Indicators of the Competitiveness of Egyptian Strawberry Exports in the English Market

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ABSTRACT

The foreign trade sector is considered one of the main ingredients of Egyptian economic activity. This sector derives its importance from its close connection to the development of the Egyptian economy, to provide the necessary foreign exchange sources to achieve and implement economic development programs and plans, by creating real export opportunities for exporters in global markets and raising the level of local production to face competition in global markets (Amira 2013). The research problem is represented in that despite the large market share of Egyptian strawberries in the English market compared to its counterpart from other importing countries, as the average imports of the English market from Egyptian strawberries amount to about 18.79% of Egypt's total exports of strawberries to global markets during the period (2018-2022), which shows the importance of the English market for Egypt as the most important importing country of Egyptian strawberries, Egypt's exports of strawberries to the English market do not exceed about 6.13% of the total imports of the English market from strawberries to global markets during the period (2013-2022) the average quantity of Egyptian strawberry exports during the study period amounted to about 23.45 thousand tons, and England ranked first in the quantity of Egyptian strawberry exports with an average quantity of exports amounting to about 4.41 thousand tons, representing about 18.79% of the average quantity of Egyptian strawberry exports. England is followed by Belgium, Germany, Saudi Arabia, Russia, and Emirates ranked from second to sixth respectively, with an average quantity of Egyptian exports amounting to about 3.94, 2.64, 2.19, 1.91, and 1.56 thousand tons for each of them respectively that the penetration rate of Egyptian strawberries in the English market and each of Spain, Holland, Belgium, and Morocco as countries competing with Egypt in the English market was approximately 0.004, 0.0811, 0.0535, 0.0446, and 0.020, respectively, as an average for the study period, the geometric average for the export potential of Egyptian strawberries in the English market and in Spain, Holland, Belgium, and Morocco reached about 0.349%, 9.306%, 11.151%, 9.491%, and 2.072%, respectively, during the study period, which means the necessity of exploiting export opportunities and increasing the presence of Egyptian strawberries in the English market and raising Egypt's share in front of competing countries (Ismat 2006).

Keywords: Competitiveness, apparent comparative advantage, price competitiveness.

INTRODUCTION

Strawberry is considered one of the most important Egyptian crops suitable for export. It is non-traditional vegetable crop that can be expanded vertically and horizontally, and can be grown in newly reclaimed lands. It is also one of the promising export crops that the Egyptian economic policy aims to maximize the return from it by increasing its exports (Dalia 2008). The quantity of strawberry exports in Egypt during the study period ranged between a minimum limit amount about 3.08 thousand tons in 2005 and a maximum limit amount about 74.98 of thousand tons in 2011, with an annual average of about 27.11 thousand tons during the period (2005-2022).

RESEARCH PROBLEM

Despite the large market share of Egyptian strawberries in the English market compared to its counterpart in other importing countries, as the average imports from Egyptian strawberries to the English market amounted to about 18.79% of Egypt's total exports of strawberries to global markets during the period (2018-2022), which shows the importance of the English market for Egypt as the most important importing country of Egyptian strawberries, Egypt's exports of strawberries to the English market do not exceed about 6.13% of the total imports of the English market of strawberries to global markets during the period (2013-2022), which requires a study of the indicators for the competitiveness of Egypt's exports of strawberries to the English market and identifying the most important factors that determine the English market's demand for Egyptian strawberries (Mona2019).

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RESEARCH OBJECTIVES

The research mainly aims at studying the increase of market share for the Egyptian strawberry crop in the English market. This is achieved by studying the following sub-objectives:

1- Studying the current status of Egyptian strawberry exports and identifying the most important importing markets

2- Measuring the most important indicators of the competitiveness of the Egyptian strawberry crop in the English market during the period (2013-2022)

3- Identifying the determinants of demand for Egyptian strawberry exports in the English market.

MATERIALS AND METHODS

The research relied on the use of both qualitative and quantitative analytical methods to achieve its objectives, using arithmetic averages and percentages, and simple linear regression to estimate the general time trend equations, as well as estimating some competitiveness indicators represented in: (apparent comparative advantage, market share, production competitiveness, price competitiveness, market penetration rate, export strength) in addition to estimating multiple regression functions in the double logarithmic form to measure the relationship between the most important factors determining the export competitiveness of strawberry crops in Egypt. The research also relied on secondary data published by the Ministry of Agriculture and Land Reclamation, the Food and Agriculture Organization (FAO), and the World Trade Center (TREAD MAP) to achieve its objectives.

RESULTS AND DISCUSSION

Firstly: The development of Egypt's strawberry exports.

A- Development of the exports quantity from the strawberry crop in Egypt during the period (2005-2022):

Data in table (1), shows that the export quantity from the strawberry crop in Egypt during the study period ranged between a minimum limit amounted about to 3.08 thousand tons in 2005 and a maximum limit amounted about to 74.98 thousand tons in 2011, with an annual average of about 27.11 thousand tons during the period (2005-2022).

Table 1. Development of the quantity, value and price of strawberry exports in Egypt during the period from (2005-2022)

years	Quantity of exports (thousand tons)	value of exports (million dollars)	price of exports (dollars per ton)
2005	3.08	1.74	565.16
2006	12.67	6.35	501.07
2007	21.61	12.04	557.07
2008	16.70	52.44	3140.76
2009	33.86	86.81	2563.84
2010	24.51	65.49	2671.73
2011	74.98	58.72	783.20
2012	22.95	77.20	3363.20
2013	33.21	69.48	2091.95
2014	54.75	75.48	1378.65
2015	20.86	73.81	3537.92
2016	27.25	100.01	3669.79
2017	24.37	90.00	3692.42
2018	21.39	74.21	3469.52
2019	31.00	87.81	2832.51
2020	17.58	78.54	4466.90
2021	22.57	110.03	4875.91
2022	24.72	117.54	4754.66
Average	27.11	68.76	2717.57
Minimum limit	3.08	1.74	501.07
Maximum limit	74.98	117.54	4875.91

Source: www.tradmap.org

By studying the general time trend for the development of the exports quantity from the strawberry crop in Egypt using equation No. (1) in Table (2), it is shown that the quantity of exports took a general increasing trend that was not statistically significant and that there is no mathematical image suitable for the nature of the data and that the data revolves around its arithmetic mean. ^{2}

B - Development of the exports value from strawberry crop in Egypt during the period (2005-2022):

Data in Table (2), shows that the value of strawberries exports in Egypt to during the study period ranged between a minimum limit amounted about $1.74 million in 2005 and a maximum limit amounted about $117.54 million in 2022, with an annual average of about $68.76 million per ton during the period (2005-2022).

By studying the general time trend for the development of the exports value from strawberry in Egypt during the study period using equation No (2) in Table (2), it is shown that the value of exports took a general increasing trend by a statistically significant annual quantity amounted about 5.20 million dollars, and the significance of the model as a whole was proven. The results also showed that about 71% of the changes in the value of exports are due to variables whose effects are reflected by the time factor.

C- Development of the price of strawberry exports in Egypt during the period (2005-2022):

Table (1), shows that the price of strawberry exports in Egypt during the study period ranged between a minimum limit amounted about $501.07 per ton in 2006 and a maximum limit amounted about $4875.91 per ton in 2021, with an annual average of about $2717.57 per ton during the period (2005-2022).

From the previous display, it is shown that the increase in the value of Egyptian strawberry exports is mainly due to the price of exporting Egyptian strawberries to foreign markets, not the quantity of exports, which may suffer from fluctuations during the study period, and this is what makes it characterizes relative stability during the study period.

By studying the general time trend of the development for the export price of strawberry crops in Egypt during the study period, it is clear from equation No. (3) in Table (2), that the export price took a general increasing trend by a statistically significant annual quantity amounted about $220.66 per ton, and the significance of the model as a whole was proven. The results also showed that about 66% of the changes in the export price are due to variables whose effects are reflected by the time factor.

Secondly: **the relative importance of the most important countries importing Egyptian strawberries**.

- Relative importance of the Egyptian strawberry exports quantity and the most important importing countries during the period (2018-2022).

Table 2. Equations of the general time trend for the development of export indicators for strawberry crops in Egypt during the period from (2005-2022)

S	Dependent variable	equation of the general time trend	F	R^2
1	Quantity of Strawberry export	$\hat{Y}_i = 24.32 + 0.29\ X_i$ (3.03) (0.40)	0.16	0.٠1
2	Value of Strawberry exports	$\hat{Y}_i = 1937 + 5.2\ X_i$ (2.15) (6.26)*	39.15*	0.71
3	Price of Strawberry exports	$\hat{Y}_i = 621.3 + 220.66\ X_i$ (1.45) (5.57)*	31.07*	0.66

Where: $\hat{Y}i$ = estimated value of the indicator under study during the period (2005-2022)
Xi = time variable where i (1, 2, 3, ..., 18)
The value in brackets indicates the calculated value of (T)
(R^2) Coefficient of determination (F) Significance of the regression model
(*)indicates the significance of the regression coefficient at 0.05 level.
Source: Collected and calculated from the data in Table (1).

the data in Table (3), show that the average quantity of Egyptian strawberry exports during the study period amounted to about 23.45 thousand tons, and England ranked first in the quantity of Egyptian strawberry exports with an average quantity of exports amounting to about 4.41 thousand tons, representing about 18.79% of the average quantity of Egyptian strawberry exports. England is followed by Belgium, Germany, Saudi Arabia, Russia, and the Emirates ranked from second to sixth respectively, with an average quantity of Egyptian exports amounting to about 3.94, 2.64, 2.19, 1.91, 1.56 thousand tons for each of them respectively, and in a percentage amounted to about 16.79%, 11.28%, 9.32%, 8.16%, and 6.66% of the average quantity of Egyptian exports. Then come Syria, the Netherlands, Iraq, and Ireland in seventh to tenth place respectively, with an average quantity of Egyptian exports amounting to about 1.18, 0.91, 0.56, 0.41 thousand tons for each of them respectively, and a percentage of amounted to about 5.04%, 3.89%, 2.39%, 1.74% of the average quantity of Egyptian exports, in the same order, during the period (2018-2022).

- The relative importance of the value of Egypt's strawberry exports and the most important importing countries during the period (2018-2022)

Data in Table (4), shows that the average value of Egypt's strawberry exports during the study period amounted to about 93.62 million dollars, and England ranked first in the value of Egyptian strawberry exports with an average value of exports amounting to about 19.56 million dollars, representing about 20.89% of the average value of Egyptian strawberry exports. England is followed by Belgium, Germany, Saudi Arabia, Russia, and the Emirates, in second to sixth place respectively, with an average value of Egyptian exports amounting to about 14.56, 9.68, 8.67, 7.46, and 6.12 million dollars for each of them respectively, at a rate of about 15.55%, 10.34%, 9.26%, 7.97%, and 6.53%. Then come Syria, the Netherlands, Iraq, and France ranked from seventh to tenth respectively, with an average value of Egyptian exports amounting to about 5.52, 3.45, 1.88, and 1.58 thousand tons for each of them respectively, at a rate amounted to about 5.90%, 3.69%, 2.01%, 1.69% from the average value of Egyptian exports, in the same order, during the period (2018-2022).

Table (3): the relative importance of the quantity of Egyptian strawberry exports to the most important importing countries during the period (2018-2022)

Years / Countries	2018	2019	2020	2021	2022	average	%
England	2.01	2.47	2.04	7.71	7.81	4.41	18.79
Belgium	4.78	7.11	4.35	1.80	1.66	3.94	16.79
Germany	4.15	4.49	2.25	1.16	1.16	2.64	11.28
Saudi Arabia	0.91	3.69	1.95	1.63	2.74	2.19	9.32
Russia	2.08	2.73	1.50	1.31	1.96	1.91	8.16
United Arab Emirates	1.38	2.34	1.33	1.15	1.61	1.56	6.66
Syria	0.002	0.23	0.79	1.57	3.33	1.18	5.04
Holland	1.08	1.53	0.71	0.79	0.45	0.91	3.89
Iraq	0.93	1.38	0.19	0.03	0.27	0.56	2.39
Ireland	0.55	0.67	0.29	0.31	0.23	0.41	1.74
Rest of the World	3.52	4.37	2.18	5.12	3.51	3.74	15.95
The World	21.39	31.00	17.58	22.57	24.72	23.45	100.00

Source: collected and calculated from the database www.tradmap.org

Table (4): the relative importance of the value of Egyptian strawberry exports to the most important importing countries during the period (2018-2022)

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Years / Countries	2018	2019	2020	2021	2022	average	%
England	6.98	7.00	9.11	37.58	37.12	19.56	20.89
Belgium	16.57	20.13	19.43	8.78	7.88	14.56	15.55
Germany	14.40	12.72	10.06	5.68	5.53	9.68	10.34
Saudi Arabia	3.15	10.45	8.73	7.95	13.05	8.67	9.26
Russia	7.22	7.72	6.68	6.38	9.30	7.46	7.97
United Arab Emirates	4.78	6.63	5.95	5.59	7.63	6.12	6.53
Syria	0.01	0.64	3.51	7.65	15.81	5.52	5.9
Holland	3.73	4.33	3.18	3.86	2.16	3.45	3.69
Iraq	3.24	3.92	0.86	0.13	1.27	1.88	2.01
France	2.03	1.45	1.44	1.60	1.38	1.58	1.69
Rest of the World	12.12	12.82	9.59	24.83	16.41	15.15	16.18
The World	74.21	87.81	78.54	110.03	117.54	93.62	100

Source: collected and calculated from the database www.tradmap.org

Third: Indicators of the competitiveness of the study crop exports in the most important global markets

1- Market share:

The market share index is considered one of the most important competitiveness indicators for the geographical distribution of exports. It is calculated by dividing a country's exports of a specific crop to an importing country by the total imports of the importing countries of that crop (Sanjaya, 2015).

The market share index is used to measure competitiveness at the commodity level about all competing countries, and thus shows the extent of the efficiency of marketing operations. Its increase is considered one of the main objectives for the process of expanding the foreign sales volume for any country, and it is measured according to the following equation:

$$\text{Marker share} = \frac{\text{The quantity of Egypt's exports from a certain commodity to a certain country}}{\text{Total quantity of imports of the same commodity for the importing country}} \times 100$$

The increase in this indicator expresses the increase in the competitive position of the country in the foreign markets of the commodity. The market share of Egyptian exports of the crops under study also shows the possible extent of developing them in those markets and the extent of the ability of those exports to cover the requirements of those markets and increase their export capabilities. This is considered one of the important mechanisms in drawing up production and export policies, which in turn reflects on achieving the strategic agricultural goals. In the case of a decrease in the market share of Egyptian exports for the crops under study within markets with large intake capacity, this requires working to increase the quantities exported of those crops by increasing the competitive capacity and price advantages of those crops compared to their counterparts in countries competing with Egypt.

Market share of Egyptian strawberry crop:

Data in Table (5), shows the market share of the quantity of strawberry exports for the most important exporting countries to the English market, which is considered one of the most important global markets importing strawberries, especially Egyptian ones, as it was shown that the average market share of Egypt from the total imports of England is increasing until it amounted to about rank 6.13% with a minimum limit amounted to about 2.08% in 2017, and a maximum limit amounted to about 13.28% in 2022.

Table 5. Market share index of the quantity of Egyptian strawberry exports in the most important importing countries during the period (2013-2022)

Years	English market				
	Spain	Holland	Belgium	Morocco	Egypt
2013	53.07	13.98	8.62	11.85	5.63
2014	51.38	17.92	9.29	6.16	10.94
2015	51.61	18.91	10.47	6.68	2.59
2016	61.49	14.10	9.75	3.57	2.93
2017	61.41	15.65	8.75	2.66	2.08
Average of the first period	55.79	16.11	9.38	6.19	4.83
2018	63.31	15.56	7.67	2.09	4.02
2019	61.91	12.42	7.96	5.52	4.20
2020	62.18	16.74	7.16	2.39	3.50
2021	55.35	10.21	4.46	11.96	12.13
2022	53.55	6.90	6.14	17.73	13.28
Average of the second period	59.26	12.37	6.68	7.94	7.43
Average as a whole	57.53	14.24	8.03	7.06	6.13

Source: collected and calculated from the database www.tradmap.org

Table 6. Indicators of the apparent comparative advantage for Egyptian strawberries in the English market compared to competing countries during the period (2013-2022)

years	English market						
	Egypt	Spain	Morocco	Belgium	Holland	Poland	Germany
2013	8.23	9.28	5.68	2.45	2.37	0.60	0.27
2014	9.14	8.23	4.72	2.50	2.58	0.64	0.30
2015	9.19	8.59	6.27	2.71	1.92	0.45	0.44
2016	11.58	8.27	5.29	2.47	1.96	0.38	0.33
2017	10.29	7.58	5.61	2.49	1.79	0.23	0.32
Average of the first period	9.69	8.39	5.51	2.53	2.12	0.46	0.33
2018	8.71	7.83	4.78	2.40	1.83	0.19	0.31
2019	9.15	7.10	6.38	2.38	1.57	0.20	0.33
2020	8.28	6.33	5.49	2.64	1.89	0.23	0.25
2021	9.27	6.72	5.55	2.08	1.70	0.26	0.16
2022	10.09	6.55	5.19	1.70	1.52	0.33	0.16
Average of the second period	9.10	6.91	5.48	2.24	1.70	0.24	0.24
General Average	9.39	7.65	5.50	2.38	1.91	0.35	0.29

Source: collected and calculated from the database www.tradmap.org

2- The apparent comparative advantage index of Egyptian strawberries compared to its most important competing countries.

Apparent comparative advantage means the extent of advantages available to country that help it to produce certain goods, such as natural and climatic conditions, primary resources, or cheap labor. However, these advantages may not help it compete in foreign markets. This may be due to low quality, high cost, or non-compliance with the standard specifications

required by foreign markets. Apparent comparative advantage is measured by the following equation:

2

$$RCAJ = \left(\frac{X_{ji}}{X_{ja}}\right) / \left(\frac{X_{wi}}{X_{wa}}\right)$$

Where: X ji: Value of country j's exports of commodity I.

X ja: Total value of country's j's agricultural exports.

X wi : Value of world exports of commodity I.

X wa: Total value of world agricultural exports.

If the value of the comparative advantage index is greater than one, the country has an apparent comparative advantage in a particular activity. Conversely, the country does not have a comparative advantage if the value of the comparative advantage index is less than (Hnan 2019).

Index of apparent comparative advantage index for Strawberry crop to

Data in Table (6), shows that most countries have a comparative advantage in strawberry exports compared to total agricultural exports for each of (Egypt, Spain, Morocco, Belgium, and the Netherlands), as the average year of the comparative advantage index during the study period amounted to about 9.39, 7.65, 5.50, 2.38, and 1.91 for each of them, respectively, except for Poland and Germany, which do not have a comparative advantage in strawberry export, as the average comparative advantage index amounted to about 0.35 and 0.29 for each of them respectively during the period (2013-2022).

3- Index Price competitiveness:

The ratio between the Egyptian export price of a commodity and the export prices of the most important countries competing with Egypt in exporting that commodity is considered one of the most important factors affecting the competitive position for Egyptian exports from this commodity in foreign markets. The price competitiveness index is estimated by finding the price ratio for the price of exports of the competing country for the commodity and the prices of Egyptian exports for the same commodity. If the value of this index exceeds one, this indicates that Egypt's price has a competitive advantage in exporting this commodity, and if it is less than one, this indicates a high price competitive advantage for this crop in foreign markets.

This index is calculated by: estimating the relative price position between the prices of the most important countries competing with Egypt in the global market (or in a certain market) and the price of Egypt's exports. This is done by calculating the ratio between the weighted average for the prices of the Egyptian studied crop in the most important competing countries in the global market as a whole (the market being studied), to the export price of the studied crop in each of these countries, using the following equation:

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

Where:

PA_j: The ratio between the weighted average of the prices of the most important competing countries in the global market or (a market) for the crop under study as a whole and the export price of the crop in Egypt.

P_c: The weighted average of the export prices of the crop in the most important competing countries as a whole.

P_e: The export price of the crop in Egypt.

C- Index of Price competitiveness for Egyptian strawberry crop:

Table (7), shows that the average export price of strawberries in the English market, which is the largest importing market for Egyptian strawberries, represents about 7630., 0.765, 5820., 839.0 from the export prices of Spain, Morocco, the Netherlands and Belgium, respectively, which indicates that Egypt enjoys a comparative price advantage over competing countries in the English market during the period (2013-2022).

-Production competitiveness:

Production competitiveness expresses the ratio between Egypt's production of a certain crop and the production of competing countries of the same crop. When this ratio exceeds one, this indicates that Egypt has an advantage in producing this crop over competing countries, and vice versa.

Index of Production competitiveness for Egyptian strawberry crop in English market:

It is clear from Table (8), that Egypt enjoys an increase in its strawberry production compared to most competing countries, as the value of the competitiveness index of strawberry production in Egypt compared to competing countries was greater than one, as it reached approximately 1.286, 1.286, 2.996, 6.230, 9.444 for the production of Spain, Morocco, Holland, and Belgium, respectively, as an average during the study period.

From this it is clear that Egypt has a great capacity for exporting to competing countries, especially since Egypt enjoys an increase in production. Therefore, policies and procedures must be created Egypt's ability to increase the quantity of exports to competing countries.

Table 7. Price competitiveness of the Egyptian strawberry crop in relation to some of the most important competing countries in the most important markets during the period (2013-2022)

years	English market				
	Egypt	Spain	Morocco	Holland	Belgium
2013	1.000	0.517	0.773	0.256	0.764
2014	1.000	0.275	0.391	0.222	0.315
2015	1.000	0.804	1.548	0.613	1.188
2016	1.000	0.813	0.645	0.623	1.010
2017	1.000	0.817	0.608	0.611	0.885
Average of the first period	1.000	0.645	0.793	0.465	0.832
2018	1.000	0.701	0.462	0.586	0.758
2019	1.000	0.695	0.470	0.526	0.738
2020	1.000	1.009	1.033	0.676	0.921
2021	1.000	0.977	0.793	0.880	0.807
2022	1.000	1.017	0.924	0.831	1.003
Average of the second period	1.000	0.880	0.736	0.700	0.845
General Average	1.000	0.763	0.765	0.582	0.839

Source: collected and calculated from the database www.tradmap.org

Table 8. Competitiveness of Egyptian strawberry production compared to the most important competing countries in the English market during the period (2013-2022)

years	Egypt	Spain	Morocco	Holland	Belgium
2013	1.000	0.829	1.784	5.080	7.217
2014	1.000	0.947	2.011	4.788	7.029
2015	1.000	1.077	3.032	7.415	8.913
2016	1.000	0.987	2.724	6.091	8.283
2017	1.000	0.885	1.971	4.825	6.715
Average of the first period	1.000	0.945	2.304	5.640	7.631
2018	1.000	1.128	2.712	5.999	8.103
2019	1.000	1.533	3.215	7.137	11.239
2020	1.000	1.592	2.599	5.594	10.045
2021	1.000	1.839	4.699	7.724	13.105
2022	1.000	2.041	5.215	7.649	13.794
Average of the second period	1.000	1.627	3.688	6.821	11.257
General Average	1.000	1.286	2.996	6.230	9.444

Source: collected and calculated from the database www.tradmap.org

5- Rate of Market penetration:

The market penetration rate is measured by the following equation:

The market penetration rate is defined as the ratio between a country's imports of a product and its actual consumption of the same product. It can be calculated from the following equation:

$$MPR_{ij} = \frac{I_{ijk}}{Q_{ij} + I_{ij} - E_{ij}}$$

Whereas:

MPR ij = Penetration rate of imports of product i in country (market) j.

I ijk = Imports of country j of product (crop) i from country k.

Q ij = Production of country j of the product (crop) i.

E ij = Exports of country j of the product (crop) i.

The value of this index ranges between zero (if imports are zero) and 1 (if reliance on imports is complete to cover local demand). High value of index and indicates the expansion of the market and the ease of entering it, as a result of its high dependence on imports to satisfy local demand, and on the other hand, it is evidence of the deterioration of the internal

competitiveness of the national economy of the country. Conversely, a low value of the index indicates the presence of local companies within the studied market that are highly competitive and able to compete with 2imports. A low value of the index may also be evidence of a high rate of local productivity in the market, a low level of local prices, a high standard of living for individuals, and thus a high internal competitiveness of the country.

Index of Market Penetration Rate for Egyptian Strawberry Crop

It is clear from Table (9), that the penetration rate of Egyptian strawberries in the English market and each of Spain, Holland, Belgium, and Morocco as countries competing with Egypt in the English market was approximately 0.004, 0.0811, 0.0535, 0.0446, and 0.020, respectively, as an average for the study period.

6- Export potential:

This index expresses the country's power in exporting a certain product and can be measured by dividing the quantity of the country's exports to a specific market by the country's domestic production. The value of the index ranges between (0,1) and the higher it is above one, the more the country's strength in exporting and its ability to compete with other countries.

Table 9. Market penetration rate for Egyptian strawberries and the most important competing countries during the period (2013-2022)

years	English market				
	Egypt	Spain	Holland	Belgium	Morocco
2013	0.0043	0.0685	0.0670	0.0489	0.0287
2014	0.0044	0.0744	0.0833	0.0523	0.0163
2015	0.0020	0.0629	0.0939	0.0570	0.0189
2016	0.0016	0.0821	0.0693	0.0556	0.0107
2017	0.0011	0.0807	0.0716	0.0475	0.0067
Average of the first period	0.0027	0.0737	0.0770	0.0522	0.0163
2018	0.0017	0.0802	0.0678	0.0391	0.0054
2019	0.0020	0.0890	0.0550	0.0445	0.0144
2020	0.0035	0.1109	0.0739	0.0428	0.0063
2021	0.0121	0.0830	0.0435	0.0249	0.0372
2022	0.0086	0.0797	0.0274	0.0335	0.0549
Average of the second period	0.0056	0.0886	0.0535	0.0370	0.0236
General Average	0.0041	0.0811	0.0653	0.0446	0.0200

Source: collected and calculated from the database www.tradmap.org

Table 10. the export potential of Egyptian strawberries and the most important competing countries during the period (2022-2023)

Years	England				
	Egypt	Spain	Holland	Belgium	Morocco
2013	0.509	7.854	12.680	11.100	3.775
2014	0.511	8.668	15.296	11.644	2.207
2015	0.222	7.122	17.974	11.958	2.597
2016	0.179	9.440	13.355	12.562	1.514
2017	0.125	9.246	12.847	10.002	0.892
Average of the first period	0.265	8.420	14.301	11.420	1.964
2018	0.197	9.184	12.000	7.988	0.729
2019	0.216	10.344	9.659	9.750	1.934
2020	0.399	13.302	12.581	9.669	0.833
2021	1.324	9.753	7.559	5.602	5.388
2022	0.927	9.343	4.510	7.243	7.903
Average of the second period	0.461	10.286	8.696	7.889	2.187
General Average	0.349	9.306	11.151	9.491	2.072

Source: collected and calculated from the database www.tradmap.org

Index of Export Potential for Egyptian Strawberry Crop

Table (10). shows that the geometric average for the export potential of Egyptian strawberries in the English market and in Spain, Holland, Belgium, and Morocco reached about 0.349%, 9.306%, 11.151%, 9.491%, and 2.072%, respectively, during the study period, which means the necessity of exploiting export opportunities and increasing the presence of Egyptian strawberries in the English market and raising Egypt's share in front of competing countries.

Third: Factors affecting the English demand for Egyptian strawberries:

The study showed that England is one of the most important countries importing Egyptian strawberries. Therefore, this section examines the relationships between the external demand of the English market for strawberries and individual demand at the global level as well as at the level of the Egyptian market. The study of the English market's imports of strawberries shows that the most important markets from which England imports are Egypt, Belgium, Spain, Morocco, and Belgium during the period (2005-2022).

The set of independent variables for which data was available and which were subjected to study and analysis in this section are the average relative price of Egypt, Belgium and Africa in dollars per ton, the average relative price of Egypt to Spain, the average relative price of Egypt, Morocco, the average relative price of Egypt to Belgium, and the total British national income, during the period (2005-2022).

Statistical estimation of the function of the English individual demand for Egyptian strawberries:

To study the factors determining the average per capita share of the import quantity to England from Egyptian strawberries during the period (2005-2022), attempts were made to estimate the demand function for Egyptian strawberries in the English market using different mathematical models that include all variables related to the English demand for Egyptian strawberries, the best statistical estimation results that were reached were as the following:

$$\ln Y = 0.65 - 0.02 \ln X_2 + 0.61 \ln X_6$$
$$(1.3) \quad (-3.4)^* \quad (3.2)^*$$
$$F=15.65^* \quad R^{-2}=0.76$$

Where: Y: Expresses the share of the quantity of imports of Egyptian strawberries to England in kg per capita

X1: Expresses the average relative price of Egypt to Belgium in dollars.

X2: Expresses the average relative price of Egypt to Spain in dollars.

X3: Expresses the average relative price of Egypt to Morocco in dollars.

X4: Expresses the average relative price of Egypt to Belgium in dollars.

X6: Expresses the average English per capita income in thousand dollars

Source: collected and calculated from www.faostat.org www.world bank

The results of the statistical analysis of the English market demand function for Egyptian strawberries indicate the significance of the model used, as the calculated F value was greater than its tabulated counterpart, and the modified coefficient of determination for the function was about 0.76, which means that 76% of the changes in the individual demand for strawberries in the English market can be explained by the independent variables included in the equation. It is clear from the function that there is an inverse relationship between the average per capita share of the number of English imports of Egyptian strawberries in kilograms per capita and the average relative price of Egypt to Spain in dollars, as the lower the relative price of Egypt to Spain in dollars by 1%, the higher the average per capita share of strawberries by 0.02% annually, and the statistical significance of these rates was fixed at the usual levels of significance. The statistical significance of the average per capita share of the English citizen was also fixed, as with an increase in the annual individual income by 1%, the average per capita share of strawberries in the English increases by 0.61% annually, which means the importance of the income of the English citizen on the average per capita share of strawberry imports, as a basic determinant.

From the previous display, it became clear that Egypt's first competitor in the English market is the Spanish market, and this is natural given Spain's large market share in strawberry exports to the English market.

RECOMMENDATIONS

-Attention to allocating areas for export production of strawberries, and working on establishing an export agency and highly efficient export institutions to study global markets and their needs for strawberries.

-Focus on the quality of Egyptian strawberry production directed for export and improving its specifications.

-Working on developing some export policies that work to treat the export of Egyptian strawberries to foreign markets.

-Studying the markets of countries competing with Egypt in foreign markets, especially in terms of prices and export dates.

2 - A detailed study of the determinants of the English market's demand for strawberries in foreign markets, and not just limited to the Egyptian market.

REFERENCES

Amira Ahmed El-Shater, Amal Kamel Eid (2013), An Economic Study for Egyptian Flax Exports, Egyptian Journal of Agricultural Economics, Volume Twenty-Three, Issue Four, December.

Ismat Shalaby, Hanaa Shaddad (2006). "Economic Indicators of Egyptian Green Bean Exports", Egyptian Journal of Agricultural Economics, Volume 16, Issue 1, March

Dalia Abdel Hamid Youssef (2008), "A Study of the competitiveness of Some Egyptian Horticultural Crops", Department of Economics, Faculty of Agriculture, Ain Shams University, PhD Thesis

Mona Fakhry Georgy, Amal Ahmed Suwaifi (2019). An Economic Study for foreign Demand for Egyptian Grapes in Global Markets, Egyptian Journal of Agricultural Economics - Volume Twenty-Nine - Issue Two, June, 787-808

Sanjaya Baru and Suvi Dogra, (2015) Power Shifts and New Blocs in the Global Trading System (London, The International Institute for Strategic Studies.

Hnan Mahrous Ibrahem, and Mohamed Sayed Ahmed, (2019) The competitiveness of Egyptian dairy products in world markets, Middle East Journal of Applied Science, 9(1):167-183.

http://www.fao.org , www.Treadmap .org

الملخص العربي

مؤشرات القدرة التنافسية لصادرات الفراولة المصرية في السوق الانجليزي

نبيل على الامام سليمان ، ثناء النوبي أحمد سليم ، مني كمال رياض

يعتبر قطاع التجارة الخارجية من أهم القطاعات الرئيسية للنشاط الاقتصادي المصري، ويستمد هذا القطاع أهميته من ارتباطه الوثيق بتنمية الاقتصاد المصرى، وذلك لتوفيره مصادر النقد الأجنبى اللازم لتحقيق وتنفيذ برامج وخطط التنمية الاقتصادية، من خلال خلق فرص تصديرية حقيقية للمصدرين في الأسواق العالمية والإرتقاء بمستوى الإنتاج المحلي لمواجهة المنافسة فى الأسواق العالمية، وتتمثل مشكلة البحث في أنه علي الرغم من كبر النصيب السوقي للفراولة المصرية بالنسبة للسوق الانجليزي عن نظريتها الدول المستوردة لها ، حيث أن متوسط واردات السوق الانجليزي من الفراولة الي المصرية يبلغ نحو ١٨,٧٩% من جملة صادرات مصر من الفراولة الي الاسواق العالمية خلال الفترة (٢٠١٨-٢٠٢٢) مما يوضح مدى أهمية السوق الانجليزي بالنسبة لمصر كأهم دولة مستوردة من الفراولة المصرية ، إلا أن مصر لا يتعدى صادراتها من الفراولة إلي السوق الانجليزي نحو ٦,١٣% من إجمالي واردات السوق الانجليزي من الفراولة إلي الاسواق العالمية خلال الفترة (٢٠١٣-٢٠٢٢) حيث بلغ متوسط كمية صادرات مصر من الفراولة خلال فترة الدراسة بلغت حوالي ٢٣,٤٥ الف طن وتحتل دولة انجلترا المرتبة الاولي من كمية صادرات الفراولة المصرية بمتوسط كمية صادرات بلغت حوالي ٤,٤١ ألف طن تمثل نحو ١٨,٧٩% من متوسط كمية الصادرات المصرية من الفراولة ، ويلي انجلترا دولة بلجيكا ، المانيا ، السعودية ، روسيا ، الامارات وفي المراكز من الثانية الي السادس علي الترتيب وبمتوسط كمية صادرات مصرية بلغت حوالي 3.94 ، 2.64 ، 2.19،1.91، ١,٥٦ ألف طن لكل منهم علي الترتيب ، ان معدل اختراق الفراولة المصري في السوق الانجليزي وكل من اسبانيا ، هولندا ، بلجيكا ، المغرب كدول منافسة لمصر في السوق الانجليزي مثل نحو 0.004 ، ٠,٠٨١١ ، ٠,٠٥٣٥ ، ٠,٠٤٤٦ ، ٠,٠٢٠ ، ٠,٠٢٠ علي الترتيب كمتوسط لفترة الدراسة ، وأن قوة التصدير للفراولة المصرية في السوق الانجليزي وكل من اسبانيا ، وهولندا ، وبلجيكا ، والمغرب قد بلغت متوسطها الهندسي نحو ٠,٣٤٩% ، ٩,٣٠٦% ، ١١,١٥١% ، ٩,٤٩١% ، ٢,٠٧٢% علي الترتيب خلال فترة الدراسة الامر الذي يعني الي ضرورة استغلال فرص التصدير وزيادة تواجد الفراولة المصرية في السوق الانجليزي ورفع نصيب مصر امام الدول المنافسة .

الكلمات المفتاحية: القدرة التنافسية ، الميزة النسبية الظاهرية ، التنافسية السعرية.