

GLOBAL GRAPES MARKET STRUCTURAL ANALYSIS AND THE ROLE AND POLICY IMPLICATION FOR AFGHANISTAN

AVALIAÇÃO ESTRUTURAL DO MERCADO GLOBAL DE UVAS E O SEU PAPEL E IMPLICAÇÕES POLÍTICAS PARA O AFGANISTÃO

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Abstract

This study assesses the market structure of the grapes exports, as generally grapes are distinguished as total grapes (HS 806), fresh grapes (HS 080610), and dried grapes (HS 080620), with a particular focus on the relative position of Afghanistan in the global market structure. The study used time series data between 2008 and 2024 for market share analyses and market concentration measures such as CR_n (CR4 and CR8) ratios and HHI index for evaluating market competitiveness and concentration degree. The findings of the study show that the global market for total grapes and fresh grapes is largely competitive and diversified in structure. Moderate concentration in both CR4 and CR8 levels, but a low value of HHI. In comparison, the study finds that the dried grapes or raisin market is concentrated moderately to high, as oligopolistic condition which is dominated by some limited major exporters. Afghanistan plays a crucial role in all commodities, but in grapes, it is relatively more crucial, with a relatively small market share in total and fresh grapes but a better market share in dried grapes, which indicates an emerging position for Afghanistan as a mid-tier exporter in dried grapes. The findings suggest that, for Afghanistan, some key policy changes in grapes' international trade are required as the level of concentration increases with the degree of processing. That is why the study suggests that Afghanistan should focus on product differentiation and implement a product differentiation policy for each commodity, emphasizing reduction of cost and efficiency in logistics, preserving new investors in dried

Resumo

Este estudo analisa a estrutura do mercado global de exportação de uvas, distinguindo entre uvas totais (HS 806), uvas frescas (HS 080610) e uvas secas/passas (HS 080620), com ênfase particularmente na posição relativa do Afeganistão no mercado internacional. Utilizando dados comerciais anuais de 2008 a 2024, o estudo aplica análises de participação de mercado e medidas de concentração, incluindo índices de concentração (CR4 e CR8) e o Índice Herfindahl-Hirschman (HHI), para avaliar o grau de concentração e competitividade do mercado. Os resultados indicam que os mercados globais de uvas totais e uvas frescas são amplamente competitivos e estruturalmente diversificados, com baixos valores de HHI, apesar da concentração moderada nos níveis CR4 e CR8. Em contrapartida, o mercado de uvas secas apresenta uma concentração moderada a elevada persistente, refletindo uma estrutura oligopolística dominada por um número limitado de grandes exportadores. O Afeganistão detém uma participação relativamente pequena no mercado total e no mercado de uvas frescas, mas surge como um exportador de médio porte significativo no segmento de uvas secas. Os resultados sugerem que a concentração do mercado aumenta com o nível de processamento, implicando condições de entrada diferenciadas entre os produtos derivados da uva. As implicações políticas destacam a necessidade de estratégias de exportação específicas para cada produto,



grapes, development, certification, and quality upgrading.

Keywords: Afghanistan. CRn and HHI. Dried Grapes (Raisins). Grapes Exports. Market Concentration.

ênfatizando a redução de custos e a melhoria da logística para uvas frescas e investimentos direcionados no processamento e na melhoria da qualidade das passas.

Palavras-chave: Afeganistão. CRn e HHI. Concentração de Mercado. Exportações de Uvas. Uvas Secas (Passas).

1 INTRODUCTION

Grape cultivation is one of the oldest means of livelihood for Afghan people since the 4th century BC (Roots of Peace, 2018). The fresh and dried grapes are still making a major exporting crop, but the alcohol making stopped due to religious concerns after Islam came to the region (De Planhol, *et al* 1957).

In the late 1960s, almost 60000 hectares of land were covered by grape plantations, almost the same as Austria's grape growing area at the time. FAO surveys reports in 1960s also indicate that before the Soviet-Afghan War, Afghanistan supplied 60% of the world's raisins to the global market at that time, which highlights the significant role of Afghanistan in the raisin market. Between 1960 and 1970, Afghanistan produced enough grapes for both internal consumption and the Gulf countries, such as Saudi Arabia. At that time, Afghan raisins contributed to the world raisin export market as 20% (Bruno, 2009). Reports also shows that less than 40% of Afghan raisin are exported due to fall short in food safety standards and international quality compared to other neighboring countries (World Bank, 2019).

The last 3 decades of civil war in Afghanistan almost destroyed all infrastructures and suffered all farmers; especially those with long-term gardens such as grapes are more in suffering that is why both grapes and raisin production and exports significantly decreased and conceded devastating losses in latest few decades (ANDS, 2008). In the 1970s, Afghanistan was supplied around 210000 tonnes of grapes annually, as a major exporter of grape commodities. Till 2000, the export of grapes and raisins was in collapse as the market price for Afghan grapes and raisins was also very low. Recently, after the 2000s, it started to revitalize due to modern investment in processing facilities in raisin production, improvement in irrigation, cold storage, packaging, and governmental

policies also encouraged the raisin production sector significantly. Lastly according to DPMEA 2025 report the new plantation of grape plants by new Taliban based regime with a value of \$8 million in just Kabul province from just one project, which also built simple raisin processing capacity for raisin production with a capacity of 10000 tonnes annually, these developments standardized production, improved quality, and helped to expand the Afghan raisin market to Asia, Europe, and beyond. The new initiative by the Taliban led the raisin export to a dramatic recovery, as Afghanistan is now the world's sixth-largest raisin exporting country, and the export value of raisins rose from 8500 tonnes per year to 24000 tonnes annually (Hanifi, 2023).

World famous trade related databases such as UN Comtrade and Trade map 2024 data shows that China is the leading producer of grape production as you can see in the (Table1). Countries like France, the US, Italy, and Spain followed each other between 4.5 MT and 6.3MT. India, Turkey, Chile, South Africa, the last one in number 20 is Afghanistan, which produced 910000 tonnes as one of the key producers in the global market. Afghanistan supplied 60% of the world's raisins to the global market before war. World Bank says 40% of Afghan exported raisin are fall short due to food safety standards (World Bank, 2019). Both grapes and raisin production and exports significantly decreased and conceded devastating losses in latest few decades of war (ANDS, 2008). According to DPMEA 2025 report Taliban based regime with a value of \$8 million in Kabul province built simple raisin processing facilities capacity of 10000 tonnes annually. Now it's the world's sixth-largest raisin exporting country (Hanifi, 2023).

Table 1

Top 20 Grape-Producing Countries (Fresh Grape Production, 2023)

Rank	Country	Production (tonnes)	Rank	Country	Production (tonnes)
1	China	16,282,482	11	Australia	1,607,540
2	France	6,286,337	12	Egypt	1,582,066
3	USA	5,909,500	13	Argentina	1,555,094
4	Italy	5,908,711	14	Iran	1,417,944
5	Spain	4,671,554	15	Brazil	1,350,000
6	India	3,520,333	16	Germany	1,174,050
7	Turkey	3,400,000	17	Portugal	999,009
8	Chile	2,550,000	18	Peru	930,294
9	Uzbekistan	1,760,559	19	Romania	925,582
10	South Africa	1,716,925	20	Afghanistan	910,000

Source: FAO/OIV estimates via Blue Marble Citizen, 2023.

In 2018, approximately 910000-984000 tonnes of grapes were produced in Afghanistan as 18th largest producer of grapes globally but in 2019 was the 17th largest (Nation Master 2025). As grapes is one of the top 5th exporting commodities for Afghanistan which achieved \$209 million revenue in 2019, as the major markets were India and Pakistan (Rafiq et al. 2025). Afghanistan grapes Trade records show from the World Trade Statistics that Afghanistan's main grape exporting destination in 2019 was Pakistan \$33million (120615 tonnes), mostly fresh grapes, India \$69.2million (20.2 million KG) mostly dried grapes (raisins) and some other countries like Turkey, Kazakhstan, Iran, UAE and Russia (World Bank,2025). These regional countries are major markets for Afghan grapes, which are primarily driven by geographical, economic, and logistical factors. This is why Afghan grapes, both fresh and dried, underscore many challenges in expanding competitiveness in the region. Some limitations may be a quality issue, logistical limitations, insufficient processing capabilities and limited access to the international market. A study carried out in 2020 also highlights the same challenges, as they mentioned that “both fresh and dried are heavily concentrated in South Asian markets, especially Pakistan and India. This regional concentration reflects Afghanistan’s geographic and economic ties but also underscores challenges in expanding competitiveness beyond the region. Key limitations include quality issues, logistical constraints, and insufficient processing and infrastructure capabilities, which hinder access to higher-value global markets”(Mushair *et al.*2020).

Table 2

Afghanistan’s Grape Exports by Destination, 2024

Rank	Partner Country	Trade Value (US\$)	Net Weight (kg)	% Share of Total Trade Value
1	India	88,741,488	31,079,990	53.50%
2	Pakistan	51,495,755	130,315,016	31.00%
3	Turkey	9,631,539	4,553,490	5.80%
4	Saudi Arabia	5,405,423	2,926,497	3.20%
5	Uzbekistan	3,624,736	4,427,380	2.20%
6	United States	3,531,965	1,059,189	2.10%
7	Canada	1,855,057	477,619	1.10%
8	Netherlands	1,729,618	865,633	1.00%
9	Germany	1,460,152	543,899	0.90%
10	Kazakhstan	1,344,194	2,716,299	0.80%
—	Other Countries (28)	26,529,214	—	15.40%
Total		165,849,141	—	100%

Data Source: UN Comtrade, 2024(Mirror data)

Usually, diplomatic relations negatively impact all export commodities, especially grapes. The diplomatic relations have even sometimes led to closure of borders, tightening in inspections, suspension in trade, and badly impacting the value and revenue of exports. Historically, Pakistan has imposed high tariffs on Afghan grapes and all agricultural commodities, as before 2025 it was 60%, which is almost a killing level of export barriers for Afghan exports, which directly impacts the competitiveness of the Afghan grapes exports. The high-level tariff imposition led to a decline in the Afghan grapes exports to Pakistan. As the tariff increases the cost, it will make Afghanistan very vulnerable for Afghan grapes to compete in the market with grapes from other countries. As we know, Afghanistan is surrounded by land, and there is no ocean route for Afghanistan to use for international trade, which is another problem for the country. The two neighboring nations (Iran and Pakistan) are always using this limitation as a political tool against Afghanistan. Luckily, the recent trade agreement between Afghanistan and Pakistan decreased the tariff from 60% to 27% (Xinhua, 2025). The relief will be temporary for a year, and I hope it could continue, but it needs a long-term sustainable policy exposure, so it could enable the Afghan exporter to access the global markets easily. But any tightening and reversal could restrict the Afghan exports' access to Pakistan. Many times, borders delay, changing in costumes regimens, registration of transport regulation also directly disrupts the flow of any goods, which increases the spoilage and losses, increases the cost, and uncertainty in export to the designated market *also* poses many additional restrictions, which Pakistan always uses as a tool for political pressure. These are struggles that arise with limited export market concentration, preventing Afghan agriculture exports to the premium and diversified global market. Reduction in over-dependence on just the regional market and expansion of Afghan export to additional global markets .It is very important for the grapes sector's export to achieve its sustainability and stable growth, which needs proper policy, oversight, and updating.

Another issue that Afghan grapes face is the strong competitive position of neighboring countries such as Uzbekistan, Iran, and Turkey in the raisin grapes global market due to some strategic advantages, including export volumes of raisin, such as Turkey, which is one of the raisin production leading exporters, exporting almost 220000 tonnes which contribute almost 20-30% to the global raisin exports (Tridge, 2024). Iran,

with 120000 tonnes, and Uzbekistan, 73000 tonnes per year, these countries have a dominant status in the global raisin market share (Majidian, 2025). Another advantage they enjoy is the quality management and control, as they use strong SPS standards, which enable them to penetrate world high-value markets easily. For example, Turkey, which can enter EU member countries, has almost 80% of its raisin exports to EU countries. Also, they have better facilities for cold chain and post-harvest handling, as they can do better product handling, storage, logistics, and also preserve the quality of transportation. Another advantage they gain from is the price of their products on average, rather than Afghanistan, as the Turkish overall raisin price is around \$2.15/kg on average, but for Sultananas raisin, the price is around 3.55-3.65 /kg, which is much higher compared to the Afghan raisin price (Cardassilaris, 2025).

Even though the Afghanistan groups sector historically and economically holds significance in the country, its potential in the global market is underutilized (Wardak, 2024). Despite many effective efforts from both the government and NGOs to revive productivity and boost exports, many challenges exist in diversification, competitiveness, and value addition in the market *also* despite strong productions and being major exporter in global markets still Afghanistan exports concentrated on some regional and neighboring countries. This study will identify the global market structure through some metric to find barriers that trapped Afghanistan exports just in regional markets. The study will provide key insights for policy makers and key stockholders with evidence based suggestion and recommendations for boosting Afghanistan grapes also to find ways to global high value markets such as Europe and Gulf countries.

The study will seek to answer the following 3 questions:

- 1) How the global grape exports market structure is
- 2) What is the role of Afghanistan in it?
- 3) What structural policies could imply to increase Afghanistan access to the high value and more competitive markets?

2 LITERATURE REVIEW

Studies related to the global grapes market structure often focus on raisins; the concentration ratio is high for raisins. In 2025, Mysore Agriculture Science reported that

Turkey controls 30% of the global raisin market exports, while Iran 17% and the USA controls 16%. Another study from Environment & Ecology conducted and claimed that the market structure of raisins is an oligopolistic competition. Fresh grapes market analyzed by the USDA/FAS in 2024 and claimed that Peru and Chile both rose in the global market rapidly, and they have overtaken many traditional players in the grapes market as they use modern facilities and infrastructure, and innovation in varieties as the reason behind it. OIV stated in 2024 that, as the vineyards are distributed and also available seasonally, this is why the market is very influenced by both export concentrations. Even in the last few reports, Afghanistan appears to be very marginal, but still, the literature portrays Afghanistan as a key player in the region. They stated that Afghanistan shares 3-4 % of the grape exports as a secondary player in the world. There is no specific study related to Afghani grapes CRn (Concentration Ratios) and HHI (Herfindahl–Hirschman Index) specifically to identify whether Afghanistan plays a key role in control of both fresh and dried grapes, or whether Afghanistan's export destinations are controlled by other key players.

All the literature stated that the market structure of global raisins is oligopolistic, and just a few countries dominate the market, making it difficult for new exporters. For fresh grapes, the market is less concentrated, rigid, and hemispheric due to seasonality and geographical distance. The season allows new players to enter as the Peru could manage to overtake over Chile and now challenge South Africa. Another debate that Afghanistan grapes can compete due to the reality and sensitivity of the market and less competition. For instance, India imports grapes from many diverse suppliers and exporting countries, one of them is Afghanistan, which opens space for Afghan grapes in global competitions. But this contradiction between aggregate and global concentration and detonation level fragmentation still requires a careful study which possesses opportunities for Afghan grapes penetration to global markets. The study also posits that Peru's policy shift and investment change the dynamic structure of the grapes' global markets.

2.1 Research gaps

Without the CRn and HHI study, we cannot understand whether Afghanistan grapes niche markets provide opportunities or dominant poses changing dominance as exporters or just in some specific markets capture fragmented demands. That is why this study will fill this gap by composing both products and destination-level concentration together in a study. As we know, in general grapes are among the most valuable agribusiness export commodities, yet there are very limited studies that have taken place to study this sector comprehensively. Some previous studies that already exist are focused on either export determinants or competitiveness in isolation. To address the country's competitiveness in the global markets Afghan trade performance in the global market *also* Afghanistan role in it need a structural studies. The combination of some quantitative research methods and analytical tools used in this study will provide a multidimensional insight into the sector.

The findings of this study will provide some practical values for many related stakeholders in the sector. In the instance of policymakers makers, the study will offer structural and competitive related challenges that Afghans grapes faced for entering and sustaining its competitive position in the global market. For agribusiness entrepreneurship and export: the study will highlight the better approach that they follow to compete with relative global competitors, also will show which markets offer better opportunities. For governments, NGOs, or other development partners, it will also provide a better and evidence-based intervention approaches related to quality improvement, marketing strategies, facilitating measures, and available constraints in trade, and much more.

3 THEORITICAL FRAMEWORKS

3.1 Industrial organization theory

This theory is a branch of economics that studies how the behaviour of firms and the overall outcome of markets are influenced by market structure. This theory dates back to the Harvard School of Industrial Organization, in the 1950s-1950s, particularly the struggle of Edwards S. Mason and Joe S. Bain (1951, 1956). Both Mason and Bain

claimed that the structure of the market determines the conduct of a firm; as a result, it determines the performance of the whole industry. Later on, the framework became familiar as the Structure- Conduct - Performance (SCP) paradigm. So this framework is the backbone of industrial organization theory. Bain claimed that if a firm has high concentration on the market, it can exercise market power, and enable it to play the role of price setter usually above the competitive level and can sustain their profit and earnings through it. As example if a market is controlled by just a few firms they can collude and leading to higher price of that product and reduce welfare of people. Another scholar, such as George Stigler (1964) and the Chicago School, criticized the SCP paradigm as they believe that profit may reflect efficiency rather than collusion. This means a firm dominates because of an innovative and efficient way, not because of anti-competitive behaviour. There is still a contradiction between the Harvard School and the Chicago School, as the former emphasizes market structure and the latter emphasizes efficiency and conduct. Later on in the 1980s, another theory of New Industrial Organization (NIO) using game theory and strategic interaction model arose, which allowed economists to study firm conduct (Pricing, Advertising, Entry deterrence, and product differentiation) rigorously. But still, the SCP framework remains and is applied widely in trade-related empirical studies, especially in agricultural markets, because in the agricultural market, the ratio of concentration and competition indicators is more essential for analyzing policies.

The structure-conduct-performance (SCP) paradigm is the main pillar of industrial organization theory, which provides a systematic way to analyze industries. The structure refers to the characteristics of the market, including the number of firms, degree of concentration, production differentiation, vertical integration, and barriers to entry. The conduct means the behaviour of firms inside the structure, such as pricing strategies, collusion, investment, advertising, and many more. The performance refers to the result and outcome of effective terms such as innovation, consumer welfare, and profitability. Usually, in the industries with higher concentration (e.g., $CR_4 > 70\%$), the firms, in coordinated behaviour, enjoy a reduction in competition and, as a result, enjoy higher profits. In a competitive industry ($CR_4 < 40\%$), usually firms try to compete aggressively based on price and quality, which leads to benefits for consumers but low profits for firms. The SCP frameworks are highly relevant to the commodities market of oils, grains, and

horticulture products, where there is global export dominated by just a few countries, which is why this insight is very crucial for analysing grapes and raisin, where the role of Afghanistan is marginal compared to other leaders of the market, but still in niches and regional market the role of Afghanistan is significant. For measuring market concentration ratio there are two common methods that use in this research as CR_n and HHI index.

Concentration Ratio (CR_n) is measure, which is also called n-firm concentration ratio, is used to percentage the market share of a country or firm in a market or international export market. It's one of the measurements for studying market structure in industrial organization economics. This tool is the earliest measure in industrial organization economics, first developed and popularized by the Harvard School of Industrial Organization in the 1930s -1950s. Edward S. Mason in 1939 and Joe S. Bain between 1951 and 1956, where those who used these measures for the top 4 and top 8 firms' market share for measuring market concentration.

Herfindahl–Hirschman Index (HHI) is also measurement tools used to analyze market concentration, but the difference with CR_n is that it just looks at the top n countries of firms, whereas HHI includes all countries and firms and gives more weight to larger players. This tool is highly used by the US Department of Justice and the Federal Trade Commission to measure mergers, but in internal market trade, economists use this to analyze the degree of competition in the international market. This idea was initiated by Albert O. Hirschman in 1945 in his book *National Power and the Structure of Foreign Trade*, and Orris C. Herfindahl in 1950 also used a similar formula in his doctoral dissertation, which was concentrated on the US steel industry. They both contributed to this concept, which is why it's called the Herfindahl–Hirschman Index (HHI).

4 RESEARCH METHODS AND METHODOLOGY

4.1 Research approach

The study employed a quantitative and discrete research approach, focusing on secondary data to analyze the global grape market structure. The data has been taken as a series of data between 2008 and 2024.

4.2 Data types and collection methods

Secondary data related to grapes coded as (HS 0806), fresh grapes coded (HS 080610), and dried grapes, which is coded (HS 080620) in the official trade database, the time series data between 2008-2024 will be taken and will be entered into Excel or other analytical tools to study trends, concentration calculations and benchmarking, the data will be collected from UN Comtrade, ITC TradeMap, and FAOSTAT. As per data limitation for some countries due to disruption or records or political instability some data missing in the world databases, but for solution we used the merrier data as reported by partner countries such as for Afghanistan in 2019-2024 Iran 2024.

4.3 Data analysis methods

4.3.1 Concentration Ratio (CR_n)

The Concentration Ratio (CR_n) assesses whether the global grape market is dominated by a few exporters: the main formula or CR_n is as follow:

$$CR_n = \sum_{i=1}^n S_i \quad (1)$$

S_i = the percentage of market share of firm or country I (Afghanistan)

n = number of firms/countries considered (top 4 or 8).

- $CR_4 < 40\%$ → means a Competitive market (low concentration with many players)
- $40\% \leq CR_4 \leq 60\%$ → Moderately concentrated
- $CR_4 > 60\%$ → Oligopolistic/Highly concentrated market, and just a few countries have high influence on the market.

Grapes exporter's countries in the global market will be ranked by market share using UN Comtrade data. CR_4 and CR_8 will be calculated in Excel or SPSS to assess market dominance for top ten worlds and will find as top larger 4 as (CR_4) and 8 as (CR_8) exporter in the world global grapes exports market.

4.3.2 The Herfindahl–Hirschman Index (HHI)

The Herfindahl–Hirschman Index (HHI) provides a weighted measure of concentration. The Herfindahl–Hirschman Index (HHI) is used in this study to measure the market concentration of Afghanistan’s grape exports across different destination countries. The index helps assess how evenly or unevenly Afghanistan’s grape exports are distributed in the global market. A higher HHI value indicates a more concentrated market—meaning Afghanistan relies heavily on a few export destinations—while a lower HHI value reflects greater diversification and reduced dependency on limited markets. By applying the HHI, the study evaluates the degree of export concentration and competitiveness of Afghanistan’s grape sector in international trade. the main formula is as follow:

$$HHI = \sum_{i=1}^N (S_i^2) \quad (2)$$

S_i = Is the percentage market share of Afghanistan in i in the market.

N = Is total number of exporting countries in the market.

$i = 1$ the first firm/country.

(S_i^2) : Market share of each is squared to give more weight to larger players.

- $HHI < 1500 \rightarrow$ Non-concentrated or competitive market.
- $1500 \leq HHI \leq 2500 \rightarrow$ moderately concentrated market.
- $HHI > 2500 \rightarrow$ highly concentrated or oligopolistic/monopolistic market.

We will collect the data of all grapes exporting countries in the world between the years of 2008-2024 and then calculate in Excel by squaring and summing shares. Stata and R also provide built-in HHI functions. Yearly HHI values will reveal whether concentration is rising or falling.

5 RESULTS, DISCUSSION AND CONCLUSION

5.1 Results and discussion

5.1.1 Market share of ten major exporting countries vs. Afghanistan

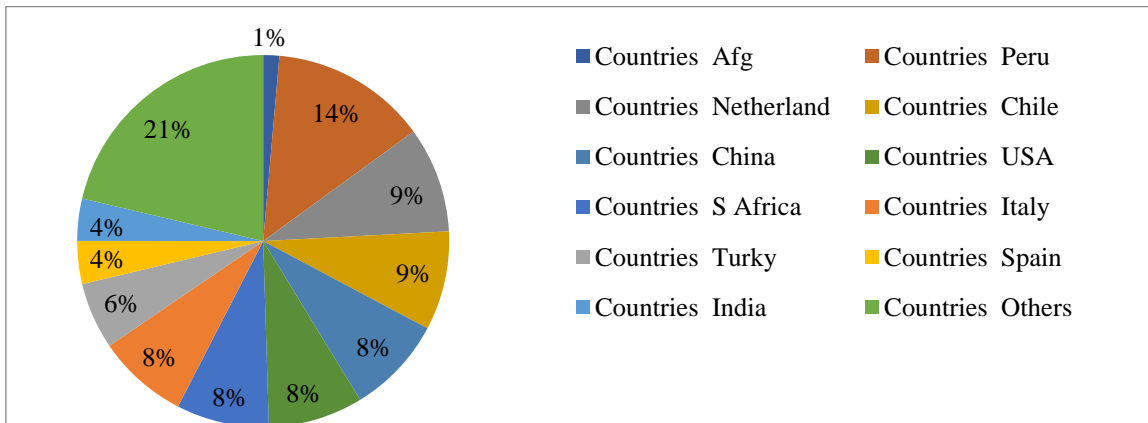
In the world official and reputable trade related databases divided grapes (HS 0806) into two more different sub cods as fresh grapes (HS 080610) and dried grapes (080620).

5.1.1.1 Market share of grapes (0806)

The market share for Grapes (0806) is much diversified, as you see in the (Figure 1).

Figure 1

0806 – Grapes, Fresh or Dried, Market Share of major Ten Exporting Countries vs. Afghanistan 2024 (%)



Data Source: UN Comtrade, 2024. (calculated by author)

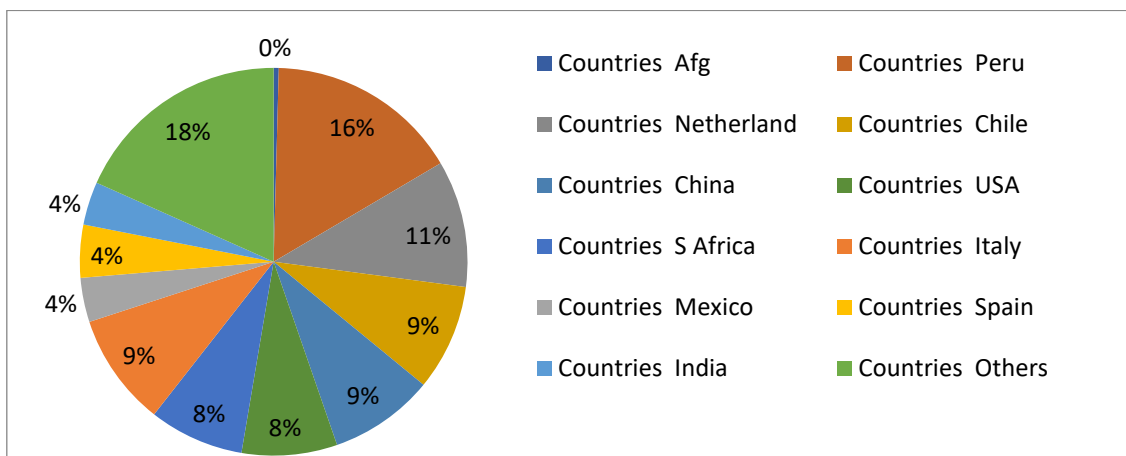
There is no single country dominating the global market. However, the main part of it is shared with Peru, the Netherlands, the USA, Chile, China, Italy, and South Africa. Peru is leading the list with 13.58% as an emerging leader. As Peru invested a lot in the sector and related facilities, the Netherlands, with 9.19% is an exporting hub for some countries, including South American countries (World's Top Exports, 2025). Other traditional producers of grapes, such as Italy, the USA, South Africa, and Chile, each account for around 7-8.5% of the global market share. China with 8.49%, Turkey, India and Spain 3-6% and Afghanistan with 1.4% which indicates that Afghanistan does not have a big share but still plays an important role in the global grapes market.

5.1.1.2 Market share of fresh grapes (080610)

Global fresh grapes (080610) were also dominated by Peru, as you see in the (Figure 2), have 16.1% of grapes exports, followed by the Netherlands with 10.5%, Italy with 8.8% Chile with 8.7% China with 8.6% USA 7.97%, South Africa 7.92% which are calling as major exporter of fresh grapes in global markets, but Mexico with 4.4% Spain 3.67% India with 3.6% are also coming in the middle contributors also Afghanistan with 0.42% also play its role in the global fresh grapes markets.

Figure 2

080610 – Fresh Grapes Market Share of major ten exporting countries vs. Afghanistan, 2024 (%)



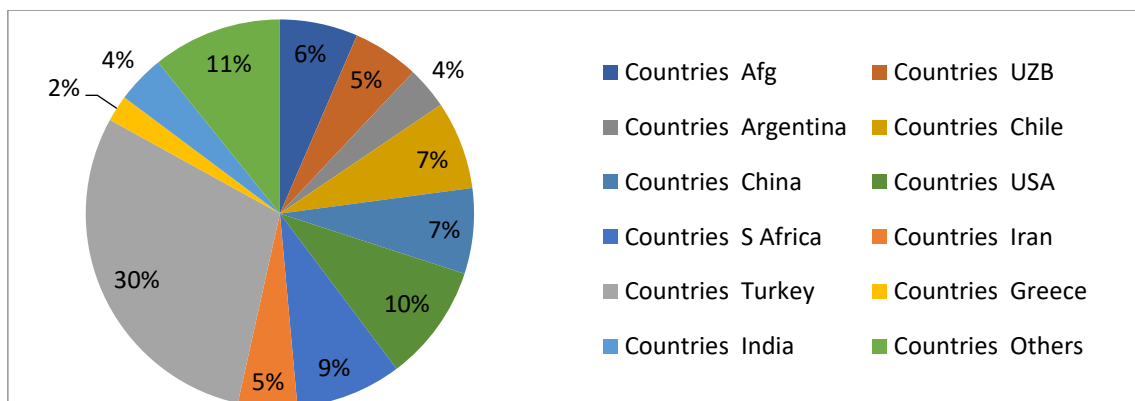
Data Source: UN Comtrade, 2024. (calculated by author)

5.1.1.3 Market Share of Dried Grapes (080620)

For finding global dried grapes (080620) market share you can see (Figure 3). in 2024, the global dried grapes market was dominated by Turkey with 29.55% global market share as one of the largest global raisin exporters, indicating it as the single largest exporter of global dried grapes. The USA holds the second position as owning 9.7% followed by South Africa with 8.8%, Chile with 7.3%, and China with 7.12% which are called major exporters of the global dried grapes market. Afghanistan contributes 6.7% & is one of the significant players in the raisin market. Uzbekistan 5.5, Iran 4.9%, India 4% Argentina 3.5% and Greece with 2.1% are the main exporters in the global dried grapes market.

Figures 3

080620 – Dried Grapes/Raisins, Market Share of ten major exporting countries vs. Afghanistan 2024 Export (%)



Data Source: UN Comtrade, 2024. (calculated by author)

5.1.2 Global grapes market concentration and afghanistan's position

The market share analyzes the relative position of an exporter country in the global exports; it does not reveal the overall competitive structure of the grapes market globally. Thus, the subsection of market concentration measures, such as the Herfindahl–Hirschman Index (HHI) and concentration ratios, both CR4 and CR8, will assess the market concentration degree.

5.1.2.1 CRn index for the global grapes market

The model of Concentration Ratio as also called (CRn) is a tool which measure market share of the baggiest exporter nations in a market together .It show whether the global grape market is competitive or dominant by few big exporters . It used as widely to assess market competitive intensity and structure. It show how much of the global exports of a specific commodity is controlled by top exporting countries, as in this study we use CR4 and CR8. We used this measurement to study each three commodities such as total grapes (0806), fresh grapes (080610) and dried grapes (080620) as separately and also we used to find for each commodity both CR4 and CR8 for each year's of 2008-2024.

5.1.2.1.1 General grapes (0806) concentration ratio (CRn) trends

Global grapes-related databases divide grapes into two different commodities and two different codes: fresh grapes and dried grapes but in this section we focus on the general or total of both fresh and dried grapes as you see in the (Table 1). It shows the CRn ratio for the total grapes between the years of 2008-2024.

Table 3

CRn Results for Total Grapes (HS 0806), Global Market (2008–2024)

Year	CR4 (%)	CR4 Market Condition	CR8 (%)	CR8 Market Condition
2008	52.36	Moderately concentrated	72	Dominant
2009	46.95	Moderately concentrated	68.16	Moderate dominance
2010	47.92	Moderately concentrated	70.34	Dominant
2011	47.67	Moderately concentrated	68.84	Moderate dominance
2012	45.95	Moderately concentrated	67.89	Moderate dominance
2013	47.88	Moderately concentrated	69.33	Moderate dominance
2014	44.82	Moderately concentrated	69.37	Moderate dominance
2015	43.99	Moderately concentrated	70.3	Dominant
2016	41.99	Moderately concentrated	67.27	Moderate dominance
2017	40.72	Moderately concentrated	67.28	Moderate dominance
2018	40.1	Moderately concentrated	67.81	Moderate dominance
2019	39.25	Competitive	66.58	Moderate dominance
2020	39.46	Competitive	66.49	Moderate dominance
2021	35.98	Competitive	64.06	Moderate dominance
2022	44.03	Moderately concentrated	69.77	Moderate dominance
2023	40.13	Moderately concentrated	67.47	Moderate dominance
2024	39.87	Competitive	69.88	Moderate–high dominance

Data Source: ITC Trade Map, 2024 (Calculated by author)

The trends of the CRn in the (Table 3) show that the total grapes market faced a long-term decline in concentration in the period of 2008-2016, in general. But the CR4 value indicates that the top big 4 countries' concentration structure is moderate. This reflects the top 4 major exporters' dominance, which ranges between 35.98% to 52.36% for the period of study between 2008 -2024. .It also shows structural changes that happen in the period. For the period of 2008 and 2016 the CR4 value constantly above 40% get to the peak in 2008 as 52.36% which indicated a moderate concentration of market structure .In the period small number or 4 baggiest leading exporter influence the global market, as oligopolistic competitions and the openness is limited for emerging and smaller exporters .between 2017- 2021 fall below 40% shows a transition phase for competitive structure and a chance for new and emerging nations rather than big 4 exporters .in the last period as after 2022 fluctuated around 40% show a hybrid market structure. But CR8, as the top 8 major exporter concentration shows a beyond dominance. In general, the value stood high throughout the whole studying period, as 64.06% and 72.00% in the period of 2008-2015. The CR8 value exceeded 70% indicating a dominance of the leading 8 countries in the grapes markets, which creates barriers for new entrants. After 2016, the CR8 value remained above 64% highlighting that even the top 4 dominance reduced, but the top 8 dominance remained. In 2024, the CR8 value of 69.88% again confirms that at the CR4 level, the market was more competitive, but in the CR8 level, the market gets into a more extended level of dominance. In general, CR4 is declining, and CR8 is relatively stable, which means broader leaders of total grape exporters are controlling the market in CR8 level.

5.1.2.1.2 Fresh grapes (080610) concentration ratio (CRn) trends

The (Table 4) shows the CRn value for fresh grapes. The data show that over the period of 2008-2024, the market concentration ranges from 41.01% to 57.24%, which indicates that the market concentration in level 4 or four major countries has fluctuated between moderate and high concentrations. In the early years of 2008- 2013, the CR4 values increased constantly to 52% and peaked in 2008 at 57.24% which highlights the highly concentrated market, dominated by a small number of exporters. This suggests that there was high market power, higher entry barriers, and limited competitive space for the

new and emerging nations to enter. In the years 2014 and 2019, the CR4 value decreased to 42% in both 2017 and 2019, which indicates that market concentration declined, maybe due to new entrants and changes in global sourcing patterns in the global fresh grapes market. In the most recent period of 2020 and 2024, the CR4 value stay bellows 45% with a slight recovery but not a return to the early period, which highlights that some structural changes happened in the global fresh grapes market. In general, the CR4 value indicates the market was dominated by just a few and 4 main exporters, but later they lost their concentration and the market entered into a greater competitive balance. The Cr8 value for fresh grapes, which is a combination of the top 8 major exporting countries' market shares, reflects a broader level of market dominance in the global fresh grapes market throughout the study period of 2008-2024. The value of CR8 stayed high at 70.09% and 75.54% highlighting that just the major 8 countries dominate the fresh grapes market. In early years of the study as 2008 and 2015 the CR8 values stayed above 72% indicating that the top 8 main exporter in the global fresh grapes market are dominate in the market , mean a large number of exports was confined by just main 8 exporters .In the period of 2016 till 2022 , the CR8 value fluctuated slightly but still remain above 70% and reached peak at 2022 to 74.54 .This indicates that even the dominance of top 4 countries in this period declined but still the top 8 major exporters dominates the power of global fresh grapes markets rather than the diffusing globally .In the end period of 2024 the CR8 value stand at 73.97% again prove that even the top 4 countries lost their power but still the market control by top 8 major exporters . in general the CR8 show a constantly concentrated condition for fresh grapes in the studying period which indicate the major 8 country are dominating the global fresh grapes export market . The top 4 countries lost dominance but top 8 nations still maintain it concentration power in the global fresh grapes market.

Table 4

Fresh grapes (080610) Concentration Ratio (CRn) trends:

Year	CR4 (%)	CR4 Market Condition	CR8 (%)	CR8 Market Condition
2008	57.24	Moderately concentrated	73.41	Dominant
2009	52.19	Moderately concentrated	70.22	Dominant
2010	52.86	Moderately concentrated	71.4	Dominant
2011	52.66	Moderately concentrated	72.11	Dominant
2012	50.91	Moderately concentrated	70.77	Dominant

2013	52.43	Moderately concentrated	72.53	Dominant
2014	48.04	Moderately concentrated	72.03	Dominant
2015	47.3	Moderately concentrated	74.95	Strong dominance
2016	45.26	Moderately concentrated	72.45	Dominant
2017	42.94	Moderately concentrated	70.09	Dominant
2018	43.14	Moderately concentrated	72.07	Dominant
2019	42.4	Moderately concentrated	70.31	Dominant
2020	42.81	Moderately concentrated	70.89	Dominant
2021	41.01	Moderately concentrated	70.5	Dominant
2022	47.9	Moderately concentrated	75.54	Strong dominance
2023	45.07	Moderately concentrated	71.69	Dominant
2024	44.92	Moderately concentrated	73.97	Dominant

Data Source: ITC Trade Map, 2024 (Calculated by author)

5.1.2.1.3 Dried grapes (080620) concentration ratio (CRn) trends

The (Table 5) Show the CRn value of dried grapes (080620). The CR4 values for dried grapes in the period from 2008 to 2024 remain consistently high, ranging between 55.43% and 70.75%. This indicates that the dried grapes market is highly concentrated. In the first period of 2008-2012, the CR4 value starts at 65.18 and peaks at 70.75% in 2011. This highlights that the dried grapes export market is highly dominated by the top 4 major exporters, which impose a high entry barrier for emerging entrants. In the second period of 2013 - 2017, the CR4 value declined to 63% especially in 2017, which is a modest de-concentration by some new expansionists as a secondary exporter, even though the main 4 remain dominant. From 2018 to 2024, it continued to decline, reaching 55.43% in 2024. In recent years, new nations entered, but still the threshold is over 50% which highlights that the dried grapes market is highly concentrated by the top 4 main exporters. The CR8 value provided insight that throughout the studying period of 2008-2024; it remains very high, ranging from 79.44% to 87.04%, indicating very strong concentration available in the global dried grapes market. This indicates that a small number of nations control the whole global grapes market. In the year 2008, the CR8 value increased from 84.33% to 87% in 2011, but after 2012, the CR8 value fluctuated a lot till the end of 2024 the CR4 value was 79.50% which indicated that despite a long term fluctuant after 2012 the CR8value remain above 79% which is the very high degree of concentration. This indicates that the global dried grapes market is control by top 8 main exporters of dried grapes. In general, both CR4 and CR8 values showed that the global dry grapes market is

very dominated by main exporters, and it's a very constrained market for new and smaller exporters to enter.

Table 5

Dried Grapes (080620) Concentration Ratio (CRn) trends:

Year	CR4 (%)	CR4 Market Condition	CR8 (%)	CR8 Market Condition
2008	65.19	Highly concentrated	84.33	Strong dominance
2009	69.83	Highly concentrated	85.4	Strong dominance
2010	70.17	Highly concentrated	86.22	Strong dominance
2011	70.75	Highly concentrated	87.04	Strong dominance
2012	70.61	Highly concentrated	84.42	Strong dominance
2013	69.45	Highly concentrated	83.82	Strong dominance
2014	69.59	Highly concentrated	84.7	Strong dominance
2015	65.28	Highly concentrated	82.07	Strong dominance
2016	64.22	Highly concentrated	79.44	Dominant
2017	62.97	Highly concentrated	82.22	Strong dominance
2018	59.91	Moderately concentrated	81.21	Strong dominance
2019	59.67	Moderately concentrated	79.68	Dominant
2020	60.73	Highly concentrated	80.99	Strong dominance
2021	61.13	Highly concentrated	81.49	Strong dominance
2022	61.05	Highly concentrated	82.27	Strong dominance
2023	59.62	Moderately concentrated	81.35	Strong dominance
2024	55.43	Moderately concentrated	79.5	Dominant

Data Source: ITC Trade Map, 2024 (Calculated by author)

5.1.2.1.4 Comparative assessment and structural implications of overall CRn results

The CRn value indicates the global grape market is highly concentrated, but different across each commodity. In total grapes, the value of CR4 shows a gradual decrease, but the high CR8 value shows dominancy, as the top 8 countries dominate the global grapes sector. Fresh grapes show a more stronger concentration with a high barrier of entry, dried grapes were the most concentrated commodity among all, with constant and high value of both CR4 and Cr8, indicating that the market is highly dominated by major exporters.

5.1.2.2 HHI index for the global grapes market

As we know, the market concentration is the key to studying a sector's competitiveness degree in its market, whether or not a country or a few countries dominate the market of the sector. We have many tools to measure it, but one of them is

the Herfindahl-Hirschman Index (HHI), which measures market concentration in general for all exporting countries, as all the countries' related data are included in the study as participants. In this part, we evaluate the global market of grapes (0806), Fresh grapes (080610), and dried grapes or raisins (080620) related market concentration evolution and degree by implementing the Herfindahl-Hirschman Index (HHI) measurement between the years 2008-2024. As one of the globally widely used tools for industrial organization and international trade-related studies, it measures the market share distribution among all exporting countries.

5.1.2.2.1 General grapes (0806) global market concentration (HHI) trends

As we know, global grapes-related databases divide grapes into two different commodities and two different codes: fresh grapes and dried grapes. But in here we focus on the general grapes global market concentration ratio, as you see in (Table 6), which shows the HHI index ratio for grapes as total between the years of 2008-2024.

Table 6

Market Concentration in Total Grape Exports (HS 0806), 2008–2024

Year	HHI Total	Market Condition (HHI Classification)
2008	859.38	Unconcentrated (Highly competitive)
2009	774.96	Unconcentrated (Highly competitive)
2010	796.1	Unconcentrated (Highly competitive)
2011	787.91	Unconcentrated (Highly competitive)
2012	761.74	Unconcentrated (Highly competitive)
2013	776.87	Unconcentrated (Highly competitive)
2014	758.83	Unconcentrated (Highly competitive)
2015	745.25	Unconcentrated (Highly competitive)
2016	702.82	Unconcentrated (Highly competitive)
2017	680.38	Unconcentrated (Highly competitive)
2018	685.55	Unconcentrated (Highly competitive)
2019	659.37	Unconcentrated (Highly competitive)
2020	661.03	Unconcentrated (Highly competitive)
2021	611.2	Unconcentrated (Highly competitive)
2022	757.2	Unconcentrated (Highly competitive)
2023	704.15	Unconcentrated (Highly competitive)
2024	710.46	Unconcentrated (Highly competitive)

Data Source: ITC Trade Map, 2024 (Calculated by author)

The result shows a decline in overall concentration of the market, as the HHI value starts from 859.38 in 2008 and decreases to 710.46 in 2024. The general grapes market

concentration remained as un-concentrated throughout the study period. As you see, the value of HHI is stated below the 1000 threshold. This indicates that the global grapes export structure is very diversified, which is a sign that non of the world's big exporter countries dominate the global grapes market, or a small number of countries do not dominating global grapes exports in the global markets, rather the exports distributed among multiple exporting nations. The decreasing side of trend also indicates that emerging exporters and participant countries increased their access to international grapes markets.

5.1.2.2.2 Global fresh grapes (080610) market concentration (HHI) trends

In general, the global fresh grapes market *also* exhibits a similar pattern of concentration to the total grapes, but with a slightly higher value. As shown in (Table 7), the HHI values for fresh grapes are between 2008 and 2024.

Table 7

Market Concentration in Fresh Grape Exports (HS 080610), 2008–2024

Year	HHI_Fresh	Market Condition (HHI Classification)
2008	953.95	Unconcentrated (Highly competitive)
2009	845.33	Unconcentrated (Highly competitive)
2010	865.07	Unconcentrated (Highly competitive)
2011	858.19	Unconcentrated (Highly competitive)
2012	827.3	Unconcentrated (Highly competitive)
2013	868.96	Unconcentrated (Highly competitive)
2014	811.22	Unconcentrated (Highly competitive)
2015	831.56	Unconcentrated (Highly competitive)
2016	790.4	Unconcentrated (Highly competitive)
2017	733.75	Unconcentrated (Highly competitive)
2018	759.56	Unconcentrated (Highly competitive)
2019	737.24	Unconcentrated (Highly competitive)
2020	750.55	Unconcentrated (Highly competitive)
2021	720.12	Unconcentrated (Highly competitive)
2022	891.57	Unconcentrated (Highly competitive)
2023	825.62	Unconcentrated (Highly competitive)
2024	816.92	Unconcentrated (Highly competitive)

Data Source: ITC Trade Map, 2024 (Calculated by author)

The value shows that in 2008, the HHI value was 953.95, but decreased to 816.92 in 2024, as it shows the same declining HHI values. The value indicated that throughout the period of the study, the market for fresh grapes was also highly un-concentrated, with

some short-term fluctuations. The table also shows that the HHI value was higher at the start, but in the middle decreased, and again after 2022 increased. It indicated that many episodic consolidations happened, maybe due to many affecting factors or maybe a shift in major exporter competitiveness. In general, the low value of HHI exhibits that there is a strong competition in the global fresh markets, and there is no single or a few main dominant exporters in the global fresh grapes markets.

5.1.2.2.3 Global dried grapes or raisins (080620) market concentration (HHI) trends

The HHI value for dried grapes, which you can see in (Table 8), has a different scenario from the general grapes and fresh grapes; the value shows that most periods of the study are between 1270 and 1500, which indicates that the market for dried grapes is moderately concentrated. Even though after 2015 there is a gradual decline, the structure of fresh grapes remains more concentrated than fresh grapes and general grapes. The trend shows that there are a few and limited numbers of countries that dominate the global dried grapes exporting market. The trends also show that there is a moderate level of concentration that creates an entry barrier for new exporters in emerging nations. If they want to enter the global markets, they should focus more on quality standards, certifications and processing facilities to compete successfully in the global dried grape markets. (Burke *et al.* 2009)

Table 8

Market Concentration in Dried Grapes/Raisins (HS 080620), 2008–2024

Year	HHI_Dried	Market Condition (HHI Classification)
2008	1383	Moderately concentrated
2009	1481.3	Moderately concentrated
2010	1450.3	Moderately concentrated
2011	1499.7	Moderately concentrated
2012	1458.89	Moderately concentrated
2013	1416.1	Moderately concentrated
2014	1458.01	Moderately concentrated
2015	1311.38	Moderately concentrated
2016	1270.14	Moderately concentrated
2017	1343.07	Moderately concentrated
2018	1287.57	Moderately concentrated
2019	1344.07	Moderately concentrated
2020	1342.13	Moderately concentrated
2021	1272.57	Moderately concentrated

2022	1353.44	Moderately concentrated
2023	1316.15	Moderately concentrated
2024	1289.88	Moderately concentrated

Data Source: ITC Trade Map, 2024 (Calculated by author)

5.1.2.2.4 Comparative assessment and structural implications of overall HHI index results

The HHI index of all three commodities, as a total group, fresh grapes, and dried grapes, reveals a clear structural difference in the single grapes sector. Total grape and fresh grapes market concentration is characterized by low concentration and high competitions, while the dried grapes show a stable and moderate market concentration structure. The findings of the study highlight that different commodities, even in the same categories, have different competitiveness, which underscores the importance of product differentiation. Also, it's suggest for emerging countries, especially developing countries, to enter the fresh grapes market rather than the dried grape market, as the fresh grapes market is more accessible, while dried grapes need more investment, processing facilities, processing standardization, and quality control to be able to compete with leading exporters effectively in the global markets. (CBI, 2020)

5.1.2.3 Comparative analyses of overall market structure across all three commodities

The result for total grapes highlights a moderate concentration in the global market. The CR4 value of total grapes ranges from 39%-52% which is a moderate concentration. The CR8 value 64%-72% indicates a highly concentrated and oligopolistic condition, but the HHI values of 611 and 859 are under 1000 and grouped into Non-concentrated and competitive market. This all indicates that even the export of total grapes is dominated somewhat by the leading exporter, but still, the secondary exporters remain present too.

The result for Fresh grapes also highlights that the CR4 value 41%-57% categorized in a moderately concentrated market, but higher than total grapes. And the CR8 value of 70%-75.5% exhibits that the global fresh grapes market is also highly concentrated in the CR8 level. But its HHI value is 720-953, categorized in the non-concentrated (competitive) market.

The dried grapes show the highest among. In the CR4 value, between 55% is moderately concentrated and 70.5% which is categorized as a highly concentrated and oligopolistic market. But in the CR8 level, the values 79.5% and 87% are very high concentrations in a market. The value of HHI 1270, which is non-concentration or competitive market, and the value of HHI of 1499.7, almost 1500, which is categorized as moderate concentration, but the other two commodities' value were very low in comparison to dried grapes. In general, declines for all three commodities over time between 2008 and 2024. A fun fact is that the most value-added segment of grapes, which are raisins, is structurally more restrictive and less constant than fresh grapes, which proves that the degree of concentration increases with the degree of processing.

5.1.2.4 Global grapes market structure from the result of CRn and HHI and its implications for Afghanistan's export competitiveness

The competitiveness of Afghan grapes exports is closely related to the concentration of general grapes markets, as captured by the CR4, CR8 ratio, and HHI index. In total, fresh and dried grapes show that Afghanistan also act in relative segments simultaneously in the structural oligopolistic niche, which needs a response in policy change.

In total grapes (0806), as the HHI value is below 1000 for the global market and moderate in both CR4 and CR8, it indicates that the global market is competitive, and the top 4 and 8 major exporters do not fully dominate the global total grapes market. In this case, Afghanistan needs to expand its export growth through specialization. But besides that, the transaction cost should be reduced, SPS and quality related standards should improve (CBI, 2020). The trade facilities should improve well (Bykova, 2017). Which could help Afghanistan to take the remaining space in the niche market or regional market first; later on it can challenge other major exporters. (OEC, 2025)

In fresh graphs (080610), the HHI is high, and the CR4 and CR8 are also higher. In this case, major exporters own a sizable and persistent share. Afghanistan faces moderate concentration in the market in this kind of market competitiveness, which depends on structural weakness rather than on market power. Post-harvest management

processes, cold chain and logistics facilities, together with working on SPS quality standards, can help Afghanistan to play well in the market. (CBI, 2020)

In the dried grapes (080620) concentration is very higher as the HHI is around 1300-1500 and the CR4 and CR8 is near 55-71 and 80-87. It conforms that the market is oligopolistic as the main 4 and 8 major exporters are dominant in the markets in which Afghanistan is available in the CR4 and CR8 as major and dominating exporter as a mid-tier exporter but has a non-negligible share between 5-8% showing the country is already embedded among major players but still far from the leading and leadership position as Turkey is. In this case, Afghanistan needs to increase its raisin export volume together with upgrading which will shift the bargaining power of Afghanistan in this type of market. At the same time, the decline in concentration occurrence, which was around 70 in the starter years but declined to 55 in 2024 in dried grapes, is a sign of diversification slowly by new entrants, such as Uzbekistan and Egypt. This creates an opportunity for Afghanistan to expand its exports carefully through investing in drying and processing facilities, standardization, and food safety and quality certification (Burke *et al.* 2009). But still, it should not care to over-specialize in a concentrated market. As a result, and as a suggestion for Afghanistan, the country should run a product-specific strategy to reduce the cost and improve logistics efficiency of fresh grapes (Rosiana *et al.*, 2017). Treat dried grapes as highly specialized to gather the right value addition and gradual diversification carefully (Caves & Pugel, 1980). This will help Afghanistan to strengthen its position in the export of grapes and raisins in global markets.

As the market structure analysis of the competitive environment that Afghanistan and the world grapes each exporter face, it directly does not measure the country's competitive position; therefore, we have to follow some evaluative indicators to measure Afghanistan's competitive position and export performance in the global market, which need another study of Afghanistan grapes exports competitiveness in global market.

6 CONCLUSION

The result of the study revealed that the global grapes market is diversified structure and is very competitive. The CR4 and CR8 values indicate that major exporters hold just a substantial share rather than complete dominance over the grape markets. The

HHI values below 100 also showed that no single country or a small group fully dominates the market. This creates a competitive chance for each country, and also creates a chance for small and emerging countries like Afghanistan to expand by using specialization, improving trade facilities, and efficiency rather than market power.

The fresh grapes market *also* showed a structure with moderate to high concentration in both CR4 and CR8 ratios, but in HHI was still classified as an unconcentrated and highly competitive market. This once again exhibits that even though there is strong availability of some major countries in the market, the market remains largely distributed and competitive. For Afghanistan, it shows that the country's limitations are due to limitations in investment difficulty, especially in post-harvest, cold chain logistics, and SPS and quality compliance. This segment also provides a relative chance for new emerging nations, such as Afghanistan, if they remove the constraints.

Dried grapes, in comparison to total grapes and fresh grapes, are structurally restorative, as both the CR4 and CR8 ratios indicate that a small number of exporters dominate the market, while in HHI value, it's still grouped into a moderately concentrated market, which conforms to oligopolistic competition in the market of dried grapes and raisins. The nature of this market competitiveness relies on quality, branding, and buyer concentration barriers. But another fact is that with all these barriers, Afghanistan could neglect an important share of it. The rise of some new emerging players, such as Egypt and Uzbekistan, suggests that market diversification is underway and new competitors are rising, which creates both opportunities and threats for Afghanistan.

Another key finding of the study is that the concentration of the market is increased due to value addition and processing level and degree. Despite dried grapes mostly relying on value addition, it is still stronger in concentration by leading countries to both total and fresh grapes, which suggests a product-specific strategy for Afghanistan.

From the policy side, the study suggests that Afghanistan should 1. Implement double-track strategies, 2. Implement scale expansion, 3. Afghanistan should work more on SPS and quality standards, 4. Reduction of cost should be another priority for Afghanistan in terms of logistics, 5. Improving the trade-related facility, such as the cold chain development, 6. In dry grapes, some new investors should be persuaded. 7 Certification should be prioritized. 7 more focus on diversification rather than excessively highly concentrated market dependency.

The study also finds that this study provides a critical insight for the market competitive environment in grapes and raisin export, but still it's not enough for a better and more advanced understanding of grapes markets and exports, and the competitiveness of Afghanistan in it still needs more advanced study to focus on Afghanistan's export competitiveness and also specify the factor which could enhance the grapes sector to fully assess the position of Afghanistan. The limitation of the research was the limitation of data for some countries and some years as Afghanistan in 2020-2024 and Iran 2024, instead used mirror data reported by partner nations.

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