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AGRONOMY AND HORTICULTURE MARKET DEVELOPMENT DIVISION

RESEARCH AND POLICY DEVELOPMENT SUBDIVISION



MARKET INTELLIGENCE REPORT BERRIES AND CITRUS FRUITS

ISSUE 2 OF 2022

1. INTRODUCTION

Berries are a group of perennial flowering plants with blue and purple berries, widely spread and distributed. They are classified in the section *Cynococcus* with the genus *Vaccinium*. They thrive in acidic soils with an ideal pH of 4.5 to 4.8 and they are considered to have the highest vitamins, proteins, and manganese among other berries and fruits (Hanson, 2016).

Citrus fruits on the other hand are a genus of flowering trees and shrubs producing citrus fruits in the rue family, *Rutaceae*, and they include some of the most important and common fruits such as oranges, lemons, grapefruits, pomelos, and limes. Citrus fruits have certain carbohydrates, fibre, vitamins C & B6, potassium, phosphorus, and manganese (Economos & Clay, 1998). Citrus is one of the world's most popular and widely grown fruit crops. Amongst the most commonly cultivated types, oranges account for more than half of the world's citrus production and they are the most widely traded citrus fruit, followed by tangerines, lemons, and grapefruits (FAO, 2020). Namibia's citrus industry is very small compared to neighbouring South Africa with oranges being the most-grown citrus type in the country (FAO, 2020).

This issue of the market intelligence report provides market analysis on various fresh (excluding frozen) berries (blueberries, strawberries, gooseberries, raspberries, and cranberries) and citrus (oranges, lemons & limes, grapefruits, and tangerines/mandarins) fruits market trends in terms of production, consumption demand and trade both from the global, regional and domestic outlook. Although also a berry fruit, this market intelligence report does not include an analysis of grapes. As one of Namibia's high-value crops with a large export market, a separate market intelligence report will be prepared separately for grapes.

2. GLOBAL OVERVIEW

2.1. BERRIES

PRODUCTION: Berries are native to Asia, Scandinavia, and North America and they continue to remain a popular product with great investments still being made in the cultivation of these berries in parts of the Latin American region (FAO, 2017). Furthermore, berries' total production has gradually increased over the years across major producing countries. According to Mordor Intelligence (2022), the majority of the global production of berries comes from Asia-Pacific with China and Japan being the leading countries in the production of fresh berries in this region.

As indicated in Figure 1 below, strawberries are the most commonly produced berry in the world, with an average production of over 8,5 billion tons over 5 years (2016 - 2020). Strawberries are followed by

raspberries with an average production of 846 million tons, with the least produced berry being gooseberries, with an average production of 114 million tons over the same period.

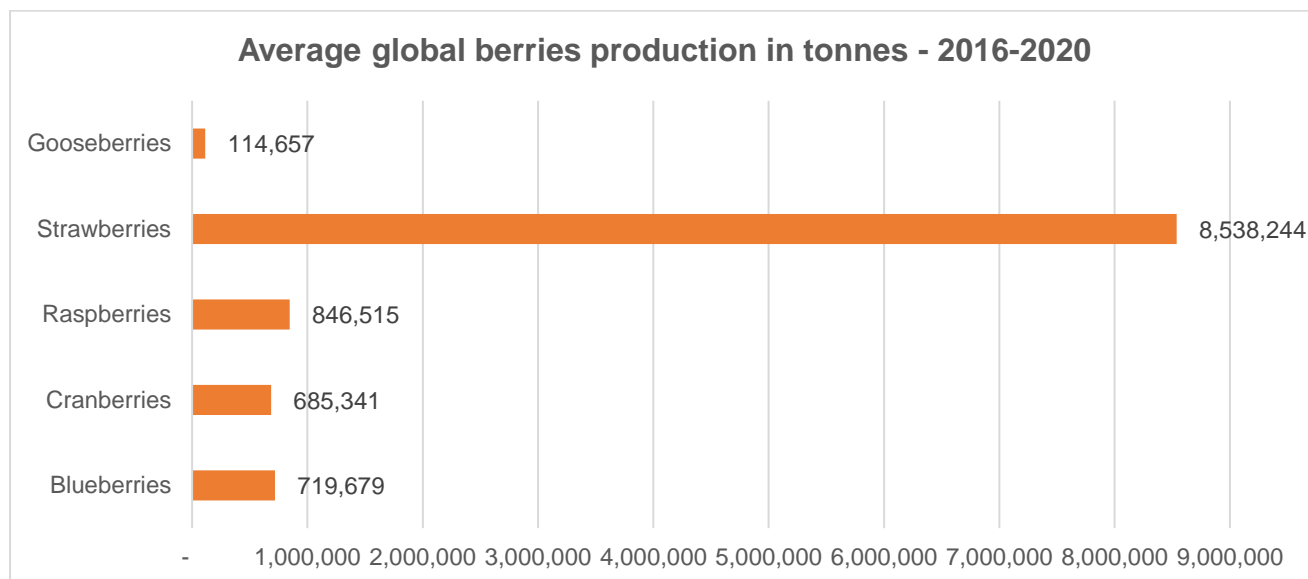


Figure 1: 5-year average global berries production (2016-2020). Source: FAOSTAT (2022)

Strawberries are produced or cultivated over the biggest area of around 384 million hectares, followed by blueberries which are cultivated over an area of about 126 million tons as of 2020 (Figure 2). Gooseberries, the least produced in the world compared to other berries, are also cultivated over a small area of about 16 thousand hectares (Figure 2).

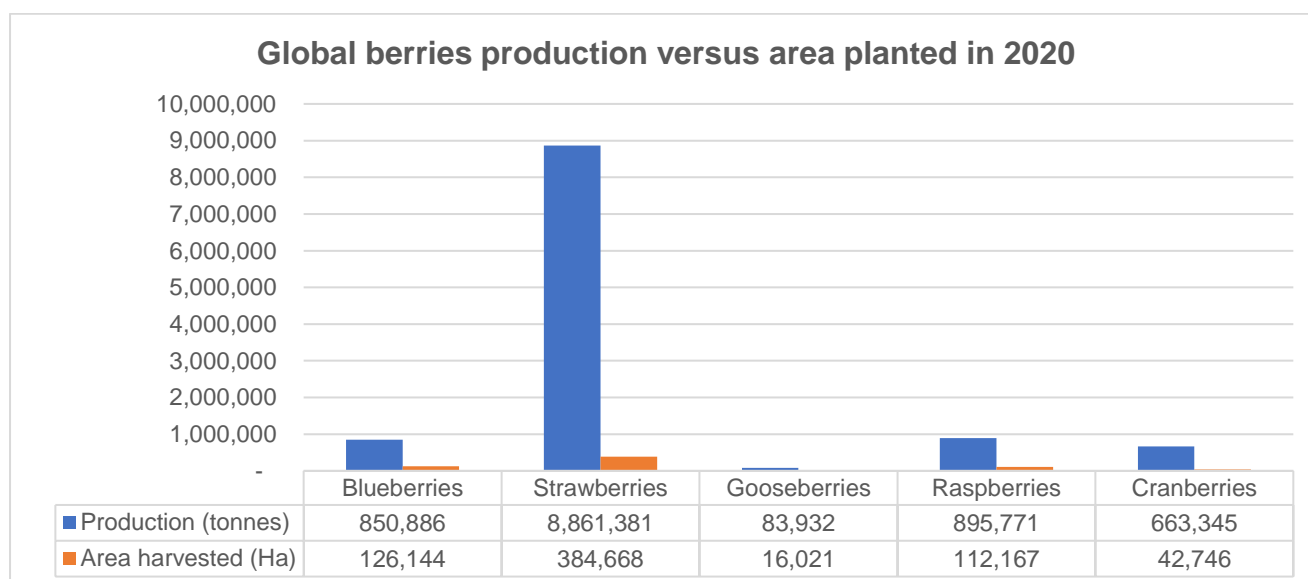


Figure 2: Global berries production vs cultivated/planted area (2020). Source: FAOSTAT (2022)

In terms of value (Figure 3), global blueberries production in 2020 was valued at US\$1,8 billion (N\$33 billion), strawberries were valued at US\$22 billion (N\$390 billion), gooseberries at US\$177 million (N\$3

billion), raspberries at US\$2,4 billion (N\$44 billion) and then finally cranberries with a production value of US\$1,3 billion (N\$23 billion).

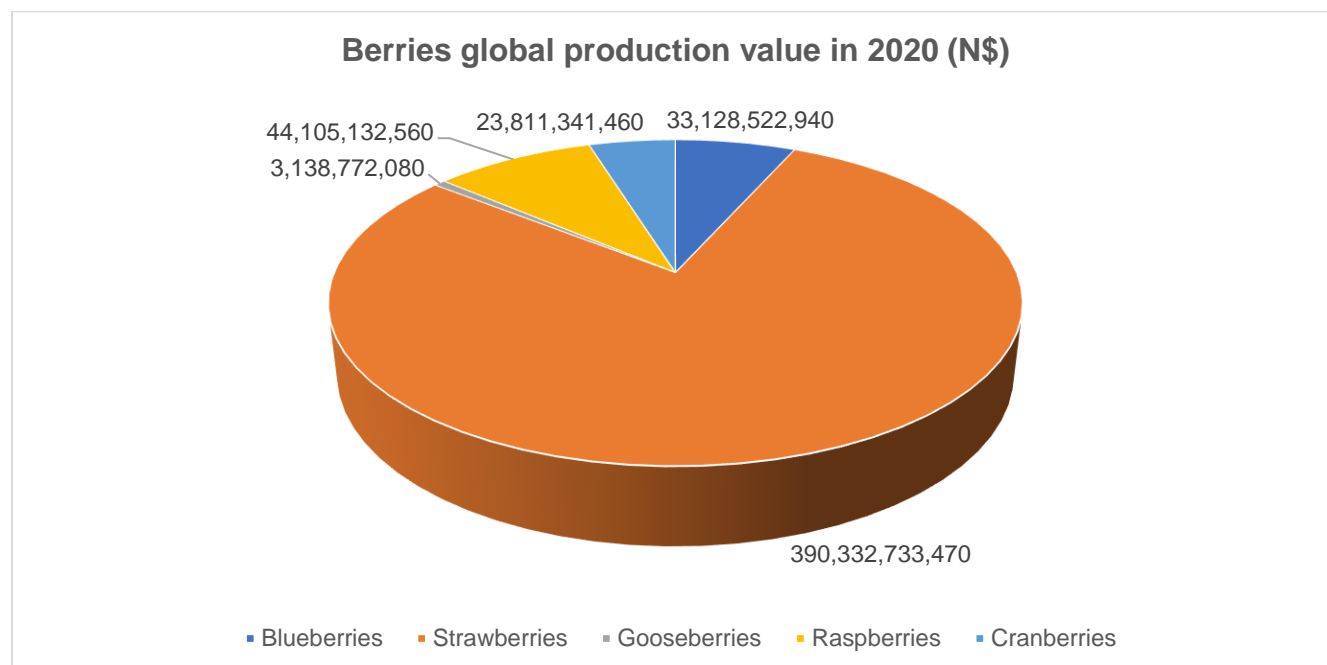


Figure 3: Global berries production value (2020). Source: FAOSTAT (2022)

According to FAO (2020), the United States of America (USA) was the top producer of blueberries with a total production of 294 thousand tons, followed by Peru with a production total of 180 thousand tons in 2020. The world’s top strawberry producer is China having produced about 3,3 billion tons followed by the United States of America (USA) with a strawberry production of 1,1 million tons in 2020. The Russian Federation is the world’s top producer of both gooseberries and raspberries with a production total of 72 thousand tons and 182 thousand tons in 2020 respectively. Cranberries are mostly produced in the USA with a total production of 355 thousand tons in 2020 (Table 1).

Table 1: World leaders in berries production in 2020. Source: FAOSTAT (2022)

| Berry type | World top Producer | Production Quantity (tons) |
|--------------|--------------------|----------------------------|
| Blueberries | USA | 294,000 |
| Strawberries | China | 3,326,816 |
| Gooseberries | Russian Federation | 72,800 |
| Raspberries | Russian Federation | 182,000 |
| Cranberries | USA | 355,163 |

EXPORTS: In 2020, global berries exports stood at 1,551,855 tons, indicating a 5% increase from 1,478,168 tons in 2019 (FAOSTAT, 2022). As the highest-produced berry globally, strawberry export

was also the highest at 932,096 tons in 2020, followed by blueberries with 394,414 tons and the least exported berry being gooseberries at 1,261 tons during the same period respectively.

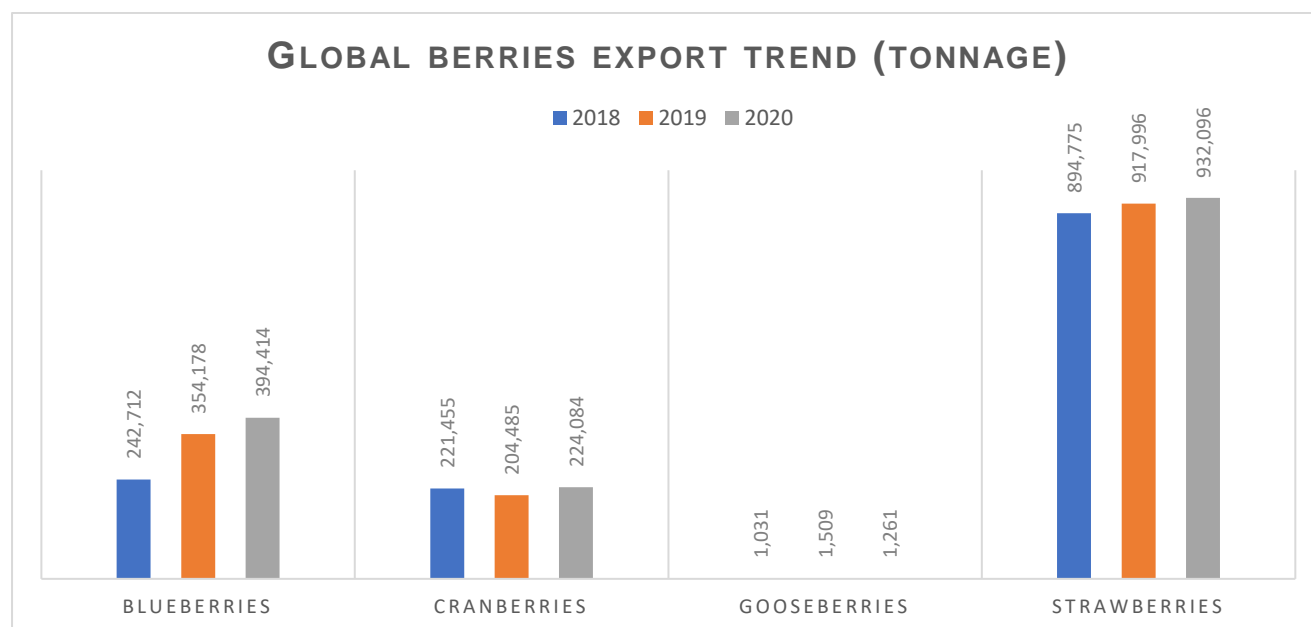


Figure 4: Overview of the global berries' exports (2018 – 2020). Source: FAOSTAT (2022)

Amongst the top exporting countries for strawberries in 2020 was Spain with a 31% export share, Mexico with 16%, and the USA with 14% (Escodo, 2018). For Cranberries, Chile is the top exporter, exporting 47%, followed by Canada with 24% and the Netherlands with 21% during the same period (Figure 4). The top blueberry exporting countries in 2020 were Peru with 41%, the USA with 11%, and Spain with 10%. Poland was the top exporter of gooseberries in 2020, with an export share of 66%, followed by 21% and Lithuania with 12% respectively (FAOSTAT, 2022; Figure 5).

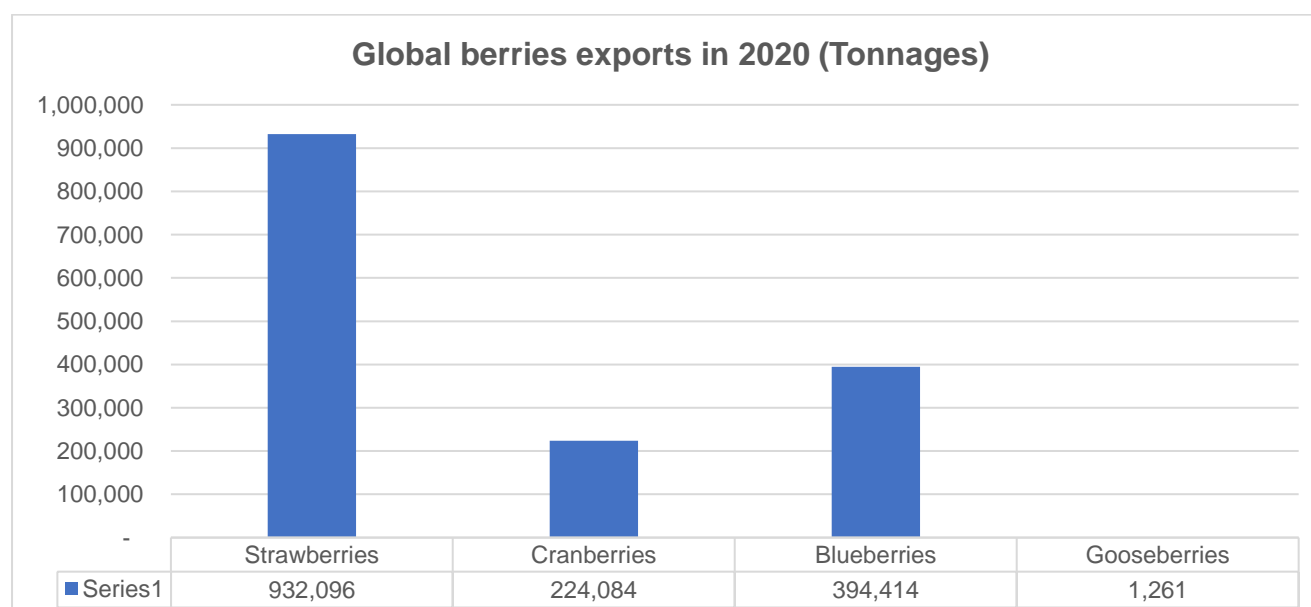


Figure 5: World berries exports in 2020. Source: FAOSTAT (2022)

IMPORTS: Global berries import saw a 10% increase from 1,407,449 tons in 2018 to 1,568,771 tons in 2019 and a further 4% increase to 1,629,889 tons in 2020 respectively (FAOSTAT, 2022). As is the same for exports, strawberries are also the most imported berry with 963,292 tons being imported in 2020 (Figure 6).

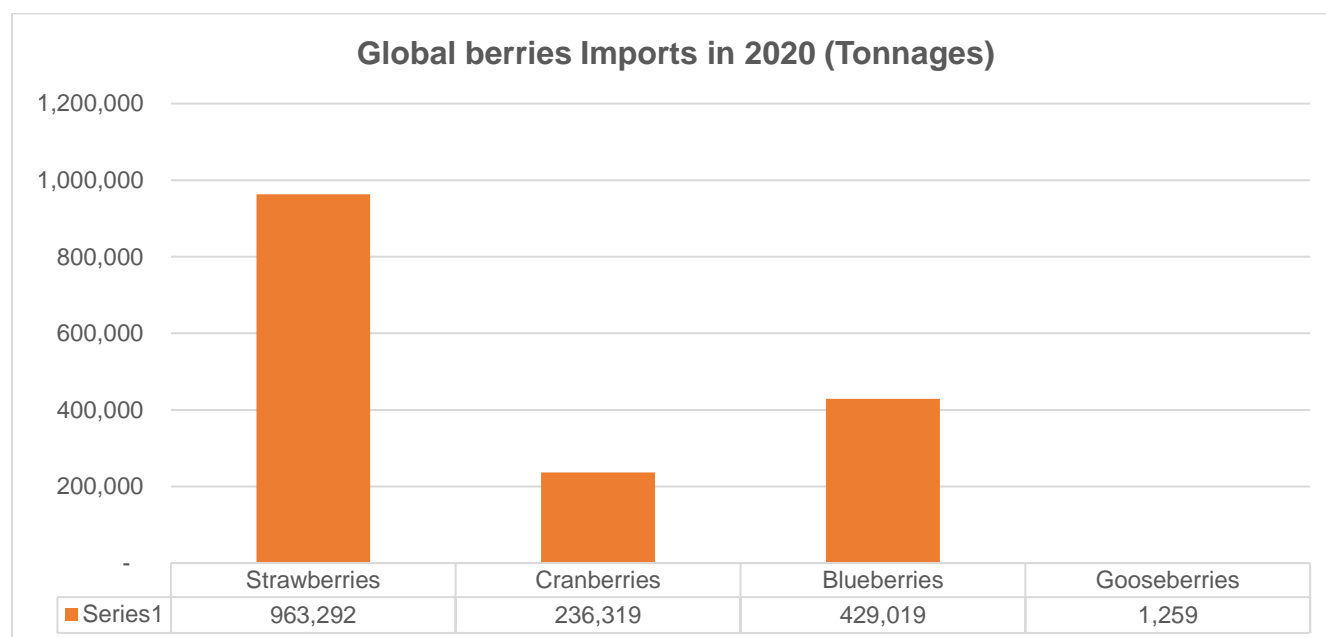


Figure 6: World berries exports in 2020. Source: FAOSTAT (2022)

As presented in Table 2 below, among the top berries-importing countries in 2020 was the USA with a 21% import share in strawberries, followed by Germany with a share of 14%. For cranberries, the Netherlands had the highest import share of 36% followed by the USA with 23%. The USA also held the top blueberries import share of 51% followed by Germany with a share of 13%. For gooseberries, Qatar held the top import share of 68%, followed by Lithuania with a 26% share in 2020 (FAOSTAT, 2022).

Table 2: Global berries top importing countries in 2020. Source: FAOSTAT (2022)

| Berry type | Top 2 importing countries | Imported quantity in 2020 (Tons) | % share |
|--|---------------------------|----------------------------------|---------|
| Strawberries Global imports - 963,292 tons | USA | 197,475 | 21% |
| | Germany | 130,778 | 14% |
| | Rest of the World | 635,039 | 66% |
| Cranberries Global imports - 236,319 tons | Netherlands | 83,945 | 36% |
| | USA | 53,528 | 23% |
| | Rest of the World | 98,846 | 42% |

| | | | |
|---|-------------------|---------|-----|
| Blueberries Global imports - 429,019 tons | USA | 219,049 | 51% |
| | Germany | 54,821 | 13% |
| | Rest of the World | 155,149 | 36% |
| Gooseberries Global imports - 1,259 tons | Qatar | 853 | 68% |
| | Lithuania | 324 | 26% |
| | Rest of the World | 82 | 7% |

2.2. CITRUS

PRODUCTION: According to AtlasBig (2019) and FAO (2020), China is the top citrus fruit-producing country in the world. As of 2019, citrus fruit production in China was 44 million tonnes, which accounts for 28% of the world's citrus fruit production. More than half of the world's citrus production was only produced by 5 countries in 2019. The other countries in the top 5 citrus production countries are Brazil, India, Mexico, and the USA, accounting for an overall 31% respectively (AtlasBig, 2019). The world's total citrus fruit production was estimated at 158 million tonnes in 2020 (Knoema, 2022).

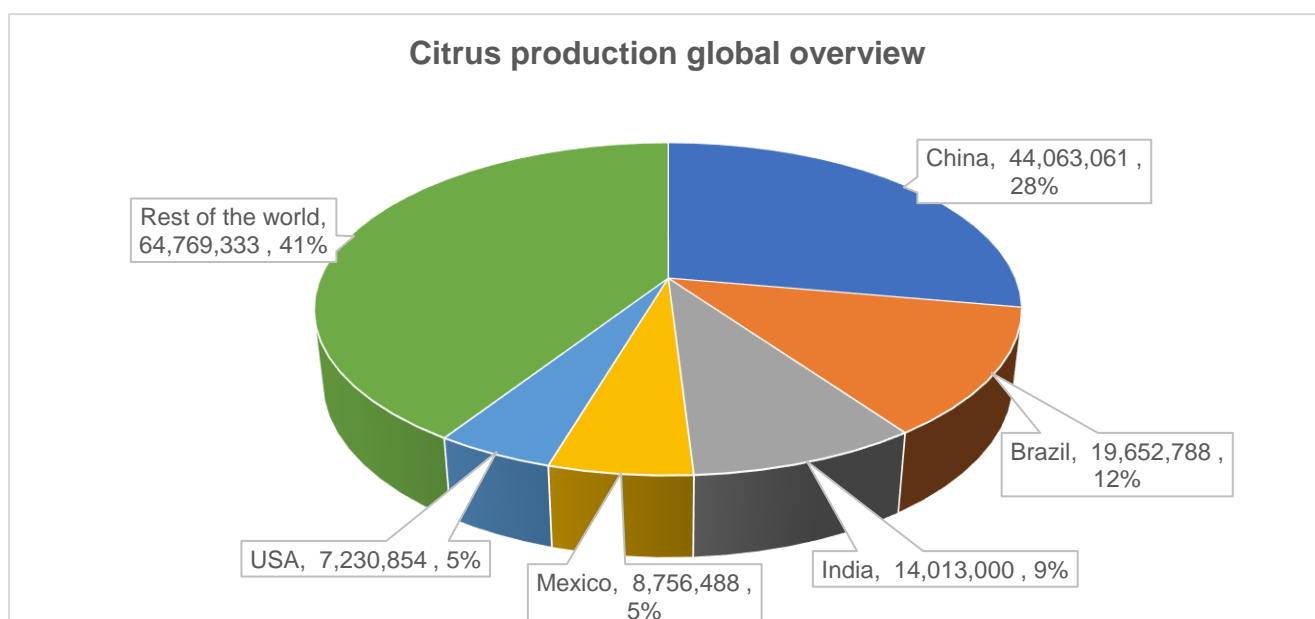


Figure 7: World citrus production overview in 2019. Source: AtlasBig (2019)

According to FAO (2022), among the most commonly cultivated types, oranges account for more than half of the world's citrus production and they are the most widely traded citrus fruit, followed by tangerines, lemons, and grapefruits. World citrus production and exports have grown steadily over the past three decades, although at a slower pace than competing fruits such as mangoes, avocados, and melons. In 2020, orange production was 75 million tons followed by tangerines at 38 million tons, lemons and limes at 21 million tons, and lastly grapefruits and pomelos at 9 million tons (FAOSTAT, 2022).

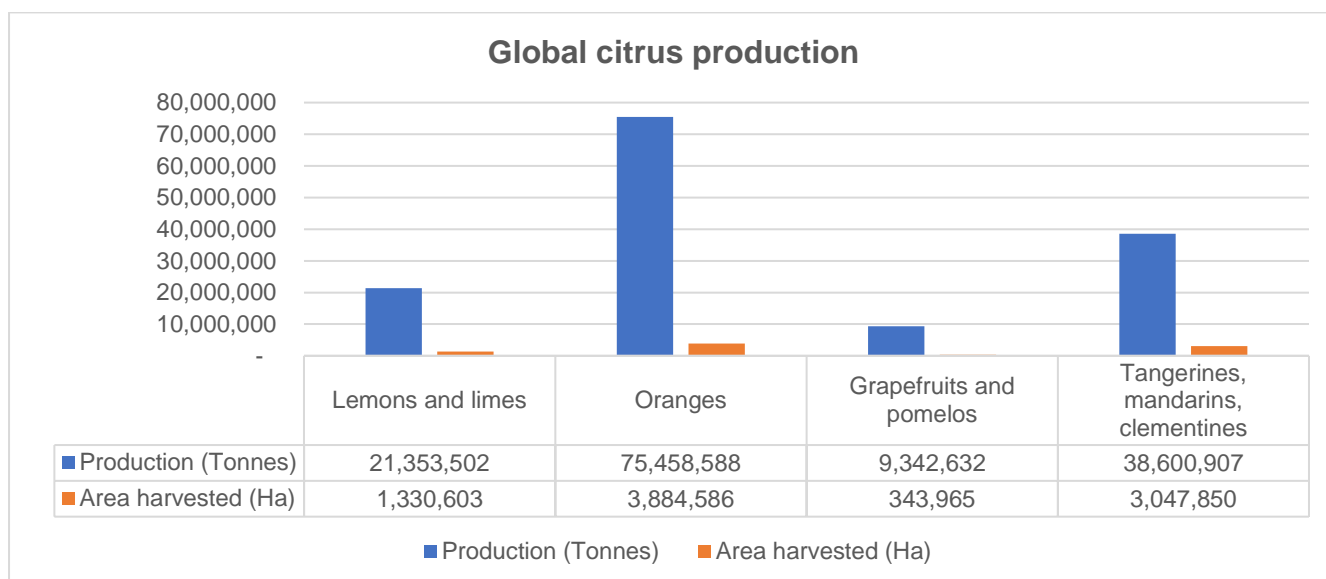


Figure 8: World citrus production vs cultivated/planted area (2020). Source: FAOSTAT (2022)

According to FAOSTAT (2022), oranges are the most commonly produced, contributing about 50% of the world's total citrus fruits. Furthermore, Brazil was the top orange producer in 2020 with 16,7 million tons. India was the top lemons and limes producer with 3,7 million tons, whilst China was the top producer of grapefruits and pomelos as well as tangerines/mandarines/clementines with 23,1 million tons.

EXPORTS: Figure 9 shows that in 2021, 58% of the world's export share was held by Spain having exported citrus fruits worth N\$62,457,148 (26%), followed by South Africa with N\$27,170,963 (12%) worth of citrus fruits, China with N\$19,720,540 (8%), the USA with N\$14,385,495 (6%) and lastly the Netherlands having exported citrus fruits worth N\$14,324,068 (6%) respectively.

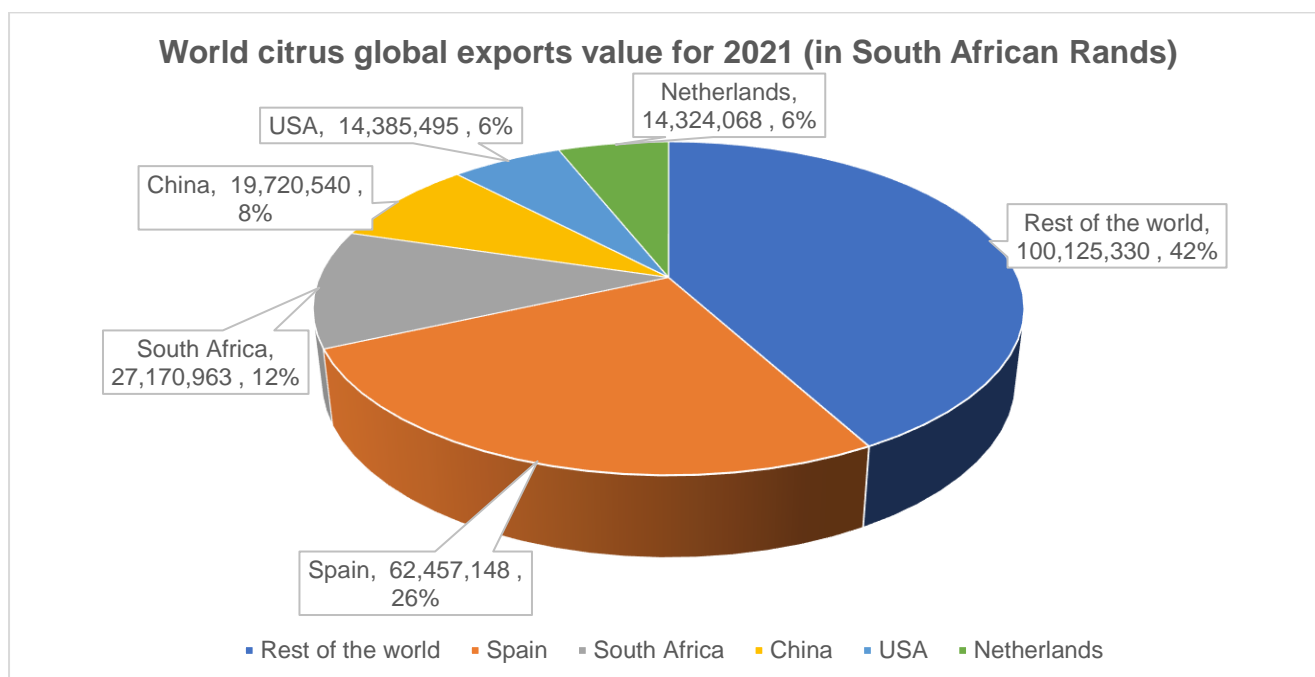


Figure 9: World citrus exports in 2021 (values in South African Rand). Source: ITC (2022)

IMPORTS: As shown in Figure 10, the world’s largest citrus fruits importer in 2021 was the USA, having imported citrus fruits worth N\$26,728,063 (10%), followed by Germany with N\$22,379,989 (9%), France with N\$19,507,392 (8%), Russia with N\$18,714,160 (7%) and lastly the Netherlands with a citrus fruit import value of N\$16,821,273 (6%) (ITC, 2022).

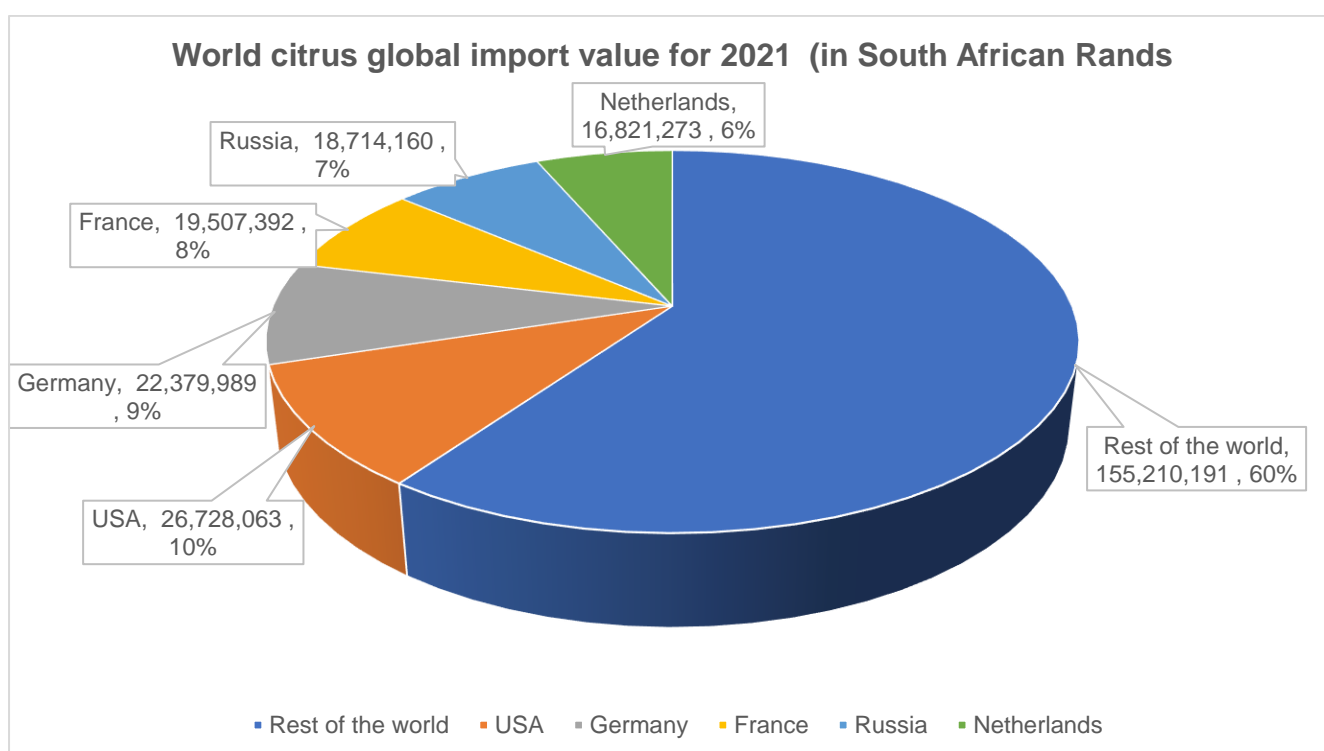


Figure 10: World citrus imports in 2021 (values in South African Rand). Source: ITC (2022)

3. AFRICAN AND SOUTHERN AFRICAN PERSPECTIVE

3.1. BERRIES

PRODUCTION: The African berries export market is dominated and led by Egypt, Morocco, and South Africa, with a few other countries such as Tunisia, Kenya, and Zimbabwe making up a very small percentage. In the year 2020, African berries production was 785,878 tons, with 597,029 tons of strawberries being produced in Egypt (FAOSTAT, 2022).

Table 3: Berries production in Africa in 2020. Source: FAOSTAT (2022)

| Berry type | Production (Tonnes) | Area harvested (Ha) | Top producing country |
|--------------------|---------------------|---------------------|---|
| Blueberries | 71 | 16 | Morocco - 71 tons |
| Cranberries | 182 | 28 | Tunisia - 182 tons |
| Raspberries | 398 | 67 | Morocco - 300 tons, Zimbabwe - 98 tons |
| Strawberries | 785,227 | 20,126 | Egypt - 597,029 tons Morocco – 166,955 tons South Africa – 10,492 tons Tunisia – 9,902 tons Kenya – 500 tons, Zimbabwe – 229 tons Malawi – 120 tons |
| Gooseberries | N/A | N/A | N/A |
| Grand Total | 785,878 | 20,237 | |

Berries production in Southern Africa is very low with limited to no data available on official data platforms such as FAOSTAT and ITC trade maps. However, according to FAOSTAT (2022), South Africa produced 10,492 tons of strawberries in 2020.

IMPORTS: South Africa, Botswana and Sudan import the highest quantities of berries in Africa, of which strawberries are the most imported berry. Other berry-importing countries include Morocco (gooseberries), Nigeria (blueberries and cranberries), and Lesotho for strawberries and blueberries (FAOSTAT, 2022).

Table 4: Berries imported into Africa in 2020. Source: FAOSTAT (2022)

| Berry type | Total Africa import | Africa's top importer | Import quantity - top African country (tons) |
|--------------|---------------------|-----------------------|--|
| Blueberries | 24 | Nigeria | 15 |
| Strawberries | 1,906 | South Africa | 729 |
| Gooseberries | 2 | Morocco | 2 |
| Raspberries | N/A | N/A | N/A |
| Cranberries | 5 | Nigeria | 5 |

EXPORTS: The top berries exporters in Africa in 2020 were Morocco with 33,409 tons of blueberries, Egypt with 33 tons of cranberries, Tunisia with 4 tons of gooseberries, and lastly, Egypt again with 31,929 tons of strawberries (FAOSTAT, 2022).

Table 5: Berries imported into Africa in 2020. Source: FAOSTAT (2022)

| Berry type | Total Africa export | Africa's top exporter | Export quantity - top African country (tons) |
|--------------|---------------------|-----------------------|--|
| Blueberries | 33,409 | Morocco | 33,409 |
| Strawberries | 38,402 | Egypt | 31,929 |
| Gooseberries | 4 | Tunisia | 4 |
| Raspberries | N/A | N/A | N/A |
| Cranberries | 50 | Egypt | 33 |

3.2. CITRUS

PRODUCTION: Citrus production in Africa is dominated by oranges which made up 64% of the total production in 2020 (FAOSTAT, 2022). Soft fruits (Tangerines, mandarins, clementines) take the second position with a production share of 18%, followed by lemons and limes with 12%, and lastly grapefruits and pomelos with 6% (Figure 11).

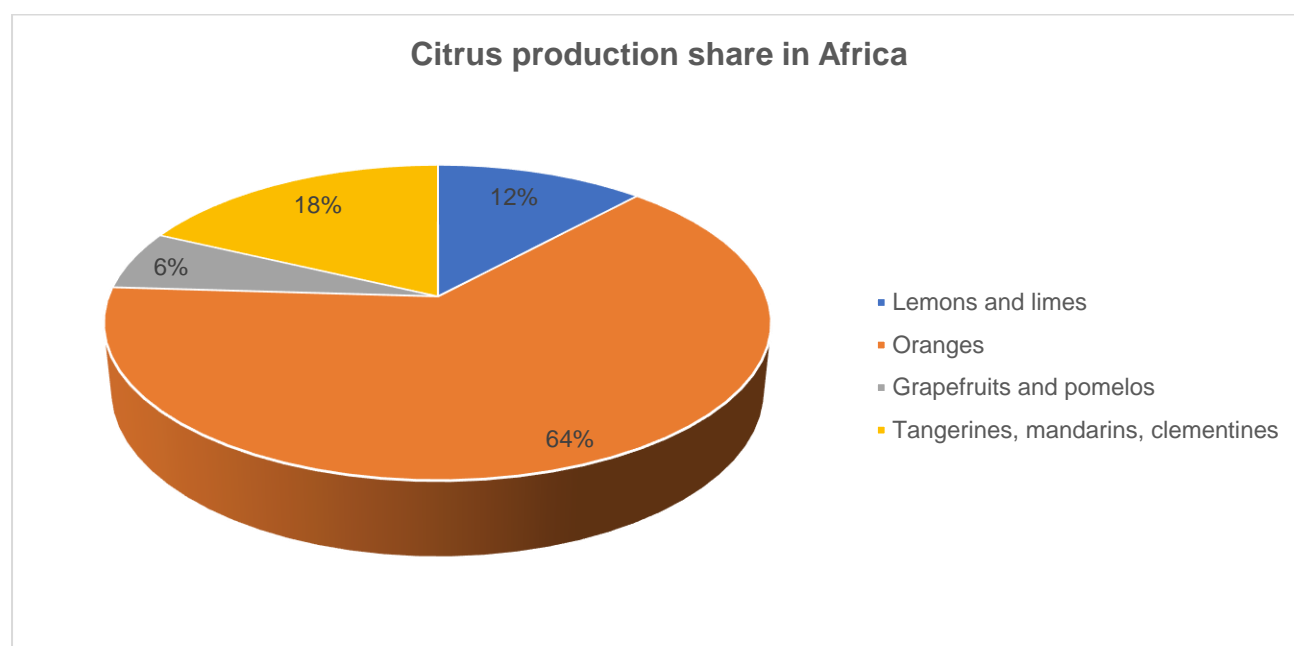


Figure 11: Citrus production share in Africa by type in 2020. Source: FAOSTAT (2022)

Citrus production in Africa is dominated by Egypt which produced 4,638,980 tons (22%) of the continent's citrus fruits in 2019. The second largest producer is Nigeria which produced 4,160,568 tons, followed by South Africa with 2,783,368 tons, Morocco with 2,621,519 tons and then Algeria with 1,584,098 tons respectively (AtlasBig, 2019). The above top 5 countries produced 76% of Africa's citrus fruits in 2019 with the rest of African countries producing only 24% in 2019.

Table 6: Citrus production in Africa in 2019. Source: AtlasBig (2019)

| Country | Quantity (Tonnes) | Production Share % |
|----------------|-------------------|--------------------|
| Egypt | 4,638,980 | 22% |
| Nigeria | 4,160,568 | 20% |
| South Africa | 2,783,368 | 13% |
| Morocco | 2,621,519 | 13% |
| Algeria | 1,584,098 | 8% |
| Rest of Africa | 5,035,073 | 24% |
| Total | 20,823,606 | 100% |

According to AtlasBig (2019), citrus production in Southern Africa was 3,524,925 tons in 2019 which contributed to 17% of total citrus production in Africa. South Africa remains the largest producer in Southern Africa and contributed 79% of Southern Africa's citrus production. South Africa is followed by Angola with 11.8% and thereafter Zimbabwe with 4% (Figure 12).

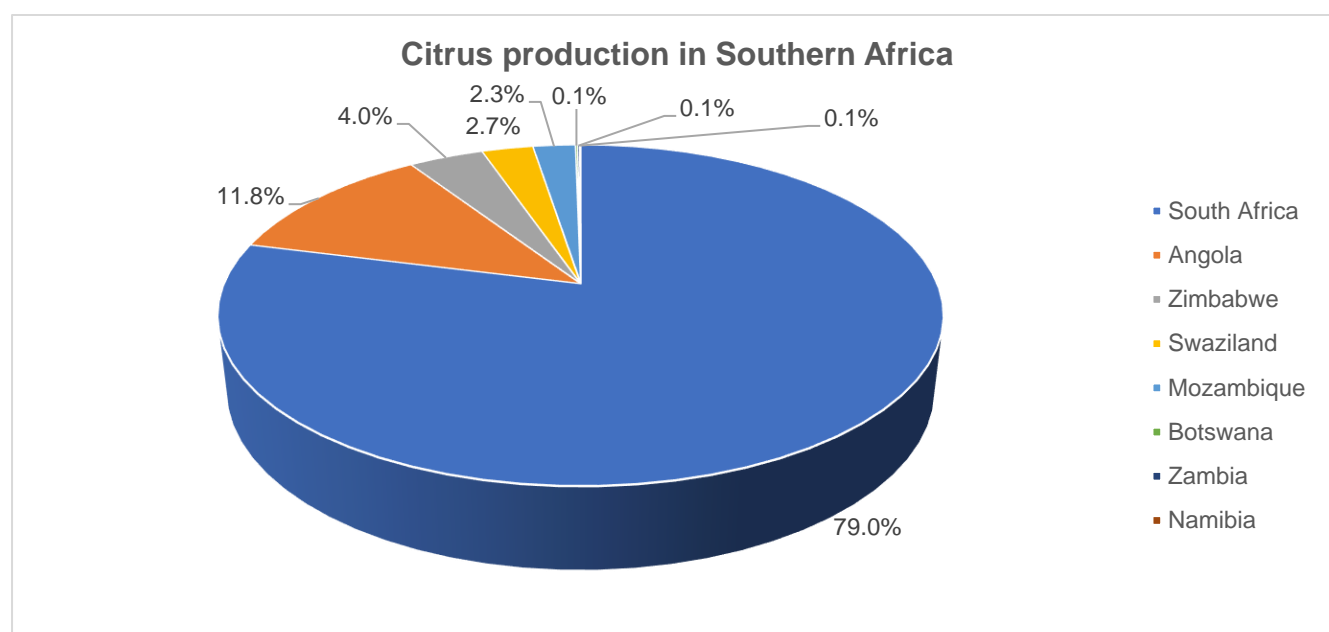


Figure 12: Citrus production in Southern Africa in 2019. Source: AtlasBig (2019)

IMPORTS: The largest imports of Africa are concentrated by Burkina Faso which imported 645,728 tons in 2021. The second largest citrus fruit importer in Africa is Kenya with 10,931 tonnes, followed by Mauritius with 9,989 tons also in 2021 (ITC, 2022).

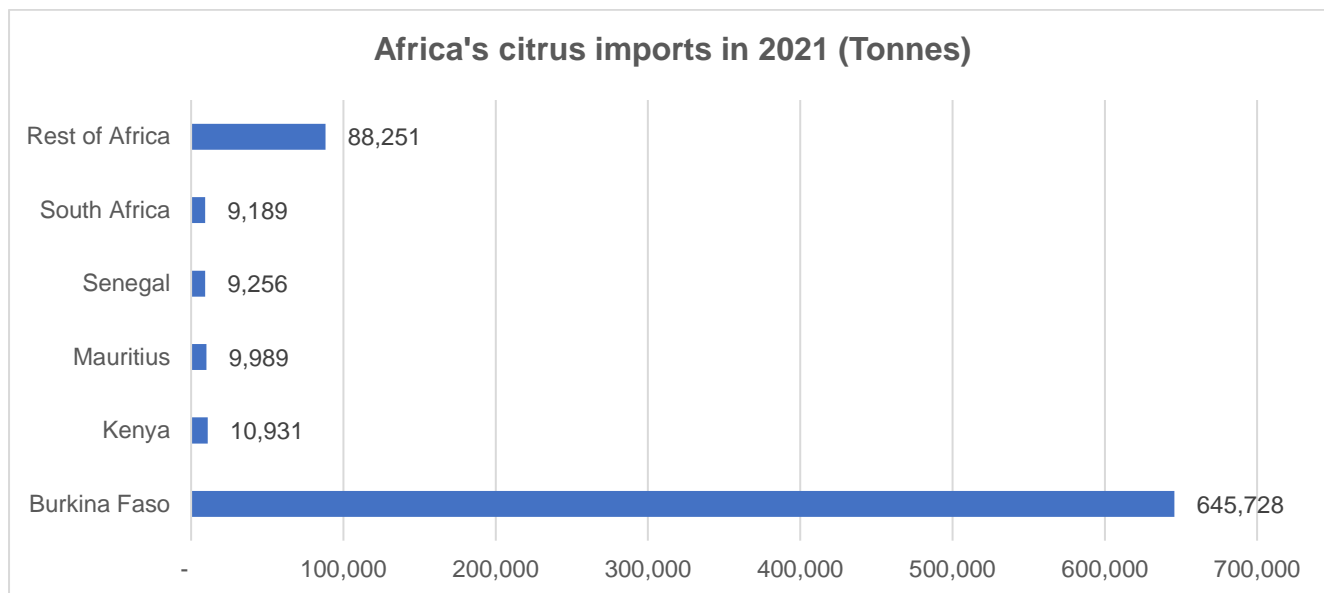


Figure 13: Africa's citrus imports in 2021. Source: ITC (2022)

In terms of citrus type, Africa imports more oranges with an import share of 63%, of which Burkina Faso was the largest importer having imported 7,425 tons in 2020. The second main imported citrus fruits to Africa are soft fruits (Tangerines, mandarins, clementines) with a percentage share of 21% and Senegal is the top importer with 4,260 tons, followed by lemons and limes with a share of 10% and the top importing country being South Africa with 2,012 tons and then lastly grapefruits and pomelos which have an import share on 6%, with Eswatini being the largest importer with 3,808 tons in 2020.

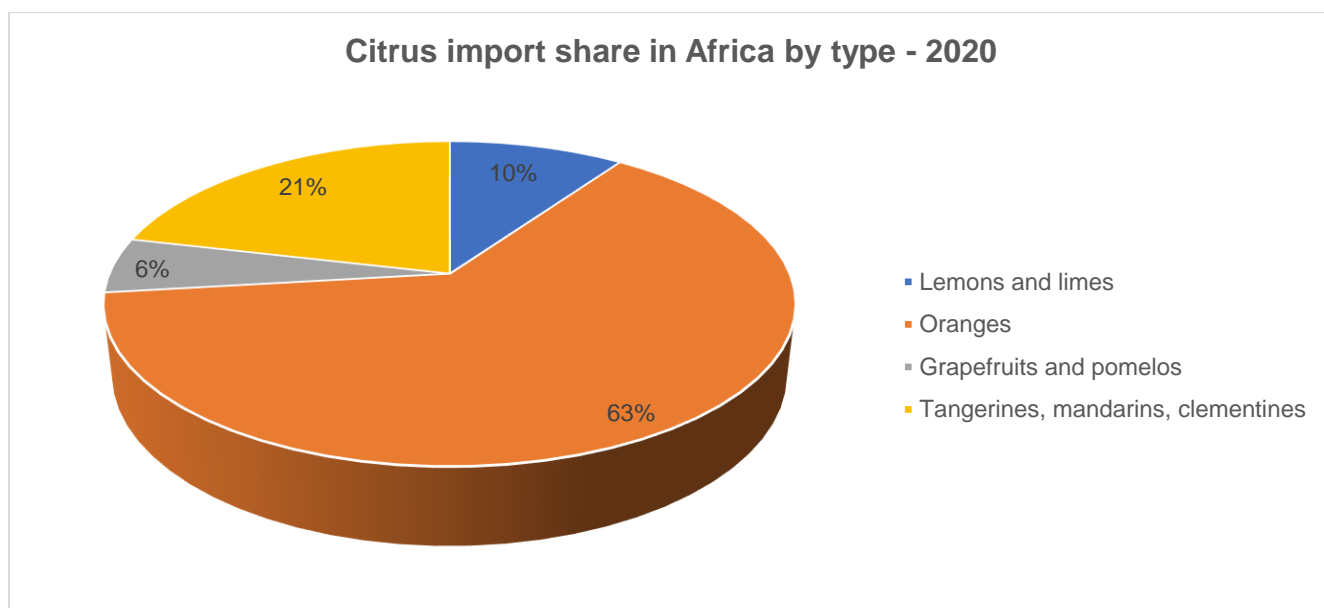


Figure 14: Africa citrus imports by type in 2020. Source: FAOSTAT (2022)

EXPORTS: With global citrus exports being dominated by power traders such as China, Spain, and the United States, a few African countries such as South Africa, Morocco and Ghana have successfully positioned themselves in the citrus export market, with South Africa being the largest exporter of citrus fruits in Africa and the second largest in the world in 2021, after Spain. South Africa's exports are forecasted to grow and the country exports oranges to more than 100 countries around the world (USDA, 2022). The duty-free exports of citrus to the United States by South Africa under the African Growth Opportunity Act (AGOA) are expected to continue their strong annual growth, as the United States is still considered a premium market (USDA, 2022).

According to ITC (2022), South Africa exported 2,598,746 tons of citrus fruits in 2021, followed by Morocco with 596,141 tons, Ghana with 150,286 tons, Zimbabwe with 73,755 tons, Eswatini with 26,939 tons, and lastly the rest of Africa contributed 36,348 tons of citrus fruits in the same period (2021).

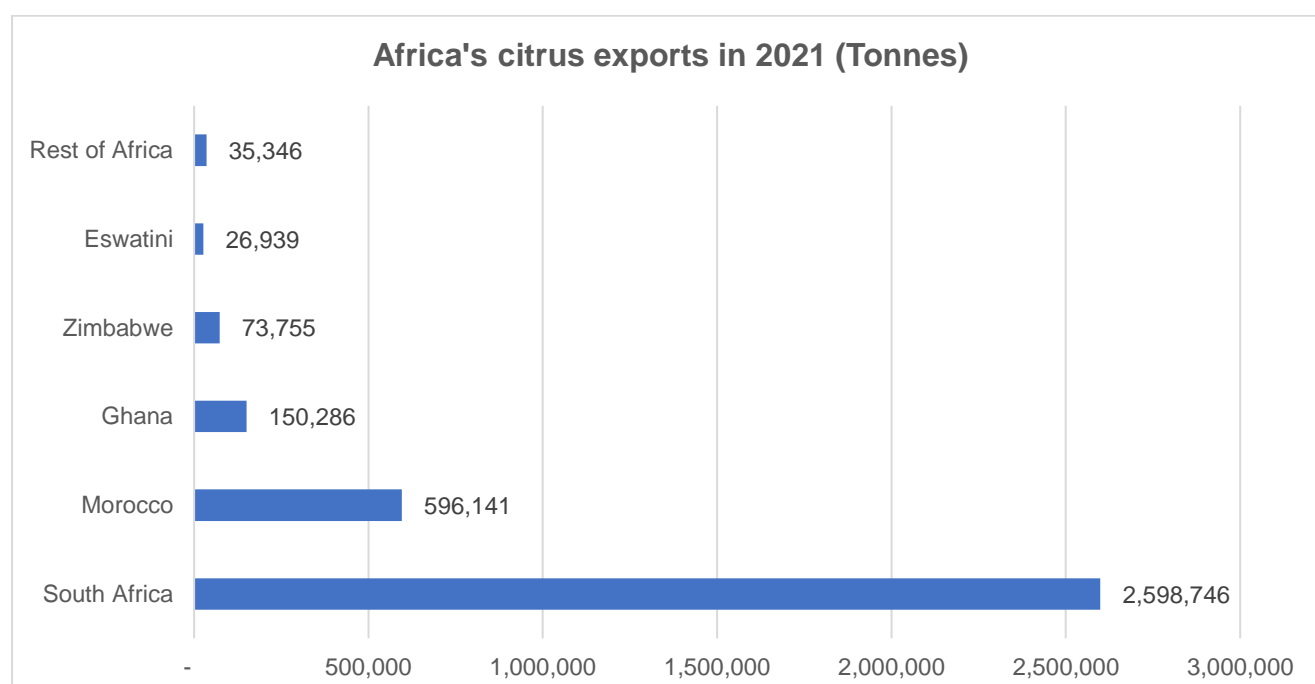


Figure 15: Africa citrus exports in 2020. Source: ITC (2022)

In terms of export share by citrus type in Africa, oranges take up 60% of the imported citrus by the continent, with Egypt being the top exporter with 1,490,421 tons in 2020. The next most exported citrus types from Africa are tangerines, mandarins and clementines (soft fruits), taking up 21% and the highest quantity of 449,607 tons was exported by Morocco in 2020. Lemons and limes contributed 13% of Africa's export with the highest quantity of 457,886 tons being exported by South Africa. Lastly, grapefruits and pomelos made up 6% of Africa's citrus export in 2020 with the highest quantity of 244,334 tons being exported from South Africa (FAOSTAT, 2022).

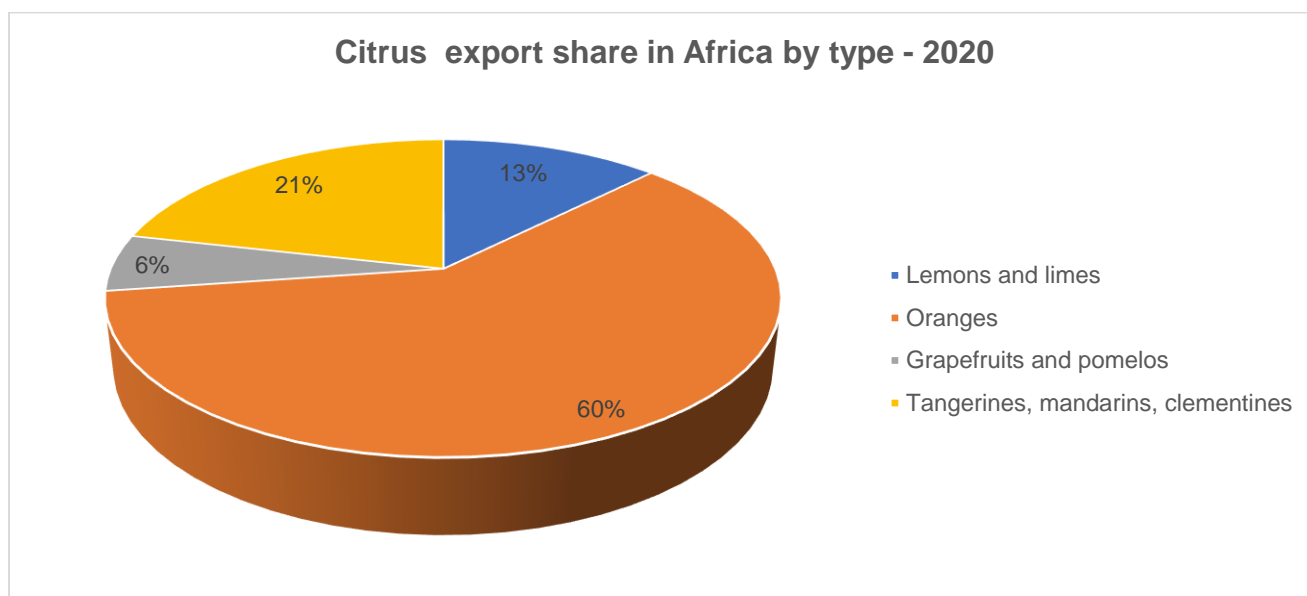


Figure 16: Africa's citrus exports by type in 2020. Source: FAOSTAT (2022)

4. DOMESTIC OUTLOOK

4.1. BERRIES

PRODUCTION: Namibia is a new entrant into the berries market and thus very little information is available on the production, consumption, exports, and imports of berries. However, Mashare berries on the banks of the Kavango River between Mashare and Mupapama villages in the Kavango East Region is Namibia's only blueberry commercial producer and it first saw its commercial harvest of 7 tons in the year 2020. Some of these harvests were exported to the Netherlands, Germany, Spain, Russia, and Hong Kong, of which more than expected have also been sold locally (New Era, 2020).

According to the NAB (2022), Namibia produced 480 tons of blueberries valued at N\$38,400,000 as well as 0.24 tons of strawberries worth N\$8,844 during the 2021/2022 financial year.

Table 7: Berries production in Namibia during 2021/22. Source: NAB (2022)

| Berry type | Quantity (Tons) | Value in N\$ |
|--------------|-----------------|-------------------|
| Blueberries | 480 | 38,400,000 |
| Cranberries | N/A | N/A |
| Raspberries | N/A | N/A |
| Strawberries | 0.24 | 8,844 |
| Total | 513.42 | 38,408,844 |

IMPORTS: In the 2021/2022 financial year, Namibia imported a total of 264 tons of berries valued at N\$8,794,517. This import comprises 52 tons of blueberries, 5 tons of raspberries, 203 tons of strawberries, 4 tons of gooseberries, and 1 ton of blackberries respectively (NAB, 2022, Table 8).

Table 8: Namibia’s berries import during 2021/22. Source: NAB (2022)

| Berry type | Quantity (Tons) | Value (N\$) |
|--------------|-----------------|------------------|
| Blueberries | 52 | 2,775,441 |
| Cranberries | N/A | N/A |
| Raspberries | 5 | 122,676 |
| Strawberries | 203 | 5,765,603 |
| Gooseberries | 4 | 88,368 |
| Blackberries | 1 | 42,429 |
| Total | 264 | 8,794,517 |

EXPORTS: Apart from blueberries, Namibia does not export any other type of berry fruits. The country, however, only exported 43 tons of blueberries valued at N\$2,506,872 in the 2021/2022 financial year (NAB, 2022).

PRICES: As of 2022, the price of strawberries in Namibia was N\$37.07/kg, whilst that of blueberries was N\$69.56/kg.

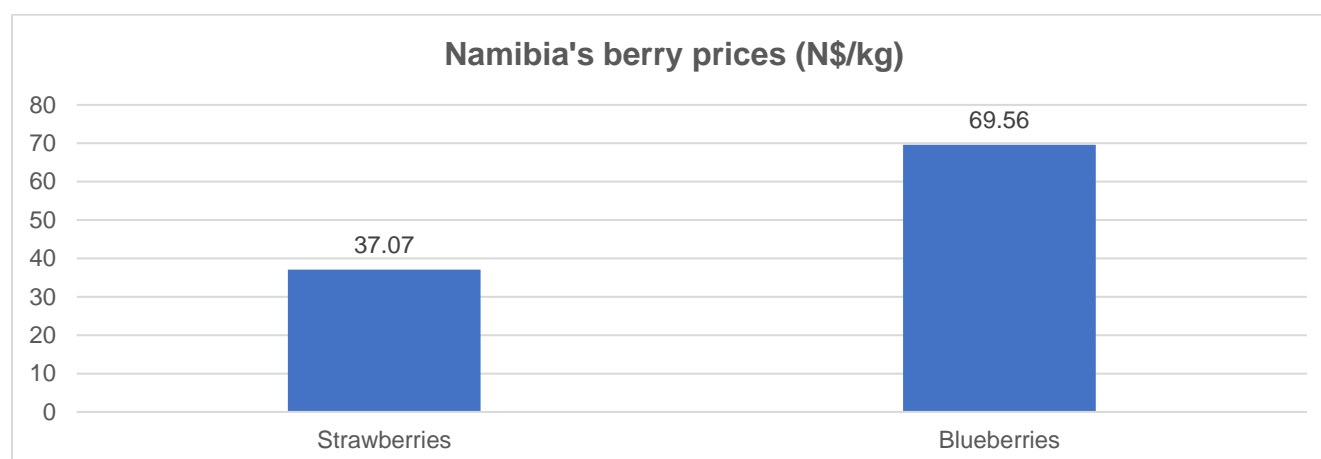


Figure 17: Local berry average prices in Namibia. Source: NAB (2022)

Imported berries in Namibia are slightly cheaper costing N\$53.47/kg compared to locally produced blueberries which cost 69.56/kg in the 2021/22 financial year. Imported strawberries cost N\$28.41/kg in comparison to N\$37.07/kg for locally produced strawberries. Imported gooseberries cost N\$23.88/kg, blackberries N\$46.12/kg, and raspberries cost N\$26.05/kg (Figure 18).

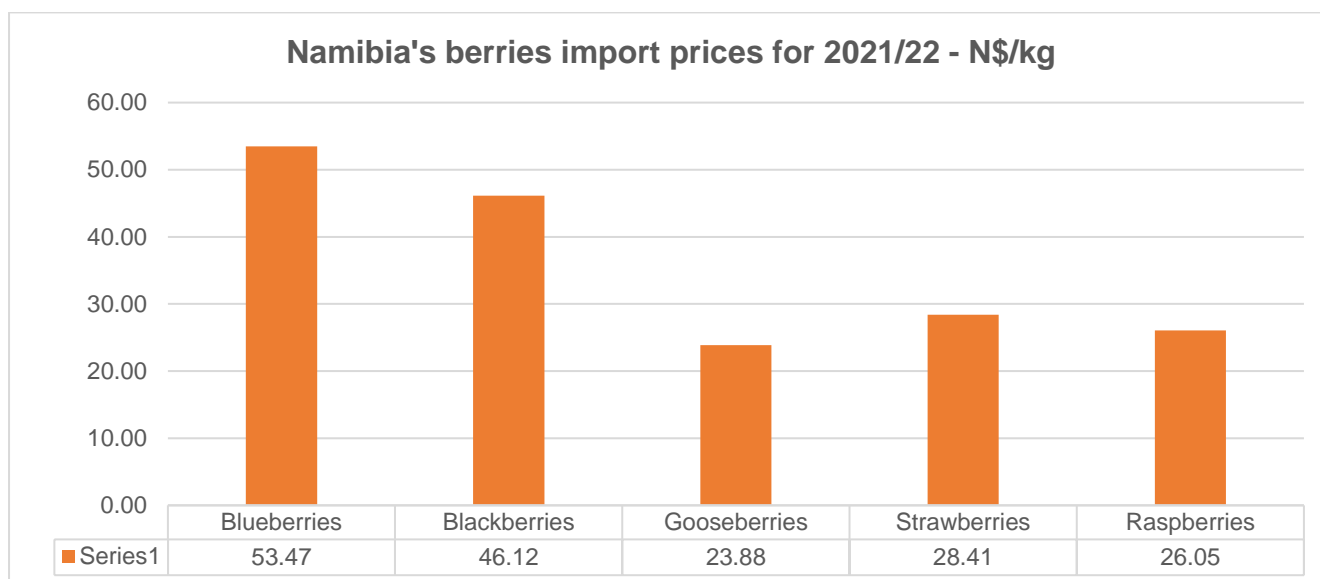


Figure 18: Average prices for imported berries in Namibia. Source: NAB (2022)

4.2. CITRUS

PRODUCTION: In terms of citrus fruit production, Namibia commercially produces oranges, lemons, and tangerines (known as nartjies in Namibia and South Africa). According to the NAB (2022), the local production of citrus fruits in Namibia was 448 tons in the 2021/2022 financial year. This figure comprised 217 tons of oranges, 132 tons of lemons and limes, 98 tons of tangerines (nartjies), and 0.5 tons of pomelos. AtlasBig (2019) reported Namibia's citrus production to be at 2,061 tons in 2019.

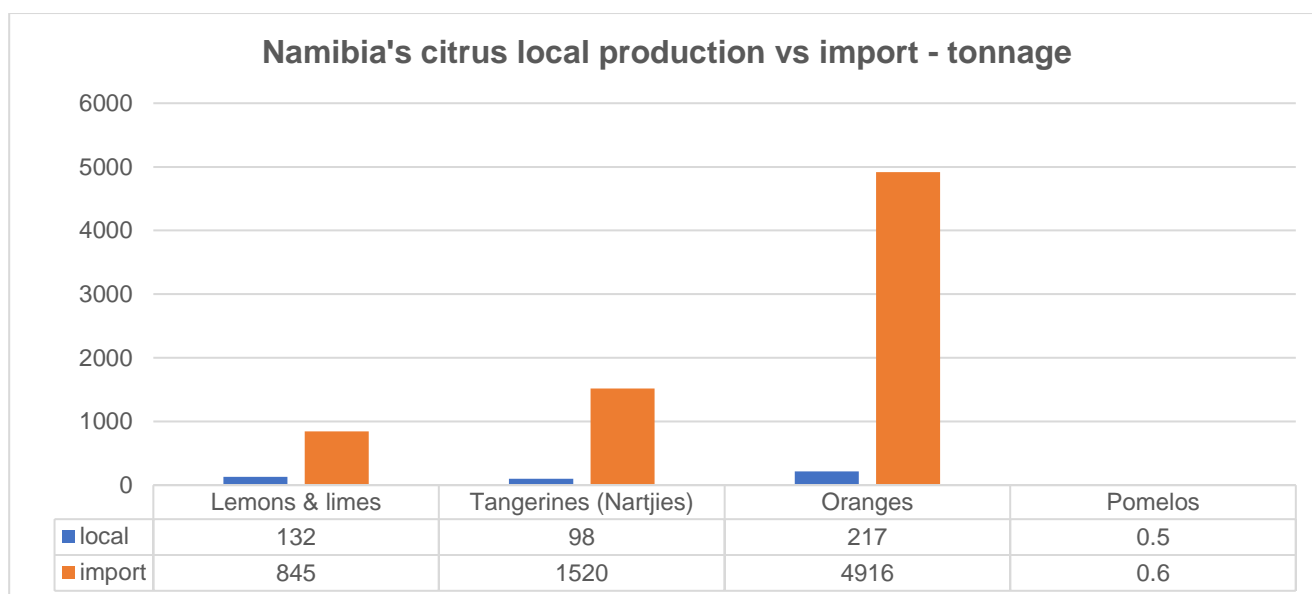


Figure 19: Average prices for imported berries in Namibia. Source: NAB (2022)

IMPORTS: As indicated in figure 19 above, Namibia imported a total of 7,281 tons of citrus fruits in the 2021/2022 financial year. This comprised 4,916 tons of oranges, 1,520 tons of tangerines (nartjies), 845 tons of lemons and limes, and 0.6 tons of pomelos.

Table 9: Namibia citrus fruits imports value. Source: ITC (2022)

| Countries | Import values in South African Rand | | | | | |
|---------------|-------------------------------------|------------|------------|------------|------------|--------------|
| | 2016 | 2017 | 2018 | 2019 | 2020 | 5-year total |
| South Africa | 44,875,000 | 44,501,000 | 47,754,000 | 51,411,000 | 60,411,000 | 248,952,000 |
| Botswana | 44,000 | 93,000 | 105,000 | 87,000 | 16,000 | 345,000 |
| Germany | - | 13,000 | - | 14,000 | 16,000 | 43,000 |
| Portugal | - | - | 369,000 | - | - | 369,000 |
| Spain | - | - | - | 14,000 | - | 14,000 |
| Not specified | - | 13,000 | - | - | - | 13,000 |

In 2020, Namibia imported 99% of its citrus fruits from South Africa and a total amount of N\$248,952,000 was spent from 2016 to 2020 (Table 9). Other significant amounts of N\$345,000 was spent to import citrus fruits from Botswana (2016-2020) and N\$369,000 to import from Portugal in 2018.

EXPORTS: Namibia's biggest citrus export destination is Angola with a 65% market share valued at N\$725,000 and 35% of the export share was exported to South Africa valued at N\$386,000 over the period 2016 – 2019 (ITC, 2022).

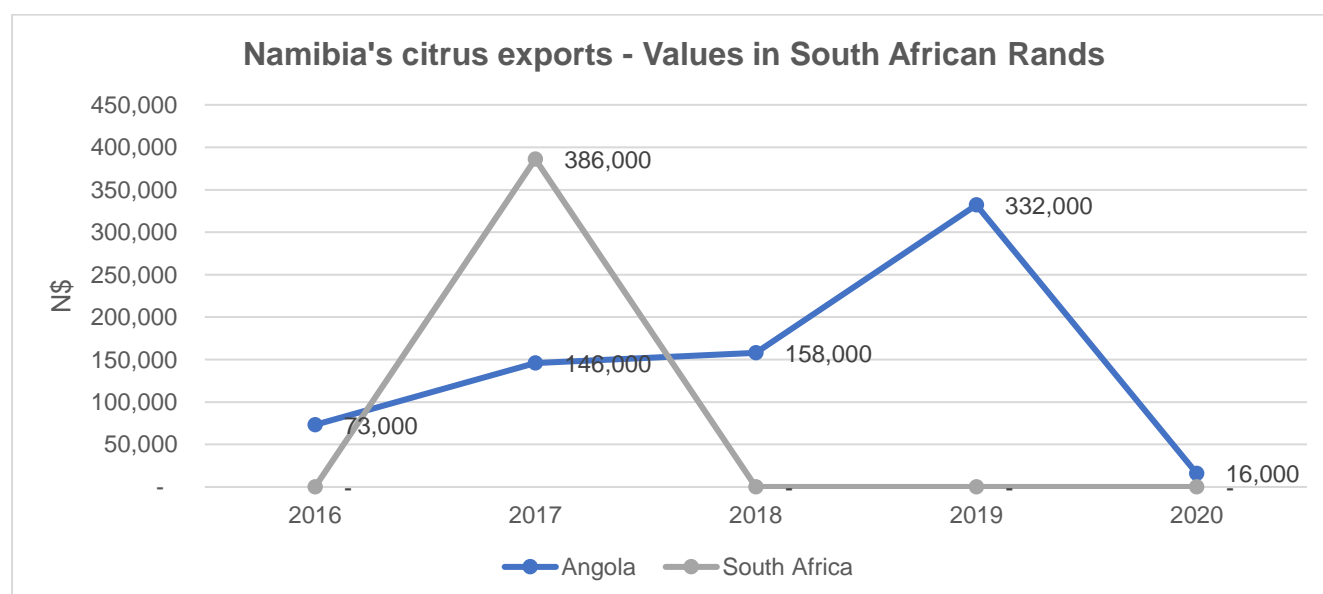


Figure 20: Namibia citrus exports – Tonnages. Source: ITC (2022)

PRICES:

Table 10. Citrus fruits average local price/ kg. Source: NAB, 2019

| Year | Grapefruit | Lemon | Limes | Nartjies (Tangerines) | Oranges |
|-----------|------------|----------|----------|--------------------------|---------|
| 2017-2018 | N\$15.53 | N\$12.07 | N\$18.37 | N\$8.39 | N\$7.05 |
| 2018-2019 | N\$10.49 | N\$10.28 | N\$14.36 | N\$8.21 | N\$5.91 |

Citrus fruit prices in Namibia have reduced drastically during the review period as presented in Table 10 above. As of 2018-2019, the price of grapefruits was N\$10.49/kg down from N\$15.53/kg in 2017-2018, lemon was N\$10.28/kg down from N\$12.07, limes cost N\$14.36/kg down from N\$18.37/kg, nartjies (tangerines) cost N\$8.21/kg, a slight reduction from N\$8.39/kg and lastly oranges cost N\$5.91/kg down from N\$7.05/kg (NAB, 2019).

5. KEY POTENTIALS

Berries production in Namibia is a very lucrative farming enterprise because of the ability to export to niche markets. Therefore, due to the constant increase in the demand for berries, there are opportunities for countries like Namibia to increase their berries production, especially for raspberries and cranberries which make up a tiny part of the blueberries and strawberries-dominated markets. Namibia is, however, faced with challenges of high input costs which may make it difficult to keep the prices competitive enough. Local farmers are, therefore, encouraged to invest in a much larger scale of production for a better economy of scale in dealing with the high input costs.

Although a bit slow, the demand for citrus production is also rising hence the need to increase production and keep up with the demand. Namibian citrus producers are encouraged to invest more in citrus production and take advantage of supplying to neighbouring countries such as Eswatini which are importing a lot of grapefruits and pomelos. Opportunities to supply citrus fruits to the American market duty-free through the AGOA trade agreement is also something that Namibian farmers can take advantage of.



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