



**Western Cape
Government**

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Market Intelligence Report: Pistachio Nut Industry of South Africa

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Executive summary

Pistachio nuts are wildly consumed for their health benefits and the global demand for these nuts has been increasing over the years. In 2022/23, the world pistachio production is forecast to decline by 5% driven by reduction in major producing countries such as the United States of America, Iran and Turkey. The world top exporters of pistachios include the United States, Iran, and Turkey, all accounting close to 80% of the global pistachio total exports in 2022. The pistachio production consumption is dominant in the Northern region, in particular from countries with higher income levels. On the other front, South Africa's pistachio production mainly takes place in the Northern Cape Province (100% of the total country production). Therefore, South Africa is not the major player in term of exports for pistachios. The latter calls for more industry investment, increase in production and expansion of area under pistachio production including Western Cape Province. The Western Cape exports of pistachios are mostly destined for the for Botswana, Netherlands, the USA and Russian markets. This calls for more market diversification as the province continues to export pistachios and investing in this industry in the future can contribute towards creating more jobs and earn gross value of production to contribute to the economy of the country (region as well).

1 Introduction

Pistachio nuts are grown in Iran, Turkey, the United States, Syria, Greece, Italy and Spain (Simsek & Gulsoy, 2018). Pistachio nuts are desert plants tolerant of high temperatures and thrive in saline soils; ripening in late summer or early autumn (Dreher, 2012). The pistachio nut has a hard, whitish exterior shell that makes constitutes about 50% of the nut weight. The pistachios are among the world's important tree nuts due to their health benefits characteristics. The pistachios are used as a savory snack or a major ingredient in many traditional desserts, pastries, fermented meats, and puddings throughout the existing human history (Simsek & Gulsoy, 2018). Therefore, pistachios are widely consumed and the have a growing demand markets. Also, pistachio is a nutrient-dense tree nut with a heart-healthy fat-acid such as protein, dietary fiber, potassium, magnesium, vitamin K, γ -tocopherol, and a number of phytochemicals (Dreher, 2012).

The tree nut (including the pistachios) market is estimated to increase by \$6.16 billion between 2021 and 2025, and it is expected to grow at a compound annual growth rate of over 4% during this period (Bakhtavoryana, Cheng, Jr, & Dharamasena, 2022). Therefore, stabilizing global political environment and growing global demand for food production could lead to more investment opportunities for countries and their industries such as pistachios. While the consumption of nuts can lead to healthy diets, nuts have also been classified as a versatile category of foods and food ingredients (Merieuxnutrisciences, 2023).

The South African nut industry is recognized as the prominent producers and exporter of macadamia and pecan nuts, and on a smaller scale, it produces other tree nuts including pistachios (BFAP, 2022). The South Africa's diverse climatic condition is well suited for the production of nuts across the country including the pistachios and creates farm-level jobs. The global demand for eating clean and healthier food has driven the growth in tree nut production by 24% (year-on-year) over the last decade across the world.

South Africa's nut industry has followed the global trend trajectory of higher production, trade and consumption over the past decade, with production growing at more than 10% per annum to meet the global demand in export markets (Research&Markets, 2021). Therefore, expansion of both the domestic and

international market demand for nuts is important for South Africa, in particular, the Western Cape pistachio nut producers and exporters.

Taping into the global pistachio nut market, requires market research initiatives to better understand individual consumer's current consumption behavior and perceptions, pistachio nut prices, product use development and the sustainable expansion of production to meet the global market demand for pistachios. The South Africa's produced nuts are mainly destined for the international markets or exports.

2. Overview of the World Pistachio Nuts Industry

2.1. World Production and Area Harvested

The pistachio nut trees thrive in dry climatic conditions and poor soil types, and well adapted to desert and semi-desert areas of the temperate and sub-tropical regions (Mandalari, et al., 2022). It is important to highlight that, the global tree nuts market is dominated by the following nuts: almonds (31%), walnuts and pistachios (19%), cashew nuts (16%) and hazelnuts (10%), and macadamia nut production accounting for only 1% (NAMC, 2022). In 2022/23 production year, the global production of pistachios fell slightly recording (see Figure 1) approximately 747 310 metric tons (in-shell basis), from 773 200 tons in 2021/22 season (INC, 2023). The global production of pistachio nuts for the 2022/23 production year was forecast to slip by 5% (USDA, 2023). This is attributed to the decline in pistachio production from top producing countries; the United States and Iran respectively.

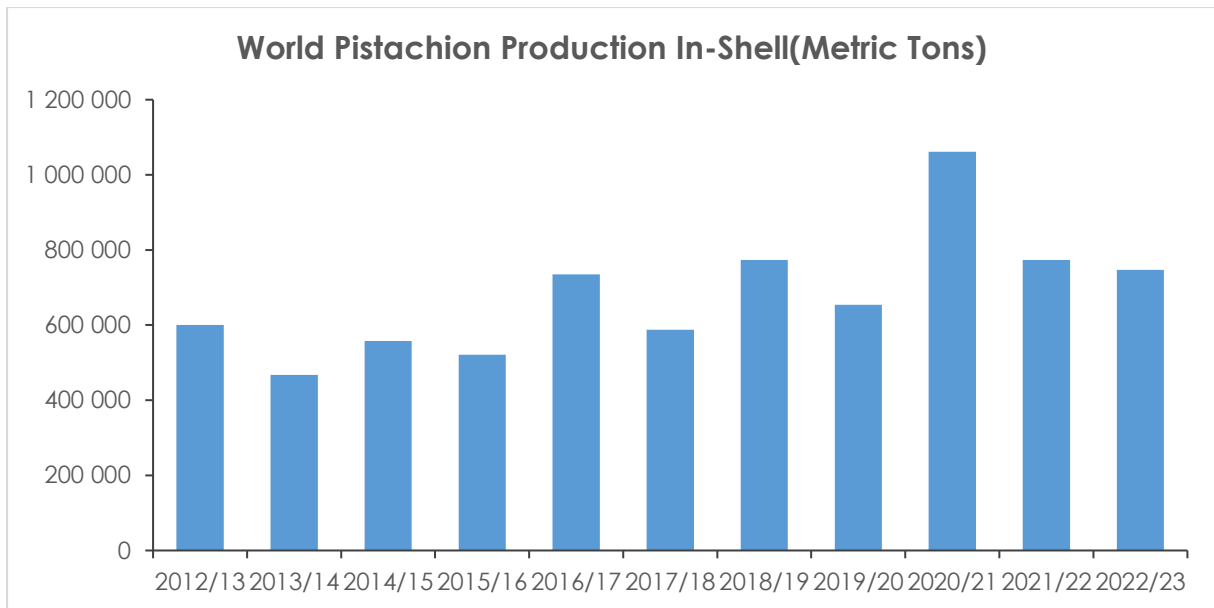


Figure 1: Global Pistachio nuts production (in-shell, metric tons)

Source: INC, 2023

The United States of America (i.e. California region), Turkey, and Iran are the largest global producers of pistachio nuts with United States supplying 54% (401 000 metric tons) of the global production, followed by Turkey (27%) at 200 000 metric tons and Iran (14%) recording 106 00 metric tons (INC, 2022). This clearly shows that most of the pistachio nut production is concentrated in the Northern Hemisphere region (see Figure 2) and consumption pistachios is also concentrated in the same region.

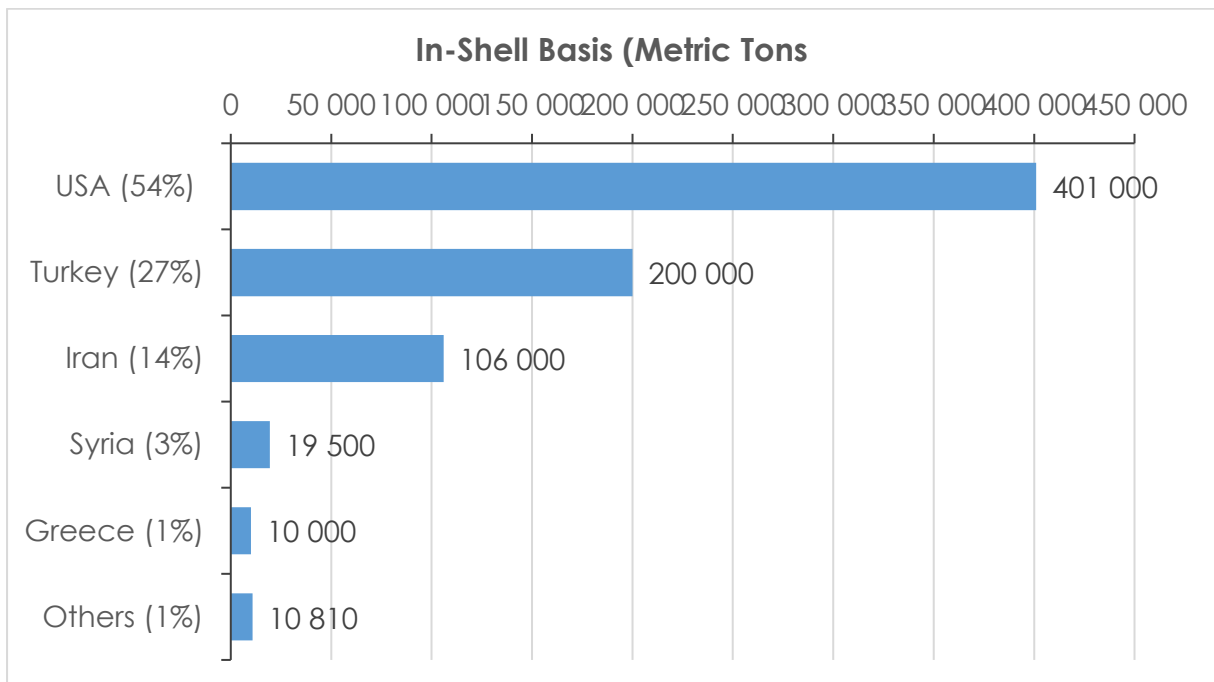


Figure 2: Major Producers of Pistachio nuts in 2022/23 production season

Source: INC, 2023

The pistachio nut production from Iran , United States, and EU region is expected to decline to 106 000(21%), 270 000(23%), and 24 000(4%) tons respectively by the end of 2022/23 production season due to lower yields, frost and drought, and drop in global demand from China amongst other factors (USDA, 2023).

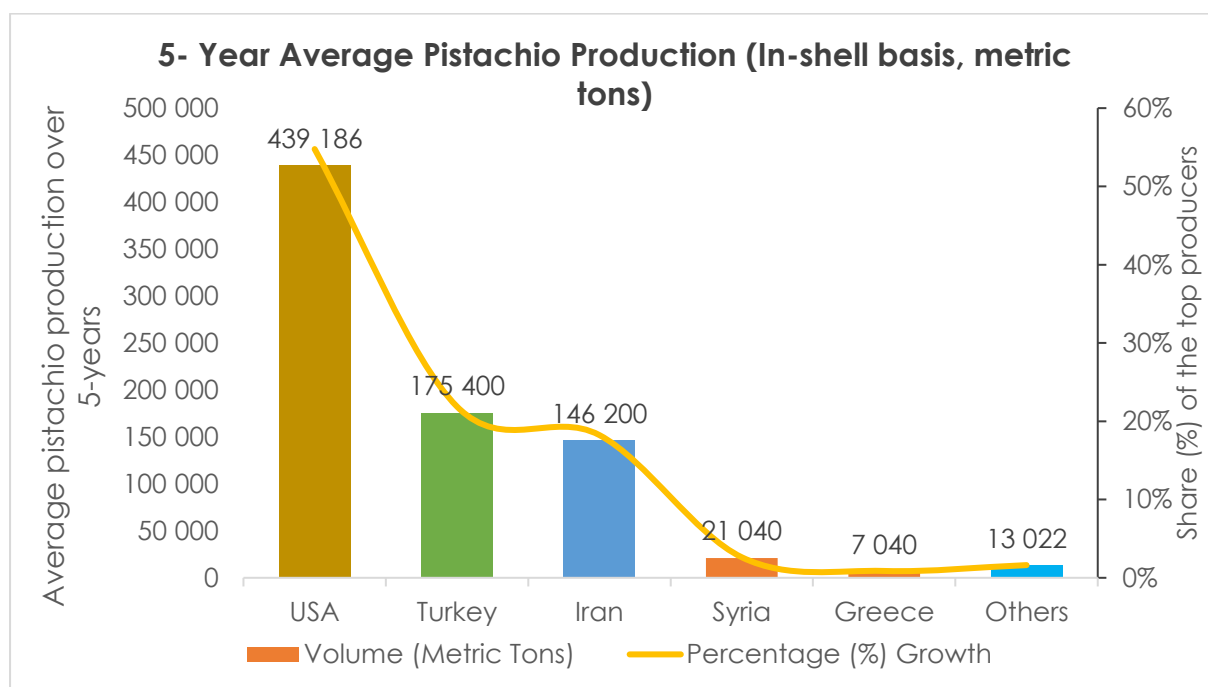


Figure 3: 5-year average Pistachio production (in-shell basis, metric tons)
 Source: INC, 2023

From Figure 3, it is evident that USA had the highest 5-year average growth in terms of the pistachio nuts production amongst top producers, recording about 439 186 metric tons. Turkey followed with a 5-year average production growth of 175 400 metric tons, Iran recording 146 200 metric tons, and Syria accounting for 21 040 metric tons respectively (INC, 2023).

2.2. World Pistachio Nuts Trade

The Pistachio nut industry is export-oriented and it is necessary to search for new markets to meet increasing and diverse world consumer demands. Therefore, the lower expected production output from major producers of the pistachio nuts in

2022/23, the global exports and shipments are forecast to be down by approximately 20% to 403 000 tons in 2022/23 marketing year (USDA, 2023).

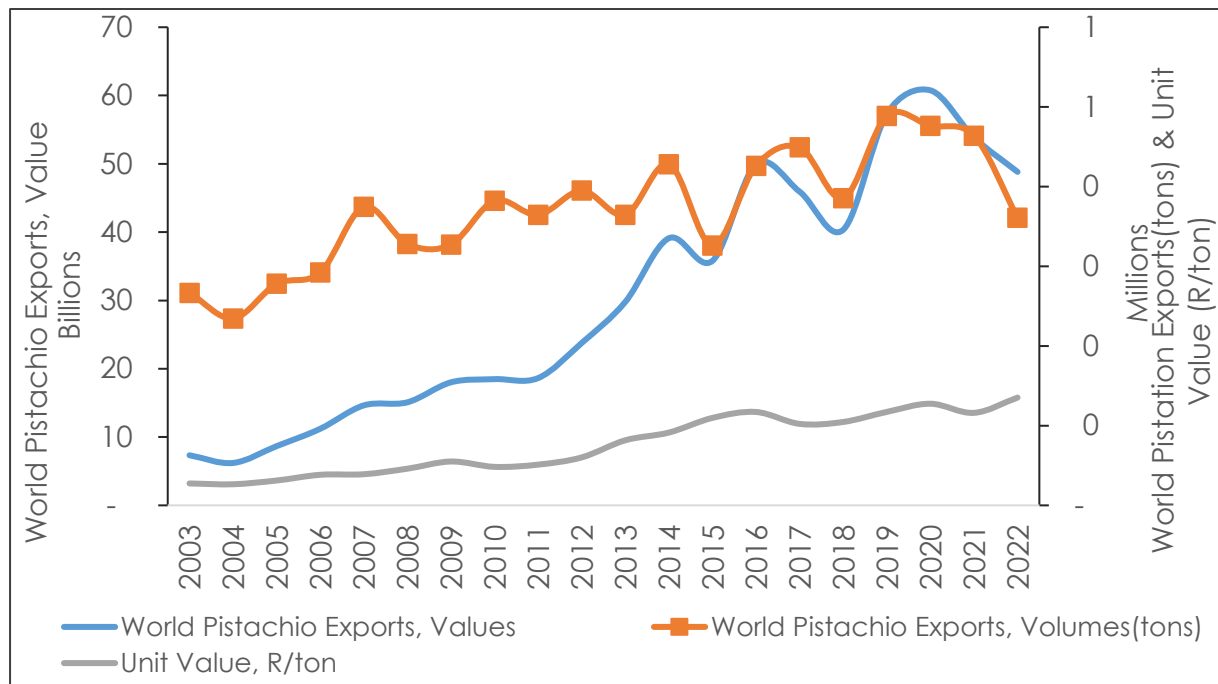


Figure 4: World Pistachio Nuts Exports (Value & Volume) and Unit Value (R/ton)
 Source: ITC, 2023

The world pistachio nuts exports have been increasing over the observed years, recording 360 996 tons in 2022, after a 22% decline (467 392 tons) from the previous marketing year, 2021 (see Figure 4). In value terms, the world pistachio nut exports reached R48.8 billion, accounting for an increase of 1.2% 5-year annual growth rate.

In 2022, the USA led the world pistachio nut exports in volume terms accounting for 66% (238 146 metric tons), followed by Iran with 8% share (28 909 tons) and Turkey accounting for 7% (28 003 tons) of the total global exports in volume terms (ITC, 2023).

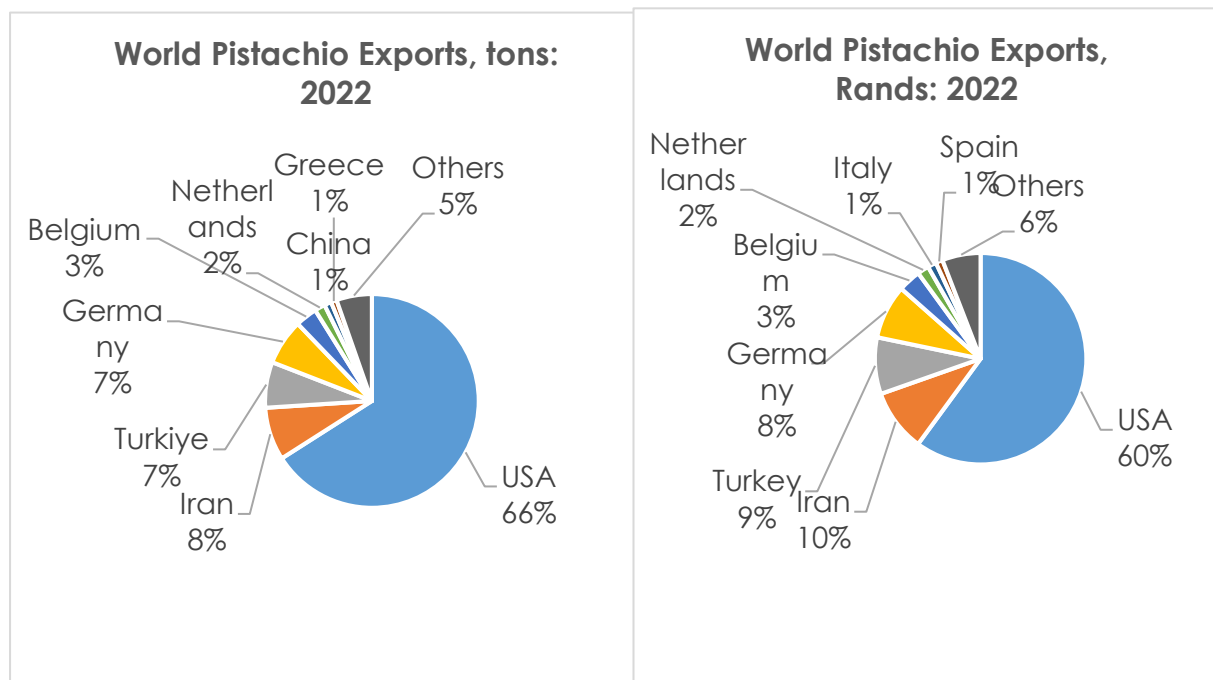


Figure 5: World Pistachio nut Exports in volume terms

Source: ITC, 2023

The main destinations for the USA's pistachio nut export volumes were China (15%), the Belgium (12%), and Germany (12%) and followed by Turkey at 9%, respectively in 2022.

2.3. Global Pistachio nut Consumption

The pistachio are native to the Middle East region, and historically, have been part of the human diets due to their nutritional attributes and potential health benefits to heart diseases management properties (Dreher, 2012). In Figure 6 below it can be seen that the world pistachio nut consumption increased over the years and world the per capita followed the same trend over the observed period. The pistachio (karnels) are often consumed as snacks, roasted and salted or flavored, and incorporated into other food products like ice cream, salads, or bakery products.

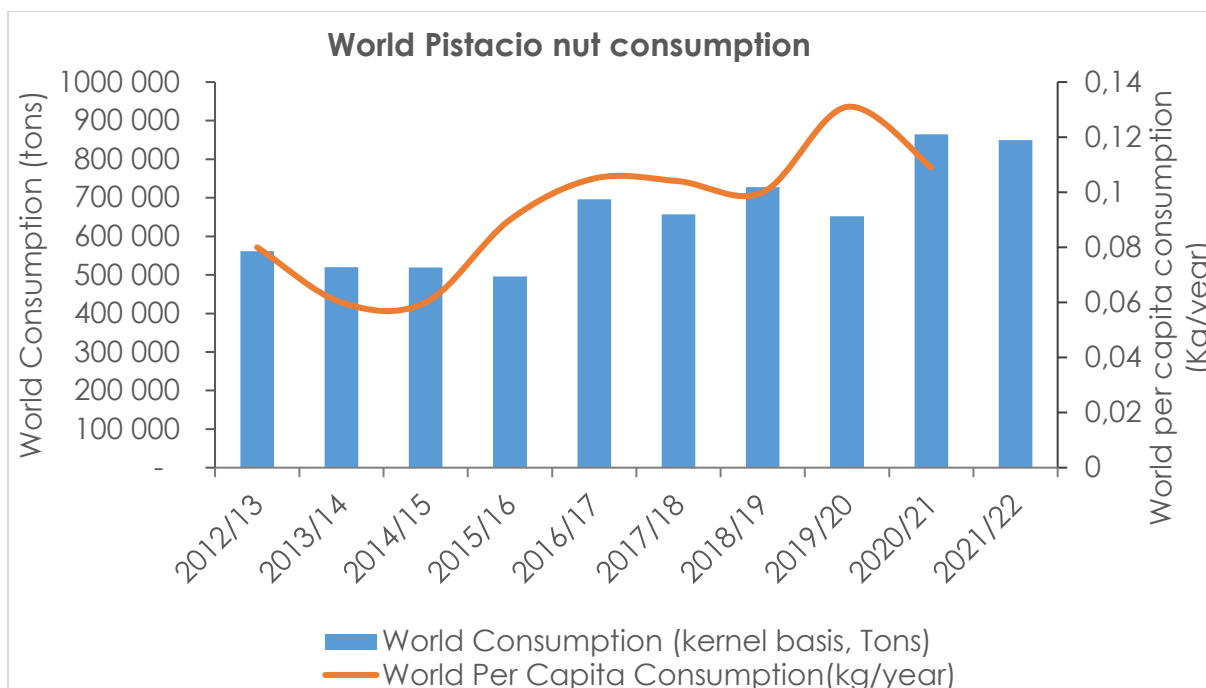


Figure 6: World Pistachio nut consumption and consumption per capita (Kg/year)

Source : Statistica, 2023

The world pistachio nut consumption is expected to nearly flat at 763 000 tons in 2022/23 marketing year due to lower production output from the global top exporters, and global shipments forecast down nearly by 20% to 403 000 tons (USDA, 2023).

3. South Africa's Pistachio nut Industry Overview

3.1 RSA Pistachio Nuts Production

The tree nuts such as walnuts, almonds, and pistachio nuts are not produced at the large commercial scale in South Africa (NAMC, 2018). Therefore, the pistachio nut industry is still in its infancy in South Africa (De Villiers, 2007). In 2019, two South African farmers decided to establish the Pistachio Growers Association of South Africa to expand the scope and scale of this infant nut industry. About close to 100% production of pistachio nuts in South Africa is concentrated in the Prieska region in the Northern Cape Province where the main processing facility is located (USDA, 2020). The South Africa area under the pistachio nuts is estimated to have increased by 7 % to 160 ha land in the 2020 production year. The South African pistachio nuts are harvested between March and April, and the most planted pistachio cultivars include Aryehm, Shufrah, and Sirora. Due to farm level and processing of pistachio nuts activities, the industry serves a source of primary employment.

3.2 RSA Pistachio nuts consumption

The South African pistachio nut local consumption increased by 2% to 255 metric tons in 2019/20 marketing year (USDA, 2020). The local consumption of pistachio nuts largely depends on the available supply and growing demand for healthy diets such as nuts in the domestic market. The domestic pistachio nuts consumption of South Africa is expected to partially offset by a slight reduction in demand due to the loss in income of some consumers and closure of tourism facilities such as hotels to address the spread of COVID-19 in 2020. Pistachio nuts in South Africa are mainly consumed as snack, used as an ingredient in cooking, baking and processed products (USDA, 2020).

3.3 RSA Pistachio Market and Trade

The South Africa's pistachio nuts export is minimal and fluctuates every year due to the inconsistency in quality and poor production (USDA, 2020). Therefore, South Africa is regarded as the net-importer of pistachio nuts as the demand outpaces the domestic total production. The amount of pistachio nut exported by the country over the years has been relatively low also. This is underpinned by unstable and unreliable South African pistachio supply side of the market (USDA, Growth, 2019). Figure 7 also shows the export quantity (tons), unit value (R/ton) and value in rands (R) of pistachio nuts of South Africa from 2014 and 2022, respectively.

In 2022, South Africa exported approximately 126 tonnes (see Figure 7) of pistachios and the export demand for South Africa's pistachio nut from the international market has declined by 19% over the past eight years (since 2014). Between 2017 and 2022, the South Africa's pistachio nuts exports in value terms increased by 43%, reaching R 18.5 million in 2022 (ITC, 2023).

The South African pistachio nuts exports in both value and volume terms has been fluctuating as well over the observed year (see Figure 7). This can be attributed to several factors, amongst, including the fact that this industry is small and the area under production as well investment has not been extended to meet the local market and international growing demand.

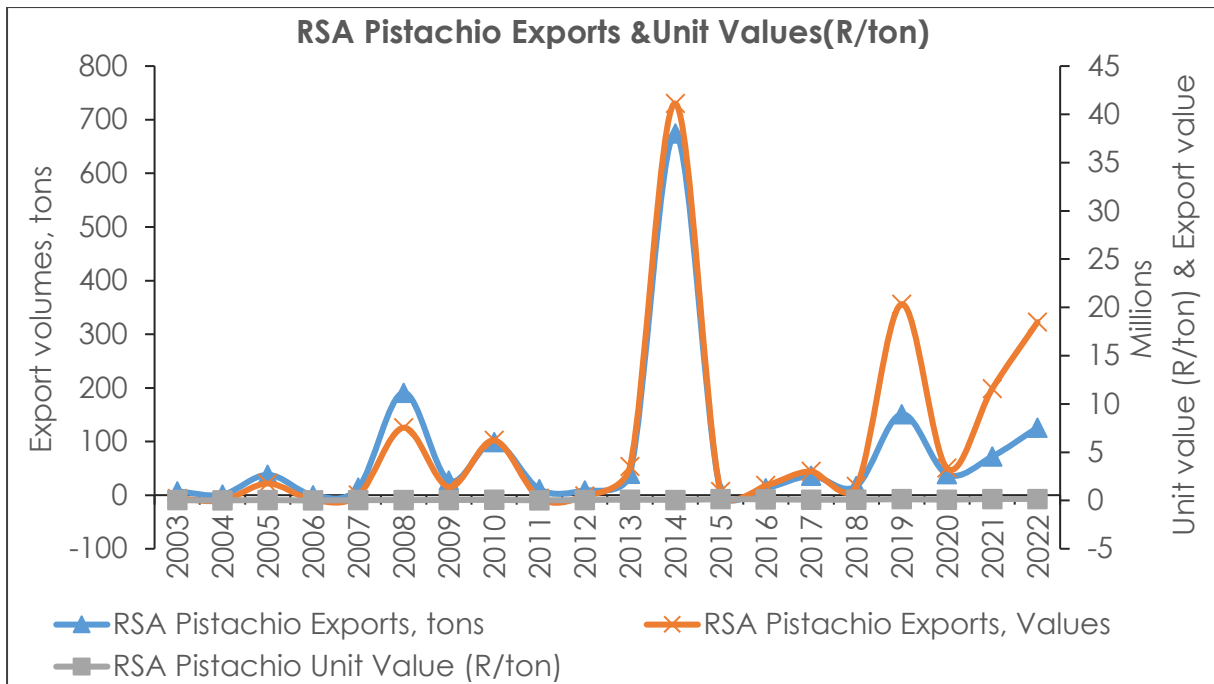


Figure 7: RSA Pistachio nuts Exports, Value (ZAR '000' and Volume (tons)

Source: ITC, 2023

The major exports destinations for South Africa's pistachio nut exports included Russia (90%), Botswana (5%), and Mauritius (1%) amongst the top five importers, in terms of value in 2022 (see Figure 8)

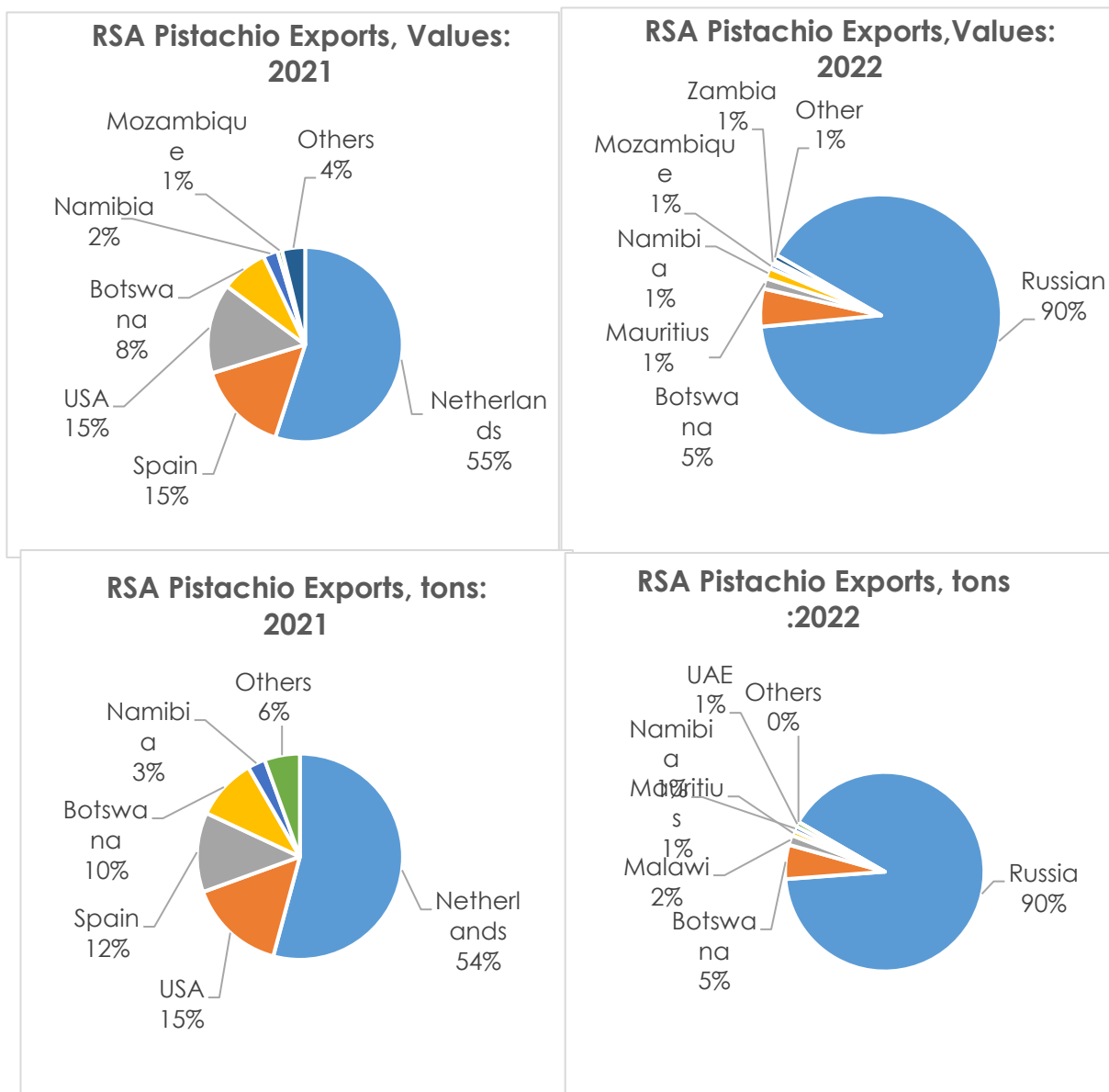


Figure 8: RSA Pistachio nuts Export Markets in value and Volume terms: 2021 vs 2022
 Source: ITC, 2023

Moreover, increase and improvement in local production, more investment dedicated for this industry and expansion on the area under the production of pistachio nuts of South Africa will set the industry in a better position to compete at the global stage and diversify its markets, in particular for Asian and European markets.

3.4 Duty application on the pistachio nuts imported to South Africa

Most of the regions that export pistachio nuts to South Africa face a free entry duty to this market for both pistachio nuts shelled and in-shell.

Heading	Article Description	Unit	Rate of Duty					
			General	EU/UK	EFTA	SADC	MERCOSUR	AfCFTA
	Pistachio Nuts							
HS080251	In Shell	Kg	Free	Free	Free	Free	Free	Free
HS080252	Shelled	Kg	Free	Free	Free	Free	Free	Free

Source :SARS, 2023

It will be important to improve the performance of the local pistachio nut and protect the domestic producers from competition through appropriate measures that will promote trade of this commodity.

4. Western Cape Pistachio Nut Production and Distribution

Most of the pistachio nut production takes place in the Northern Cape Province. The area planted for almonds, cashews, pistachios, and chestnuts is still minimal in South Africa and accounts for a combined 1% of the total area dedicated for tree nuts in the country (USDA, 2020). About 100% of the South African pistachio production is concentrated in the Northern Cape province (USDA, 2020). However, even though, most of the pistachio nuts are in Northern Cape, Western Cape Province does export this tree nut. This can be explained through re-exports or the offices of the major producers are in Western Cape for export logistic purposes such as the port of Cape Town.

4.2 Western Cape Pistachio Nut Markets

Most of the pistachio nuts from the Western Cape Province are destined for international export market between 2012 and 2022 as shown by the varying export trend (Figure 9). The South African pistachio export market is minimal and most of the production comes from the Northern Cape Province, hence the Western Cape export accounts for a small portion of exports values, either as re-exports or using the port of Cape Town advantage.

Also, Figure 10 below is the pistachio export markets destination of the Western Cape Province in 2021 and 2022, respectively, in value terms. The Western Cape pistachio nuts exports were predominantly absorbed in the Northern hemisphere region in 2021.

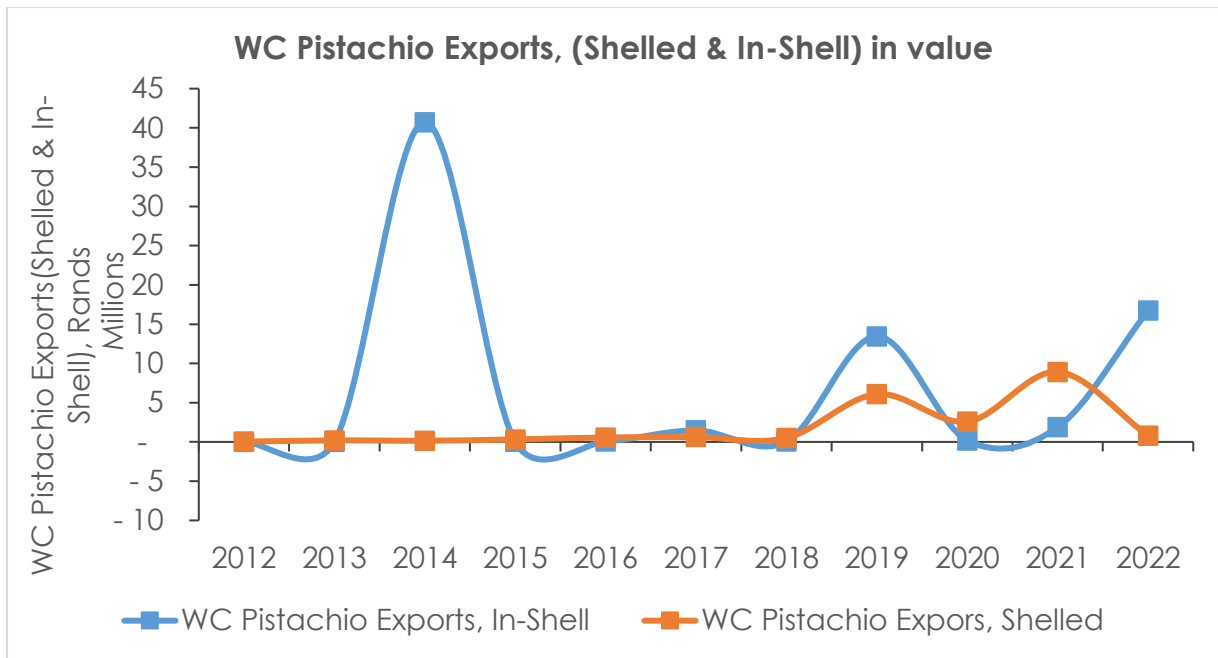


Figure 9: Western Cape Pistachio Nuts Exports (Shelled and Inshell):2012 to 2022
 Source: Quantec, 2023

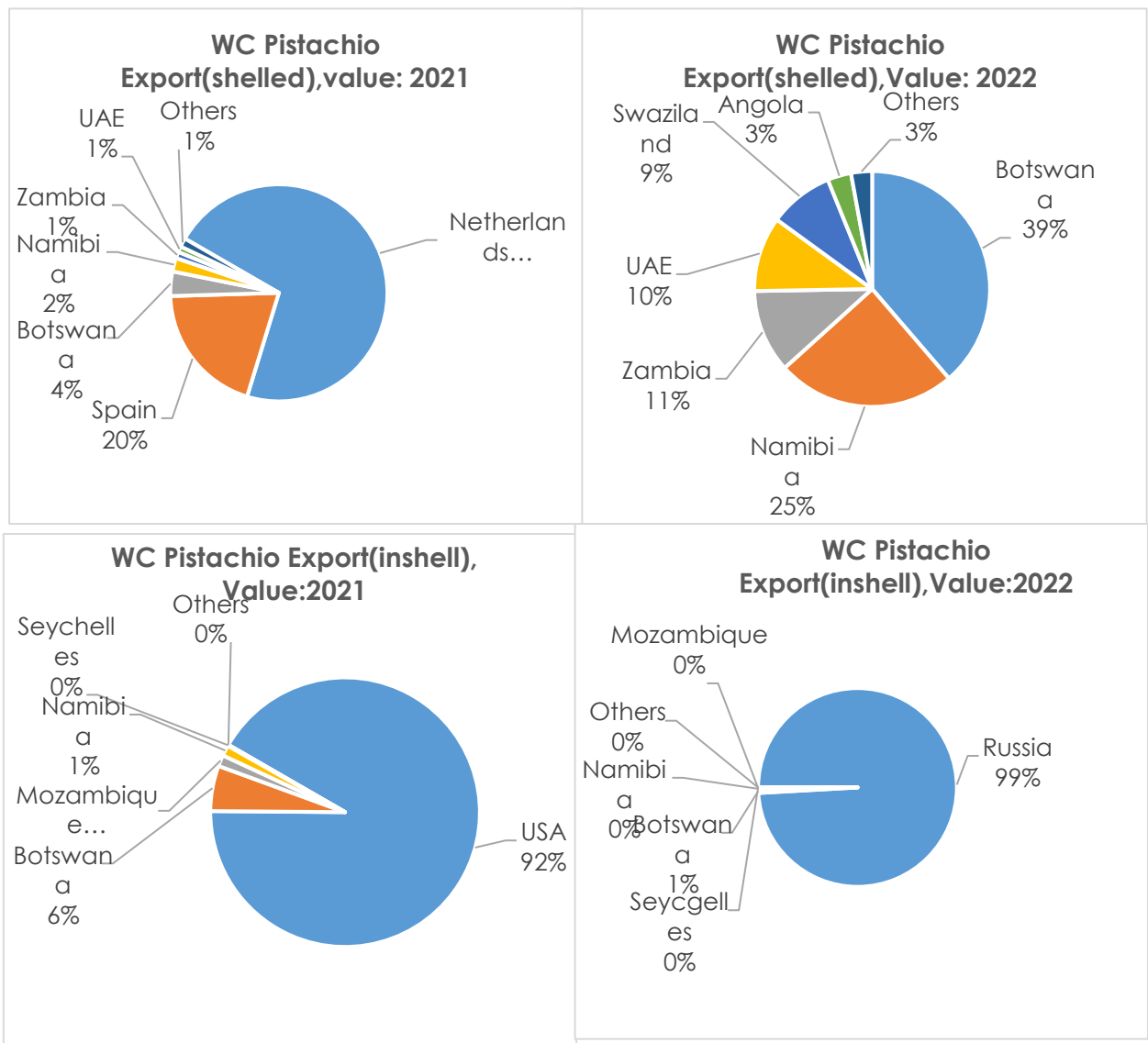


Figure 10: Western Cape Pistachio nuts Exports (Shelled& Inshell), values: 2021 vs 2021
Source: ITC, 2023

Surprisingly, the pistachio nuts (shelled) from Western Cape were destined mostly to the African markets in 2022. A mixed picture is seen for Western Cape exports of pistachio nuts in-shell, as Russia and USA absorbed 92% and 99%, respectively amongst the top importers.

5. The Competitiveness Performance of the South African Pistachio Nut Industry

There are a number of standard measures applied in both the local and global market to measure the economic performance and sectoral competitiveness (Ntombela, 2017). The dominant quantitative measure of competitiveness is the Relative Trade Advantage (RTA), accounting for both imports and exports, coined by Balassa (1989), further refined by Vollrath (1991) and popularized by in South Africa by Esterhuizen

(2006). The RTA index has been recently applied in research for several agricultural sectors in South Africa, and it tends to favor export-oriented sectors as it captures the main structural elements of industries.

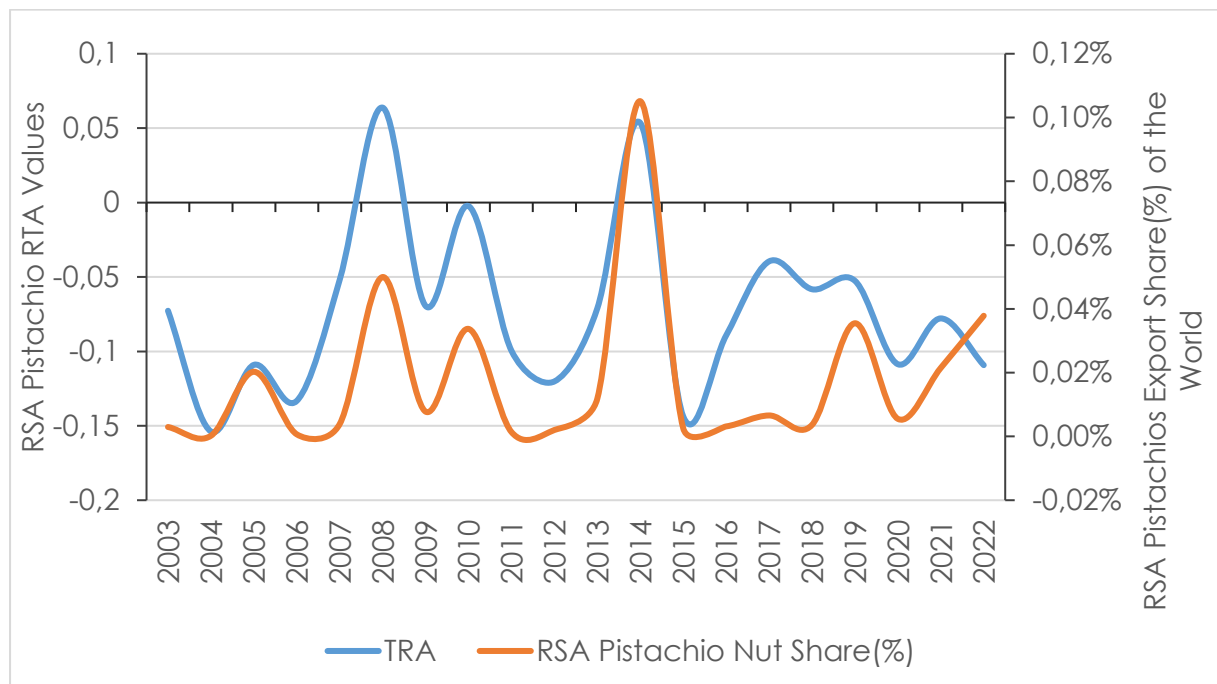


Figure 11: Competitiveness of the RSA Pistachios and export share (%) from the world
 Source: ITC, 2023

From Figure 11, the pistachio nut industry of South Africa recorded the RTA values less than one, that showing a competitiveness disadvantage at the global level. The industry only had a positive RTA value of 0.05 in 2014 and recorded an export share of 0.11% from the world pistachio exports in the same year.

Moreover, this report's purpose is not to examine and assess the theoretical soundness of the RTA method as the measure of sectoral competitiveness, rather to apply it in the context of the pistachio nut industry's competitive performance. Therefore, understanding the competitive performance of this industry will help investors, farmers, traders and other interested stakeholders participating along the value chain to design better policies, and industry strategies and take informed investment decisions to improve the industry's competitiveness status at the global stage.

6. Conclusion and recommendations

The pistachio nut are consumed for their health benefits and the global demand for these nuts is increasing. In 2022/23 production year, the world pistachio production is estimated to decline by 5% due to reduction in the top producing countries such as the United States of America, Iran and Turkey. The major world exporters of pistachios include the United States, Iran, and Turkey, all accounting for approximately 80% of the pistachio total exports in 2022. The pistachio production consumption is dominant in the Northern region, in particular from countries with higher income.

South Africa's pistachio production is concentrated in the Northern Cape Province, and accounts for 100% of the total country production of this crop. South Africa is not the major player in term of exports for pistachios due to its low production and area under pistachio nuts production. Therefore, this calls for more industry investment and diversified products to meet the global demand. The Western Cape exports of pistachios are mostly destined for the for Botswana, Netherlands, USA and Russian markets and this calls for more market diversification as the province will be starting planning pistachios and investing in this industry in the future to create more jobs and earn gross value of production to contribute to the economy of the industry.

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