Western Cape Government

Agriculture

Market Intelligence Report: Dried grapes

Tshepo Morokong

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1. Introduction

Agriculture plays an important role in food production, employment and economic development (Johnston and Mellor, 1961; Diao *et al,* 2007). However, investment and technological innovation are required to keep up with the growing demand for agricultural products (FAO[1], 2017). The change in taste and quantity demanded of agricultural products as driven by human population growth and increased per capita consumption has exerted much pressure on the sector (FAO, 2017). Furthermore, the expected growth in income in low and middle-income countries will shift agricultural production systems from staple food products to make provision for increased demand for lucrative agricultural products such as proteins (beef meat, eggs) and fruits (e.g apples, grapes). Coupled with the fact that agricultural production is influenced by the prevailing environmental conditions, land tenure certainty, technological innovation, availability of capital, political stability and the availability of markets to name a few (FAO, 2017). A strategic allocation of scarce resources in agriculture requires market research and analysis aimed at identifying niche agricultural commodities (Cuyvers *et al,* 2009). Products with an absolute or a good comparative advantage have potential to create jobs and positively contribute to the economy.

South Africa's National Development Plan (NDP) and other key policies such as the Agricultural Policy Action Plan (APAP) and the New Growth Path (NGP) have highlighted foreign trade as one of the key areas with potential for growth (NPC[2], 2011; DAFF[3], 2015). Chapter six of the NNDP is about creating an inclusive rural economy through the creation of 643 000 direct and 326 000 indirect jobs in the primary, secondary and tertiary sectors relating to agriculture by 2030 (NPC, 2011). To achieve this objective, the sector is set to focus on expanding high-value agricultural exports, invest in water infrastructure, link farmers to markets and improved skills and training to name a few (NPC, 2011). The Western Cape Provincial Strategic Goal (PSG) no.1 aligns to the NDP by aiming at creating opportunities for growth and jobs (WCDoA[4], 2015). In addition, one of the Western Cape Department of Agriculture's Strategic Goals (DSG) is to maintain and continue growing it's agricultural exports from

[1] Food and Agriculture Organization of the United Nations
[2] National Planning Commission
[3] Department of Agriculture, Forestry and Fisheries
[4] Western Cape Department of Agriculture

the value of R16.349 billion achieved in 2013. The Western Cape Province, with its Mediterranean climate is the leading grape producing province in South Africa. Other agricultural products produced in the province include pears, oranges, peaches, lemons and limes. Nevertheless, grape fruits are the most dominant, making up 57% (104 317 ha of 181 466 ha) of all planted orchards in the Western Cape in 2017 (WCDoA, 2018).

The grapes produced in South Africa are either pressed (e.g. wine, juice), dried (raisins) or eaten raw (table grapes) (DAFF, 2017). However, given the dynamism of the markets and the emergence of new ones, market analysis is essential for developing a robust market strategy. Market information on the performance of the wine and table grapes in the industry is well captured (VINPRO, 2018; SAWIS, 2018; DAFF, 2017; SATI, 2017), but since dried grapes constitute a small proportion in the grapes market, the market intelligence is not at par. Even though this industry is comparatively small, recent expansions in area planted have resulted in dried grapes delivering good returns to potential investors (HORTRO, 2017).

The aim of this Market Intelligence Report is therefore to provide the reader with insights into the dried grapes industry, current trends in both local and international markets, as well as provide some context to the current market supply. In recent years, dried grape production in both the Western and Northern Cape provinces in South Africa has picked up considerably as driven by various market opportunities. The factors driving these changes will be explored in detail, followed by some analysis on identifying potential export markets for dried grapes by developing a Market Attractiveness Index (MAI). The outcome of this study is to support various agricultural stakeholders towards sound decision-making and to contribute towards information sharing and policy planning within the dried grape industry.

2. Overview

Dried grapes commonly referred to as raisins are from various cultivars of grapes (*Vitis vinifera), and are dried forms of grapes* (Ghasemzadeh, 2008). Some of the popular varieties include Sultana, Thompson seedless and currants (e.g. Black Corinth and Zante) (FAO-OIV, 2016). For example, the Thompson seedless as the name suggests, it is a seedless dried grape whereas other varieties are seed bearing (UN, 1992). Dried grapes are consumed both as food and are included in various other food products and therefore used as intermediate inputs for food processing (e.g. cereals, baked

bread). Dried grapes offer both health and nutritional benefits; they are cholesterol and fat free, rich anti-oxidants and are a healthy alternative snack (Williamson & Carughi, 2010; Lemos & David, 2010; Williamson & Carughi, 2010). Furthermore, they contain high manganese content per 100g served in comparison to apples, bananas, oranges and watermelon (FAO-OIV, 2016) and have a long shelf life (Ghasemzadeh, 2008). Dried grapes varieties are usually small berries that are without seeds and they ripen early (FAO-OIV, 2016). Their harvesting is traditionally labour intensive because it requires additional farm labour for the drying processes in which harvested grapes are scattered on concrete floors or polypropylene tarps to allow exposure to the sun for drying (Turkben & Cetin, 2001). Depending on the approach used for drying, a raisin can be named a sun, alkaline or shadow raisin (Ghasemzadeh, 2008). Sun drying approach is the most preferred because is it faster, cost effective and the final output is good quality (USDA, 2018). Moreover, recent advances in technology automated/mechanised most of the manual activities for ease of harvesting and drying grapes (Boriss *et al,* 2006). The processing of dried grapes is much specialised and the final product must be free of dust, dirt and discolouration. With much exposure to the sun, the dried grapes sugar content is broken-down by to ultraviolet rays (Boriss *et al,* 2006); hence, the dried grapes are prepared in accordance with industry best practices and the preference of the importing countries.

In the South African context and particularly the Western Cape, recent years of stagnating wine prices and drought conditions have resulted in producers searching for higher-earning alternatives. The increase in dried grape deliveries and area planted recently suggest that opportunities exist for farmers to diversify their crop mix. To provide more insight on the current conditions in the dried grapes markets, this report will provide analysis on both the world market in terms of production and trade, as well as the demand-side trends looking ahead. There is a need for potential investors and exporters to understand the factors driving these changes in growth and to identify potential markets. Market analysis provides timely information on how to align the right products to the correct customers and ensure the supply through the most efficient channels (Deszca et al, 1999). In the following sections, we start at the macro level to look at global trends, then domestic level and conclude with the state of market attractiveness.

3. Global Market

3.1 Production

In 2014 the global area planted for all grapes was 7.5 million hectares (ha) of the land surface, with an average yield of around 10 (tonnes/ha) (FAO-OIV[5], 2016). This translates to 75.1 million tonnes of grapes produced worldwide in 2014 (FAO-OIV, 2016). Of these, around 2.5 million tonnes are lost in the various production and processing systems, which means that only 72.6 tonnes goes through the value chain. To break this down further, 55% is used for producing wine, must and juice, whilst another 37% for tables grapes. Only the remaining 8% or 6.2 million tonnes of grapes are further processed to produce 1.5 million tons of dried grapes[6].

Figure 1 below shows a general increase in the actual (tonnes) global production of dried grapes from 1million tonnes in 2001 to a peak of 1.25 million in 2014, and thereafter a definite declining trend ever since (USDA, 2018). Thus, in the past three to four years, the global supply of dried grapes have dropped by around 47 000 tons.

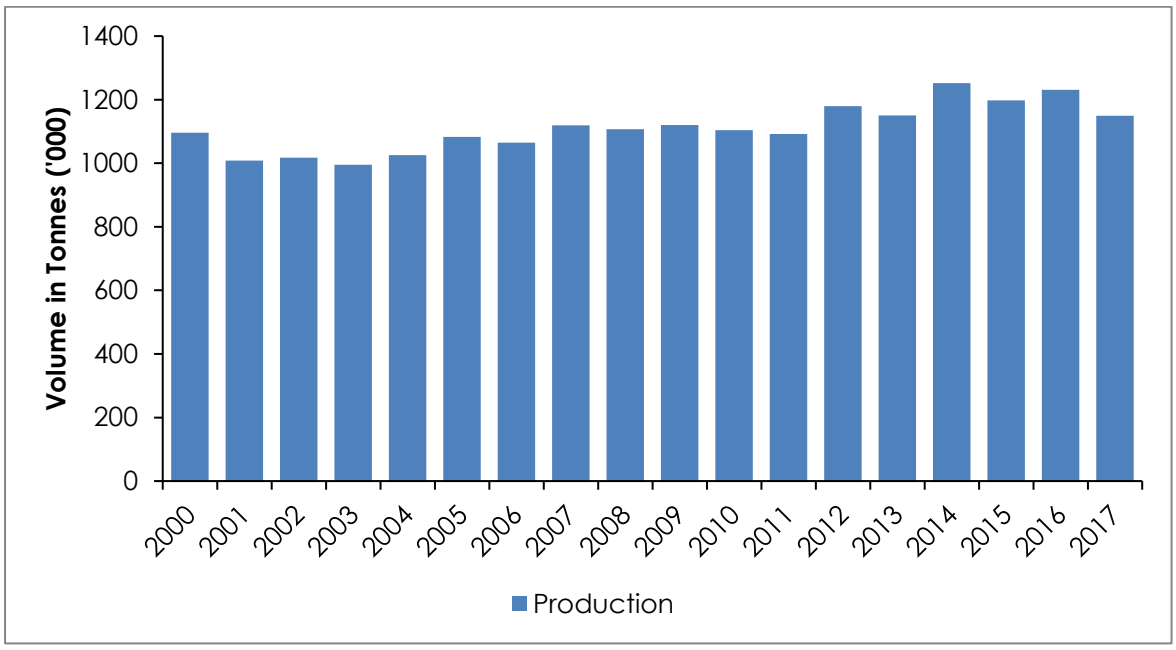


Figure 1: Global volume of dried grapes production during the period 2000-2017
Source: USDA, 2018

In Figure 2 is a list of the major producing regions of dried grapes. The Middle East produced 36% of the global production of dried grapes, followed by the North

[5] Organisation of Vine and Wine International Organisation – Food and Agriculture Organization of the United Nation
[6] According to the FAO-OIV (2016) 4kg of grapes produces 1kg of dried grapes

America 22%, East Asia 16%, South America 8%, Sub-Saharan Africa and the Former Soviet Union each at 6%, Oceania 2% and the European Union 1% (USDA, 2018). Within the European Union, Greece produces more than 99% of the dried grapes, and other producing countries are Spain, Bulgaria, Cyprus and Italy, which combined make up the rest (CIB, 2018). The major global producers of dried grapes in 2017 at country level are therefore Turkey, followed by the United States, China, Iran, South Africa, Chile, Argentina and Afghanistan (Figure 3).

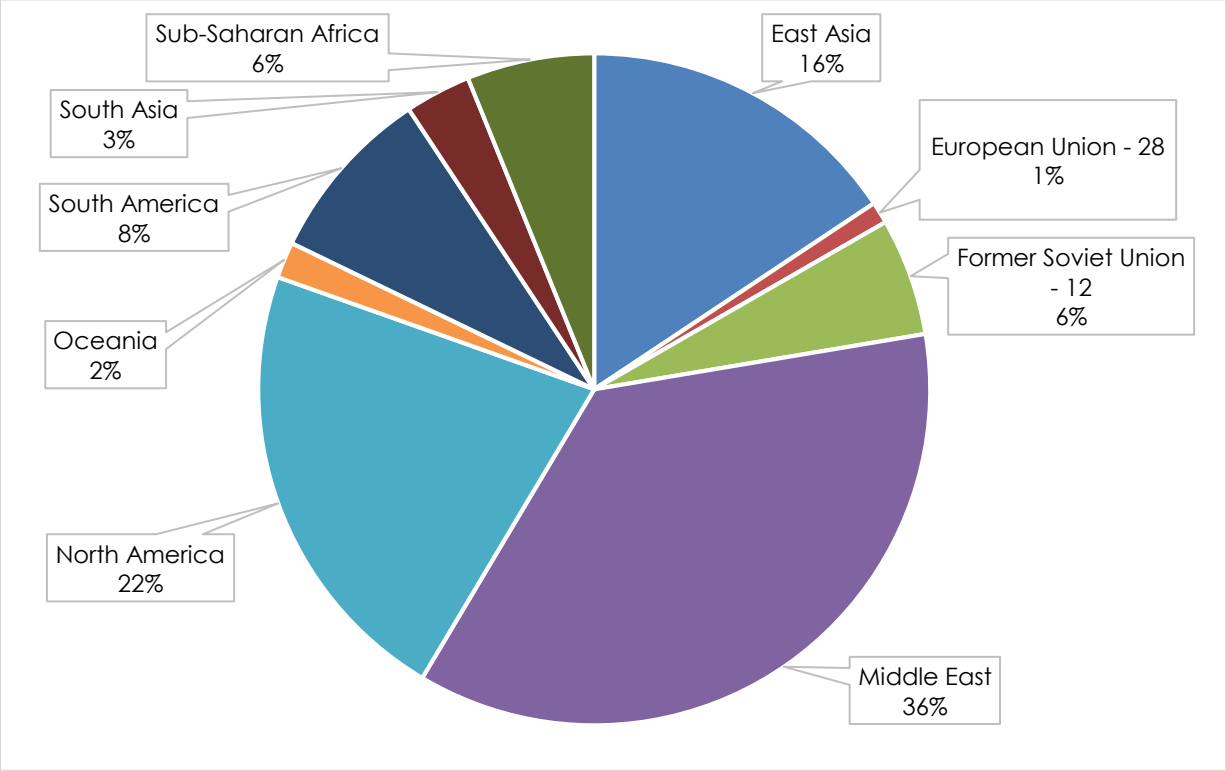


Figure 2: Leading dried grapes producing regions during the 2017
Source: USDA, 2018

It also important to note from Figure 3 shows the declining trend in production volumes for some of the leading producers since 2014. The USA, Turkey and Iran has all seen declines in production from in the past several years, which in total has meant that these countries produced 125 000 tons fewer dried grapes.

On the other hand, only South Africa, Uzbekistan, Argentina and Australia have seen growth in the same period. This provides the first anecdotal evidence of major opportunities for South Africa dried grape producers and if major suppliers of dried grapes are failing to supply world markets. As will be discussed in the next section, if world demand either remains constant or are growing, this enables a situation where

South African businesses can deliver more dried grapes to make up for this shortage, potentially at higher export prices.

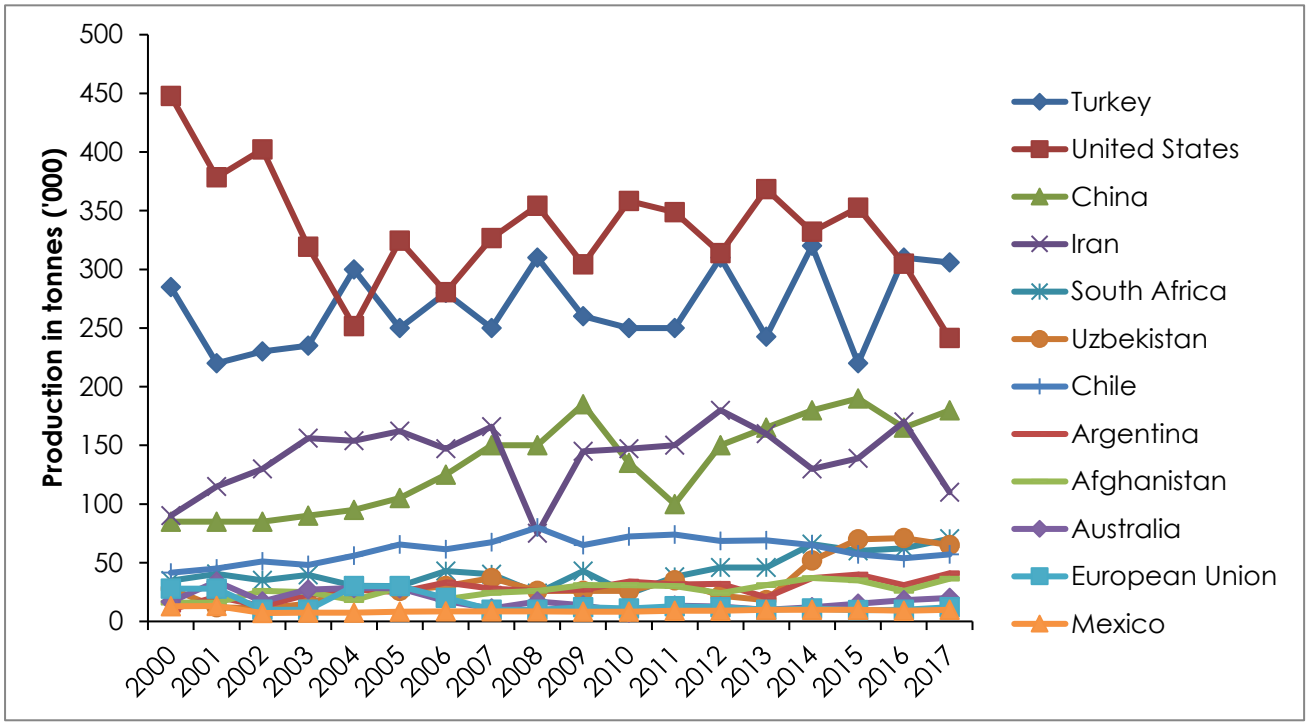


Figure 3: Major dried grapes producers in 2017
Source: own compilation from USDA, 2018

3.2 Consumption

Previous sections dealt with the world production of dried grapes, the following section deals specifically with global consumption of dried grapes and therefore is indicative of the demand for the product. In terms of overall consumption per country (Figure 4), the European Union is the region that consumes the largest share of dried grapes around the world at 28%, followed by the USA at 18%, China 15%, Turkey and Kazakhstan each at 4%. Other countries worth mentioning are Japan, Australia and Iran each consuming around 3% of the total, with the remaining 18% consumed by the rest of the world (USDA, 2018). Within the European Union, the country with the highest consumption of dried grapes is United Kingdom (CIB, 2018). These consumption shares by different regions, reiterates that not only are the countries in the Northern hemisphere major producers but they are also leading in terms of consumption. The bakery and retail industry are the major consumers of dried grapes in Europe (CIB, 2018).

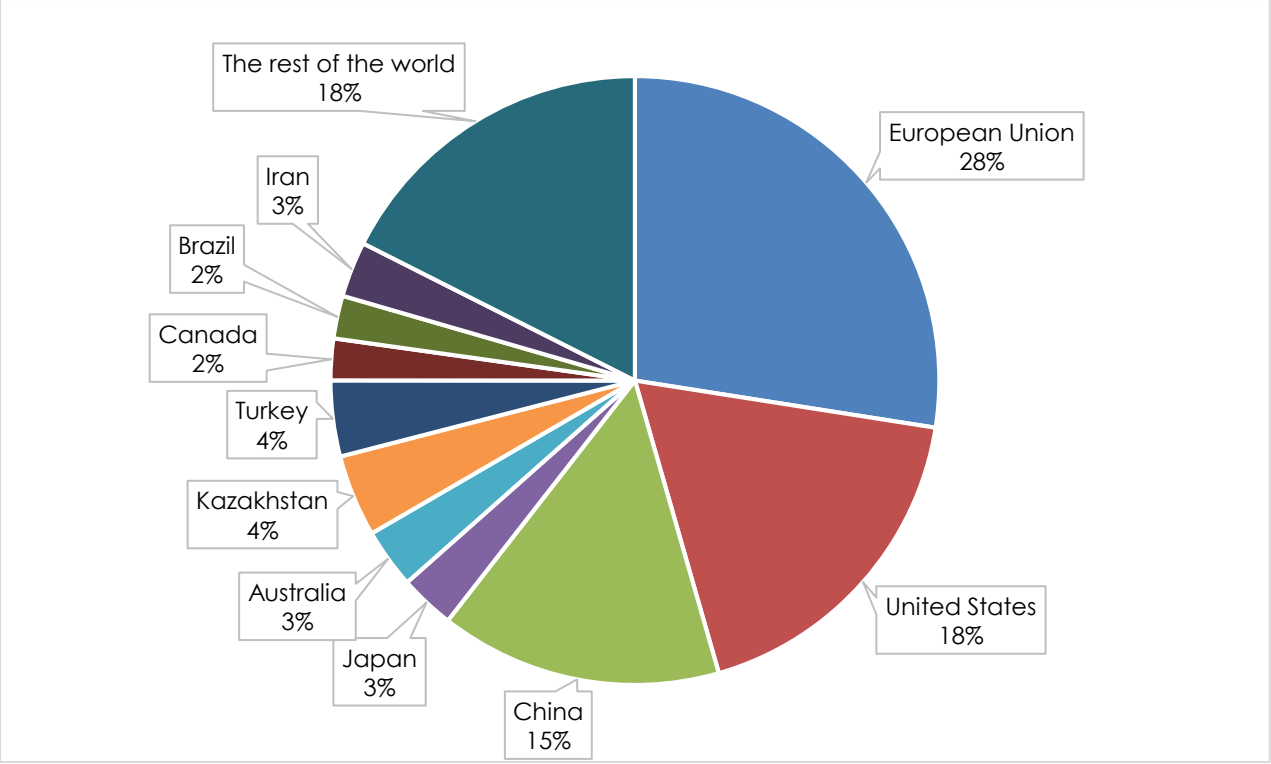


Figure 4: Dried grapes consumption during the year 2017
Source: ITC7, 2018

To get a sense of changes in demand for dried grapes worldwide, Figure 5 shows the consumption per region. There has been a steady increase in demand for the product, growing from 941 000 tonnes in 2000 to 1.2 million tonnes in 2016. Demand for dried grapes in Europe has remained stagnant in the past several years, but is still a significant market mainly supplied by Turkey. There is also a growing demand in regions such as East and South Asia, as well as Sub-Sahara Africa. Thus, in the medium term, it seems likely that demand for dried grapes is set to continue looking ahead. Finally, it should also be noted that these aggregate numbers do not show important dynamics at the country level. To get a more detailed understanding of the global dried grape market, analysis on trade information gives more insights. This will be covered in the next section.

[7] International trade centre (ITC)

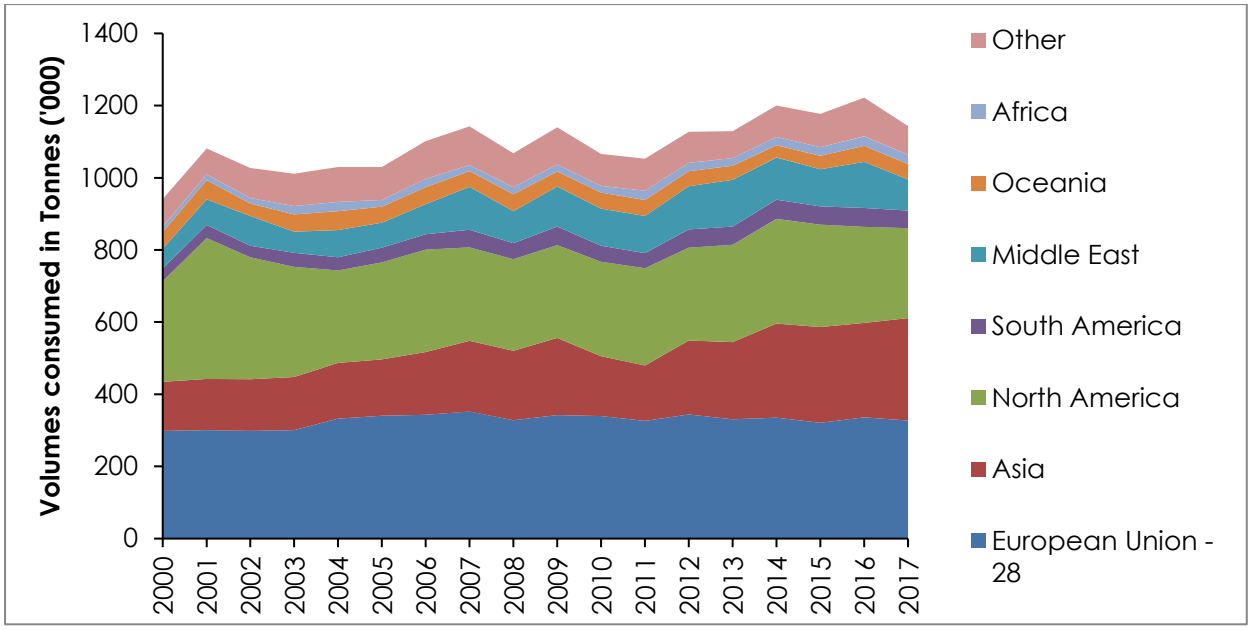


Figure 5: Global consumption of dried grapes from 2000 to 2017
Source: USDA, 2018

3.3 International Trade

Given the dynamic nature of markets in terms of production and consumption, international trade information provides insights into the transfer of production through foreign markets for exports and imports. Since this information is readily available for most countries, such analysis is essential for better planning and decision making at industry level. The global production overview as discussed previously indicates a downward trend on volumes produced since 2014 for major producing countries, whilst world consumption has continued its marginal growth. World trade in value is given in Figure 6 below, which includes both the value in rand and dollar terms. For both, the value of imports and exports for both imports and exports for the period 2001 to 2016 has been increasing before a sharp decline in 2017. Looking at these values in conjunction with the production volumes, it looks like a drop in the actual volumes of dried grapes was a precursor for the decline in the value of exports (Figure 7). Again, these declines were related to weaker crops in Turkey and other leading producers. Regardless of the recent drop in trade, the value of exports have grown remarkably from R4.8 billion in 2001 to R20.9 billion in 2017; an average annual growth of 9.6% (ITC, 2018). The figure also gives the same values in US dollar terms to ensure these increases were not merely attributed to the weakening of the South African Rand, which did play a significant role. However, the value of exports grew from 565 million USD to 1.5 billion USD in the same period; an annual average increase of 6.6%.

As expected, the import trends in both rand and dollar terms follow the same pattern. The question that might arise from these increases in trade values is what were the main drivers to the change in both or either price or volumes?

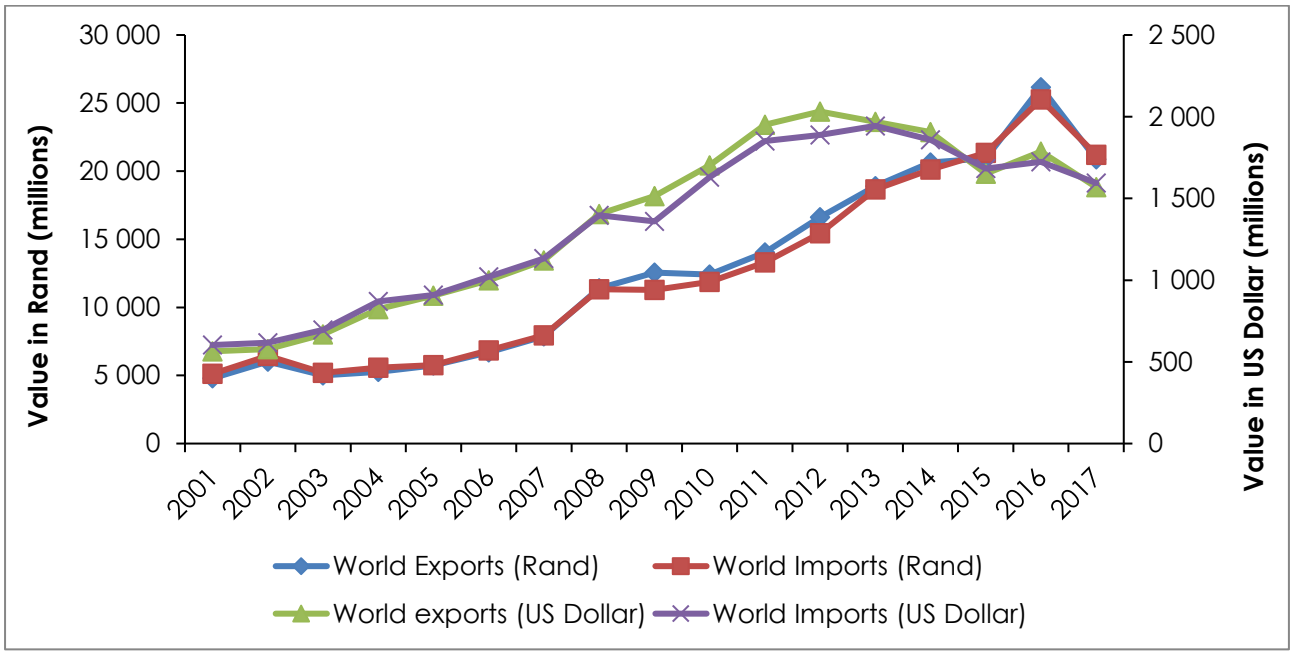


Figure 6: World imports and exports of dried grapes, 2001 to 2017
Source, ITC, 2018

Figure 7 and 8 seeks to provide answers to the above question, which gives firstly the trends in export volumes and then various average unit prices (R/tonne). Clearly, both have an increasing trend over the same period, but price increases were increasing at a much faster pace. The world import prices in Figure 8 are given both rand and dollar terms and the UK import prices are given with world import prices. As alluded earlier, the weakening of the rand against the major currencies have been a driver of price increases for dried grapes, but prices in dollar terms have also shown strong growth albeit that there was some decline in recent year. Overall and since 2001, import prices have grown sustainably in both South African and USA currency. This is a good sign for potential investors as it is indicative that the market is still growing and in context of some major producing country having declining production trends. Also, the EU market prices seem to have a small premium margin against the world average price.

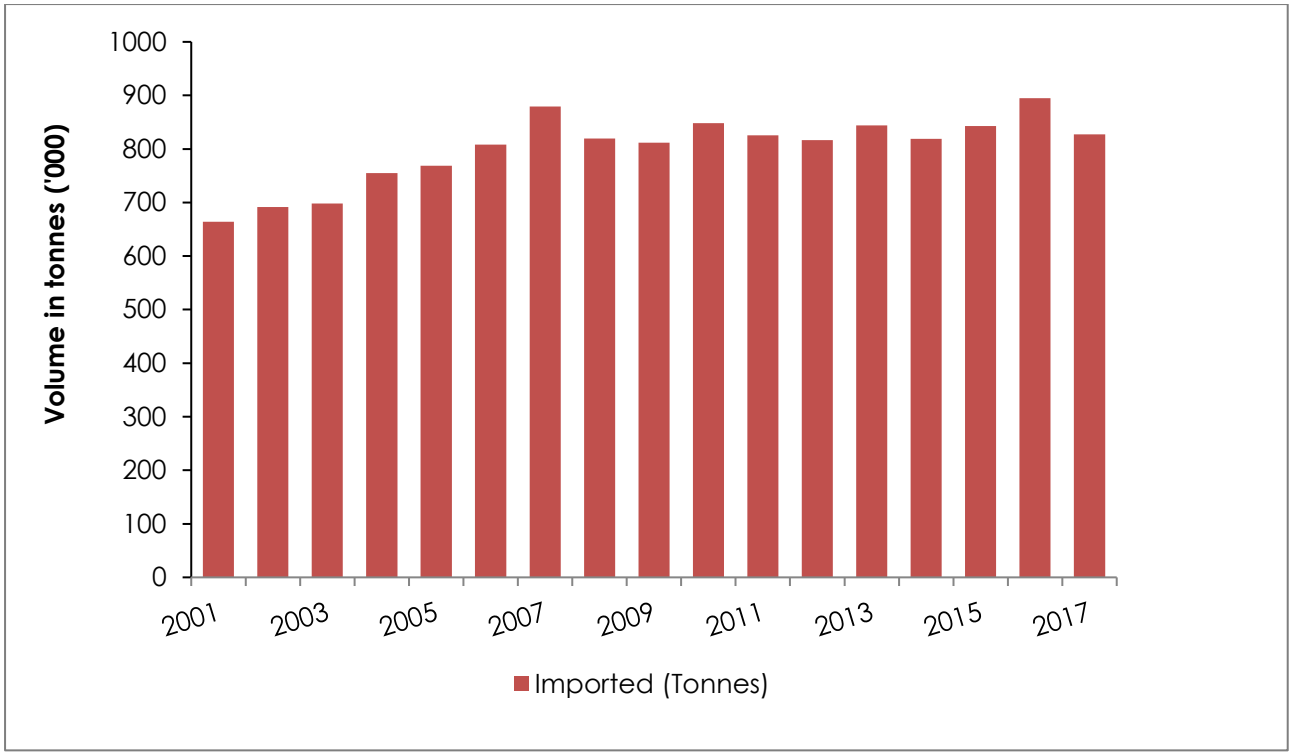


Figure 7: World imports of dried grapes by volume and value in rands for the period 2001 to 2017
Source: ITC, 2018

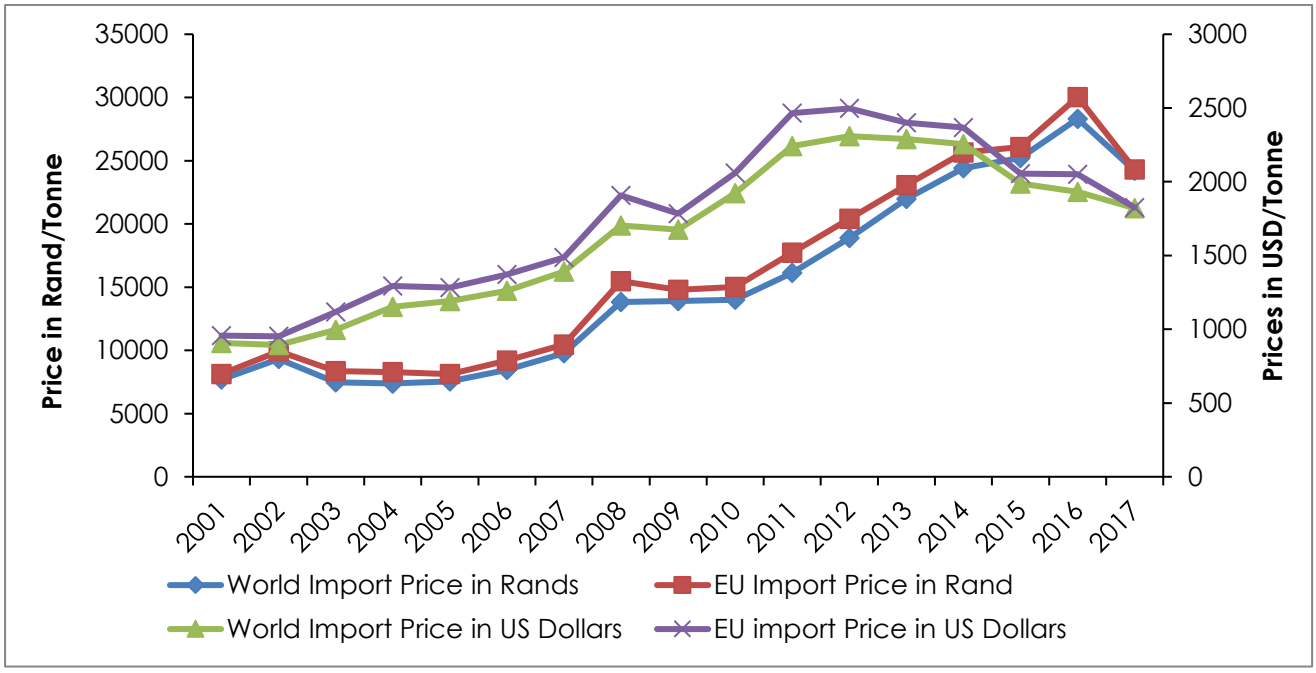


Figure 8: World Imports prices for dried grapes for the period 2000 to 2017
Source: ITC, 2018

Now that is clear that trade in dried grapes over the past two decades have expanded substantially, Table 1 give the breakdown of the top ten exporting and

importing countries of dried grapes internationally, by volumes and market share for each country. Turkey is the leading exporter of dried grapes, accounting for 268 771 tonnes and commands 32% of the global market share. Interesting to notice is that Turkey's market share is more than double the share of the second exporting country (United States of America). However, from the United States of America onwards to Iran, Uzbekistan, Chile and other exporting countries, the difference in market share is marginal (ITC, 2018). South Africa is the sixth leading exporter of dried grapes in the world, exporting 48 962 tonnes which constitute 5.98% of the global market share. In terms of imports, the United Kingdom absorbs 106 014 tonnes of dried grapes which constitute 12.81% of the global market share, followed by Netherland at 6.6%, Kazakhstan 5%, Japan 4.61% and others.

Table 1: World leading dried grapes exporters and importers in 2017

Ranking	Exporting country	Volumes (Tonnes)	Share in the World Exports (%)	Importing country	Volumes (Tonnes)	Share in the World Imports (%)
1	Turkey	268 771	32.84	UK	106 014	12.81
2	USA	126 790	15.49	Germany	76 232	9.21
3	Iran	75 615	9.24	Netherlands	54 582	6.60
4	Uzbekistan	68 494	8.37	Kazakhstan	41 413	5.01
5	Chile	51 788	6.33	Japan	38 103	4.61
6	South Africa	48 962	5.98	China	33 132	4.00
7	Argentina	27 455	3.36	France	28 933	3.50
8	Afghanistan	25 574	3.13	Canada	26 621	3.22
9	India	24 058	2.94	Brazil	25 336	3.06
10	Greece	19 521	2.39	Australia	24 392	2.95
	Total exports	818 326	9.93	Total imports	827 402	45.04

Source: ITC (2018)

At this point it is also important to note that seasonal differences in the supply of grapes provide opportunities for different countries depending on where they are situated; Northern or Southern Hemisphere. Figure 9 makes this distinction and indicates that the value of dried grapes exports in the northern hemisphere is significantly higher when compared to the Southern hemisphere. Given the climatic variation between the northern and southern hemisphere, it is logical to expect alternating on and off-season of dried grapes exports (Western Cape Department of Agriculture, 2017). However, the figure below does not indicate much of this variation, instead trends in dried grapes exports for the northern and southern hemisphere show similar patterns

but at different scales/ volumes of dried grapes. A plausible explanation for this seemingly lack of seasonal differences in the pattern of dried grapes exports between the north and southern hemisphere could be because processed dried grapes are not highly perishable like fresh grapes and other fruits. However, what is clear from the figure is that the value of exports has increased over time in both hemispheres, then a decline in 2016 and 2017.

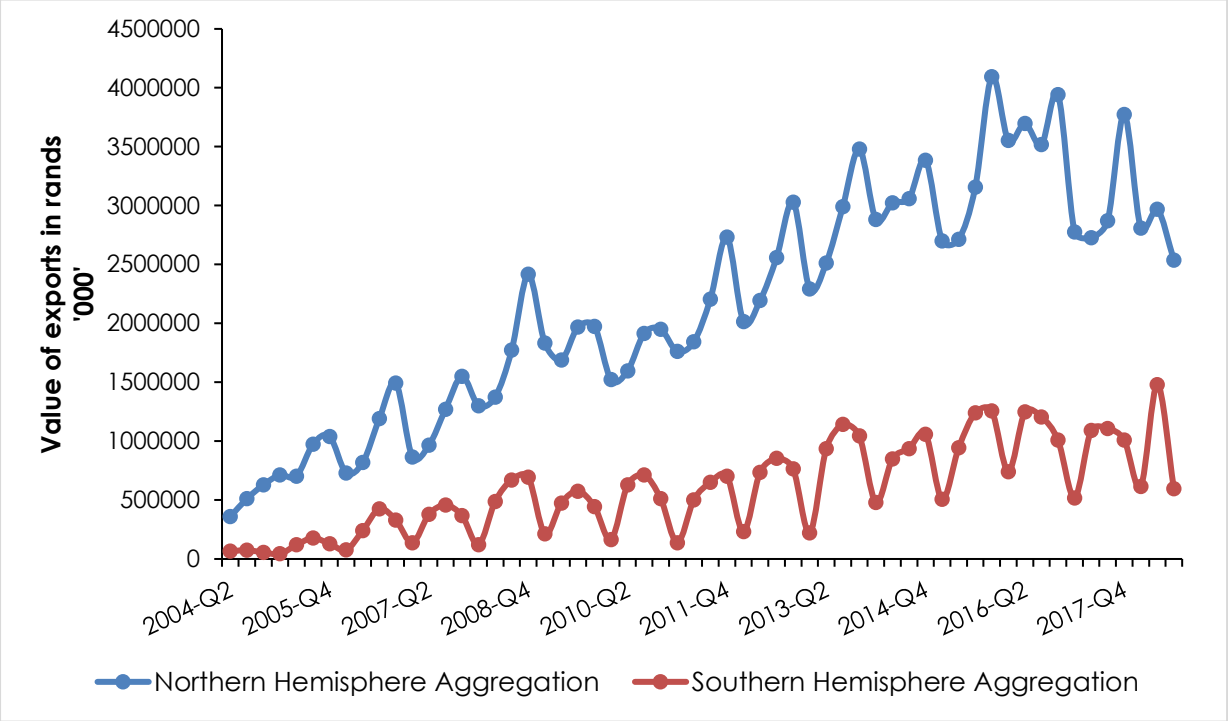


Figure 9: World exports of dried grapes (HS: 080620) per hemisphere
Source: ITC, 2018 & Own compilation

4. The South African Dried Grape Industry

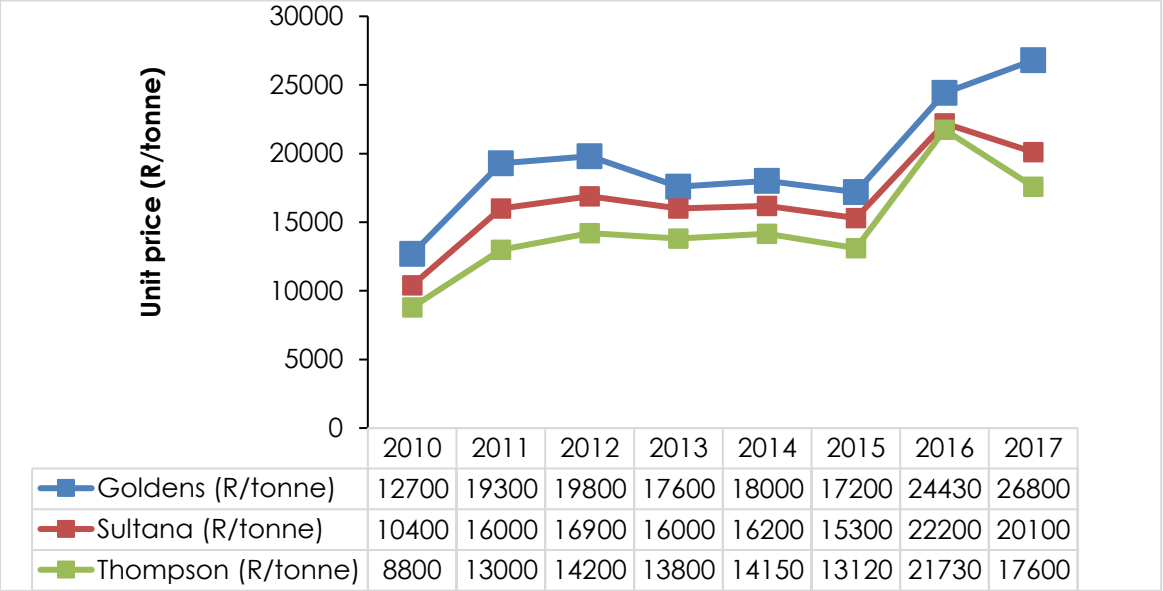
The South African dried grape industry is like many of its international counterparts constituting a small proportion of the total grape output. With only 1066 to 1100, producers and four major processing companies (HORTGRO, 2018; USDA, 2018). South Africa is the sixth global exporter of dried grapes in the world (ITC, 2018; USDA, 2018).

In 2017, area planted dried grapes, table grapes and wine grapes was 16 586, 19 674 and 94 545 hectares respectively (HORTRO, 2017; SATI, 2017; SAWIS, 2018). In the case of dried grapes, Figure 10 shows that the total area for dried grapes production increased from 14 734 in 16 586 hectares, total production increased from 37 907 to 65 593 tonnes, and the yield increased from 2.6 to 4 tonnes per hectare during the

period 2012 to 2017(HORTRO, 2017). An estimated 37% of the dried grapes area is Thompson seedless/Sultana, 22% Merbein seedless, Sugraone and Flame each occupies 6%, Crimson seedless and Currant each occupies 3% and other cultivars (HORTGRO, 2018). The Northern Cape Province in South Africa accounts for more than 90% of the dried grapes production in the country, whilst Western Cape production is around 1 932 hectares in total and growing (USDA, 2018; Hortgro, 2018). The global trend in terms of production of dried grapes as previous discussed, showed a decline in the year 2016 and 2017 but on the contrary South African dried grapes industry continued to increase its production in that same period. This is an important observation as it shows the resilience of the sector against global trends and particularly in severe drought conditions

Figure 10 : Dried grapes production in South Africa 2012 to 2017
Source: own compilation based on data from HORTGRO

The dominant cultivars of dried grape produced South Africa are Golden, Sultana and Thompson, and their producer prices have increased over time as indicated in Figure 11. However, whilst there was shortage of supply in the globally during the period 2016 to 2017, the Goldens dried grapes producer price increased by 10%. More than 85% of South Africa's dried grapes production goes for exports markets (Figure 12), with an estimated turnover of R1.22 billion, and major exports markets are countries in the northern hemisphere and they import 62% of SA's exports (HORTRO, 2017; USDA, 2018).



	2010	2011	2012	2013	2014	2015	2016	2017
Goldens (R/tonne)	12700	19300	19800	17600	18000	17200	24430	26800
Sultana (R/tonne)	10400	16000	16900	16000	16200	15300	22200	20100
Thompson (R/tonne)	8800	13000	14200	13800	14150	13120	21730	17600

Figure 11: South African producer prices for dominant cultivars of dried grapes 2010-2017
Source: HORTGRO, 2018

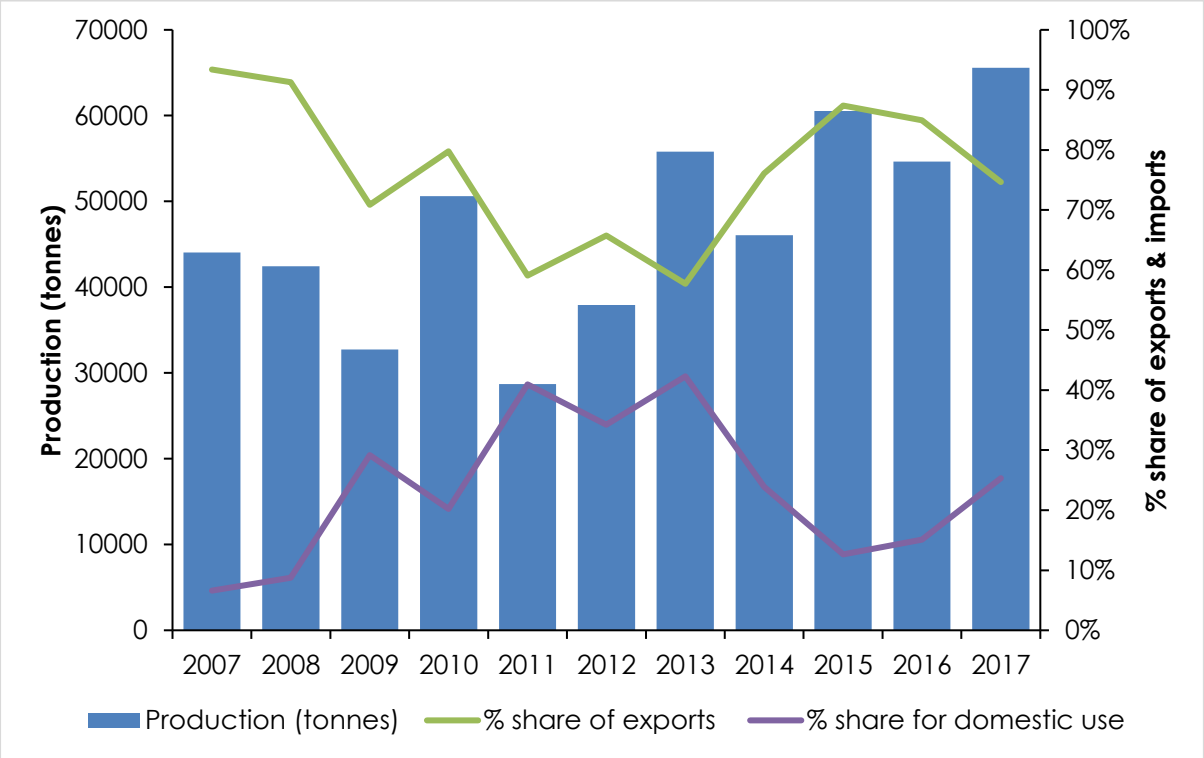


Figure 12 : South African dried grapes production, percentage share exported & domestic use during the period 2010 to 2017
Source: ITC, 2018

5. South African Export Performance

South African dried grapes export performance has been unstable in terms of the volumes exported over the years, but the general trend shows an increase (Figure 13). The value of exports increased overtime and was volatile from 2006 towards end of 2011, but post that period it increased. All these trends show growth in the dried grape industry. The unit prices have shown a steady increase from 2001 to 2016 before a slight decrease in 2017. South Africa contributes 6% to the global share of dried grapes exports, and the three top importing countries are Germany, Netherlands, Algeria and France (Figure 14). In the following section, a market attractiveness method is applied to identify the potential markets for South Africa exports of dried grapes.

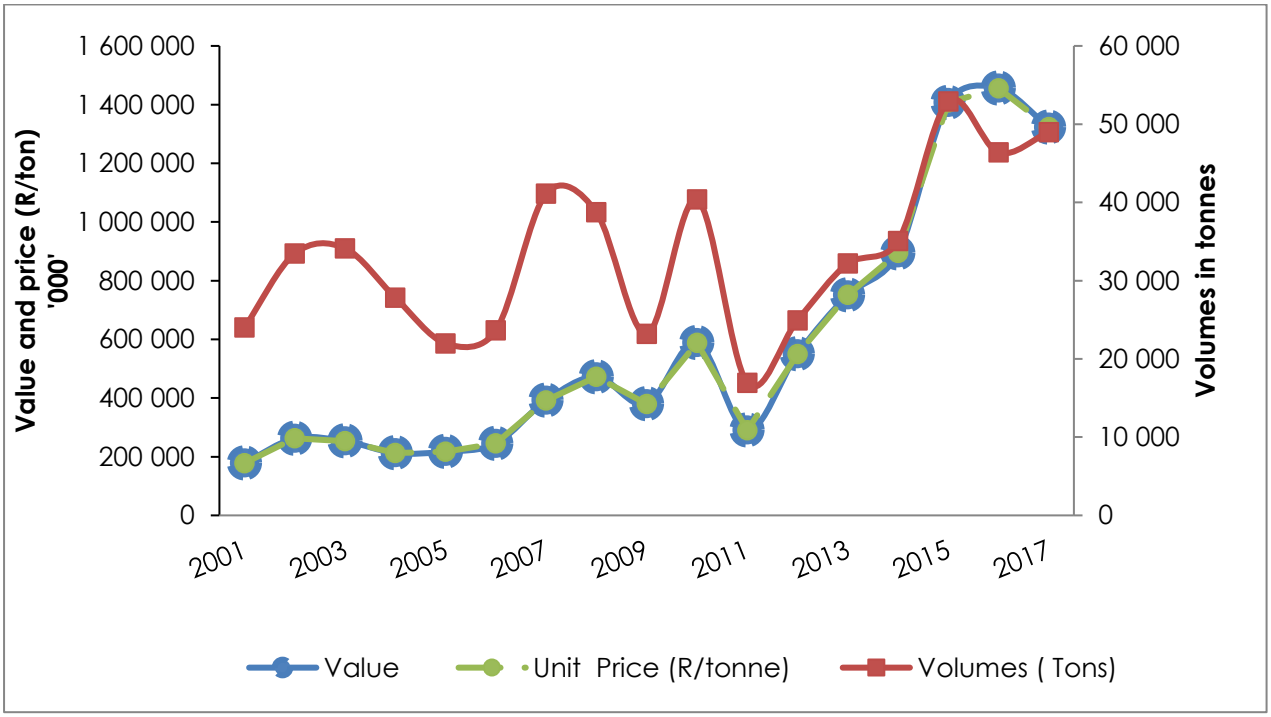


Figure 13 : South African dried grapes export volumes, value and unit prices for the period 2001-2017
Source: ITC, 2018

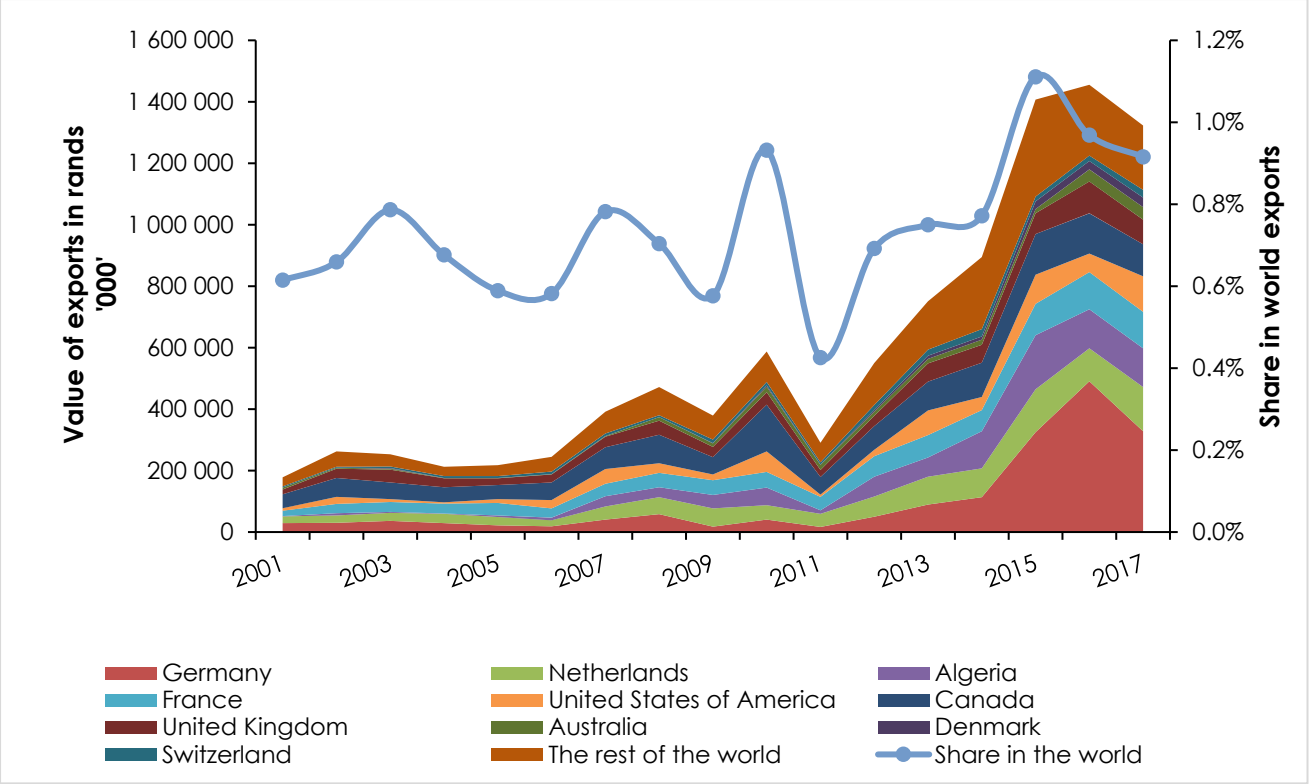


Figure 14 : South African dried grapes value of imports by country
Source: ITC, 2018

6. Attractive Market Opportunities

In the previous section, the performance of the South African dried grapes industry was discussed. It clear that this sector is growing and the foreign markets are favourable hence more 85% of the production goes into these markets. However, markets are not static but rather dynamic as they respond to indigenous and exogenous factors. In this section, an approach known as Market Attractiveness Index (MAI) is used to identify potential markets with for South Africa's dried grapes exports. The MAI is a composite index consisting of the Country Demand index and Market Access index (Figure 15). The country demand index looks at indicators such as a country's real gross domestic product (GDP) forecast, export volume growth, market size and trade balance. The market access index looks at the relative tariffs, relative distance and total fruit exports (Western Cape Department of Agriculture, 2018). Next to each indicator is the data source of data used. The outcomes of applying this approach are presented in the following section.

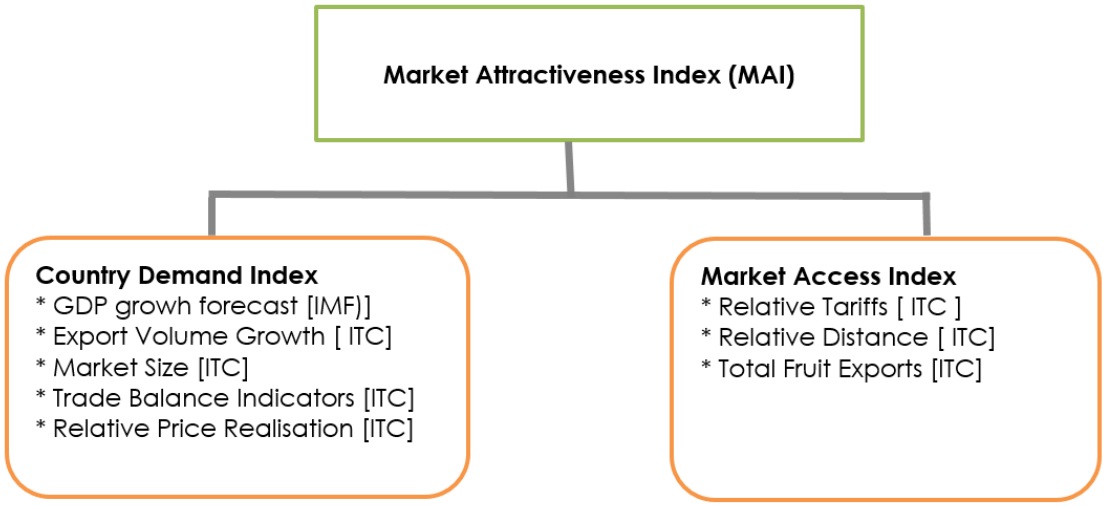


Figure 15 : Market attractiveness index
Source: Adopted from Western Cape Department of Agriculture, 2018

6.1 Market Attractiveness Index (MAI) Results

Figure 16 provides the list of the top most attractive markets for South Africa's exports of dried grapes given in the blue bars. Alternatively the red dots shows South Africa annual growth rate in value to those markets. The MAI should be not be interpreted as an absolute measure of attractiveness, but rather as a relative measure. Thus, any of the top markets mentioned in the figure could have potential for investors and needs further country-level analysis.

The top attractive markets for dried grapes were the UK, Germany and the Netherland in the top three, followed by the Philippines, Indonesia and Thailand. Of these, South Africa is already showing good performance in the EU markets with annual growth rates of 8% for the UK, 38% to Germany and the Netherland with 12%. The MAI results, as well as the South African export growth to these countries suggest that these markets provide opportunities for South African exporters looking ahead. Other notable inclusions from the MAI results were nations such as Australia, Saudi Arabia, France, Italy and Singapore. Australia in particular had been a major growing importer with good market access prospects and South Africa has managed to expand their exports by 27% per annum since 2013.

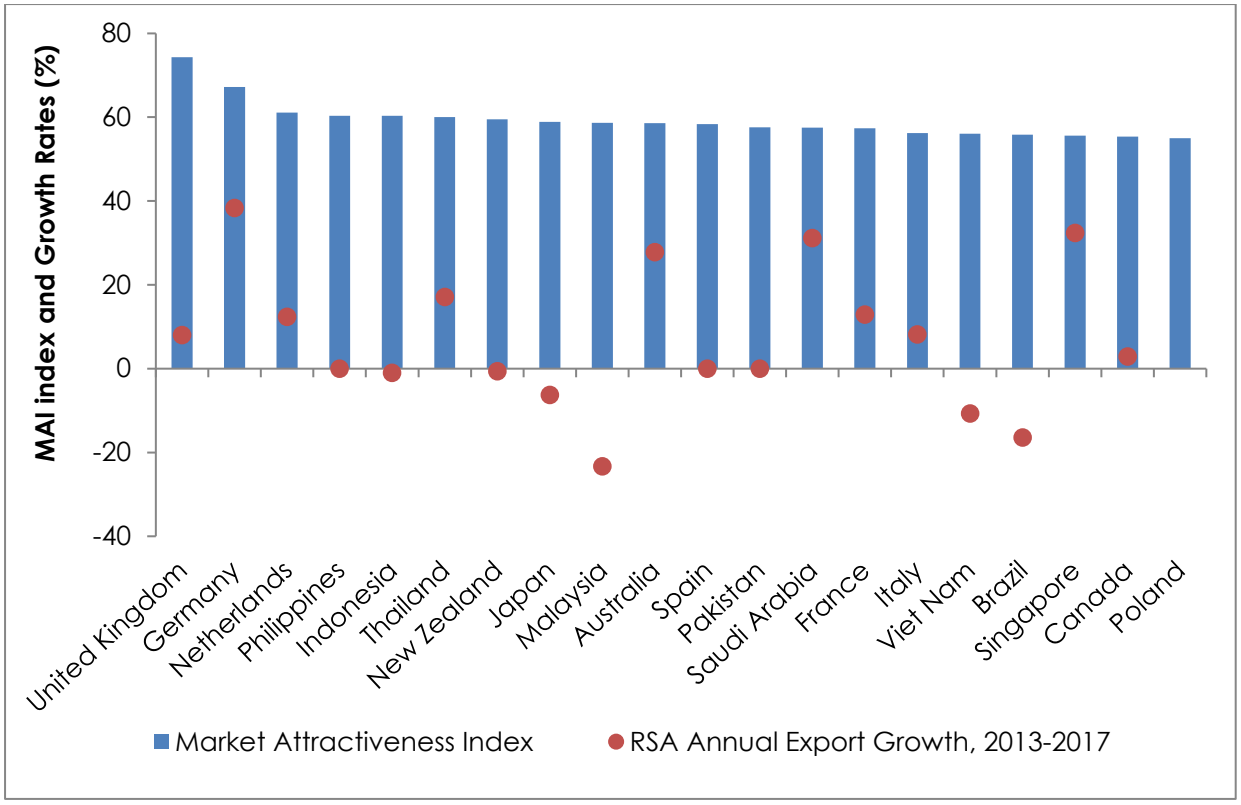


Figure 16: The Market Attractiveness Index results
Source: Own compilation based on data from ITC, 2018 & IMF, 2018

The results presented here points to various options to expand exports of South Africa dried grapes in the future and it would be good for the industry to widen its basket of countries in order to mitigate risk. Policy makers at National Government should also seek to expand market access conditions in countries such as Indonesia and the Philippines towards zero tariffs.

7. Conclusion

In this report, an assessment the historic trends in the performance of dried grapes markets was conducted. This information is important to South Africa's dried grapes industry, as it shows how well the sector compares to the rest of the world. As well as to inform sound decision-making under changing market conditions. The local and international markets show that dried grapes constitute a small proportion in the grapes industry relative to wine and table grapes. However, the general trend shows an increase in the production and value of dried grapes during the period under review. Although in 2017, the global production declined but the South Africa showed much resilience to this global phenomenon as it continued to increase its total production, yield per hectare and received higher producer price for Golden dried

grapes cultivar. South Africa is the sixth leading exporter of dried grapes in the world. At macro level, the major producers at region level are countries in Middle East, North America, East Asia, South America, Former Soviet Union and Sub-Saharan Africa. In 2017, Turkey was the leading exporter followed by the United States of America, China, Iran, Chile and South Africa. The recent decline in global dried grapes production, present an opportunity for South Africa to expand its exports base. Some of the potential markets identified through the MAI are United Kingdom, Germany, Netherlands, Philippines, Indonesia and Thailand. Three of the identified markets are existing already, and this means that South Africa will need to increase its production in order to increase its share of exports to these countries. Since, there are established trade channels and clear trade agreements, this conditions are conducive expansion for volumes exported.

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