## Markets and Economic Research Centre



South Africa's diverse weather and climatic conditions enable the country to cultivate and produce a variety of fruits. The country is known globally as a producer and exporter of citrus, deciduous and subtropical fruits. The report is released on a quarterly basis by the trade unit of the markets and Economic Research Centre.

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## 1. Background

South Africa's diverse weather and climatic conditions enable the country to cultivate and produce a variety of fruits. The country is known globally as a producer and exporter of citrus, deciduous and subtropical fruits. This issue of the Fruit Trade Flow Report looks at citrus fruit (grapefruit and lemons) and pome fruit (apples and pears). The main focus is on the analysis of the current season's performance of these fruits, for both the export and domestic markets, in comparison with the previous seasons. This report also assesses the global production of these fruits, giving a perspective on South Africa's production and export rankings (as a share of global production and exports).

## 2. Overview of citrus fruit for the 2019/20 season

Citrus fruits have been some of the most popular products during the pandemic, owing to their immune-boosting properties in the world's quest to fight COVID-19. The citrus fruit industry comprises five broad categories, namely oranges, easy peelers (soft citrus), grapefruit, lemons and limes. The next section gives a preview of global citrus production for the 2019/20 season, with a particular focus on grapefruit and lemons.

### 2.1. Preview of global citrus production for the 2019/20 season

The world is estimated to produce approximately 6.70 million tons of grapefruit in 2019/20. This is, however, a decline of $1.41 \%$ from the 2018/19 season, due to the decline in the United States (10.8 \%) and Mexico ( $23.2 \%$ ) caused by unfavourable weather conditions. Figure 1 illustrates the world's top producers of grapefruit from 2015/16 to 2019/20. China is the leading producer of grapefruit and has been for the past few years. China produced over 4 million tons of grapefruit from 2015/16 to 2019/20. The United States (US) is the second largest producer of grapefruit in the world, with South Africa coming in third place according to the 2019/20 estimates, taking over Mexico's position. China is estimated to produce 4.93 million tons in 2019/20, followed by the US at 485000 tons, South Africa (387 000 tons), Mexico (350 000 tons) and Turkey (270 000 tons).


Figure 1: Top global producers of grapefruit, 2015/16-2019/20
Source: USDA (2020)
*Estimate
The production of lemons and limes is projected downwards by 11.4 \% from 8.53 million tons in 2018/19 to 7.55 million tons for the 2019/20 season. This downturn is due to production in Argentina, the European Union (EU) and Turkey having decreased by 21.4 \%, 15.8 \% and 13.6 \% respectively. The EU's production was affected by unfavourable weather conditions in Spain and Italy. Figure 2 shows that the largest producer of lemons and limes is Mexico, but despite this, production in that country is also estimated to decline by about 8.4 \% to 2.2 million tons. Mexico is followed by the EU, producing 1.42 million tons, then Argentina at 1.4 million tons. South Africa is the sixth-largest producer of lemons and limes and is expected to produce 579000 tons of lemons, equivalent to a $17.7 \%$ increase from last season.


Figure 2: Global producers of lemons and limes, 2015/16-2019/20
Source: USDA (2020)
*Estimate
The consumption of lemons and limes is expected to decline by $5 \%$ due to the decline in production. However, the demand for lemons during the COVID-19 pandemic has increased, pushing prices up because of shortages in the EU. This was a favourable outcome for exporting countries such as Argentina and South Africa. The EU is the largest consumer of lemons and limes, estimated at 1.716 million tons in 2019/20. The US follows with 1.356 million tons, then Mexico ( 1.140 million tons), Turkey (532 000 tons) and Russia (207 000 tons).


Figure 3: Global consumption of lemons and limes, 2015/16-2019/20
Source: USDA (2020)
*Estimate

### 2.1.1 Preview of global trade in citrus

Global grapefruit exports ranged from 785000 tons to an estimated 902000 tons during the period under review. The world exports about $13 \%$ of what it produces, while South Africa exports about $70 \%$. South Africa is the leading exporter of grapefruit in the world (Figure 4). The country is estimated to export 270000 tons in the 2019/20 season, followed by China (255 000 tons), Turkey (185 000 tons), Israel (75000) and the US (57 000 tons).


Figure 4: Global exports of grapefruit, 2015/16-2019/20
Source: USDA (2020)
*Estimate

The global imports of grapefruit are represented in Figure 5. It is evident that the EU is the largest importer of grapefruit, expected to import 370000 tons in 2019/20, followed by Russia, importing 135000 tons, then China (68 000 tons), Japan (20 000 tons), Canada (37 000 tons) and both Ukraine and Hong Kong (35 000 tons). Ukraine and Hong Kong imports are expected to increase by 20.7 \% and 29.6 \% from 2018/19 respectively.


Figure 5: Global imports of grapefruit, 2015/16 - 2019/20
Source: USDA (2020)
*Estimate

Mexico, South Africa and Turkey dominate the world's exports of lemons and limes. Due to lower production volumes, exports are projected to decline by $7.6 \%$ to 1.956 million tons in 2019/20. Mexico takes the lead as the largest exporter of lemons and limes, set to export 755000 tons in 2019/20, followed by South Africa, which will surpass Turkey by exporting 416000 tons, while Turkey will export 370000 tons (Figure 6). Argentina is expected to export 220000 tons and the US 90000 tons.


Figure 6: Global exporters of lemons and limes, 2015/16-2019/20
Source: USDA (2020)
*Estimate

Figure 7 shows the global imports over the period 2015/16 to 2019/20. Imports are expected to increase by 2.95 \% compared to 2018/19. The US was the leading importer of lemons and limes over all the years under review and is expected to import 815000 tons in 2019/20, followed by the EU at 600000 tons, Russia ( 210000 tons), Saudi Arabia (145000 tons) and Canada (120 000 tons).


Figure 7: Global imports of lemons and limes, 2015/16-2019/20
Source: USDA (2020)
*Estimate

### 2.2. Preview of South Africa's citrus production season, 2018/19

South Africa is expected to produce 579000 tons of lemons and limes and 387000 tons of grapefruit. South Africa's production of grapefruit, as well as lemons and limes, is estimated to have increased by 4 \% and 17.7 \% respectively in 2019. Favourable weather conditions supported increased production, increased area planted and high yields. The production and harvesting of these commodities were not highly affected by the COVID-19 pandemic, but logistics were affected due to delays at the start of the export season, mainly caused by congestion in the ports.


Figure 8: South Africa's production of grapefruit and lemons and limes, 2015/16 - July 2019/2
Source: USDA (2020)
*Estimate

### 2.2.1 South Africa's trade in citrus

South Africa exported 15.33 million cartons ( 1 carton $=15 \mathrm{~kg}$ ) of grapefruit in 2019, $11 \%$ lower than what was predicted for the 2019 export season (Table 1). This situation was influenced by weather conditions and logistical challenges within the sector. Grapefruit exports in 2020 are expected to be higher than the actual number of cartons exported in 2019. South Africa is expected to export 16.69 million cartons due to higher production and demand. So far, the country has exported 14.28 million cartons as of week 42, and the season usually closes in week 42. Lemon exports in 2020, on the other hand, are estimated at 26.41 million cartons, representing an increase of $19 \%$ from the previous season. Up until week 42, South Africa had exported a total of 25,76 million cartons, showing a $31 \%$ difference from 2019 in the same week.

Table 1: South Africa's citrus passed for export

| Product | 2019 <br> Estimate | 2019 <br> Actual | \% Difference <br> (Actual vs <br> estimate) | 2020 <br> Estimate | Week 42 <br> Grapefruit 17147107 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 15337965 | $-11 \%$ | 16688662 | 14282512 |  |  |
| Lemons | 21982876 | 22077288 | $0 \%$ | 26406988 | 25763116 |

Source: Citrus Growers' Association (CGA) (2020) \& Agrihub (2020)
South Africa has made a mark for itself in the global market in terms of citrus exports. Figure 9 represents the main importing countries of grapefruit from South Africa in 2020, up until week 42. Europe was the largest importer of South Africa's 14,28 million cartons of grapefruit in 2020, with a market share of $38 \%$, followed by South-East Asia (28 \%), Asia (13 \%), Russia (9 \%) and North America (5 \%).


Figure 9: Export destinations for South Africa's grapefruit, 2020
Source: Agrihub (2020)

Figure 10 shows the top countries importing lemons and limes from South Africa during the 2020 export season so far. The Middle East imported $35 \%$ of the 25,76 million cartons of lemons exported by South Africa, while Europe took a share of $34 \%$, followed by Russia and the UK (each 9 \%), South-East Asia (7\%) and North America ( $5 \%$ ). So far, most of these countries' imports grew higher than 2019 imports when compared during the same period because of the benefits of lemons in boosting the immune system against COVID-19.


Figure 10: Export destinations for South Africa's lemons and limes, 2020 (week 42)
Source: Agrihub (2020)
Figure 11 shows the quantities and average prices of grapefruit sold at the National Fresh Produce Markets (NFPMs) from 2018 to 2020 (August). It can be noted that the highest volume of 7107.61 tons was sold in 2019 compared to the other years where a total of 3874.91 tons was sold in 2018, with 2771.44 tons sold so far in 2020. This might be because of lower prices following the diversion of grapefruit that ought to have been exported to the local markets. The highest volume (2932.32 tons) was sold in August 2019 for the lowest price of R744.42/ton during the three years.


Figure 11: Local market sales of grapefruit, 2018-2020
Source: DALRRD (2020)

Figure 12 illustrates the volumes and prices of lemons sold at the NFPMs from 2018 to 2020. Significantly larger volumes were supplied between March 2020 and August 2020 when compared to the other years. By August 2020, the markets had already sold 17046.81 tons of lemons, while they sold 18917.98 tons in total in 2019. This might correspond to the increase in production and the increase in demand for lemons during the COVID-19 pandemic as related to the vitamin C content of lemons, which is reported to boost the immune system.


Figure 12: Local market sales of lemons, 2018-2020
Source: DALRRD (2020)

## 3. Overview of pome fruit for the 2019/20 season

Pome fruits consist of different fruit types, including apples, pears and quinces. The focus of this report is on the 2018/19 production season for apples and pears.

### 3.1. South Africa's pome fruit production

South Africa produces approximately 1.3 million tons of apples and pears each year. The total value of pome fruit production amounts to more than R8 billion, with $92 \%$ of this generated from fresh fruit sales. South Africa produces more apples than pears (see Figure 13). According to the latest information from Hortgro, a large share of apples ( $45 \%$ ) produced is exported to the international markets, while local markets and processing markets account for about $25 \%$ and $30 \%$ respectively. In 2019, apple production increased by 7 \% when compared with the 2018 volume.

On the other hand, half of the pears produced are exported to the international markets while the local and processing markets use about $13 \%$ and $34 \%$ respectively. A smaller share of $3 \%$ goes into dried fruits. In 2019, pear production increased by $2 \%$ when compared with the 2018 period.


Figure 13: Pome fruit production between 2010 and 2019
Source: Hortgro (2020)

### 3.2. South Africa's trade in pome fruit

Table 2 below highlights the cultivars of apples and pears that were passed for export in week 36 of 2019 and 2020. Generally, apples passed for export increased by $6 \%$ in week 36 of 2020 as compared to 2019. Golden Delicious is an important cultivar produced in South Africa, mostly for export, and it improved by $9 \%$ in week 36 of 2020. On the other hand, pears passed for export, in general, decreased by $6 \%$ in week 36 of 2020 as compared to 2019. Packham's Triumph was the only cultivar to show positive growth (26 \%), while Forelle showed a negative growth rate of $6 \%$, as was the case for Vermont Beauty ( $-19 \%$ ) and others ( $-25 \%$ ).

Table 2: Pome fruit cultivars passed for export ( 12.5 kg cartons)

| Cultivars inspected YTD | 2019 | 2020 | Difference |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Apples |  |  |  |  |  |
| Golden Delicious | 6345284 | 6906629 | 561345 | $9 \%$ |  |
| Cripps Pink and Pink Lady | 4350037 | 4432929 | 82891 | $2 \%$ |  |
| Fuji | 2709257 | 2841712 | 132455 | $5 \%$ |  |
| Other | 15604490 | 16502014 | 897523 | $6 \%$ |  |
| Total | 29009069 | 30683283 | $\mathbf{1 6 7 4 2 1 4}$ | $\mathbf{6 \%}$ |  |
| Pears |  |  |  |  |  |
| Packham's Triumph | 4543921 | 5717018 | 1173097 | $26 \%$ |  |


| Forelle | 3972642 | 3730536 | -242106 | $-6 \%$ |
| :--- | :---: | :---: | :---: | :---: |
| Vermont Beauty | 1700464 | 1384185 | -316278 | $-19 \%$ |
| Other | 5998710 | 4489778 | -1508932 | $-25 \%$ |
| Total | $\mathbf{1 6 2 1 5 7 3 7}$ | $\mathbf{1 5 3 2 1 5 1 7}$ | $\mathbf{- 8 9 4 2 2 0}$ | $\mathbf{- 6 \%}$ |

Source: Hortgro (2020)
South African apples are mainly exported to international markets, with about $45 \%$ of production being destined for export (refer to Figure 14). The figure below highlights the main importers of South Africa's apples. About 27 \% of apples destined for international markets are imported by the Far East and Asia, followed by the UK ( $21 \%$ ), Africa (20 \%), the Russian Federation (12 \%), the Middle East (10 \%) and Europe ( $8 \%$ ). There is an expected improvement to Africa's share due to ongoing negotiations; however, currently, Nigeria is the principal importer.


Figure 14: South Africa's export destinations for apples
Source: Hortgro (2020)
According to Hortgro (2020), South Africa exports $50 \%$ of its total production of pears to international markets. South Africa's pears have recently received outstanding attention in countries such as China. The figure below highlights the main export markets for South Africa's pear exports. It can be observed that Europe constitutes a larger share of $30 \%$, followed by the Russian Federation ( $21 \%$ ), the Middle East (20 \%), the Far East \& Asia (16 \%), and Africa (3 \%).


Figure 15: South Africa's export destinations for pears
Source: Hortgro (2020)
In South Africa, about 25 \% of apples produced are consumed locally as fresh fruit. The figure below highlights the volumes and prices of apples sold during the period 2018, 2019 and 2020 (January-August). In 2018, about 143686 tons were sold on the NFPMs at an average value of R7 227 per ton, while in 2019 there was an increase of 6091 tons when compared to 2018 sales. The current period (January - August) has recorded sales of about 92836 tons in total at an average price of $R 7,284.04$ per ton.


Figure 16: South Africa's local market sales of apples
Source: DALRRD (2020)

Figure 17 highlights the volumes and the prices of pears sold in the NFPMs during 2018, 2019 and 2020 (January-August), measured in tons and South African rand. In South Africa, about $13 \%$ of pears are consumed in local markets as fresh fruit. In 2018, about 43309.5 tons were sold at an average price of R6 722 per ton, and in 2019 about 46014 tons were sold at an average price of R7 289 per ton. The 2020 period only covers January to August as per the available data, and 31695 tons were sold at an average price of R 6610 per ton.


Figure 17: South Africa's local market sales of pears
Source: DALRRD (2020)

## 4. Fruit industry perspectives

The following section focuses on current issues affecting the fruit industry, and also provides an analysis of how the industry is performing in terms of addressing developmental issues and where it could improve.
4.1 Export promotion should complement geographical indications (Gls) for sustainable markets access: A case for South Africa's primary agricultural products
Over the years, industries in the agricultural sector have been and are still carrying out generic promotion of their products in international markets. Some industries' generic export promotion initiatives are funded through statutory levies, while others also get support from the Department of Trade, Industry and Competition (the dtic). In some settings, generic promotional activities are voluntarily financed by ascribing members. In general, generic export promotion initiatives used include participating in tradeshows, working with marketing agents, advertising, as well as the use of
company websites. Agricultural industries like table grapes that deal in fresh produce work closely with the Fresh Produce Exporters' Forum (FPEF) through which generic export promotions occur. Work done by the NAMC takes cognisance of the positive impact of export promotion as exhibited by the wine, table grapes and deciduous fruit industries (https://aejonline.org/index.php/aej/article/view/245). However, the landscape in international trade is fast transitioning, whereby countries are now resorting to protecting geographical indications of fruits and vegetables among other products in key strategic markets like Europe, Asia and America. By definition, a geographical indication (GI) is a generic term used to describe the various legal mechanisms used to protect geographical designators that inform consumers about the geographic origin of a product and the product's quality and characteristics.
This article, therefore, aims to highlight the likely long-term implications of South Africa not protecting Gls in key international markets for an export-oriented fruit industry, among others. Gls are highly recognised as a policy tool through which to achieve the above, and more importantly, while ensuring that the products are of high and reputable quality. Several regions/territories have established GI systems through which to protect designated names of products from their trading partners.

The European Union (EU), which remains South Africa's key market for a number of fruits, is one such market with well-established systems. Other markets include China, the United States and Mexico. South Africa is also working towards improving upon the existing structures (dominated by wines and three foodstuffs - Karoo lamb, rooibos and honeybush, which are enshrined in the EU-SADC economic partnership agreement), but the fruit industry has not yet "come to the party". Meanwhile, nonEuropean competitors within the European market like China, the United Kingdom and Thailand have taken the bold step of protecting Gls for several fruits, among other foodstuffs. The EU member states have registered slightly over 380 Gls as broadly categorised under "Class 1.6. Fruit, vegetables and cereals fresh or processed". Some of the protected Gl fruit categories include pomes, artichokes, apricots, etc. However, taking into consideration product names which are pending to be registered, the EU alone has close to 430 Gls in the fruit industry. Other countries like China and Vietnam have also recently signed special trade agreements through which a number of fruit products like pome, raisins, avocados and nuts, among others, are protected in the EU market. A bilateral trade agreement on Gls between the EU and China covers 200 products, while the EU-Vietnam FTA covers 169 products, and in both cases, there are also many fruit products.

Table 3: Summary of South Africa's most exported fruits to the EU for which some competitors like China have protected GI names in the EU market

| South Africa's top 10 fruits exported to <br> Europe (EU 28) |  | Non-EU countries with Protected Gls in the EU <br> for the product |  |
| :--- | :--- | :--- | :--- |
| Name | Share in South <br> Africa's exports | China / Vietnam | Share in the country's <br> exports |


| Grapes (fresh) | 66.1 \% | Vietnam | 15.5 \% -Vietnam <br> 3.5 \% - China |
| :---: | :---: | :---: | :---: |
| Oranges (fresh/dried) | 34.9 \% | China, Vietnam | $0 \%$-China <br> $0 \%$-Vietnam |
| Mandarins (fresh/dried) | 53.4 \% | Vietnam | $\begin{aligned} & 0 \% \text { - China } \\ & 0 \% \text {-Vietnam } \end{aligned}$ |
| Lemons (fresh/dried) | 36.7 \% | China, Vietnam | 54.9 \% - Vietnam $0 \%$ - China |
| Apples (fresh) | 22.6 \% | China, Vietnam | 0.1 \% - China |
| Cranberries | 91.5 \% | China |  |
| Pears (fresh) | 29.9 \% | China | $\begin{aligned} & 4.8 \% \text { - Vietnam } \\ & 1.8 \% \text { - China } \end{aligned}$ |
| Dried grapes (Raisins) | 65.4 \% | China | 49.4 \% - China <br> 34.1 \%- Vietnam |
| Grapefruit (fresh/dried) | 42.1 \% | China, Vietnam | 67.9 \%- Vietnam 44.6 \% - China |

Sources: Trade Map database, Council of the European Union (2020)
Based on Table 3, it is clear that the EU absorbs significant proportions of each of the fruits exported by South Africa, while China and Vietnam supply significantly smaller proportions of the same products, except for lemons, grapefruit and raisins for Vietnam, as well as grapefruit and raisins for China. Therefore, the protection of the Gls of these products in the EU by China and Vietnam is in one way a means of assuring consumers in the EU that the protected products are of high quality - a leverage upon which the products are bound to be recognised further and gain better market access. This may further be reinforced by promotional campaigns, as done by South Africa's fruit industries on top of the preferential duty-free treatment accorded to the products under the binding agreements with the EU.

Even though South Africa's fruits are enshrined in the EU-SADC EPA through which they benefit from the preferential benefits (especially duty-free market access), there is a concern that in the long term, consumers will build much more confidence in the quality of products protected within the EU by other trading partners. This is bound to foster more trade-in fruits from countries with Gls, like China, the US and Vietnam, among others. Conversely, although South Africa's products may not necessarily be of compromised quality, their visibility on retailers' shelves might however be jeopardised by the consumers' confidence in fruits from other countries, with wellrecognised Gls within Europe that will have built a long-term reputation. After that, likely, the proportion of South Africa's various fruit products destined for the EU is bound to drop and the country shall lose out.

## Conclusion

The international trade landscape is fast changing and many countries are capitalising on protecting GIs in key international markets like the EU, China and the US. Recently, the EU and China signed a special agreement on Gls while Vietnam also enacted a Free Trade Agreement with the EU, in which Gls also prominently feature. Therefore, South Africa also needs to protect more Gls, not only in the EU but also in other key markets like the US and China (and East Asia in general). Another major concern is that South Africa has not secured and protected Gls for the fruit industry (especially in the EU, which is a very important market for South Africa's fruits). In the long term, this presents a risk of South Africa's fruit products facing much stiffer competition in the EU from equally competitive products from China and Vietnam, among other countries. Thus, it is prudent for South Africa's fruit industry to consider protecting fruit Gls, not only in the EU but also in fast-growing markets like China and the US, which already have well-established Gl systems, coupled with a large and fast-growing middle-class category of people who are ready to pay higher prices for products of approved quality, as certified by "GI".

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## USEFUL LINKS

Agrihub
Bureau for Food and Agricultural Policy (BFAP)
Citrus Growers' Association (CGA)
Department of Agriculture, Forestry and Fisheries (DAFF)
Food and Agriculture Organisation (FAO)
www.agrihub.co.za
www.bfap.co.za
www.cga.co.za
www.daff.gov.za
www.fao.org/docrep/

Fresh Produce Exporters' Forum (FPEF)
Hortgro Services
National Agricultural Marketing Council (NAMC)
Perishable Products Export Control Board (PPECB)
Quantec Easy Data
South African Subtropical Growers' Association (Subtrops)
South African Table Grape Industry (SATGI)
Trade Map
www.fpef.co.za
www.hortgro.co.za
www.namc.co.za
www.ppecb.com
www.quantec.co.za
www.subtrop.co.za
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