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Market Intelligence Report: Raspberries

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1. Introduction

High value agricultural products present economic opportunities for competitive producers, both in international and local markets. In the South African context, policies such as the National Development Plan, the Agricultural Policy Action Plan and the New Growth Path guides the sector towards export-focussed, labour intensive farming to bolster economic crop and to reach set targets for job creation in the sector.

Numerous government-led initiatives have enabled farmers to successfully produce high-value export crops, such as berry varieties. These include but are not limited to the discontinuation of agricultural marketing boards, the dismantling of state support to farmers, phasing out certain import and export controls combined with the introduction of import tariffs (Western Cape Government, 2018). The Western Cape Department of Agriculture (WCDOA) has identified the potential of berry production for job creation and economic growth, with attention and funds directed towards alternative crop research; albeit with much investment directed to blueberries, there is scope to boost support smaller industries such as raspberries.

This report aims to build on previous work done on alternative crops, focussing on raspberries¹ with an analysis of global markets, local production and trade performance. The analysis will seek to inform the potential and attractive export markets for producers, exporters and entrepreneurs to consider in further decision making.

The berry industry is expanding with unprecedented steady growth on a global scale. The raspberry world market has experienced significant growth from 9.6% in 2004 to 11.1% in 2008 Mann, 2015). The value of world imports grew from R17.7 million in 2014 to R38 million in 2018 (ITC, 2019), this growth has seen production respond to these opportunities, expanding the market share in world exports. It follows that research is required to support decision-making in this sector going forward and to identify new markets to build on the performance of South African producers and exporters in existing markets.

This report seeks to provide valuable insights into the industry and market information for improved decision-making for both the private and public sector in order to expand the industry.

¹ Raspberries are from the genus *Rubus* that includes blackberries. The most economically important *Rubus* species are the European red raspberry, the North American red raspberry and the black raspberry.

2. Overview

Berry products are among the fastest growing edible fruits worldwide with fresh berries leading the category. Growth in demand and consumption can be attributed to the growth in the world market and health benefits in its status as a “superfruit” (Mann, 2015). Berries have many health benefits: they are high in fibre that aids in lowering cholesterol, rich in vitamin A and C, folate, potassium and antioxidants that supports healing and promotes healthy cells (Pacific Northwest Extension , 2007). There has been a growing demand for convenience and versatility with berries offering convenience in terms of no peeling, easy storage and consumption by hand. Berries are versatile products that can be consumed fresh, frozen, dried as extracts, in juices pulps and in beverages. The industry is moving towards year-round availability to service demand for berries in all variations. Improved varieties that can be cropped twice a year are also contributing to increased yields (Mann, 2015). The industry is labour intensive and production increased by 30.8% in the last five years (ITC, 2019). This potential for growth and job creation presents great opportunity for South Africa to grow the export base.

Raspberries belong to the bramble fruits (includes blackberries) in the *Rubus* genus (subgenus *Ideobatus*) within the *Rosaceae* family. Native to Asia, North America and Europe (Kriel, 2019), historically raspberries have been cultivated by the Romans since the 4th Century (Pacific Northwest Extension , 2007) and grown in British gardens since the 13th century, increasing in popularity for its medicinal and other varied uses. By the mid-1600s, raspberries became popular in London markets and with the growing popularity, gardeners began selecting, and naming superior plants (Pacific Northwest Extension , 2007). Despite the health benefits and growing popularity, the development of cultivars lagged behind other fruit and only by the early 1900s were controlled crosses released.

With the development of cultivars and consumers becoming more health conscious, production has almost doubled since 2007 and commercial production taking place in many parts of the world largely led by the biggest international producers: Poland, Serbia, Russia, Chile and Peru (Kriel, 2019). South African production is still relatively small due to costs of production, among others, but as with the successful rise of the blueberry industry, raspberry production in South Africa shows promise.

Local production is mainly in the Western Cape, Free State and Mpumalanga provinces, moving into Limpopo province going forward (Hortgro, 2017). Producers in the northern hemisphere have a geographical advantage given their proximity to the largest consumers of raspberries, making Chile and Peru South Africa's main competitors. The expanding frozen raspberry market presents opportunities to reduce geographical advantages and open up markets further.

Physical properties

Raspberries come in four colour varieties: red, black, yellow and purple; and with their perennial root systems can have a commercial life of 10 to 20 years. Cane growth is biennial meaning that an individual cane lives for two years, completing vegetative growth in the first year (primocanes) and bearing fruit in the second year (floricanes) (Berries for Africa, 2019). Table 1 depicts differences in requirements for the summer and autumn bearers. In South Africa, these brambles are largely produced under netting which protects the crop and extends the production season.

Table 1: Production requirements for summer and autumn bearers

		Summer bearers (floricane)			Autumn bearers (primocane)		
Climate		High chilling requirement (similar to apples)			Low chilling requirement 300-600 PCUs		
Trellising & netting		Trellising to double wire hedge row system			Support in windy areas.		
Fertilization	Tree years	N(kg/ha)	P(kg/ha)	K(kg/ha)	N(kg/ha)	P(kg/ha)	K(kg/ha)
	1	90	20	90	90	20	90
	2	210	20	200	150	20	200
	3	300	20	250	210	20	250
Cultivars		Glen Prosen, Glen Lyon, Tulameen			Heritage, Autumn Bliss		

Source: Alleman & Young (2006)

General requirements:

- spacing of 2.5-3.0m x 0.6-1.2m, with wind protection to avoid drying out of canes
- shallow root depth of at least 600mm (not exceeding 5cm), and
- drip irrigation requirements are approximately 30 000ℓ/ha/week (in spring and summer) (Alleman & Young, 2006).

Raspberries typically require well-drained loam or sandy loam soil with high organic matter and pH between 5.6 and 7.0. Poorly drained, clayey soil (>40%) is generally avoided for raspberry production as raspberry roots will not grow in continuously wet soil, 25cm raised beds can assist in this regard. Similarly, while raspberries require irrigation throughout the growth cycle, overwatering can result in root rot (Berries for Africa, 2019).

Producers can expect yields ranging from the conservative 5tonnes/ha up to over 12 tonnes/ha over a production lifetime of 10 to 15 years. The risks to production include diseases (mildew, anthracnose), pests (crickets, bollworm, antestia stinkbug) and the short shelf life of the soft fruit (Alleman & Young, 2006).

Primocanes are green stalks that grow in the first year of growth, after turning brown it goes through a dormant period in winter and becomes the floricanes in the second year of growth. Primocanes produced from the buds at the base of the plant referred to as the crown and those produced from the root system are called suckers as shown in Figure 1.

Second year canes are brown and woody, producing fruit in early to mid-summer. The floricanes do not grow taller but produce lateral branches that flower and bear fruit. Certain red raspberry cultivars produce flowers on the upper portions of the primocanes in autumn allowing for "double cropping", essentially extending production throughout the year (Utah State University, 2004). Advantages of primocane cropping includes reduce labour and management costs whilst obtaining high quality autumn fruit, the downside being reduced yields. (Pacific Northwest Extension , 2007). These varieties have lower chill requirements and may be better suited to warmer sub-tropical areas in South Africa.

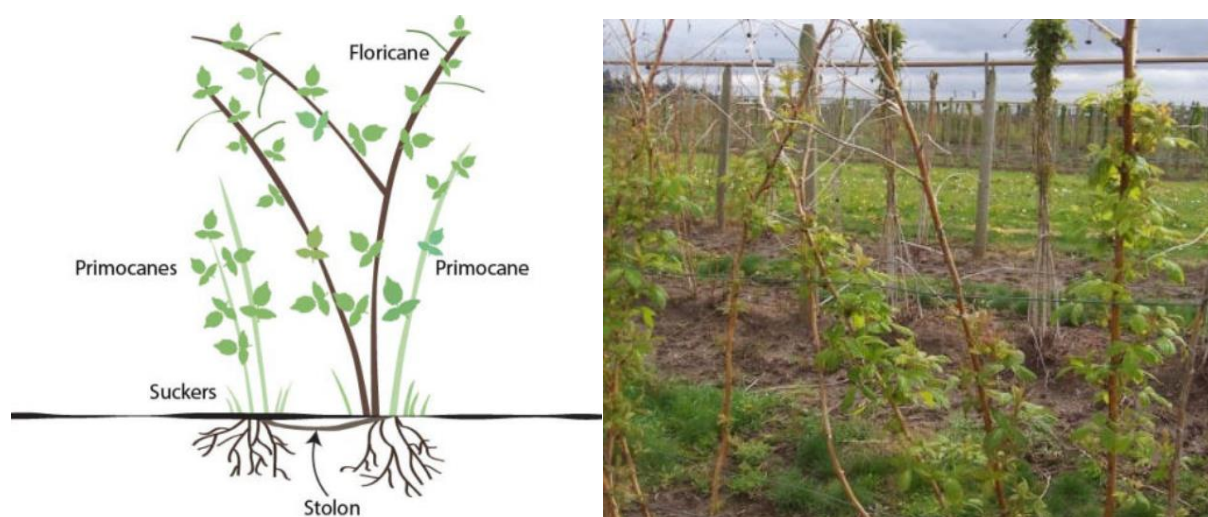


Figure 1: Typical raspberry plant showing primocanes and floricanes

In mild climates, raspberries can be grown in tunnels or under netting to delay primocane fruiting to produce off-season crops. This is another means of extending the production cycle throughout the year, positioning producers to provide quality products to the major markets in their off-season.

3. Global Market

3.1 Production

The Food and Agriculture Organisation (FAO) (2018) reports on the production in tonnes, hectares planted and yield per hectare. As shown in Figure 2, raspberry production has shown significant growth over the past few decades. There were notable increases in area planted in the mid-1980s from approximately 65 thousand hectares in 1985 to about 118 thousand hectares in 2017. The increased planted area aligns with gains in productivity over the years.

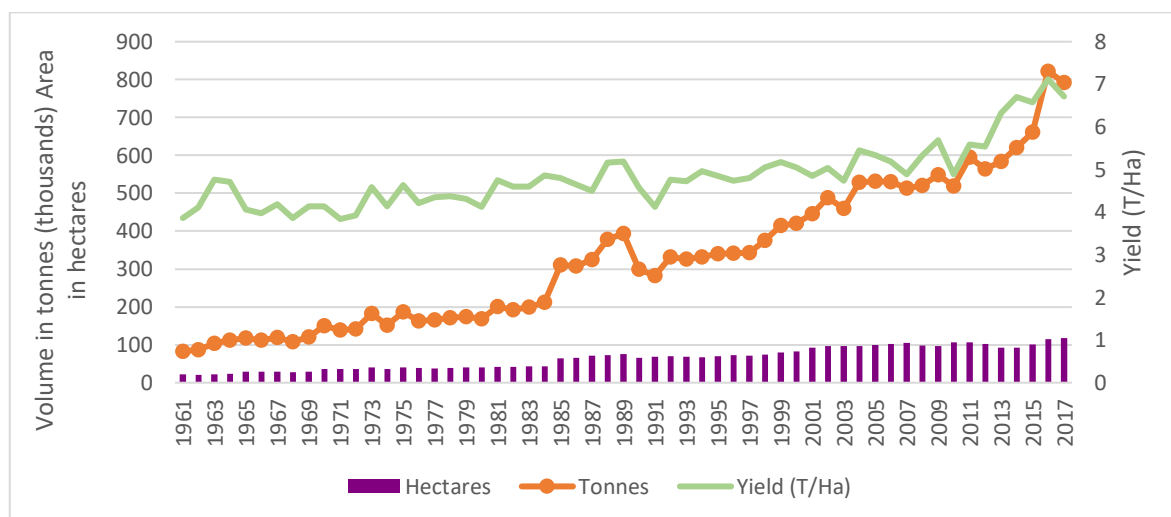


Figure 2: Global raspberry production, area planted and yields

Source FAO (2018)

Over the same period, the yields grew from around 4.8 to 6.7 tonnes per hectare, putting total global output at about 791 thousand tonnes in 2017. This growth in global production suggests an increasing demand for raspberries in the global market going forward. Considering Figure 2, FAO (2018) data suggests that the Russian Federation is the leading producer contributing to 37% of global output. Other top producers follow closely, with Poland at around 15%, and the United States of America at 14%. There has been considerable increases in producing this high-value crop with surplus production traded in international markets. An example of relatively rapid growth is Poland, where according to FAO (2018) data, the country planted approximately 4500 hectares in 1965 and has shown year on year increases since. In 1986 the country planted 10 000 hectares, reaching 20 000 hectares by 2007 and about 30 000 hectares in 2017.

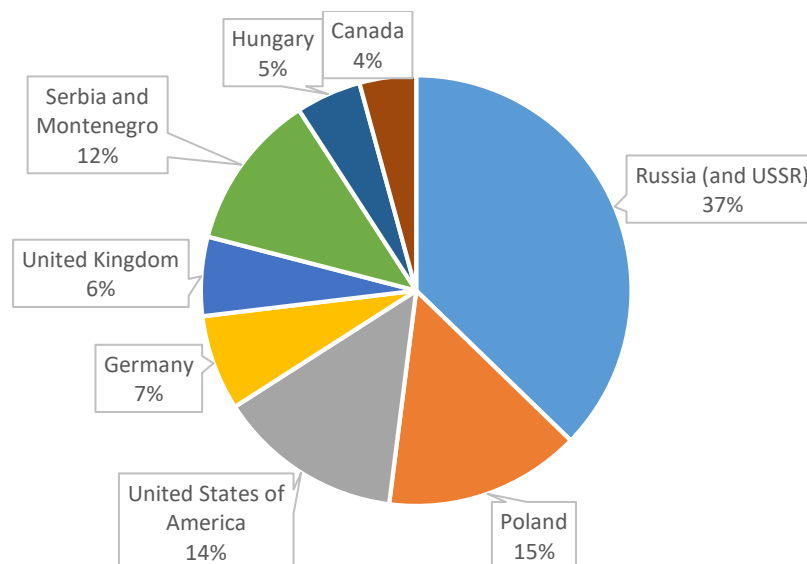


Figure 3: Leading raspberry producing countries (tonnes)

Source (FAO, 2018)

Market factors that contribute to supply include increased cold storage capacity and planting material subsidies. The USAID Agricultural Growth and Rural Opportunities programme started in 2015 aims to develop a more competitive agriculture sector via grants and technical support to stakeholders along the value chain. USAID identified raspberries as one of the fruit with the economic potential and as such introduced new varieties that lengthen the growing season that has implications for job creation and economic growth. In Kosovo, for example, this programme has introduced new methods for cultivation, packaging and marketing, which has brought about increases in hectares planted and yield (USAID, 2018).

Raspberry production has been driven by the increased demand attributed to a significant its “superfood” status given its many health benefits: high in fibre, vitamins and antioxidants (Pacific Northwest Extension , 2007) and rise in food products that formerly did not contain raspberries. Furthermore, markets for frozen berries are increasing due to the short life span of berries and the opportunity presented to reduce geographical advantages as well as the opportunity available to purchase frozen berries online (CBI, 2017).

3.2 International Trade

The increase in world raspberry production has been established mainly driven by greater growth in demand for the versatile product (and products containing raspberries) given the various health benefits and convenience of the product. However, shelf life of fresh raspberries is limited and consumers are demanding high quality, consistent product. Freezing raspberries preserves the natural goodness of the fruit without reducing nutrient value, also providing opportunities to access markets that would otherwise not be penetrable given the short shelf life of fresh raspberries. The demand for frozen berries is expected to continue on an upward trend (OctoFrost, 2016). Whilst the dominant fresh raspberry suppliers do not compete with southern hemisphere producers, the dynamics are different for frozen fruit suppliers, where all producers are competing in an increasingly competitive space.

Figure 4 illustrates the growth in demand of world imports and exports of fresh raspberries². In cases where the data could not allow for further disaggregated at the tariff-level, the statistics for the bigger group of HS: 081020 (Fresh raspberries, blackberries, mulberries and loganberries were used; assuming that these categories of raspberries show similar growth patterns in world markets). HS: 081120 was used for frozen raspberries (including blackberries, mulberries, loganberries and gooseberries, with negligible impact assumed).

Fresh Raspberries

World imports for fresh raspberries have grown from R998 562 in 2001 to R38 million in 2018, averaging a 37% annual growth rate (ITC, 2019). Similarly, world exports have increased from R956 242 to R26.3 million for the same period, with an average annual growth rate of 26% (ITC, 2019).

Figure 5 shows that the growth noted above is as a result of both higher prices and higher volumes traded. The volumes traded expanded from 49 000 tonnes in 2001 to 423 000 tonnes in 2018; similarly the Unit Value³ (in Rand per Tonne) showed year on year increases since the end of the financial crises in 2009/2010.

² Raspberries grouped in HS: 081020 and includes fresh raspberries, blackberries, mulberries and loganberries. Some countries does not report import statistics to the detail that would have raspberries separate. Many European and North American countries do however report in more detail and raspberries are included under the HS: 08102010 and HS: 08102090 for the United Kingdom; HS: 0810201020, HS: 0810201022, HS: 0810201024 and HS: 0810209020

³ This indicator is a proxy for prices and is calculated by using the value of imports divided by the quantity. In the past this is often used as a good indicator of average prices.

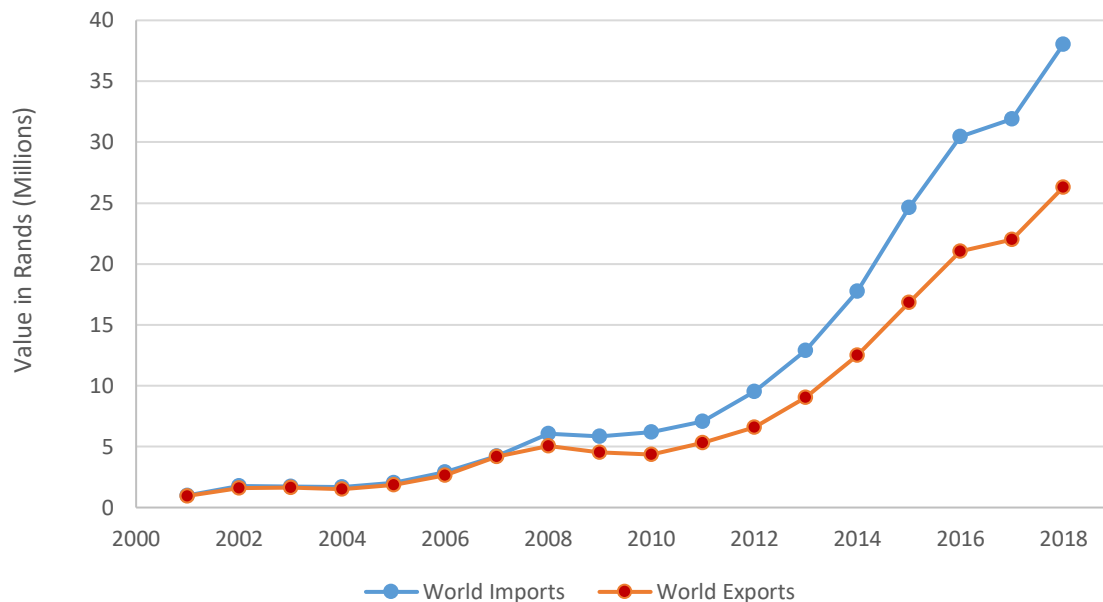


Figure 4: World imports and exports of fresh raspberries, 2001 to 2018

Source: ITC (2019)

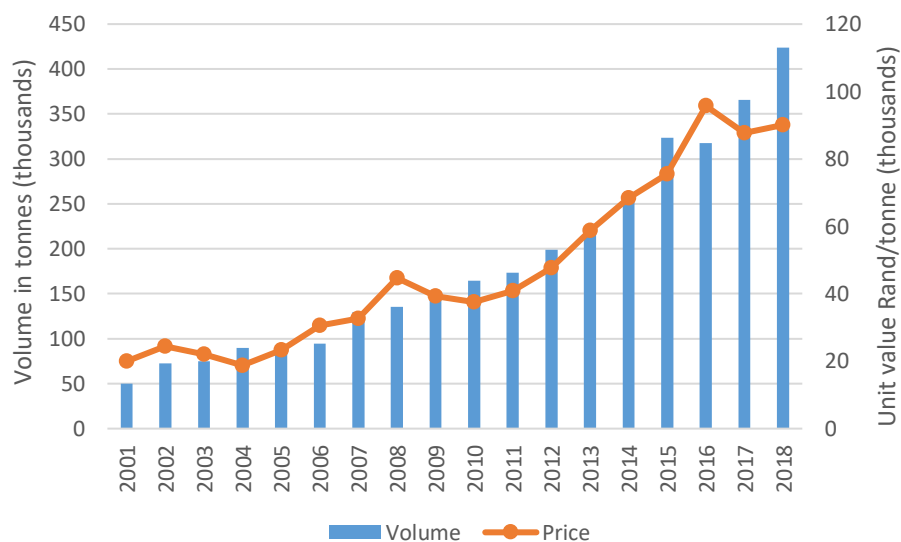


Figure 5: World imports of fresh raspberries, volumes and prices, 2001 to 2018.

Source: ITC (2019)

The average price of fresh raspberries across all importing countries was R89 925 per tonne in 2018 (ITC, 2019). It is worth noting that prices vary considerably across countries due to the structure of the market with a higher demand for berries in the northern hemisphere. Countries that contribute largely to global production such as the Russian Federation and Serbia have a much lower import price due to supply dynamics in the European Union.

Figure 6 shows that leading fresh raspberry importers United States of America (USA) generally had higher prices than world import prices from 2001 to 2008. The end of the financial crisis 2009/2010 showed a shift to USA import prices consistently below world prices up to 2018. With a high demand for product, the United Kingdom (UK) consistently pay a premium above world import prices over the same period (ITC, 2019). UK fresh raspberry export prices have been volatile over the period 2001 to 2018 with a significant slump in prices in 2010, consistent with decreased trade flows due to the financial crisis. With this global downturn, South Africa was positioned to service the export market and high demand in the northern hemisphere (considering seasonality), consistently fetching high export prices to meet the growing demand, well above world prices.

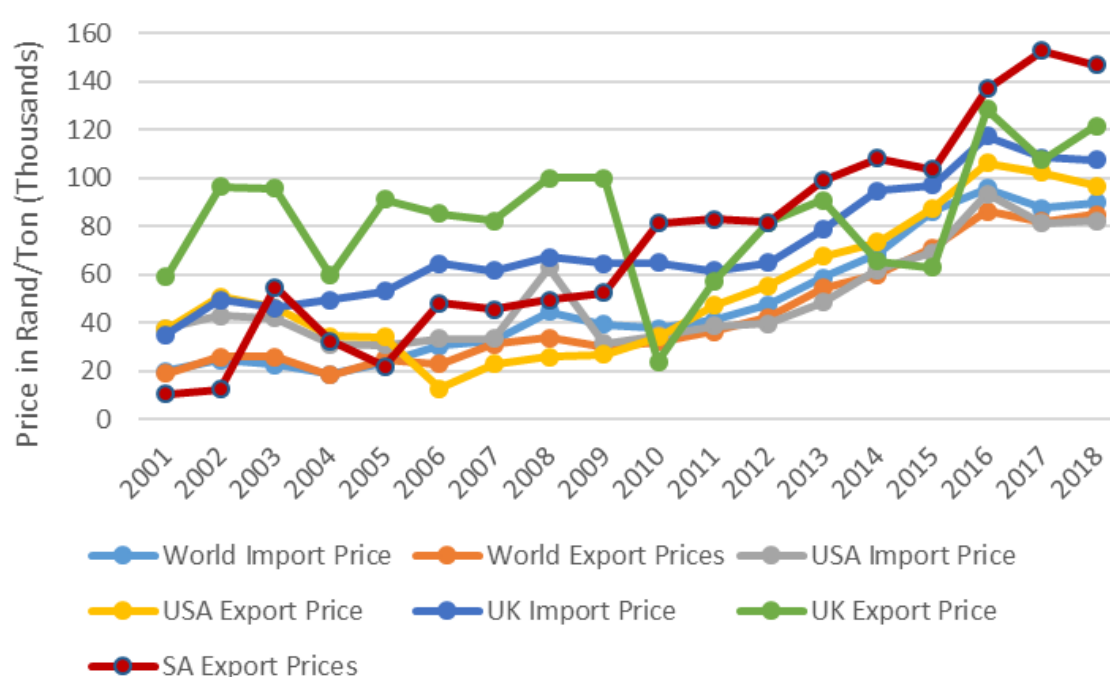


Figure 6: World prices for fresh raspberries, 2001 to 2018

Source: ITC (2019)

Table 2 shows the main players in international trade with both the top 10 fresh raspberry importers and exporters listed in terms of volumes. Mexico, one of the biggest southern hemisphere competitors for South Africa, exporting about 87 thousand tonnes in 2018 (ITC, 2018). After Mexico, the export volumes drop substantially with Spain in second exporting around 55 thousand tonnes, followed by the USA at 46 thousand tonnes. South Africa remains a relatively small player in the world market for raspberries with a mere 0.5% market share in world fresh raspberry exports.

The USA is the leading importing country by some margin, importing 182 thousand tonnes, followed by the Canada and Germany with about 40 thousand tonnes, and the UK at 27 thousand tonnes. The USA plays a significant role in the dynamics of these markets. The rest of the top ten consist of other European countries such as the Netherlands, Italy, Spain, Austria and Belgium (ITC, 2018). Northern hemisphere importers is an opportunity for South African exported to meet demand in terms of seasonality.

Table 2: World leading fresh raspberry exporters and importers in 2018

Rank	Exporting Country	Volumes (tonnes)	Share in World Exports	Importing Country	Volumes (tonnes)	Share in World Imports
1	Mexico	86 995	28.1	USA	182 044	43
2	Spain	54 690	17.6	Canada	40 547	9.6
3	USA	45 891	14.8	Germany	39 720	9.4
4	Portugal	25 445	8.2	UK	27 115	6.4
5	Morocco	23 134	7.5	France	24 775	5.9
6	Netherlands	18 197	5.8	Spain	24 241	5.7
7	Poland	11 274	3.6	Netherlands	17 910	4.23
8	Afghanistan	7441	2.4	Italy	10 093	2.4
9	Serbia	6786	2.1	Austria	9 617	2.3
10	Guatemala	4774	1.5	Belgium	8 742	2
14	South Africa	1392	0.5	-	-	-
	Total Exports	309 186		Total Imports	423 050	

Source: ITC (2019)

Frozen Raspberries

World imports for frozen raspberries have grown from R2 233 775 million in 2001 to R12 654 261 million in 2018, peaking at nearly R16 million in 2016 (ITC, 2019). Similarly, world exports have increased from R2 062 278 to just over R14 million in 2016 and contracting to R11 362 746 million for the same period (ITC, 2019).

The growth noted above is as a result of higher volumes traded with steadily increasing prices. The volumes traded expanded from 220 548 tonnes in 2001 to 479 912 tonnes in 2018. Volumes declined with economic downturn in 2009 and after steady increases, contracted again following the traded peak in 2016.

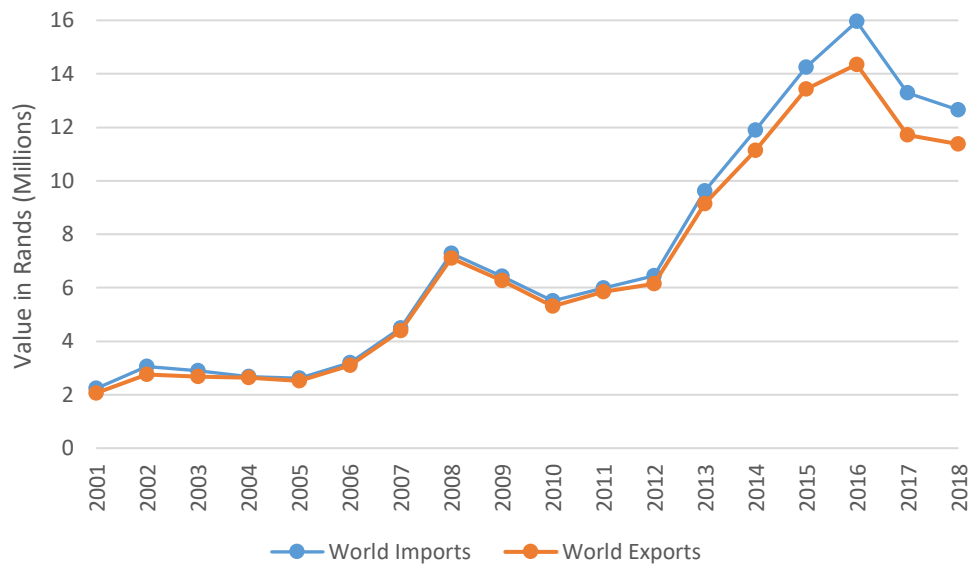


Figure 7: World imports and exports of frozen raspberries, 2001 to 2018

Source: ITC (2019)

Despite a declining price since 2016, prices are relatively high; with a sideward shift from 2017 and peaking volume to date, international trade of in the frozen berry market shows much promise.

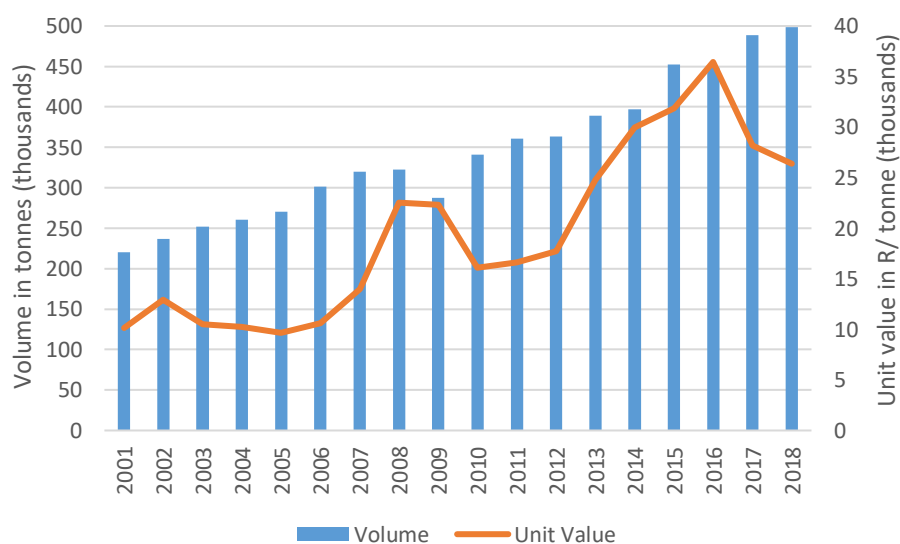


Figure 8: World imports of frozen raspberries, volumes and prices, 2001 to 2018.

Source: ITC (2019)

Figure 10 shows that prices for frozen raspberry imports have generally followed trends for world prices, with leading importer Germany paying the closest to world prices. The USA and UK prices remained relatively flat between 2001 and 2007, prices

increased slightly in 2008 followed by a contracted market with the global financial crisis. For both importers, prices have remained flat until 2013, increasingly significantly for the USA from 2013 to 2016 before nearly returning to 2013 prices in 2017. Serbia is well positioned and leading the market, fetching export prices well above world export prices. Chile has established itself in the market and a strong competitor for Poland in terms of export prices. As a southern hemisphere player, South Africa is hugely challenged to compete with Chile for high export prices of frozen raspberries.

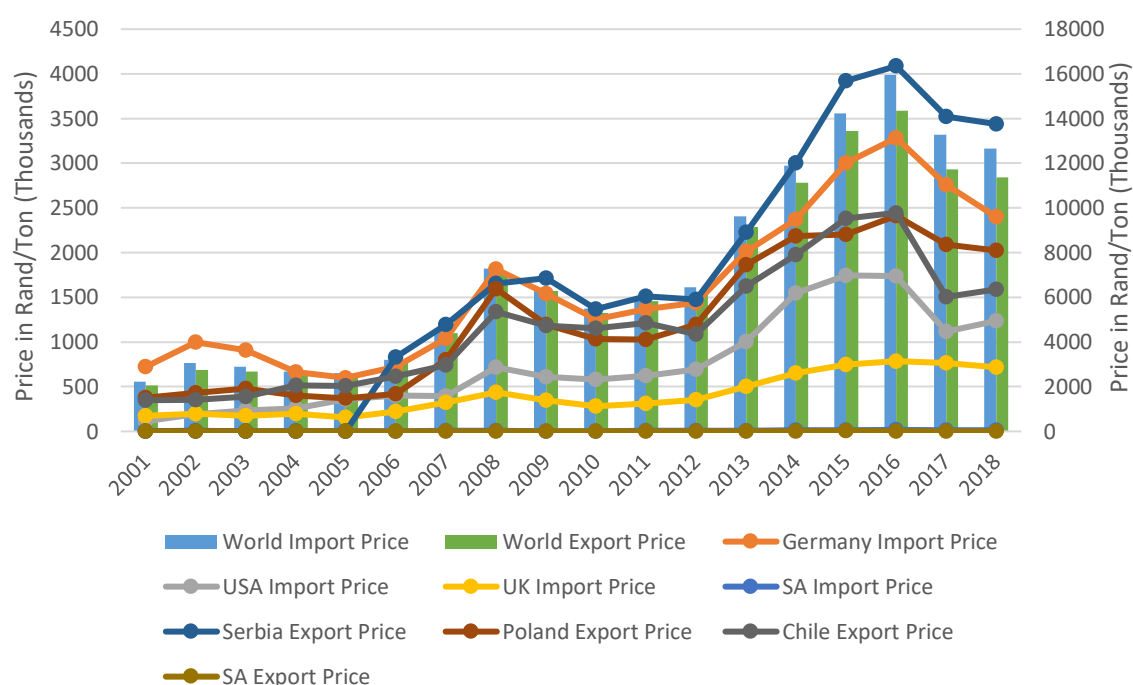


Figure 9: World prices for frozen raspberries, 2001 to 2018

Source: ITC (2019)

Table 3 shows the main players in international trade with both the top 10 frozen raspberry importers and exporters listed in terms of volumes. Serbia is the leading exporter of frozen raspberries in the world holding 28% market share, followed by Poland with about 24% of the market. Whilst still a strong competitor given the high prices fetched, export volumes of Chile as the third largest exporter are much lower than Poland and Serbia. Chile, the biggest southern hemisphere competitor for South Africa, is currently of the top three biggest exporters of frozen raspberry in the world, exporting about 45 842 tonnes in 2018 (ITC, 2018). Chile has a geographical advantage to major importers USA and Canada but the frozen raspberry market does offer opportunity to small market players like South Africa.

Germany is the leading importing country by some margin, importing 107 thousand tonnes, followed by the USA and France with about 38 thousand tonnes, and Belgium at nearly 30 thousand tonnes. (ITC, 2018).

Table 3: World leading frozen exporters and importers in 2018

Rank	Exporting Country	Volumes (tonnes)	Share in World Exports	Importing Country	Volumes (tonnes)	Share in World Imports
1	Serbia	134 839	28	Germany	107 160	22
2	Poland	118 052	24	USA	38 932	8
3	Chile	45 842	9.6	France	38 268	8
4	Bosnia and Herzegovina	24 612	5.1	Belgium	29 793	6.2
5	Belarus	19 553	4.1	Russia	28 726	6
6	Belgium	17 283	3.6	UK	24 467	5.1
7	Netherlands	16 511	3.4	Poland	22 110	4.6
8	Germany	15 916	3.3	Netherlands	20 523	4.3
9	China	15 178	3.2	Canada	20 426	4.3
10	Ukraine	14 883	3.1	Austria	18 978	4
39	South Africa	99	0.02	-	-	-
	Total Exports	479 839		Total Imports	479 912	

Source: ITC (2019)

4. The South African Raspberry Industry

The South African berry industry has experienced notable growth in recent years. Statistics compiled by Hortgro and the South African Berry Producers' Association (SABPA) give some insights on raspberry production across South Africa. Production is concentrated in the Western Cape (68% of production) and, to a far lesser extent produced in Free State and Mpumalanga (Hortgro, 2017). The industry association predicts that production will increase in the Western Cape and production areas will shift from Free State and Mpumalanga to Limpopo and North-West provinces. In terms of hectares under production, the WCDoA's Flyover project shows that there were at least 111 hectares of raspberries planted in the Western Cape in 2013 and up to 121 hectares in 2017. However, industry statistics suggest a substantially higher amount at around 205 hectares in 2017 (Hortgro, 2017).

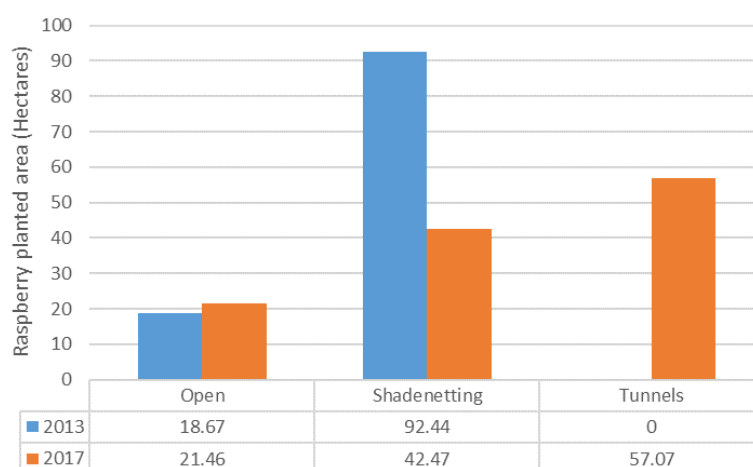


Figure 10: Raspberry planted area, 2013 and 2017

Source: WCDOA Flyover Project (2013 & 2017)

As expected, around 52% of all South African raspberries are destined for the export market and the estimated total production for the 2017/18 season was 1 679 tonnes. The local market utilises 30% of fresh sales (up from 24% in 2015/16), the remainder processed downstream in agricultural value chains (Hortgro, 2018). According to Hortgro (2018) orchard establishment of raspberries has been speeding up with 80% of all orchards having an age of less than three years (Hortgro, 2018). The preferred production systems to grow raspberries is under tunnels (47%), followed by shade netting (35%) and open field (18%) (WCDOA, 2017).

These numbers align with volumes reported by the SABPA/Hortgro survey, PPECB and Trademap data, as can be seen in Table 4 (Hortgro, 2018; ITC, 2019; (PPECB, 2019). Further inquiry should be conducted for the discrepancies in the data.

Table 4: South African fresh raspberry exports in tonnes, 2014 to 2019

	Survey	PPECB	Trade Map
2014/2015	968	1286	895
2015/2016	976	1272	1199
2016/2017	1181	1399	1269
2018/2019	875	105	1392

Source: SABPA/Hortgro (2018), ITC (2019) & PPECB (2019)

4.1 South African Export Performance

This section considers the current trade performance of South African raspberry exports, in terms of determinants of growth. Figure 11 shows that the growth in the value of fresh raspberry exports is driven by price increases as well as volume expansion, with unit values used as a proxy for price.

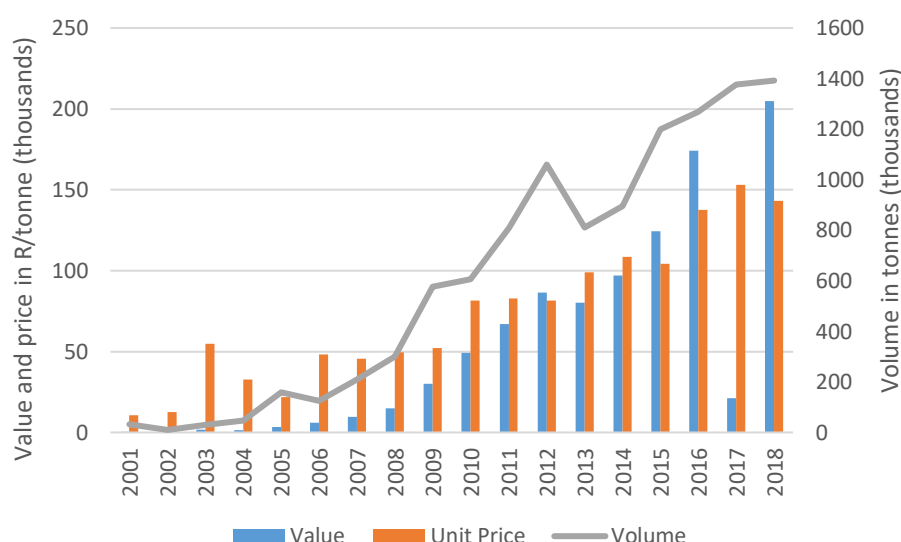


Figure 11: South African fresh raspberry exports in value, volume and unit price, 2001 to 2018.

Source: ITC (2019)

Increases can be attributed to an increased demand for product and currency performance. After more than a decade of stable volumes for fresh raspberries, a substantial increase can be seen from 2012 onwards from 86 000 tonnes to 210 000 tonnes in 2017 before dropping back slightly to 205 000 tonnes in 2018. Since 2012, prices have increased from R81 517 to 147 013 in 2018.

Figure 12 shows the export performance of SA frozen raspberries in terms of value, volume and price. SA remains a relatively small player in terms of frozen raspberry exports with volumes remaining low and flat between 2001 and 2009. Whilst there was expansion in 2010/11 and again in 2015 to a lesser extent, volumes remain low. Unit prices have been volatile and value low, increasing in 2015 following a global peak in the market. Prices have not dropped to since 2016 and the value and volume are seeing sideward shifts.

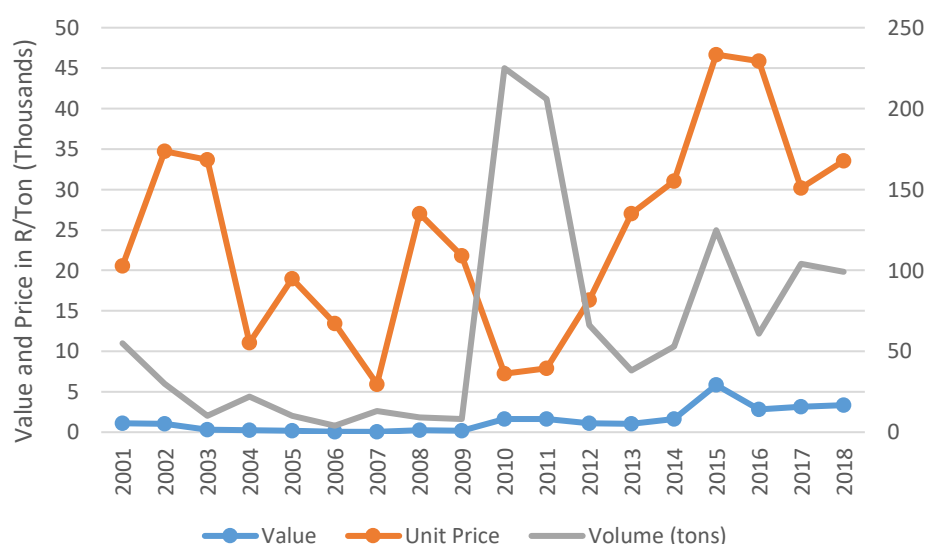


Figure 12: South African frozen raspberry exports in value, price and volume

Source: ITC (2019)

South Africa's main markets for fresh raspberry exports as shown in Figure 13 with the United Kingdom as South Africa's main market, importing raspberries valued at R185 842 and R154 453 in 2017 and 2018 respectively. Producers should look towards the emergence of markets such as Saudi Arabia, Singapore and Ireland that continue to show increases in demand and could see further growth going forward (ITC, 2019). South Africa increased its market share from 0.1% in 2003 to 0.8% in 2018 (ITC, 2018).

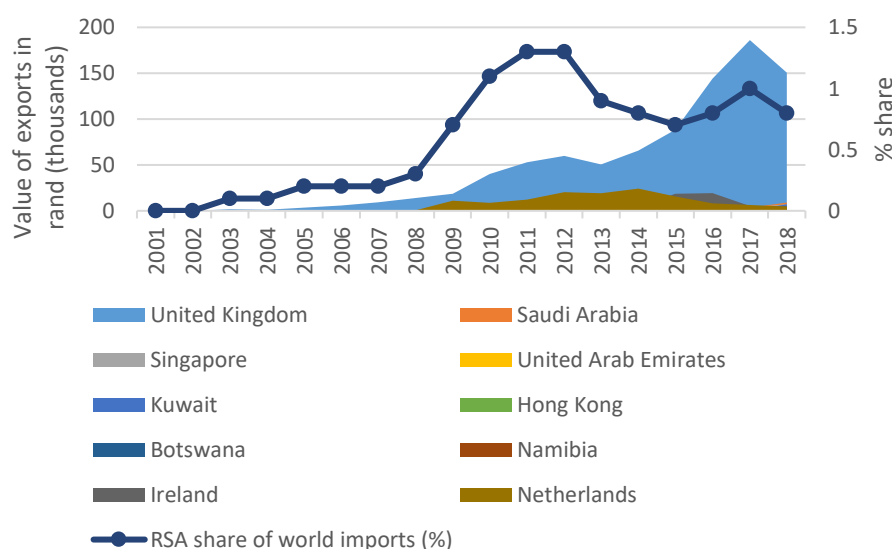


Figure 13: South African fresh raspberry importers by value, 2001 to 2018.

Source: ITC (2019)

The Japanese convenience fruit market (processed fruit in particular) is growing driven by consumers becoming more health conscious and continued diversification of diet. Whilst the USA is one of the largest suppliers of processed fruit, the attractive Japanese market has become increasingly competitive and USA market share has been declining (Kashiwagi, 2017). Japan has shown active diversification of suppliers of frozen berries (for cheap, high quality product), with countries like Peru and Chile gaining market share. The 2019 recall of frozen berries (possible hepatitis A contamination) in the USA has seen more room for entering the market.

Korea is another important market to consider, despite being a leading economy in Asia, its agricultural sector continues to decline; thus imported agricultural products bode well for SA producers interested in this market. Consumers are showing increasing demand for healthy food and consumer-ready foods (Euromonitor, 2014) such as frozen raspberries. Whilst such items may be imported from the USA, there is potential for SA to tap into these markets going forward. Other Asian markets such as Taiwan, Hong Kong and India present SA producers with opportunities for frozen raspberry exports.

South Africa would have the geographical advantage in Namibia and Eswatini, over southern hemisphere competitors and should continue to explore these nearby markets.

One of the challenges for South Africa is meeting the quality requirements at competitive prices, given the high input costs. There is also the further challenge of meeting rigorous specifications, particularly in the Asian markets, which places further burden on the already high labour costs of the industry. However, there is still much

opportunity and promise for SA exporters; Kashiwagi (2017) suggests that the opportunity lies in product differentiation, be it in taste, technology, traceability etc. Innovative solutions not based on price alone can put SA raspberries on the map, so to speak.

Figure 14 shows how the market has changed over time, looking at the export value in 2008 and 2018. In 2008, the UK was South Africa's main market in terms of value, followed by Zimbabwe and Mozambique. South Africa has a geographical advantage for African markets over southern hemisphere competitors, therefore nearby markets should also be targeted. Figure 14 also shows substantial market expansion for South African raspberry exports, particularly for African markets. It is also noted that the export value for the Netherlands and Namibia surpassed that of the UK by 2018.

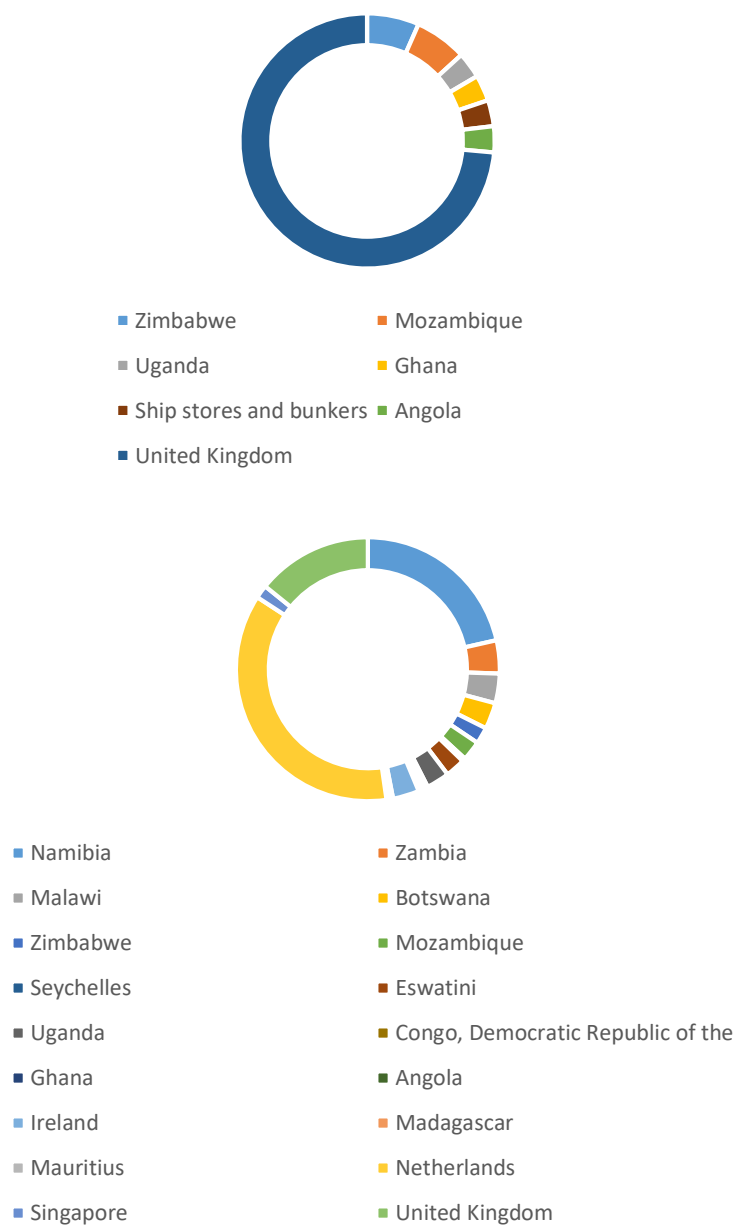
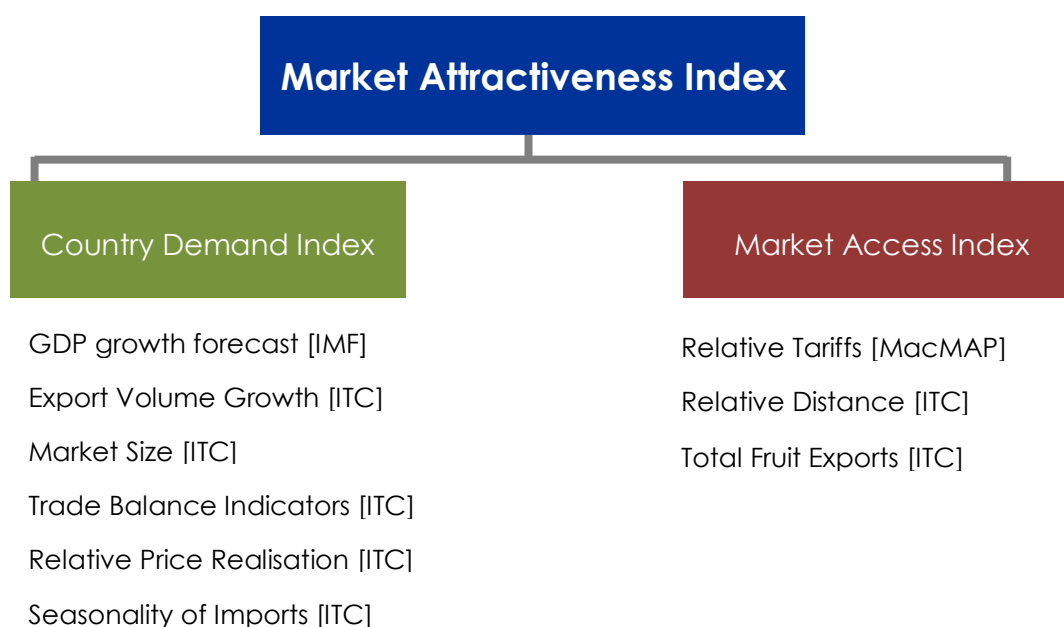


Figure 14: South African frozen export value, 2008 (above) and 2018 (below).

Source: ITC (2019)

5. Attractive Market Opportunities

This section looks at world market attractiveness for South African raspberry exports. The analysis lists potential market destinations for South African producers according to the Market Attractiveness Index (MAI), using data from the International Trade Centre (ITC). The MAI is a simple methodology of using a composite index, combining various individual indicators into one single indicator. The MAI framework is shown in the diagram that follows.



The results from the MAI analysis give a relative framework to identify attractive markets based on the selected criteria. The top markets identified could be attractive markets where exporters can do further detailed analysis for each country in order to compile a robust export strategy.

5.1 MAI Results

The top 20 attractive markets for fresh raspberries as highlighted in Table 5, which gives the final MAI index value (0-100), as well as some additional indicators to benchmark these findings. The results show that United Emirates, Hong Kong and Singapore were the top three most attractive markets identified for fresh raspberries. These markets are existing markets for South Africa that have seen import growth in recent years. The UK remains a very attractive market for South Africa given its value of import growth and being of the biggest berry importers in the world. South African raspberry Investors should pay particular attention to the German market given strong growth, size of the

market and favourable market access conditions. Hong Kong, Singapore and Malaysia show strong market potential.

Table 5: MAI results for fresh raspberries

#	Country	MAI	Value of World Import 2018/2019	Value of Import Growth, 2015/2016-2018/2019	Value of RSA Export 2018/2019
1	Hong Kong, China	76	16407	6470	-
2	United Arab Emirates	75	47875	44193	-
3	Singapore	75	35056	29497	620
4	Mauritius	74	1155	883	-
5	Indonesia	74	2866	1873	-
6	Germany	71	1398595	1031940	204264
7	Malaysia	71	8777	5420	-
8	United Kingdom	71	1483769	1115646	36223
9	Namibia	68	390	290	-
10	Mozambique	68	307	201	-

Source: Own Compilation

Regionally, smaller markets such as Mauritius, Mozambique and Namibia are attractive markets for South Africa with a distinct distance advantage in these markets. If consistent quality can be achieved to meet the requirements of larger markets such as Germany and the United Kingdom, these markets should be targeted. Eastern markets are opening up for South African exports however China's distance advantage should be considered. Having said that, South Africa is well-positioned to supply these markets due to seasonality.

6. Conclusion

This report aimed at providing market intelligence to support alternative crops such as raspberries. In recent years, there has been expansion in production both in terms of volumes and area planted, albeit not to the extent and success of the blueberry industry. There is potential to grow the industry and support job creation in the Western Cape. Potential for high returns are a motivation for producing raspberries under netting; however, the cost of infrastructure and energy costs for climate control will influence viability.

Demand has been driven by the health benefits of berries, along with secondary uses in products that contain raspberries. Increased value of raspberries has also led to increased production, where countries in the northern hemisphere pay a premium for raspberries in their off-season, and even more so for consistent quality that South Africa can supply. Whilst the dominant fresh raspberry suppliers do not compete with southern hemisphere producers, the dynamics are different for frozen fruit suppliers, where all producers are competing in an increasingly competitive space.

South Africa is challenged in meeting the quality requirements at competitive prices, given the high input costs. There is also the further challenge of meeting rigorous specifications, particularly in the Asian markets, which places further burden on the already high labour costs of the industry. However, there is still much opportunity and promise for SA exporters; opportunity exist in product differentiation for solutions not based on price alone. South Africa has grown its share in the world market from 0.3% in 2001 to 0.8% in 2018 and has shown potential in markets such as Hong Kong, Singapore, Malaysia, Ireland, Japan, Indonesia and the United Arab Emirates.

The Market Attractiveness Index identified several potential markets⁴ suggesting that the raspberry industry should both prioritise and expand exports to existing markets and look to develop the newer markets. This will enable the industry to diversify products in established European markets and will limit the risks if these markets suddenly become saturated or less accessible.

⁴ Potential markets beyond the top ten lists are available on request.

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