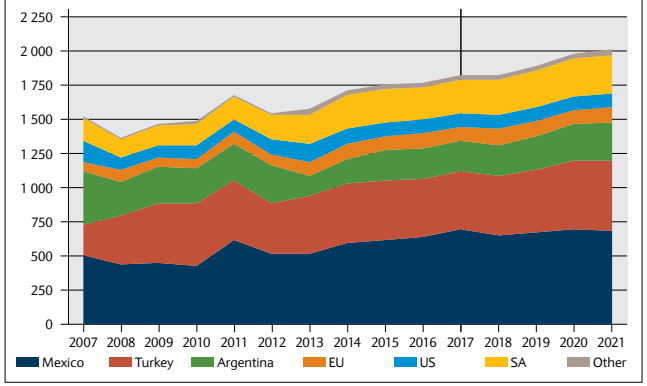
At 2,42 million sales, soft citrus recorded the highest budwood sales of all citrus varieties in 2016, with annual soft citrus budwood sales increasing 150% from the 960 873 sales recorded in 2010. Soft citrus budwood sales in 2016 accounted for 42,7% of the total citrus budwood sales of 5,67 million.

Based on this, exports are expected to increase 70,7% from the 16,08 million cartons exported in 2017, to 27,45 million cartons in 2022, at an average growth of 14,4% per year.

Unlike the lemon export market, the future increase in soft citrus supply is unlikely to exceed global demand.

However, as a matter of priority, South Africa needs to improve its preferential market access to at least equal those of other competing soft citrus export countries in the southern hemisphere.

Graph 2: World lemon exports ('000t)



Grapefruit

Over the past five years, the average growth in grapefruit exports was 1,5% per year, while annual grapefruit budwood sales varied significantly, with 30 320 budwood sales recorded in 2012, and 162 730 sales in 2013.

Grapefruit budwood sales were the lowest of all citrus varieties at 90 595 sales in 2016, and accounted for 1,6% of the total citrus budwood sales of 5,67 million.

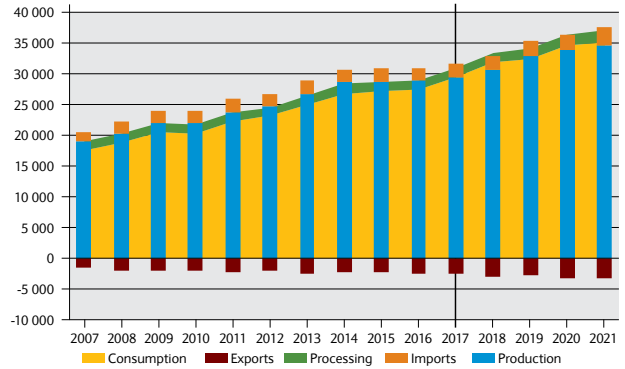
Based on this, grapefruit exports are expected to increase 7,4% from the 13,32 million cartons exported in 2017, to 14,31 million cartons in 2022, at an average growth of 1,5% per year. At the current pace of development, it is unlikely that domestic supply will exceed demand.

Oranges

The production of oranges in South Africa includes Valencia production on 27 535ha and navel production on 16 233ha. Over the past five years, the average annual growth of orange exports ranged between 2,9% to 3,7%. However, budwood sales for oranges declined from 616 012 sales in 2012, to 414 853 sales in 2016. Valencia budwood sales declined from 751 220 sales in 2012 to 449 852 sales in 2016. Orange budwood sales accounted for 15,2% of the total citrus budwood sales of 5,67 million in 2016. Based on this, orange exports are expected to increase 25% from 59,7 million cartons in 2017, to 74,91 million cartons in 2022, at an average of 5% per year.

South Africa needs to prioritise preferential market access to compete with other orange exporting countries in the southern hemisphere. The global market for oranges continues to show potential for development.

Graph 3: World consumption & productions trends for soft citrus ('000t)



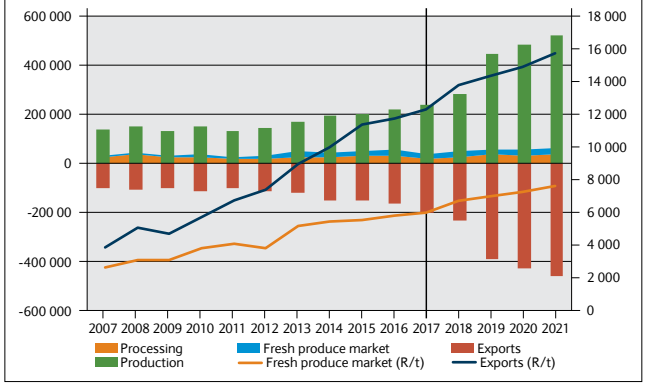
Outlook

The future profitability of citrus production for the export market differs according to each citrus type. The growing global middle class continues to seek a healthier lifestyle, which will improve global demand for citrus fruit.

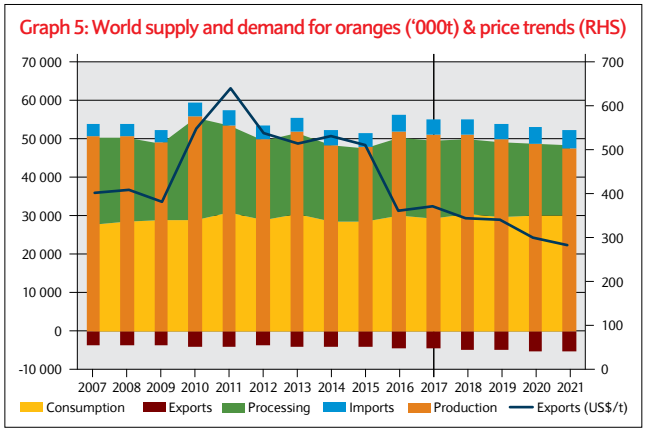
For those considering expanding into citrus production, the following should be kept in mind:

- Future profitability can be optimised by limiting production risk through ensuring sufficient future access to resources such as quality irrigation water.
- Only diversify into citrus production in regions where the climate is optimal for production and achieving high yields.
- Plant new varieties that will be in demand in the future.
- Future production and marketing should intersect with both the earlier and later marketing windows to optimise profitability.
- Prioritise export market development by bilaterally negotiating improved preferential market access.
- Improve access to technologically advanced sorting and packing facilities in order to improve citrus quality.
- Retain access to future global markets and develop new markets by complying with the latest production requirements.
- Consider alternative crops to certain citrus varieties to diversify future production and price risk.

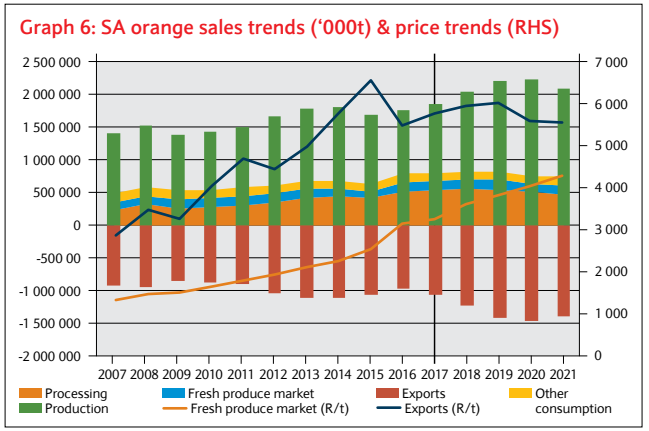
Graph 4: SA soft citrus sales trends ('000t) & prices (RHS)



Graph 5: World supply and demand for oranges ('000t) & price trends (RHS)



Graph 6: SA orange sales trends ('000t) & price trends (RHS)



Avocado

Karabo Takadi, agricultural economist at Absa AgriBusiness
Nomakhosi Nhlapo, manager, agricultural economists at Absa AgriBusiness
Wessel Lemmer, senior agricultural economist at Absa AgriBusiness

International trends

Strong demand has kept avocado prices at attractive levels for the past decade, which continues to bode well for additional investment into this sector. As a result of drought conditions in some of the major avocado-producing and exporting countries in 2016, global prices have significantly increased, as production has declined.

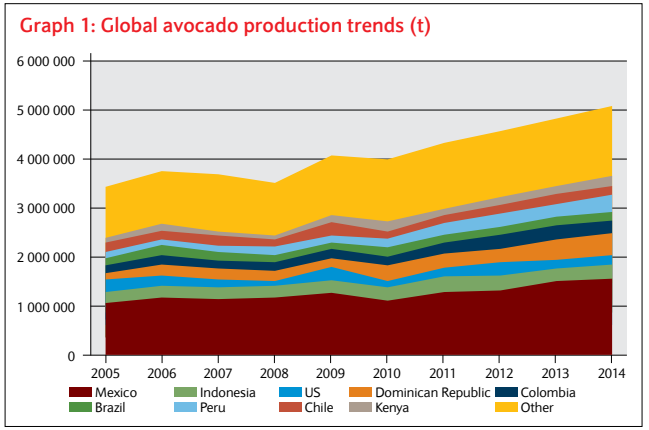
The American Restaurant Association, which analyses data from the US Department of Agriculture, reported that the wholesale price of avocado in the US increased 125% between January and September 2017, from US$37,25 [about R527,48] for a standard box of 48 avocados, to US$83,75 [R1 185,95].

Mexico, which is currently the world's biggest producer of the fruit and exports primarily to the US, Europe, Asia and Canada, recorded a substantial harvest in 2016. However, production declined by an estimated 20% in 2017, as a result of unfavourable weather conditions. Moreover, poor weather also resulted in a production decline in Peru in 2017, resulting in limited production and insufficient supply. This presents South African producers with a temporary opportunity to gain more widespread access to the European market.

Meanwhile, avocado production has recovered in Chile, after almost a decade of drought.

Chile ceases avocado exports during April, opening up a potential marketing window for South African producers.

Graph 1: Global avocado production trends (t)



Domestic trends

There are about 17 500ha planted to avocado in South Africa. However, the 2015/2016 drought negatively affected avocado yields in 2017, which resulted in lower-than-average production levels. Moreover, as 2017 was an off-season, which usually tends to deliver lower yields, production declined even further.

The estimated total avocado production for 2017 is currently at 117 000t. However, there is certainly room for expansion, with an average of an additional 1 000ha planted to avocado every year. Avocado is currently grown in Limpopo, Mpumalanga, and KwaZulu-Natal. There is also growing interest to expand production to the Eastern and Western Cape.

Consumption

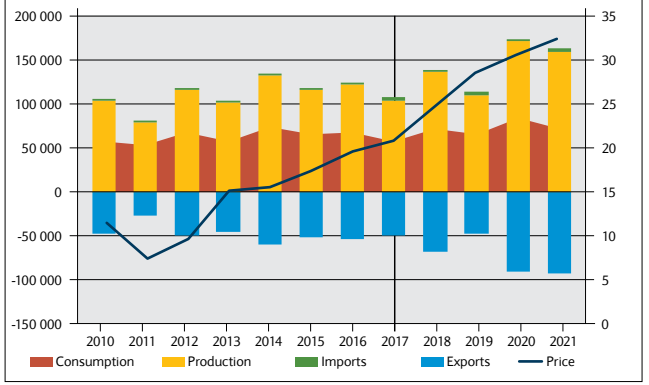
In 2016, 45% of South Africa's avocado harvest was exported, while 18% was sold on fresh produce markets. Twelve percent went to the processing sector, while 16% was sold on the informal market and 8% was sold directly to retailers.

Price increases have been driven by higher demand, as well as avocado increasingly being used in the manufacturing and production of beauty products.

Exports

Lower production and yield have resulted in lower exportable volumes. Exports for 2017 are expected to amount to 52 000t, which is 7% lower than that of 2016. South Africa's avocado crop is primarily exported to the Netherlands. Despite lower yield in 2017, there may be more export opportunities for South African producers in the future, as industry role players work on accessing new markets such as the US, Japan, China and India. The avocado industry remains profitable, as local prices have increased annually for the past six years. During this period, prices increased 173%, as a result of strong demand. This may also explain the increased rate at which additional trees have been planted.

Graph 2: SA avocado production (t) & price (R/kg) trends (RHS)



Graph 3: SA avocado exports (t) & price trends (RHS)

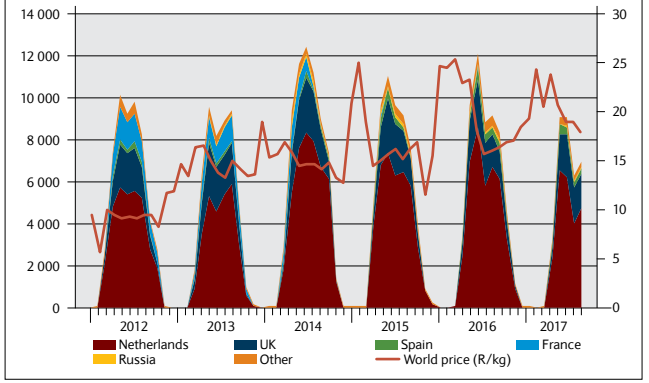


Table 1: The main supplier countries for avocado to the EU in 2015 and 2016

EU summer season (t)			EU winter season (t)		
	2015	2016		2015	2016
Peru	114 321	144 367	Chile	78 244	88 888
Southern Africa	50 962	54 095	Mexico	45 593	35 000
Kenya	20 728	23 444	Spain	37 700	50 000
Brazil	3 535	3 908	Israel	34 995	63 000
Tanzania	3 278	2 948	Colombia	11 189	22 000
Other	497	337			
Argentina	78	133			
Total	**193 399**	**229 231**	**Total**	**193 399**	**258 000**

Outlook

Demand is increasing more rapidly than the current rate of production. This trend will most likely be supported by a growing market, which may encourage producers to invest in expanding production.

SECTION 3:
NUTS

Macadamia nut

Karabo Takadi, agricultural economist at Absa AgriBusiness
Wessel Lemmer, senior agricultural economist at Absa AgriBusiness

International trends

Global production of macadamia nuts is expected to increase from the 178 596t produced in 2016, to 193 462t in 2017.

Australia and South Africa are the world's largest producers and processors of macadamia nuts.

While South Africa was once the world's largest producer of the nut, a decline in production as a result of drought and unfavourable growing conditions led to Australia overtaking the African continent.

Australia

In 2016, Australia produced a bumper crop as a result of favourable weather conditions throughout the season. However, adverse weather conditions in 2017 recently resulted in Australia reducing its crop estimation for the year from 50 500t to 48 570t.

Global demand for macadamia nuts remains strong, with the free trade agreements between Australia and South Korea, Japan and China having a positive impact on Australian exports.

Global demand & production

Since 2015, global demand for macadamia nuts has grown substantially, as a result of consumers becoming more health-conscious and demanding healthier snacks. Demand is expected to further increase over the next five years.

Globally, about 70% of macadamias are used as snacks, while 30% is used as an ingredient in a final product.

It is likely that a higher percentage of macadamias will be used as an ingredient in the manufacturing of food and other products in the future.

Expansion

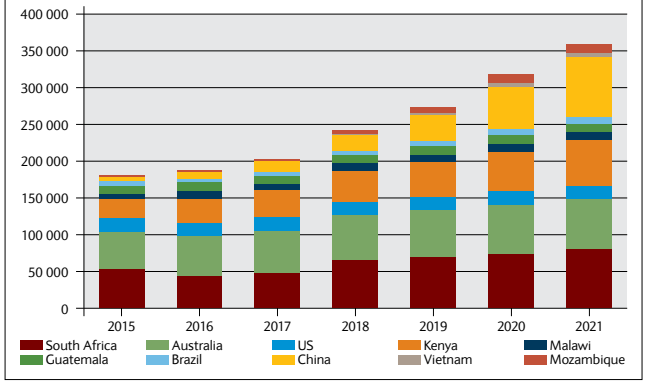
Macadamia nuts comprise 2% of the global tree nut supply value, and indications suggest that there is room for great expansion in the sector.

Macadamia nut production is also considered a profitable venture, as it achieves high prices due to strong, global demand.

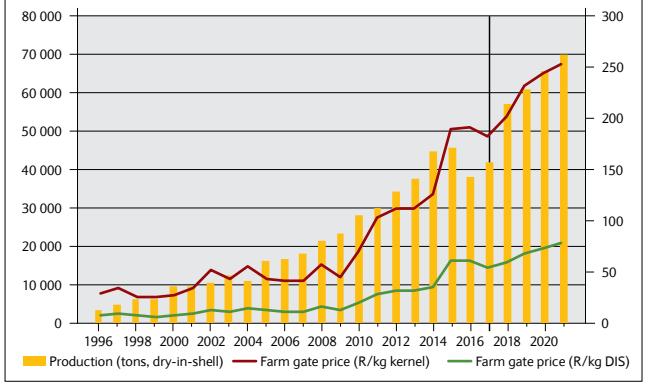
However, if production increases and supply exceeds demand, the nut is likely to enter the processing market, in which there will be a high demand for lower-priced macadamias.

To optimise profitability, producers need to ensure access to resources such as sufficient water for production, and only expand in areas with the most favourable weather conditions for production. In so doing, these producers will ensure that they remain competitive in the global market, while continuing to realise profitable margins.

Graph 1: World macadamia production projections (t)



Graph 2: SA macadamia production (t) & price (R/kg) trends (RHS)



Domestic trends

In 2017, South Africa is expected to yield a total crop of 42 000t. This is 11% higher year-on-year, as many production regions received good rain after the drought that negatively impacted production in 2016. Despite the improvement in yield, South Africa has still not reached its previous record-high of 46 000t, which it achieved in 2015, with the 2016 drought resulting in a production decline of 17,4%, compared with the corresponding period in 2015.

However, increased plantings and adequate rainfall is expected to boost production in 2018. Nonetheless, if supply exceeds demand, prices will decline in 2018. The macadamia industry is expected to expand over the next couple of years, due to an increase in plantings over the past few years, and these plantings now coming into production.

Producers are currently continuing to plant more hectares to macadamias, with new plantings also substituting other crops such as sugar cane, citrus, bananas and timber.

More than 25 000ha in South Africa have been planted to macadamias, while plantings are increasing by a further 3 500ha per annum.

Exports

South Africa exports macadamias from March until November every year, with exports peaking during June and July.

As South Africa is a net exporter of macadamias, the exchange rate and increase in global demand and supply will affect export prices. In order to capitalise on the export markets, South Africa needs to establish more cracking facilities to meet the global demand for shelled (kernel) products.

Kernel and nut-in-shell exports

In 2016, nut-in-shell (NIS) exports declined 45%. This was likely due to lower production and an increase in processing capacity, which led to a 14% increase in the volume of kernel exports.

The export market for macadamia kernels is diversified, and most of South Africa's kernels are exported to the US, EU, Hong Kong and the UK. Due to the 2016 drought, South Africa could not further develop its export markets as production was not sufficient to enter or supply other markets.

Some of the country's best-quality macadamias are being exported NIS, while lower quality nuts are processed and sorted.

In future, the industry may process more macadamias to kernel in order to satisfy the high global demand for this product. Farm gate prices have increased significantly over the past few years, and are expected to either continue to increase or remain stable.

Table 1: South African macadamia production (t), quantity of nuts cracked (t), & macadamia nuts exported as nut-in-shell (t) from 2007 to 2016

Year	Total production (dry-in-shell [DIS]*)	Quantity cracked in SA (DIS*)	Quantity exported as NIS** (DIS*)
2007	18 232	17 449	783
2008	21 650	20 134	1 516
2009	23 507	21 004	2 503
2010	28 429	24 926	3 503
2011	30 068	23 504	6 582
2012	34 571	21 295	13 276
2013	37 500	21 179	16 321
2014	44 890	25 766	19 124
2015	46 000	21 257	24 743
2016	38 000	24 230	13 680

Figures in bold are estimates
* 1,5% kernel moisture
** Nut-in-shell
No data on NIS exports is available prior to 2007.
South African exports of macadamias NIS are mostly exported to Hong Kong, China, Taiwan and Vietnam.

Outlook

International

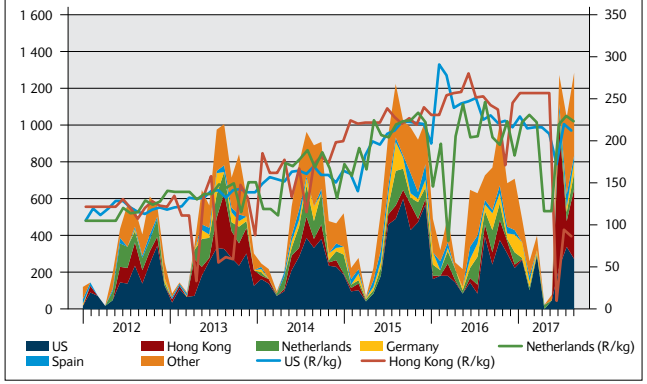
Indications suggest that the global macadamia sector will continue to grow in terms of production and profit. Based on global tree nut market trends, as well as historical data from South Africa, it is further expected that the demand for macadamia nuts will continue to exceed supply in the long term.

The global macadamia sector thus encourages the development of new orchards in order to satisfy the current high demand, and to develop new product lines and markets.

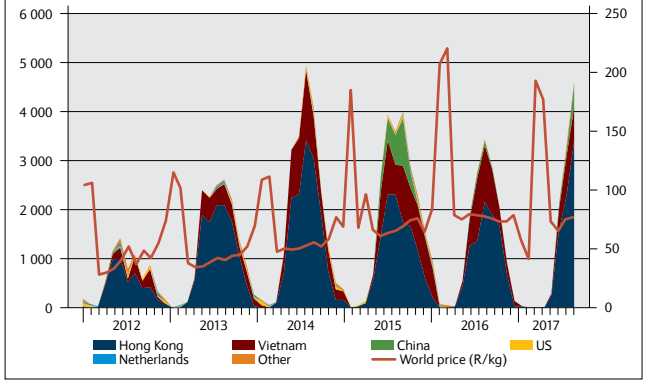
Domestic

Increased plantings over the past few years and adequate rainfall are expected to boost production in 2018. However, due to the expected increase in production in 2018, it is essential that South Africa's market access to export destinations improve so that producers will remain profitable. South Africa's NIS exports to China and Taiwan may decline in future, as macadamia production in China is expected to increase. It is therefore critical for the South African macadamia industry to collaborate closely with government to negotiate preferential trade agreements with other export destinations.

Graph 3: SA macadamia kernel exports (t) & price trends (RHS)



Graph 4: SA nut-in-shell macadamia exports (t) & price trends (RHS)



Pecan nut

Karabo Takadi & JG Horn, agricultural economists at Absa AgriBusiness
Wessel Lemmer, senior agricultural economist at Absa AgriBusiness

International trends

The world's four biggest pecan nut-producing countries are the US, Mexico, South Africa and Australia. Global production for the 2016/2017 crop is expected to be slightly higher than that of the previous season.

Overview

In Mexico, yield is expected to be lower this season as a result of a lack of rain during key filling months. Quality issues were also reported earlier in the season.

While 2016 was an off-year for Australia's pecan nut crop, the country still achieved good-quality nuts. Solid domestic demand, along with a strong international market, is expected to support the Australian market. Furthermore, while China's interest in pecan nuts from Australia remains strong, kernel demand from Europe and Asia, including that from emerging markets, are also being observed.

US pecan nut stocks for 2016/2017 are expected to be higher due to production increases in most pecan nut-producing states, as well as higher opening stocks and an increase in imports. Producer prices also increased on the back of strong domestic and international demand. However, adverse weather conditions, including hurricanes Harvey and Irma, could result in yield reduction in the 2017/2018 season.

Domestic trends

South Africa produced 10 900t of pecan nuts in 2016.

This was despite the 2016 drought, which resulted in government imposing water restrictions on irrigation in specific regions of the country.

However, production has steadily increased over the past nine years, with about 29 000ha currently planted to the crop, of which between 26% and 28% are presently in production.

Moreover, pecan nut production is expected to increase significantly over the next few years as more orchards come into production.

Exports

The 2017 crop produced roughly 14 000t of good-quality pecan nuts of which between 85% and 90% will be exported.

The majority of South Africa's pecan nut crop is exported nut-in-shell (NIS) to China, where demand remains strong.

However, as this market prefers larger nuts, smaller-sized nuts not suitable for the Chinese market will be cracked and consumed locally, or exported to markets in the EU.

South African nuts arrive fresh on the Chinese market, which is a great advantage for local exporters.

The two most important times for nut marketing in China are during the Chinese New Year, which usually occurs in February, and the autumn festival, which occurs around September.

As South Africa harvests pecan nuts in June and July, it is well suited to supply this market at these particular times.

Consumers becoming more health-conscious are the main drivers behind the increased demand for pecan nuts, while the exchange rate is one of the largest drivers for South African pricing.

The average export price for pecan nuts was R89/kg in 2016, compared with R66/kg in 2015, and R54/kg in 2014.

The steady increase in prices year-on-year can, to some extent, be attributed to the fluctuating exchange rate.

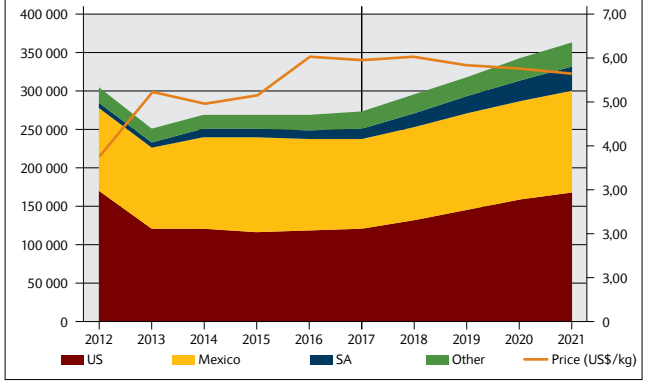
Outlook

Locally, South Africa's pecan nut production is expected to increase significantly over the next few years as more orchards come into production.

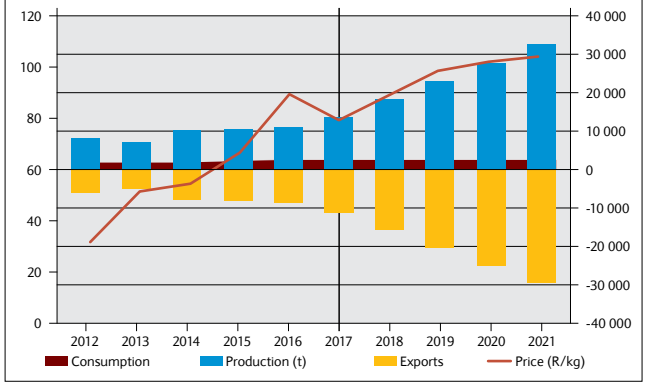
Growth in demand is expected to be driven by an increase in exports to Asia where demand is improving in line with population growth.

Furthermore, increasing demand will also be driven by consumers becoming more health-conscious, and favouring healthier snacks.

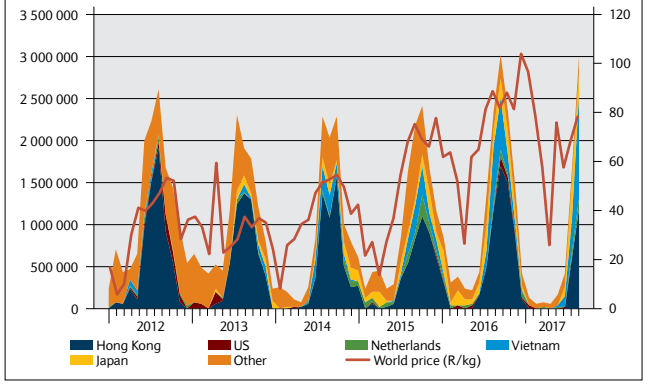
Graph 1: World pecan nut production (t) & price trends (RHS)



Graph 2: SA pecan nut production (in-shell) & price trends (RHS)



Graph 3: World pecan nut & other nut exports (t) & price trends (RHS)



SECTION 4:
GAME AND OSTRICH

Game

Wessel Lemmer, senior agricultural economist at Absa AgriBusiness
Dr Flippie Cloete, head of Terratek at Suidwes Landbou
Ernst Janovsky, independent agricultural economist

Overview

Interest in breeding higher value game, as well as breeding colour and/or morphological variants, started during the global financial crisis of 2007 to 2009. Before the crisis, the rand was relatively strong, and thus the game industry endured low profitability, with the stronger rand resulting in subdued income from local and international hunters. As such, the breeding of higher value and/or colour and morphological variants revived the industry, and the hunt was on to acquire the best genetic material to breed animals with traits that met the demands of professional, international trophy hunters. Since 2013, the demand for top genetic game breeding material has increased sharply, with prices for most game animals reaching a historic high in 2015.

However, the 2016 drought and subsequent low commodity prices in 2017 have negatively impacted on the buying power of game ranchers, farmers and breeders in the summer rainfall production region. This is because the drought has negatively affected not only the gross incomes of grain and oilseed producers, but also that of permanent crops and livestock producers, which has led to an increase in animal feed prices. This, in turn, has made it more expensive to keep game animals in good condition.

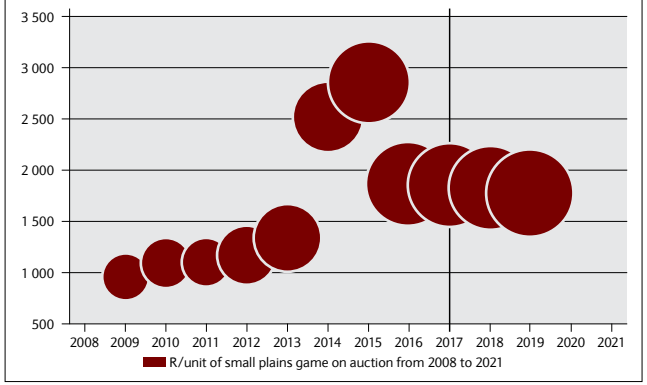
Increased breeding improved the quality and supply of game animals, with the number of auctions and animals offered for sale on auction notably increasing over the past few years.

However, the impact of the drought on income and production costs, as well as on the hunting industry, has resulted in the recent downward trend in game animal prices. Moreover, investor confidence has decreased resulting in a negative impact on demand.

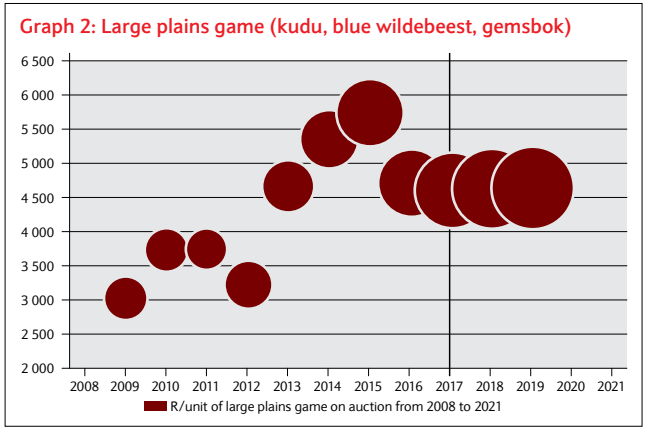
Game animal auction prices have sharply decreased to levels close to the current hunting or consumptive value of most animals. Disease-free buffalo is arguably the exception, with prices prevailing at relatively high levels when compared with other species. The price resilience of disease-free buffalo is mainly a result of strong demand from well-established game ranchers in the process of improving the genetic quality of their animals, or expanding and diversifying their game animal portfolio.

This outlook is based on data received from all game auctions in South Africa from January 2008 to August 2017. The outlook also projects prices and number of game on auction for 2018 and 2019.

Graph 1: Small plains game (impala, blesbok, springbok)



Graph 2: Large plains game (kudu, blue wildebeest, gemsbok)



Small plains game

(Impala, blesbok, springbok)

- Weak economic growth has undoubtedly had a negative impact on local hunters and their spending patterns. Recent research conducted by TREES at North-West University revealed that while hunters do not necessarily spend less, they do hunt fewer animals per year. This is a result of the price increase in the hunting of animals, as well as price increases in equipment and other associated expenses such as accommodation, food, and fuel. A decline in the number of animals hunted per hunter, per year, could further contribute towards the current price pressure. Similarly, the decline in prices of colour and/or morphological variants also contributed towards a decline in the average price of various plains game species.
- The prices of previously higher-valued impala and springbok have declined, while the price of blesbok has remained fairly stable at lower levels compared with previous years.
- It is expected that female game animal prices will decline about 8% in 2018, compared with prices in 2017, while the number of female game animals on auction during 2018 will increase 15%.
- Male game animal prices are expected to decline 15% in 2018 compared with prices in 2017, while the number of male game animals on auction during 2018 will increase 29%.

Large plains game

(Kudu, blue wildebeest, gemsbok)

- The demand for larger game animals is generally higher amongst local hunters when compared with demand for smaller game species. As such, large game animal prices tend to be more resilient, with higher beef and mutton prices providing underlying support for large plains game prices.
- Improved grazing conditions and rainfall in the summer rainfall production region will improve the profitability of game farming

as feeding costs will decline and population growth rates will increase.

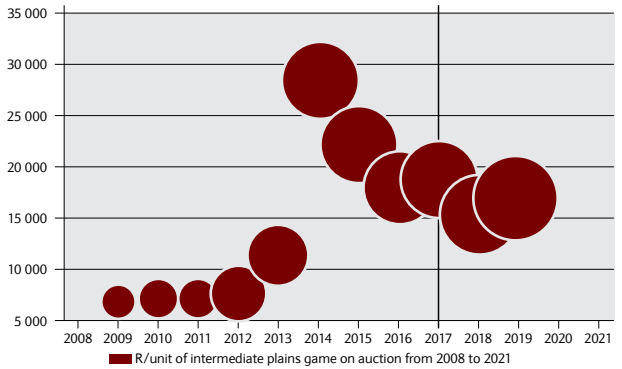
- The value of split bulls, such as golden wildebeest, weakened to be on par with the value of non-split bulls. As split bulls are no longer used for breeding, they are marketed for hunting at prices equal to those of non-split bulls, as premiums are no longer paid for split bulls for breeding purposes.
- Female game animal prices are expected to decline 5% in 2018, compared with 2017, while the number of female game animals on auction in 2018 will increase 29%.
- It is expected that male game animal prices will decline 9% in 2018, compared with 2017, while the number of male game animals on auction in 2018 will increase 29%.

Intermediate plains game

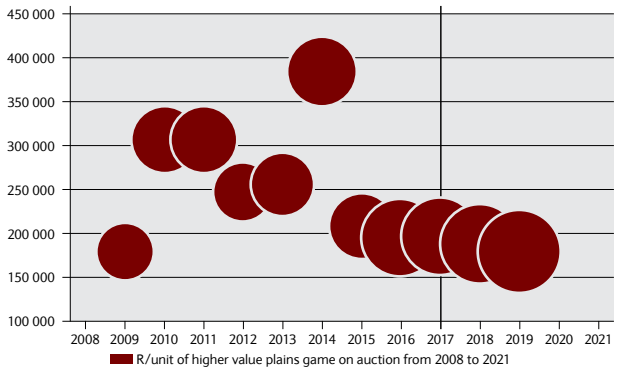
(Nyala)

- It is expected that male game animal prices will decline 4% in 2018, compared with 2017, while the number of male game animals on auction will increase 20%. This marginal price decrease is mainly a result of the notable difference in price between young and older animals. As mature male animals currently sell for much higher prices, farmers have the financial incentive to keep these animals for longer before selling them. This provides underlying support for prices.
- Female game animal prices are expected to decline 31% in 2018, compared with 2017, while the number of female game animals on auction will increase 28%.

Graph 3: Intermediate plains game (nyala)



Graph 4: Higher-value plains game (buffalo, sable antelope, roan antelope)

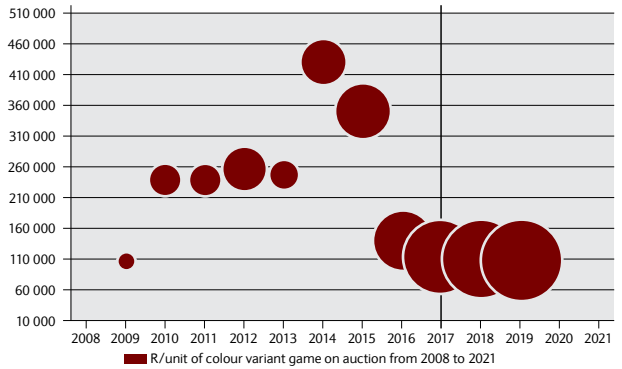


Higher-value plains game

(Buffalo, sable antelope, roan antelope)

- In contrast to previous years, it is expected that more mature and trophy animals will be offered on auction during 2018, with the expectation that they will achieve higher prices than before.
- It is expected that more female sable and roan antelope will be auctioned in 2018, compared with 2017, in an attempt by breeders to achieve a similar income as achieved in preceding years.
- Buffalo prices are likely to remain relatively high in 2018, which will provide underlying support for the value of other higher-value plains game.
- It is expected that female game animal prices will decline 13% in 2018, compared with 2017, while the number of female game animals on auction will remain unchanged from the previous year.
- It is likely that male game animal prices will increase 13%, compared with 2017, while the number of male game animals on auction will increase 17% in 2018.
- Due to the negative correlation between horn size and fertility, breeders are warned not to limit productivity by favouring horn size over fertility traits.

Graph 5: Colour variant game (black impala, golden wildebeest)



Colour variant game

(Black impala, golden wildebeest)

For the first time ever, a greater effort has been made in terms of developing a consumer market for colour and/or morphological variants. A number of colour and/or morphological variants, especially golden wildebeest and black impala, were hunted during 2017. However, the extent to which this market will develop remains to be seen.

Current information from the hunting industry suggests that most of the colour and/or morphological animals being hunted are not pre-booked at hunting shows or other, similar platforms, with the majority of hunters deciding to hunt these animals while on safari in South Africa. This may be due to the preconceived notion that these animals are domesticated and have been genetically manipulated, amongst other reasons. While this assumption is likely based on inaccurate information published or broadcast in popular media, it appears that at least some hunters are changing their preceptions once on safari in South Africa.

- Similar to higher-value game species, the number of animals offered on auction during 2018 and 2019 is likely to increase, which will most probably contribute towards a decline in prices during the coming season.
- The value of split bulls, such as golden wildebeest, has weakened to be on par with the value of non-split bulls.
- It is expected that female game animal prices will sharply decline in 2018, compared with 2017, while the number of female game animals on auction will increase 19%.
- Male game animal prices are expected to sharply decline in 2018, compared with 2017, while the number of male game animals on auction will trend slightly lower than, or remain unchanged from, the number achieved in 2017.

Outlook

It is anticipated that the game industry will enter a consolidation phase over the next two years. As such, the number of auctions held countrywide will likely decline compared with those of previous years. The number of animals offered on auction will, nevertheless, increase. However, due to reduced profit margins, game sellers are more likely to sell out-of-hand, rather than incur the marketing and logistic costs associated with auctions.

To sustain income levels and turnover, the number of lower-priced game on auction will increase over the next two years.

As the rand is expected to remain fairly strong in the medium term, income generated through international hunters will be limited. Should policy uncertainty and government debt levels continue to increase, further credit downgrades are probable, especially if South Africa's trade balance worsens.

A credit downgrade will weaken the rand, which would benefit the hunting and game industries, should policy uncertainty not impact negatively on tourism. Game farmers that acquired top breeding stock in previous years are expected to remain profitable.

Ostrich

Conce Moraba & Pieter de Jager, agricultural economists at Absa AgriBusiness
Wessel Lemmer, senior agricultural economist at Absa AgriBusiness

In June 2017, avian influenza was confirmed in South Africa, and since then, the H5N8 virus strain has spread to ostrich farms in the Southern Cape, with 12 confirmed cases of avian influenza on ostrich farms near Heidelberg, as well as on farms between Oudtshoorn and Calitzdorp. The industry is expected to quickly recover, however, as evidence suggests that ostriches have the genetic ability to develop immunity to the virus, while insufficient government funds to compensate farmers for losses suffered due to the outbreak has led to the incomplete culling of ostrich herds in which the virus has been confirmed. As such, these birds develop immunity to the illness, and can re-enter production faster than their poultry counterparts.

The markets

Fresh meat

Due to the bird flu outbreak and subsequent severe phytosanitary restrictions, the export of fresh ostrich meat to Europe is currently prohibited. Since the 2011 outbreak, which is considered more severe than the current outbreak, the sector developed an export market for pre-cooked ostrich meat. However, prices for fresh meat are higher, and the industry has struggled to maintain the market for pre-cooked meat. Thus, this market will have to be further developed in order to support and expand the export market for pre-cooked ostrich meat.

Challenges for future exports

The close geographic proximity of ostrich farms increases the risk of bird flu contamination in cases where farms are located within a 10km radius of each other. For example, in two cases where outbreaks were confirmed as positive for avian influenza, 70 farms have been quarantined, and fresh meat exports prohibited, because of their close geographic proximity to the affected farms. However, prices have remained high, as supply is limited. Current process allows for the continuation of fresh meat exports three months after South Africa has been declared bird flu-free. However, as not all quarantined ostriches are being culled, export restrictions on fresh meat will likely be much longer than only three months.

Feathers

The large majority of ostrich feathers are exported to Europe for the manufacturing of dusters, to Brazil for use in carnivals, or to other countries for use in the production of fashion accessories. The expected decline in ostrich production and slaughter rates will thus support prices. Is it expected that feather prices will remain high in the medium term, which will contribute more significantly to producers' profit margins. Moreover, global demand for ostrich feathers currently outweighs supply. Due to the expected decrease in slaughtering rates, it is anticipated that supply will remain low in the long term, which will further support prices. It is also expected that there will be a shortage of feathers, and that feather quality will also decline, as the sudden increase in ostrich slaughtering suggests that not all feathers were mature enough at time of slaughtering to achieve better prices.

Leather

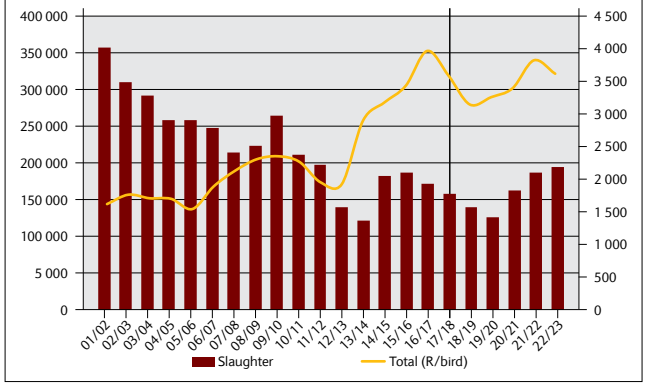
It is expected that the international exotic leather market, which consists of ostrich and crocodile leather, amongst others, will decline in the long term. The market for ostrich leather comprises two, important industries: first, ostrich leather is popular in the production of US boots. However, indications suggest that demand for US boots is declining, as the younger generations of Americans show less interest in the product than the older generations. It is therefore necessary that the ostrich leather industry develops new markets for ostrich leather in order to offset the decline in demand for ostrich leather in the US; second, ostrich leather remains in high demand from international fashion brands for the manufacturing of handbags. Countries, such as South Korea, import ostrich leather from South Africa, process it to manufacture handbags, and export these to countries such as Japan, China, Hong Kong and Singapore.

However, the market for ostrich leather in the manufacturing of no-brand handbags in Asia is not as vibrant as the brand name market in Europe, and thus demand for ostrich leather remains under pressure in Asia. Producers will have to improve the quality of ostrich skins delivered to tanneries, as better-quality skin will likely make a notable difference in the income generated from each ostrich.

Feed prices

It is expected that feed prices will remain subdued in the long term, as the bumper maize and soya bean crops will likely ensure that feed prices remain low for the next two years. This should help producers improve profit margins and mitigate the decline in production.

Graph 1: Number of ostriches slaughtered & price/ostrich (RHS)



Outlook

It is likely that ostrich slaughter rates will decline over the next two to three years. Up to 30 June 2017, 171 000 ostriches were slaughtered, and it is expected that this number will decline to between 155 000 and 158 000 in 2018. This number is expected to decline even further in 2019, with an estimated 110 000 to 120 000 ostriches slaughtered. The reduction in slaughtering rates is due to the avian influenza outbreak, the decrease in production and slaughter prices, and the impact of the drought on feed prices.

As such, it is expected that producers will begin specialising in the different facets of ostrich production, such as meat, leather and feather production.

The close proximity of ostrich farms to each other, which has a notable impact on fresh meat exports, must be addressed. It is also probable that ostrich chicks will, in future, be reared on farms in regions where feed is manufactured, and where farms are more than 10km apart from each other.

Appendix B: Commodity tables

Vegetables

Table 1: Tomato trends (t) in South Africa from 2010 to 2018

Year	Production	Imports	Consumption	Exports	Prices (R/t)
2010	523 000	120	520 000	3 000	4 454
2011	545 000	330	540 000	6 000	4 449
2012	527 000	330	513 000	14 000	4 738
2013	538 000	360	536 000	2 000	5 096
2014	539 000	370	537 000	2 000	6 086
2015	561 000	340	559 000	2 000	6 043
2016	573 000	460	571 000	2 000	5 803
2017	581 000	300	579 000	3 000	5 911
2018	591 000	290	588 000	3 000	5 878

Table 2: South African potato trends (t) from 2010 to 2018

Year	Production	Imports	Consumption	Exports	Prices (R/t)
2010	2 165 000	10	2 122 000	43 000	2 688
2011	2 205 000	10	2 185 000	20 000	2 616
2012	2 202 000	20	2 158 000	44 000	2 658
2013	2 194 000	40	2 184 000	10 000	3 382
2014	2 344 000	30	2 331 000	13 000	3 448
2015	2 318 000	10	2 304 000	14 000	2 888
2016	2 322 000	60	2 311 000	11 000	4 771
2017	2 330 000	30	2 316 000	14 000	3 269
2018	2 320 000	20	2 306 000	14 000	3 240

Table 3: South African carrot trends (t) from 2010 to 2018

Year	Production	Imports	Consumption	Exports	Prices (R/t)
2010	152 000	0	124 000	28 000	3 431
2011	178 000	20	153 000	25 000	2 915
2012	183 000	10	177 000	6 000	2 725
2013	184 000	10	183 000	1 000	3 283
2014	202 000	0	201 000	1 000	3 968
2015	214 000	10	212 000	2 000	3 108
2016	218 000	0	216 000	2 000	3 806
2017	220 000	0	219 000	1 000	3 776
2018	225 000	0	224 000	1 000	3 688

Table 4: South African onion trends (t) from 2010 to 2018

Year	Production	Imports	Consumption	Exports	Prices (R/t)
2010	563 000	420	555 000	8 000	3 142
2011	625 000	430	615 000	10 000	2 608
2012	596 000	410	588 000	8 000	3 095
2013	619 000	310	612 000	7 000	4 166
2014	675 000	320	667 000	8 000	4 253
2015	687 000	280	678 000	9 000	3 523
2016	688 000	460	680 000	9 000	5 423
2017	693 000	240	682 000	11 000	2 828
2018	676 000	250	668 000	8 000	5 624

Citrus

Table 5: South African lemon production (t) & price trends from 2010 to 2021

Year	Production	Imports	Consumption	Processing	Exports	Price (R/t)
2010	216 202	54	11 484	731	151 640	4 055
2011	260 994	270	12 821	982	166 853	3 244
2012	240 750	113	12 520	720	166 619	4 754
2013	257 819	363	13 270	596	175 989	5 550
2014	329 095	677	14 934	1 288	219 455	6 771
2015	353 051	920	14 908	1 378	246 293	7 238
2016	323 358	2 038	15 958	3 066	236 842	8 399
2017	401 839	1 750	15 583	4 730	222 915	6 933
2018	454 169	2 029	16 517	4 196	292 812	7 729
2019	543 408	2 308	18 588	5 659	378 259	9 001
2020	1 059 465	2 587	18 556	7 602	840 228	9 116
2021	1 290 977	2 866	19 863	5 574	107 8321	10 013

Table 6: World lemon production (t) & price trends from 2010 to 2021

Year	Production	Imports	Consumption	Processing	Exports	Price (US$/t)
2010	7 037 000	1 425 000	4 626 000	2 347 000	1 489 000	724
2011	6 524 000	1 497 000	4 478 000	1 854 000	1 689 000	803
2012	6 510 000	1 526 000	4 580 000	1 904 000	1 552 000	663
2013	6 214 000	1 517 000	4 597 000	1 543 000	1 591 000	737
2014	7 405 000	1 602 000	4 947 000	2 338 000	1 722 000	1 042
2015	6 938 000	1 812 000	5 008 000	1 920 000	1 822 000	977
2016	7 209 000	1 805 000	5 138 000	1 985 000	1 891 000	1 117
2017	7 101 000	1 704 000	5 090 000	1 980 000	1 910 000	1 025
2018	7 223 000	1 705 000	5 098 000	1 971 000	1 900 000	1 031
2019	7 243 000	1 771 000	5 228 000	2 046 000	1 973 000	1 048
2020	7 346 000	1 876 000	5 416 000	2 161 000	2 075 000	1 008
2021	7 499 000	1 870 000	5 305 000	2 186 000	2 105 000	1 063

Table 7: South African soft citrus production (t) & price trends from 2010 to 2021

Year	Production	Imports	Consumption	Processing	Exports	Price (R/t)
2010	148 313	751	9 046	26 233	116 670	3 805
2011	130 113	846	10 283	16 212	108 569	4 091
2012	142 166	898	11 209	20 018	122 631	3 760
2013	171 234	1 395	23 021	26 769	133 548	5 159
2014	195 293	928	23 833	22 062	153 177	5 442
2015	202 563	1 146	23 941	28 620	156 583	5 606
2016	219 334	1 267	22 503	33 537	189 597	5 811
2017	240 709	1 344	17 833	20 726	202 150	6 063
2018	284 148	1 421	23 247	25 591	235 309	6 788
2019	443 084	1 499	21 709	34 222	387 153	7 071
2020	481 767	1 577	24 678	28 205	428 884	7 344
2021	520 449	1 654	26 900	36 588	456 960	7 767

Table 8: World soft citrus production (t) & price trends from 2010 to 2021

Year	Production	Imports	Consumption	Processing	Exports	Price (US$/t)
2010	21 898 000	2 034 000	20 333 000	1 495 000	2 104 000	775
2011	23 761 000	2 216 000	22 177 000	1 411 000	2 389 000	940
2012	24 489 000	2 117 000	23 057 000	1 384 000	2 165 000	920
2013	26 474 000	2 281 000	24 847 000	1 425 000	2 483 000	948
2014	28 294 000	2 177 000	26 527 000	1 614 000	2 330 000	968
2015	28 730 000	2 181 000	27 186 000	1 409 000	2 316 000	913
2016	28 527 000	2 292 000	26 883 000	1 491 000	2 445 000	994
2017	30 121 000	1 099 000	28 789 000	1 480 000	2 611 00 0	1 154
2018	31 310 000	1 257 000	31 151 000	1 501 000	3 166 000	1 164
2019	33 625 000	1 412 000	23 185 000	1 611 000	2 976 000	1 059
2020	34 583 000	1 662 000	25 330 000	1 712 000	3 621 000	1 045
2021	35 434 000	1 801 000	26 531 000	1 720 000	3 398 000	1 061

Citrus

Table 9: South African orange production (t) & price trends from 2010 to 2021

Year	Production	Imports	Consumption	Processing	Exports	Price (R/t)
2010	1 415 447	1 468	134 872	266 508	1 123 510	1 608
2011	1 496 417	1 349	137 964	306 761	988 154	1 763
2012	1 646 425	9 809	129 244	351 436	1 107 218	1 912
2013	1 808 142	19 292	126 370	421 474	1 173 286	2 075
2014	1 797 476	13 108	120 310	439 590	1 142 640	2 231
2015	1 761 115	16 670	114 110	402 088	1 159 411	2 543
2016	1 382 793	3 468	89 035	212 129	1 063 813	3 817
2017	1 849 365	15 015	142 587	524 033	1 706778	3 259
2018	2 034 748	16 442	148 392	545 366	1 886 356	3 607
2019	2 204 361	17 868	146 115	536 997	2 058 247	3 826
2020	2 211 679	19 294	135 320	497 324	2 076 359	4 068
2021	2 088 973	20 721	127 389	468 178	1 961 584	4 306

Table 10: World orange production (t) & price trends from 2010 to 2021

Year	Production	Imports	Consumption	Processing	Exports	Price (US$/t)
2010	55 990 000	3 495 000	28 825 000	26 639 000	3 996 000	537
2011	53 797 000	3 668 000	30 839 000	22 729 000	3 932 000	600
2012	49 851 000	3 628 000	28 928 000	20 662 000	3 889 000	527
2013	52 082 000	3 423 000	30 670 000	20 833 000	4 002 000	503
2014	48 938 000	3 708 000	28 231 000	20 356 000	4 059 000	529
2015	46 993 000	4 006 000	29 253 000	17 278 000	4 468 000	515
2016	50 186 000	4 115 000	28 190 000	21 482 000	4 629 000	565
2017	51 089 000	4 130 000	28 496 000	21 038 000	4 540 000	438
2018	51 183 000	4 188 000	29 691 000	20 152 000	4 906 000	407
2019	49 929 000	4 152 000	28 962 000	20 342 000	5 047 000	359
2020	48 747 000	4 280 000	29 305 000	19 429 000	5 193 000	317
2021	47 841 000	4 594 000	29 283 000	19 259 000	5 196 000	302

Table 11: South African grapefruit production (t) & price trends from 2010 to 2021

Year	Production	Imports	Consumption	Processing	Exports	Price (R/t)
2010	343 028	1 000	5 393	122 572	216 112	1 472
2011	415 572	4 000	4 412	199 034	220 030	2 082
2012	308 741	4 208	4 306	120 043	180 515	2 306
2013	443 066	17 705	6 017	178 331	262 909	2 336
2014	417 421	11 526	4 428	191 138	217 184	3 113
2015	390 473	7 259	3 918	153 801	220 240	3 960
2016	284 350	3 964	3 615	101 333	202 495	5 193
2017	400 000	10 342	4 139	159 435	232 433	4 982
2018	410 000	11 153	4 243	163 421	238 244	5 514
2019	440 000	11 965	4 553	175 379	255 677	5 848
2020	463 158	12 777	4 793	184 609	269 134	6 219
2021	474 737	13 589	4 913	189 225	275 862	6 582

Table 12: World grapefruit production (t) & price trends from 2010 to 2021

Year	Production	Imports	Consumption	Processing	Exports	Price (US$/t)
2010	5 227 000	752 000	4 243 000	928 000	808 000	468
2011	5 544 000	731 000	4 602 000	873 000	800 000	544
2012	5 842 000	743 000	4 818 000	954 000	813 000	514
2013	6 067 000	752 000	5 087 000	907 000	825 000	477
2014	6 246 000	670 000	5 422 000	745 000	736 000	462
2015	6 363 000	700 000	5 634 000	710 000	784 000	470
2016	5 934 000	688 000	5 313 000	552 000	756 000	525
2017	6 241 000	714 000	5 524 000	528 000	790 000	499
2018	6 620 000	746 000	5 905 000	540 000	787 000	498
2019	6 867 000	754 000	6 054 000	525 000	849 000	462
2020	7 158 000	701 000	6 398 000	608 000	772 000	466
2021	7 800 000	738 000	6 957 000	640 000	849 000	474

Avocado

Table 13: South African avocado production (t) & price trends from 2010 to 2021

Year	Production	Exports	Imports	Consumption	Price (R/kg)
2010	104 677	47 808	1 683	56 868	11.30
2011	80 142	27 636	1 799	52 506	7.20
2012	117 129	50 317	1 805	66 811	9.36
2013	103 131	46 400	2 308	56 731	14.91
2014	133 708	60 177	1 962	73 531	15.33
2015	117 238	52 095	2 246	65 143	17.20
2016	123 392	55 736	2 416	67 655	19.64
2017	105 000	49 944	2 670	57 726	20.89
2018	136 950	69 001	2 924	70 872	24.76
2019	111 142	48 884	3 178	65 436	28.59
2020	172 182	92 350	3 432	83 263	30.83
2021	160 701	93 686	3 686	70 701	32.62

Macadamia nut

Table 14: South African macadamia production (t) & price trends from 2010 to 2021

Year	Production (dry-in-shell [DIS]*)	Farm gate price (R/kg kernel)	Farm gate price (R/kg DIS)
2010	28 429	69,00	19,30
2011	30 068	103,00	28,80
2012	34 571	112,00	31,40
2013	37 500	112,00	31,40
2014	44 890	125,50	35,10
2015	46 000	191,00	61,30
2016	38 000	192,40	62,32
2017	42 000	183,30	55,50
2018	57 042	203,30	60,50
2019	60 845	232,80	69,70
2020	65 493	245,10	74,50
2021	70 141	255,30	80,00

Table 15: World macadamia production (t) from 2015 to 2021

Year	Australia	SA	US	Kenya	Malawi	Other
2015	45 000	46 000	15 845	23 239	5 282	20 520
2016	48 600	38 000	15 845	28 521	8 451	23 387
2017	48 750	42 000	15 845	32 746	6 338	30 000
2018	52 817	57 042	15 845	38 028	8 028	40 775
2019	55 986	60 845	15 845	42 254	6 761	57 676
2020	58 099	65 493	15 845	47 958	8 451	82 851
2021	60 211	70 141	15 845	53 662	9 541	106 025

Pecan nut

Table 16: South African pecan nut production (t) & price trends from 2012 to 2021

Year	Production	Price (R/kg)	Exports	Consumption
2012	7 900	31,00	6 076	1 824
2013	6 900	51,00	5 034	1 866
2014	9 900	54,00	7 998	1 902
2015	10 500	66,00	8 371	2 129
2016	10 900	90,00	8 582	2 318
2017	13 552	79,00	11 197	2 355
2018	18 229	89,00	15 836	2 393
2019	22 906	99,00	20 475	2 431
2020	27 583	103,00	25 114	2 469
2021	32 260	105,00	29 753	2 507

Table 17: World pecan nut production (t) & price trends from 2012 to 2021

Year	World	US	Mexico	SA	Other	Avg price (in US$/kg)
2012	307 426	169 811	109 434	7 900	20 280	3,78
2013	251 814	120 755	107 547	6 900	16 612	5,26
2014	269 166	120 755	120 755	9 900	17 756	4,99
2015	269 808	116 981	124 528	10 500	17 799	5,20
2016	271 000	118 868	120 755	10 900	19 579	6,09
2017	290 008	120 868	117 755	13 552	21 536	6,00
2018	309 015	133 559	121 758	18 229	23 690	6,10
2019	328 023	146 250	125 762	22 906	26 059	5,90
2020	347 030	158 941	129 766	27 583	28 665	5,80
2021	366 038	168 284	133 847	32 260	31 532	5,70

Game

Table 18: Small plains game (impala, blesbok, springbok) on auction from 2010 to 2019

Year	Female (R/unit)	Females auctioned	Male (R/unit)	Males auctioned	Average (R/unit)	Total auctioned
2010	1 051	3 814	1 388	660	1 100	4 474
2011	1 051	3 814	1 388	660	1 100	4 474
2012	1 134	5 602	1 496	725	1 176	6 327
2013	1 291	7 477	1 683	1 137	1 343	8 614
2014	2 615	7 423	2 161	1 648	2 532	9 071
2015	3 078	10 145	2 018	2 458	2 869	12 603
2016	1 895	10 191	1 800	2 574	1 876	12 765
2017	1 614	5 562	2 000	1 659	1 711	7 221
2018	1 487	6 372	1 712	2 147	1 551	8 519
2019	1 303	6 291	1 634	2 274	1 402	8 565

Table 19: Large plains game (kudu, blue wildebeest, gemsbok) on auction from 2010 to 2019

Year	Female (R/unit)	Females auctioned	Male (R/unit)	Males auctioned	Average (R/unit)	Total auctioned
2010	3 428	2 123	5 577	395	3 766	2 518
2011	3 428	2 123	5 577	395	3 766	2 518
2012	2 788	2 955	5 815	513	3 236	3 468
2013	4 015	3 518	7 011	972	4 689	4 490
2014	4 605	4 154	7 990	1 194	5 372	5 348
2015	5 490	5 457	6 493	1 926	5 757	7 383
2016	4 291	5 009	5 946	1 856	4 735	6 865
2017	4 538	3 173	6 487	1 356	5 131	4 529
2018	4 293	4 091	5 912	1 756	4 790	5 847
2019	4 297	4 212	5 964	1 891	4 826	6 103

Game

Table 20: Intermediate plains game (nyala) on auction from 2010 to 2019

Year	Female (R/unit)	Females auctioned	Male (R/unit)	Males auctioned	Average (R/unit)	Total auctioned
2010	6 548	366	9 025	102	7 088	468
2011	6 548	366	9 025	102	7 088	468
2012	7 090	828	10 035	161	7 570	989
2013	11 174	886	12 236	296	11 453	1 182
2014	26 903	1 516	34 819	410	28 603	1 926
2015	24 246	1 614	14 512	425	22 189	2 039
2016	20 402	1 236	11 959	483	18 017	1 719
2017	13 610	1 200	11 999	432	13 190	1 632
2018	9 367	1 530	11 517	519	9 928	2 049
2019	9 422	1 636	11 466	596	9 986	2 232

Table 21: Higher-value plains game (buffalo, sable antelope, roan antelope) on auction from 2010 to 2019

Year	Female (R/unit)	Females auctioned	Male (R/unit)	Males auctioned	Average (R/unit)	Total auctioned
2010	381 357	566	195 723	401	307 140	967
2011	381 357	566	195 723	401	307 140	967
2012	369 316	427	92 136	336	247 255	763
2013	404 996	396	123 732	423	256 350	819
2014	543 044	619	151 718	404	384 486	1 023
2015	324 216	415	100 322	495	207 851	910
2016	258 153	855	87 312	518	194 827	1 373
2017	166 855	949	81 761	490	139 566	1 440
2018	145 790	948	92 078	571	126 815	1 519
2019	145 875	1 085	93 802	640	127 594	1 724

Table 22: Colour variant game (black impala, golden wildebeest) on auction from 2010 to 2019

Year	Female (R/unit)	Females auctioned	Male (R/unit)	Males auctioned	Average (R/unit)	Total auctioned
2010	216 194	134	307 360	45	239 113	179
2011	216 194	134	307 360	45	239 113	179
2012	219 709	267	378 279	79	255 914	346
2013	226 961	98	279 164	53	248 737	151
2014	439 872	248	423 333	136	433 670	384
2015	351 417	392	351 738	187	351 522	579
2016	140 976	465	130 692	177	138 274	642
2017	16 518	540	37 543	251	22 993	791
2018	14 067	644	14 162	245	14 093	889
2019	13 937	635	11 330	245	13 219	879

Table 23: South African ostrich production & price trends from 2001/2002 to 2022/2023

Marketing Year	Slaughtered	Skin (R/bird)	Meat (R/bird)	Feathers (R/bird)	Total (R/bird)
2001/02	355 725	931	641	45	1 572
2002/03	307 779	749	972	45	1 721
2003/04	291 045	660	959	45	1 664
2004/05	257 263	666	945	45	1 656
2005/06	257 619	678	771	45	1 494
2006/07	246 042	748	1 040	63	1 852
2007/08	213 761	927	1 090	81	2 098
2008/09	222 265	1 007	1 185	85	2 278
2009/10	262 904	842	1 399	85	2 327
2010/11	210 776	624	1 530	88	2 242
2011/12	196 980	691	1 112	114	1 917
2012/13	138 519	925	668	293	1 886
2013/14	120 610	1 072	1 242	577	2 891
2014/15	181 161	1 362	1 168	646	3 176
2015/16	186607	1 550	1 317	572	3 439
2016/17	170 935	1 525	1 829	634	3 987
2017/18	157 000	1 317	1 625	657	3 599
2018/19	138 697	1 367	1 073	702	3 143
2019/20	125 984	1 498	975	786	3 259
2020/21	161 345	1 535	1 021	842	3 398
2021/22	186 200	1 550	1 487	802	3 839
2022/23	192 743	1 489	1 440	699	3 628

Table 24: South African fresh, frozen and chilled meat ostrich exports from 2010 to 2017

Year	Exported (value in R)	Exported (kg)	R/kg
2010	294 854 737	3 977 399	74
2011	76 682 400	972 195	79
2012	2 111 023	37 637	56
2013	4 437 603	45 610	97
2014	33 138 396	229 017	145
2015	157 344 194	823 111	191
2016	288 390 272	1 814 810	159
2017	96 943 788	788 100	123

Table 25: South African ostrich skin, feathers & feather parts exports from 2010 to 2017

Year	Exported (value in R)	World (kg)	R/kg
2010	49 722 896	128 189	388
2011	55 304 793	129 112	428
2012	67 256 516	132 910	506
2013	42 168 193	44 626	945
2014	45 219 891	61 847	731
2015	51 463 618	84 997	605
2016	43 021 169	132 035	326
2017*	2 416 252	6 919	349

*Preliminary figures for January to August

Notes

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