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The Competitiveness of Egyptian Grapes Crop in the Most Important Global Markets

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Abstract

Although Egypt's production of grapes crop amounted to be 1.18 million tons in 2020, its value was estimated at about 8.123 billion pounds, representing about 14.7% of the total value of Egypt's production of fruits, which is estimated at 49.647 billion pounds. The value of its exports amounted to be 235.77 million dollars, representing about 5% of the value of Egyptian agricultural exports, which is around 5.17 billion dollars. The decrease in the amount of Egyptian exports of exported grapes and subjected to intense competition within its most important import markets, leading to instability, fluctuation and decline, thus so it is necessary to analyze the competitive situation of the Egyptian grapes within the most important global markets.

The results of this research indicated during the study period (2017-2021) that Egypt ranked the (13th) among the most important grapes -producing countries, with an average production of about 1.77 million tons, representing about 2.25% of the average world production of grapes. Egypt ranked the (11th) among the countries exporting fresh grapes, with an average quantity of about 201.2 thousand tons, representing 4.9% of the average amount of global exports.

The results of the competitiveness indicators also showed that Egypt has an apparent comparative advantage of about 7.7, which indicates that there is an opportunity for Egypt to expand and increase its exports of grapes in the foreign markets,. Opening new markets, as Egyptian grapes exports occupy the fourth place among the most important fresh grapes exporting countries in the UK market, with a market share of 14.3%, and Egyptian grapes exports occupies fourth place in the

Netherlands market with a market share of 10.66%, while Egyptian grapes exports occupy the position (7th) in the German market with a market share of about 4.37% during the study period (2017-2021).

The penetration rate of Egyptian grapes exports amounted to be about 0.086 in the UK market, which indicates the existence of competition facing Egyptian grapes exports in the UK market, while the rate of penetration of Egyptian grapes exports reached about 0.364 in the Netherlands market. The rate of penetration of Egyptian grapes exports was 0.042, Which mean Egyptian grapes exports occupies the last position among the competing countries, which reflects the difficulty of penetration to the German market. The results also showed also that Egypt did not enjoy a competitive price advantage when compared to the prices of the most important competing countries in all the markets under study, which confirms the quality and preference of some consumers for Egyptian grapes s despite its high relative price. Because of its good quility is still conferred.

Key words: competitiveness, market share, global markets, Egyptian grapes.

Introduction:

The grapes crop is one of the most important export fruit crops in Egypt and comes in second place after citrus in terms of its economic importance. Most of its production in Egypt is consumed fresh, and part of the grapes crop from seedless varieties is used for drying and processing raisins, while some quantities are directed to the manufacture of fresh juice ⁽¹⁾ . As Egypt's production of the grapes crop amounted to about 1.18 million tons in 2020 ⁽²⁾, its value was estimated at about 8.123 billion pounds, representing about 14.7% of the total value of Egypt's production of fruits, which is estimated at 49.647 billion pounds. The value of its exports amounted to about \$235.77 million, representing about 5% of the value of Egyptian agricultural exports, which amounted to about \$5.17 billion during the period (2017-2021)⁽³⁾

Foreign trade in Egypt is considered one of the most important prospects for development in the current and future period because it links the countries of the world to each other and makes them one world as for economic integration. It also reflects the development of the trade balance movement and the extent of trade balance in terms of deficit or surplus in the volume of trade exchange between

countries. One of the most promising sources to increase the state's foreign exchange earnings and thus increase the Egyptian national income. Therefore, the development of Egyptian agricultural exports is one of the most important challenges facing the Egyptian economy in light of global economic changes and new international conditions and changes. Therefore, there is an interest in creating a better export climate that contributes to increasing the capacity of exports. Egyptian agricultural to gain access to foreign markets through the development of mechanisms aimed at raising the competitiveness of the most important agricultural export crops.

Research problem

Although Egypt's production of the grapes crop amounted to be about 1.77 million tons, the amount of exports is estimated at about 201.2 thousand tons, representing about 11% of the total grapes production during the period (2017-2021) ⁽²⁾, which shows the decrease in the amount of Egyptian exports. From grapes s, Egyptian grapes exports are subjected to intense competition within its most important global import markets, which results in instability, fluctuation and decline in Egyptian grapes exports. Therefore, it is necessary to analyze the competitive situation of the Egyptian grapes crop within the most important global import markets.

research aims

The research aims to:

(1) identify the most important grapes -producing countries in the world and the ranking of Egypt in relation to these countries.

(2) estimate the current situation of the foreign trade of Egyptian grapes s by studying the geographical distribution of Egyptian exports of grapes.

(3) estimating some indicators of competitive performance within the most important global markets.

Research method and data sources

To achieve the goal of this research, the descriptive analysis method was used, and some indicators of the competitiveness of Egyptian grapes and the most important competing countries within the most important global markets were applied. Database of Food and Agriculture Organization (FAO) and the World Trade Center, were used.

Result and discussion

a. The average development and relative importance of the most important fresh grapes producing countries in the world during the period (2017-2021)

It is clear from the data of Table (1) that China ranks first in the world in grapes production, with an average production of about 16.320 million tons, representing about 18.44% of the average global production of about 88.424 million tons during the period (2017-2021), Italy came second With an average production of about 9.85 million tons, representing about 10.84% of the average global production, followed by the United States of America in third place with an average production of about 7.85 million tons, representing about 8.88% of the average world production, Then comes in fourth to sixth place Spain, France and Turkey with an average production of about 7.37, 6.99, 4.82 million tons, representing about 8.33%, 7.90% and 5.45% of the average global production respectively. India, Chile, Argentina, Iran, South Africa and Australia occupied the positions from the seventh to the twelfth with an average Production amounted to about 3.44, 3.0, 2.56, 2.38, 2.36, and 2.0 million tons, representing about 3.89%, 3.39%, 2.90%, 2.69%, 2.67%, 2.27%, of the average global production, respectively, during the period (2017). -2021), Finally Egypt ranked thirteenth among the most important countries of grapes producer with an average production of about 1.77 million tons, representing about 2.25% of the average global production of grapes.

Table (1) The Relative Importance of the Most Important Fresh Grapes Producing Countries in the World During the Period (2017-2021)

Ranking	Country	Average production quantity	
		Quantity	Contribution %
		(thousand tons)	
1	China	16302	18.44
2	Italia	9585	10.84
3	America	7848	8.88
4	Spain	7367	8.33
5	France	6988	7.90
6	Turkey	4818	5.45
7	India	3440	3.89
8	Chilean	3001	3.39
9	Argentina	2565	2.90
10	Iran	2377	2.69
11	South Africa	2364	2.67
12	Australia	2004	2.27
13	Egypt	1987	2.25
14	Brazil	1774	2.01
15	Rest of the world	16005	18.10
16	the World	88424	100.00

Source: Compiled and calculated from Food and Agriculture Organization of the United Nations data. (FAO) International Information Network. [www. faostat.org](http://www.faostat.org).

b. The Geographical Distribution of the Most Important Global Markets Exporting and Importing Grapes During the Period (2017-2021)

1-The Relative Importance of the Average Quantity of Fresh Grapes Exports to the Most Important Exporting Countries During the Period (2017-2021)

By studying the development of the average quantity of fresh grapes exports, there are many and different global markets, as well as the exported quantities vary from one period to another, as the data in Table (2) indicate that the Chilean market occupies the first place as the most important export market for fresh grapes, with an average quantity of about 675.8 thousand tons, representing about 16.1% of The average amount of global exports, while the

Turkish market came in second place with an average quantity of about 522.6 thousand tons, representing about 12.4% of the average total amount of global exports. The Peruvian market, Italy, South Africa, China, Holland, India, Spain and Australia ranked third until Tenth place with an average quantity of about 491.5, 463.4, 432.3, 338.1, 333.3, 289.0, 270.9, 202.1 thousand tons, representing about 11.7%, 11.0%, 10.3%, 8.1%, 7.9%, 6.9%, 6.5%, 4.8% on Ranking from the average total amount of global exports, Egypt ranked eleventh among the countries exporting fresh grapes, with an average quantity of about 201.2 thousand tons, representing 4.9% of the average value of global exports during period (2017-2021).

Table (2) The Relative Importance of the Most Important Fresh Grapes Exporting Countries in the World During the Period (2017-2021)

Rank	Country	Average production quantity	
		Quantity	Contribution %
		(thousand ton)	
1	Chile	675.8	16.1
2	Turkey	522.6	12.4
3	Peru	491.5	11.7
4	Italia	463.4	11.0
5	South Africa	432.3	10.3
6	China	338.1	8.1
7	Holland	333.3	7.9
8	India	289	6.9
9	Spain	270.9	6.5
10	Australia	202.1	4.8
11	Egypt	201.2	4.8
12	Iran	135.9	3.2
13	Brazil	76.6	1.8
14	Greece	35.1	0.8
15	Rest of the world	172.1	4.1
	the World	4198	100

Source: Compiled and calculated from Food and Agriculture Organization of the United Nations data. (FAO) International Information Network. [www. faostat.org](http://www.faostat.org).

2-The Relative Importance of the Average Quantity of Fresh Grape Imports for the Most Important Importing Countries During the Period (2017-2021)

It is clear from the data of Table (3) that the American market occupies the first place as the most important importing market for fresh grapes among the countries of the world, with an average import quantity of about 673.98 thousand tons, representing about 16.2% during the study period(2017-2021). While the Netherlands market came in second place with an average quantity of about 419.8 thousand tons, representing about 10.1% of the average total amount of global imports of fresh grapes, German market ranked third with an average quantity estimated at 411.2 thousand tons, representing about 9.9% of the average total amount of global imports, Britain and China markets came in the fourth and fifth, with an average import quantity of about 405.1, 359.9 thousand tons, representing about 9.7% and 8.6%, respectively, of the average global imports during the study period(2017-2021).

Table (3) Evolution of the Quantity of Fresh Grapes Imports for the Most Important Importing Countries in the World During the Period (2017-2021)

Rank	Country	Average import quantity	
		Quantity (Thousand ton)	Contribution %
1	America	673.98	16.2
2	Holland	419.76	10.1
3	Germany	411.15	9.9
4	Britain	405.05	9.7
5	China	359.97	8.6
6	Canada	212.22	5.1
7	Russia	209.94	5.0
8	Indonesia	193.34	4.6
9	France	174.81	4.2
10	Mexico	160.89	3.9
11	Spain	147.57	3.5
12	Rest of the world	112.40	26.2
13	the scientist	4167	100

Source: Food and Agriculture Organization. (FAO) International Information Network. www.faostat.org

c. Foreign Trade and Geographical Distribution of the Most Important Global Markets Importing Egyptian Grapes During (2017-2021).

By studying the geographical distribution of Egyptian grape exports to the countries of the world, the data in Table (4) showed that the markets of the United Kingdom, the Netherlands and Germany are among the most important markets for importing Egyptian grapes. The average quantity of Egyptian grape exports to the UK market was about 29.65 thousand tons, with an estimated rate of about 23.2% of the average quantity of Egyptian grape exports, while the Netherlands market came in second place with an average quantity of about 26.41 thousand tons, representing about 20.5% of the total amount of Egyptian grapes., German market ranked third, with an average imported quantity of about 11.68 thousand tons, representing about 9.1% of the average total amount of Egyptian grape exports estimated at 128.66 during the period (2017-2021).

Table (4) The Average Relative Importance of the Average Amount of Exports for the Most Important Importing Countries of Fresh Egyptian Grapes Worldwide During the Period (2017-2021).

Country	Average export quantity	
	Quantity	Contribution %
	(thousand ton)	
United kingdom	29950	23.3
Holland	26412	20.5
Germany	11675	9.1
Russia	13888	10.8
Sylvania	4783	3.7
Saudi Arabia	6580	5.1
UAE	4515	3.5
Italia	2893	2.2
Malaysia	3086	2.4
The rest of the world	24880	19.3
the World	128662	100

Source: Food and Agriculture Organization, and the United Nations on the Internet.

It is clear from the previous data that the markets the United Kingdom, Holland and Germany are among the most important markets for importing Egyptian grapes.

- d. Fourth: Indicators of the Competitiveness of Egypt and the Most Important Competing Countries Within the Most Important Egyptian Grape Import Markets During the Period (2017-2021).

This part is concerned with estimating some indicators of the competitiveness of Egyptian grape exports within the most important global imported markets (the United Kingdom, the Netherlands and Germany) during the period (2017-2021).

Relative comparative advantage indicator

The relative comparative advantage index (RCA) indicates the potential opportunities to expand trade and gives an approximate picture of the future exports of the country and competing countries in global markets by comparing the country's share of global exports of a particular commodity or crop with the share of total or agricultural exports of those countries with the total total exports or global agricultural. When the value of this indicator is higher than the correct one, this indicates that the country has an apparent comparative advantage in this commodity or crop, but if this indicator is less than the correct one, this indicates that that country suffers from a relative decline in the apparent advantage and apparent relative of the commodity under study. It is calculated for any commodity through the following equation (5):

$$RCA_j = \frac{X_e^j}{X_e^a} \div \frac{X_w^j}{X_w^a}$$

RCA_j = apparent comparative advantage

X_e^j = The value of the country's exports of the commodity to the outside world.

X_e^a = The value of the country's agricultural exports to the outside world.

X_w^j = Total value of world exports of the commodity.

X_w^a = Total value of world agricultural exports.

Increasing the value of the index for Egypt compared to any competing country means increasing its competitiveness in foreign markets, and decreasing the value of the index for Egypt compared to any competing country means a decrease in its competitiveness in foreign markets.

Table (5) The Indicator of the Apparent Comparative Advantage of the Grapes Crop During the Period (2017-2021)

The apparent comparative advantage of Egyptian grape exports and competing countries (during the period (2017-2021))									
Statement	Egypt	South Africa	Chile	Peru	Greece	Hong Kong	Italy	Turkey	Netherland
Average apparent comparative advantage	7.7	16.6	10.5	8.6	4.3	3.7	3.4	1.9	1.5

Source: Compiled and calculated from the World Trade Center website database.

The data in Table (5) indicates that Chile, South Africa and Peru are in the first, second and third place and have a high apparent comparative advantage with an average of about 16.6, 10.5, 8.6, respectively, Egypt occupies the fourth place among the world's exporting countries of fresh grapes, with an average of about about 7.7, followed by Greece, Hong Kong, Italy, Turkey and finally the Netherlands, With an apparent relative advantage index reached 4.3, 4.3, 3.4, 1.9, 1.5, respectively, which indicates that there is an opportunity for Egypt to expand and increase its exports of grapes to the markets, and this means that grape crop is one of the important exporting crops, must work and continue to preserve the global markets for it.

Market Share Index

Market share is one of the important competitive indicators, as the increase in the value of the indicator represents one of the main objectives to increase the volume of foreign sales of any country, and thus the increase in market share reflects the competitive situation. of the Egyptian grape crop during the period (2017-2021). It is calculated for any commodity through the following equation⁽⁶⁾:

$$MS_{IJm} = \frac{E_{IJM}}{I_{mJ}} \times 100$$

Where:

MS_{IJm} = The market share of the country (I) of the commodity (J) in the market (m).

E_{IJM} = Quantity of the country exports (I) of the commodity (J) to the market (m).

I_{mJ} = Quantity of total market imports (m) of the commodity (J).

It is clear from the data of Table (6) that Egyptian grape exports rank fourth among the most important countries exporting fresh grapes to the UK market, with a market share of 14.30%, As well Egyptian grape exports occupies fourth place in the Netherlands market with a rate of 10.66%, while Egyptian grape exports Seventh place in the German market with a rate of about 4.37%.

Table (6) Market share of Egyptian grape exports and competing countries within the most important Egyptian grape import markets during the period (2017-2021)

Market	Competing country	Market share
United kingdom	South Africa	30.59
	Chile	16.38
	Spain	20.12
	Egypt ^{(4)th}	14.3
The Netherland	South Africa	32.46
	India	20.59
	Peru	19.84
	Egypt ^{(4)th}	10.66
Germany	South Africa	25.56
	India	10.83
	Greece	7.88
	Brazil	3.43
	Chile	4.55
	Egypt ^{(7)th}	4.37

Source: Compiled and calculated from the World Trade Center website database

Data presented in table (6) showed that Egyptian grape comes in 4th for both the united kingdom and Nethanlad exporting countries and 7th in germen market. While give an Alan to important the quality and quantity of the different cultivars of grape.

It is also important to use the chance of open windows for the early harvested cultivars such as superior, early superior, flam and king rely which are considered as preferred grape types due to the less sugar concentration and it is seedless cultivars.

Market penetration coefficient

The market penetration coefficient is one of the most widely used measures to measure the competitiveness of any country in exporting a commodity, because it represents a measure of acceptance and absorption of the exported commodity in foreign markets, which shows the possibility of increasing exports of that commodity in those markets. This indicator also contributes to setting policies and procedures that regulate external marketing. The market penetration rate indicates the extent of the existence of real external markets for the commodity and expresses the ability of those markets to absorb additional quantities of the commodity. It is calculated using the following equation (7):

$$MPR_{ij} = \frac{EX_{ij}}{Q_{ij} + M_{ij} - X_{ij}}$$

WHERE

- MPR_{ij} = the country's penetration rate of the most important market of commodity j.
- EX_{ij} = the exporting country's exports of commodity j.
- Q_{ij} = The importing country's production of commodity j.
- M_{ij} = the importing country's imports of the commodity j.
- X_{ij} = Exports of the importing country of the commodity j.

It is clear from the data of Table (7) that Egyptian grape exports rank fourth with a penetration rate of about 0.086, which indicates the existence of competition facing Egypt's grape exports in the UK market. While Egyptian grape exports occupy fourth place in the Netherlands market, with a penetration rate of about 0.364, which confirms the intense competition that Egyptian grape exports are exposed to within this market. While the ranking of Egyptian grape exports in the German market ranked last among the competing countries, which reflects the weak capacity of Egyptian grapes to penetrate to the German market.

Table (7) Market Penetration Coefficient In The Most Important Markets For Importing Egyptian Grapes During The Period (2017-2021)

Markets	Importing Countries	Market penetration coefficient							
		EGYPT	SOUTH AFRICA	CHILE	SPAIN	ITALY	GREECE	PERU	INDIA
United kingdom		0.068	0.242	0.139	0.123	—	—	—	0.056
Nethesland		0.364	0.836	0.048	—	—	—	0.711	0.76
Germany		0.042	0.126	0.061	0.099	—	0.098	—	0.065

Source: Compiled and calculated from the World Trade Center website database

Price Ritio

This indicator is used to judge the competitive price situation of Egypt compared to the competing countries for an export commodity, and the lower the export price of the country under consideration compared to its counterpart in other competing countries. This means that there is a price advantage for the commodity, but it is affected by other factors such as transportation costs, taxes, the date of export and other costs associated with the export process, which have become more influential on the export price than production costs. In another way, the price competitiveness index can be found between the average prices of the countries competing to Egypt for a commodity, and the Egyptian price for this commodity, and it is calculated as follows (8):

$$Pa_j = \frac{P_c}{P_e}$$

WHERE:

- Pa_j** = the ratio between the average export price of the commodity of a competing country to its Egyptian counterpart.
- P_c** = The average export price of the commodity for a competing country.
- P_e** = The average export price of the Egyptian commodity.

A higher value of the indicator than a correct one means an increase in Egypt's competitiveness in foreign markets, and a lower value of an indicator than a correct one means a decrease in Egypt's competitiveness in foreign markets.

A. Price Ratio with the most important grape-exporting countries in the UK market during the period (2017-2021)

It is clear from the data of Table (8) that the relative price amounted to about 0.98, 0.90 and 1.21 for each of South Africa, Chile and Spain, respectively. Therefore, Egypt enjoys a price advantage compared to grape exports to South Africa and Chile only in this UK market.

B. Price Ratio with the most important grape-exporting countries in the Netherlands market during the period (2017-2021)

It is clear from the data of Table (8) that the relative price amounted to about 0.62, 1.03, 0.88 and 1.05 for each of South Africa, Chile, India and Peru, respectively, and accordingly, Egypt enjoys a price advantage compared to grape exports to South Africa and India only in this market, the Netherlands. .

C. Price Ratio with the most important grape-exporting countries in the German market during the period (2017-2021)

It is clear from the data of Table (8) that the relative price amounted to about 0.78, 0.65, 1.0, 0.89, 0.94, and 1.1 for South Africa, Chile, Italy, Greece, India and Brazil, respectively, and accordingly, Egypt enjoys a price advantage compared to grape exports. For South Africa, Chile, India and Greece only in this Germany market.

Table (8) The Price Ratio of Egyptian Grapes for the Most Important Competing Countries in the Most Important Markets During the Period (2017-2021)

Markets	Import country	The average Egyptian export price (dollars / ton)	Relative price								
			South Africa	Chile	Spain	Italy	Greece	Peru	India	Brazil	Egypt
United kingdom		1955	0.98	0.90	1.21	—	—	—	—	—	1.00
Holland		1942	0.62	1.03	—	—	—	1.05	0.88	—	1.00
Germany		1834	0.78	0.65	—	1.0	0.89	—	0.94	1.1	1.00

Source: Compiled and calculated from the World Trade Center website database

Recommendations

- 1- **Expansion of Egyptian grape exports and opening new markets.**
- 2- **The existence of a national marketing apparatus to develop a strategic planning for growing grapes for export.**
- 3- **Establishing a database on foreign markets to provide marketing information and continue studying the import markets and countries competing for Egyptian grapes.**
- 4- **Activating the role of commercial representation offices within the Egyptian grape export markets.**

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