Vol. 9. No.4. 2020

Contents available at:
www.crdeepjournal.org

International Journal of Environmental Sciences (ISSN: 2277-1948) (CIF: 3.654)

Full Length Research Article

Competitiveness of Egyptian Grapes exports in the most important world markets

Radhi, Khaleel[(1)]Shehata, Gaber[(2)]and Elgabery, Amal[(3)]
[(1)]Staff member, Faculty of Food Sciences, Al-Qasem Al-Akhdar University, Iraq
[(2)]Dept. of Agricultural Economics - Faculty of Agriculture (Saba Pasha) – Alexandria University, Egypt
(3) General Director and Director of International Practices Research – Egyptian Customs Authority, Egypt

ARTICLE INFORMATION

Corresponding Author:
Shehata Gaber

Article history:
Received:28-10-2020
Revised: 02-11-2020
Accepted:18-11-2020
Published: 25-11-2020

Key words:
Grapes crop – Egyptian exports - Competitiveness - World markets

ABSTRACT

Foreign trade plays an important role in any economy. Through foreign trade, countries can get everything they need from others in exchange for exporting their surplus production and benefit from the field of international specialization on which it is based. Export is one of the main pillars on which the Egyptian national economy depends on providing its foreign exchange needs that can be used to finance economic development programs in general, There was a fluctuation in the quantity and value of Egyptian agricultural exports, whether directed to the Arab markets or to other world markets, at the same time as the increase in the quantity and value of Egyptian imports in general, which in turn led to a steady increase in the Egyptian trade balance deficit, especially during the last few years . Therefore, the development of Egyptian agricultural exports is one of the most important objectives of economic planners and policy makers in light of the simultaneous local, regional and global economic changes. The Egyptian agricultural economic policy aims at developing and diversifying agricultural exports in which Egypt enjoys a competitive advantage in world markets, as well as the development of non-traditional exports, specially vegetables and fruit crops. The competitiveness of exports of grapes was measured by calculating some of the competitiveness indicators including market share index, market penetration rate, price ratio index, virtual comparative advantage index, geographical concentration index (Gini Hirschman) and the index of instability. The measurement of the external demand function on the quantity of Egyptian exports of grape in the world markets depends on the export price of the Egyptian grape, the amount of exports of American grapes, and the export price of the American grape. These variables also explain about 78.81% of the changes in the quantity of Egyptian exports of to the world markets. A study of the forecast results of the selected models until 2024 shows that the export value of grapes crop are expected to reach about $ 319.4 million in 2024, with an increase of about 52.7% compared to 2018. The research, based *on its findings, reached some recommendations that could benefit the Egyptian economic policy makers in this field.*

Introduction

Foreign trade plays an important role in any economy. Through foreign trade, countries can get everything they need from others in exchange for exporting their surplus production and benefit from the field of international specialization on which it is based. Export is one of the main pillars on which the Egyptian national economy depends on providing its foreign exchange needs that can be used to finance economic development programs in general, There was a fluctuation in the quantity and value of Egyptian agricultural exports, whether directed to the Arab markets or to other world markets, at the same time as the increase in the quantity and value of Egyptian imports in general, which in turn led to a steady increase in the Egyptian trade balance deficit, especially during the last few years (Abu Deif, 2008). Therefore, the development of Egyptian agricultural exports is one of the most important objectives of economic planners and policy makers in light of the simultaneous local, regional and global economic changes.

The Egyptian agricultural economic policy aims at developing and diversifying agricultural exports in which Egypt enjoys a competitive advantage in world markets, as well as the development of non-traditional exports, specially vegetables and fruit crops. Rely on them to increase Egyptian agricultural exports in the coming years, especially after the establishment of the World Trade Organization (WTO) .

It should be noted that the role of agricultural marketing in the light of contemporary global economic changes is no longer limited to delivering the product to the consumer, but also includes the work of innovation and innovation, both on the consumption and production or in marketing methods

themselves in line with the latest modern technologies that create a competitive advantage (Bassyiouni, 2013).

Research problem

Egyptian agricultural foreign trade is characterized by special features, most notably: the majority of Egyptian agricultural exports of raw materials, and the low relative importance of exports from manufacturing industries. In the world economy, the establishment of the World Trade Organization and some other economic blocs poses a reality that poses a challenge to agricultural exports in particular. But, the Egyptian agricultural exports in the coming years, especially after the establishment of the World Trade Organization. This is in addition to the role that agricultural marketing can play in light of the contemporary global changes. Therefore, the following question arises: What is the future of Egyptian agricultural exports and the means of development in the context of globalization?

Based on the research problem, the research aims in general to study the reality and the future of Egyptian agricultural exports grapes and means of development in the light of globalization.

Research methodology and data Sources

The research relied on the method of descriptive analysis through the use of arithmetic, geometric averages and percentages. during study (2002-2018). Box-Jenkins (ARIMA) models were used to predict the value of Egyptian exports of grapes. With the self-regression method with the moving average, as shown by the following equation:

$$Y_{it}=\beta_0+\beta_1 Y_{it-1}+\beta_2 Y_{it-2}+----------+\beta_\rho Y_{it-\rho}+\varepsilon_i+\theta_1\varepsilon_{it-1}+\theta_2\varepsilon_{it-2}+----+\theta\,\varepsilon_{it-q}$$

Autoregressive term(AR) **Moving Average term (MA)**

The research was adopted in obtaining secondary data published and unpublished by the Ministry of Agriculture and Land Reclamation, Central Agency for Public Mobilization and Statistics, Central Department of Agricultural Sector, FAO. Some researches, theses, studies and scientific books were also used

Results and discussion

First: The relative importance of the value of the most important agricultural export crops from the total Egyptian agriculturalexports:

A review of Table 1 data shows that the orange crop ranked first in the total value of Egyptian agricultural exports during the period (2002 - 2018), amounting to about 279.43 million US dollars, representing about 14.93% of the total value of agricultural exports. Cotton came second with an average of about 196.87 million dollars, accounting for 10.52% of the total value of agricultural exports.

Rice came in the third place with an average of about 170.73 million dollars, or about 9.12%, followed by onions with an average of about 125.62 million dollars by about 6.71%, then potatoes with an average of about 124.65 million dollars or about It was followed by grapes with an average of about $ 118.23 million, accounting for about 6.32% of the total value of agricultural exports during the study period. The average value of these crops amounted to about US $ 1,015 billion representing 54.27% of the total value of agricultural exports during this period .Beans, strawberries, medicinal and aromatic plants and tomatoes came in the seventh to tenth ranks with relative importance of 3.31%, 2.16%, 1.7% and 1.2% of the total value of Egyptian agricultural exports respectively during the period (2002– 2018) .due to the low relative importance of both potatoes such as vegetables and grapes as fruit crops in the total value of Egyptian agricultural exports, which called for their selection to discuss ways of developing the value of agricultural exports from them under globalization.

Table (1): Relative importance of the value of the most important agricultural export crops from the total Egyptian agricultural exports during the period from 2002 – 2018

No.	Name of crop	%
1	Orange	%14,93
2	Cotton	%10,52
3	the rice	%9,12
4	Onions	%6,71
5	potato	%6,66
6	Grapes	%6,32
7	Other crops	%45,73
	Total	%100

Source: Compiled from: *Central Agency for Public Mobilization and Statistics, Bulletin of Foreign Trade, various issues.www.capmas.gov.eg*

Second: Indicators of the efficiency of Egyptian agricultural exports grapes during the average period (2010-2018)

This section deals with the results of measuring the competitiveness of the most important Egyptian agricultural exports represented by grapes as one of the most important exports fruit crops by calculating the indicators of the efficiency of the Egyptian agricultural exports which include (market share index, market penetration index, competitive position index, geographic concentration index, or GiniHershman, virtual advantage index) over the average period (2010-2018).

Market share index of the most important Egyptian agricultural exports grapes in the most important international markets

-Market share index of Egyptian grape exports in the most important international markets:

Data from Table (2) shows that the market share of Egyptian grape exports in the total value of world grape exports ranged between a minimum of about 1,208% in 2010 and a maximum of about 3,986% in 2012 with an average of about 2,934% during that period. The market share of Egyptian grape exports in the international markets increased from about 1,208% in 2010 to about 3,287% in 2018, an increase of 172% from 2010.

Table (2): Development of Market Share Index of Egyptian Agricultural Exports of Grapes during the period (2010 – 2018)

Year	Grapes
2010	1.208
2011	2.875
2012	3.986
2013	3.195
2014	3.005
2015	3.095
2016	2.315
2017	3.443
2018	3.287
Average	2.934

Source: Compiled and calculated from FAO ،www.fao.org

Market penetration index for Egyptian grape exports in the most important international markets

Data from table (3) shows the increasing penetration rate of Egyptian grape exports to world markets, ranging from a minimum of about 0.2% in Italy and a maximum of about 47.3% in Netherlands. United Kingdom, Russia and Germany are among the most penetrated markets for Egyptian grape exports, with penetration rates of 30.4%, 1.6%, and 1.2% respectively during the average period (2010-2018).

Table (3): Average Market Penetration Rate for Egyptian Grape Exports in Major International Markets During Average Period (2010-2018)

Country	Quantity of Egyptian Grape Exports	State imports of grapes State	Production of grapes State exports	State exports of grapes	Market penetration rate
Netherlands	40,566	328,1	1,1	243,5	47,3
United kingdom	73,973	251,3	0,8	9,1	30,4
United Russia	11,557	368	344,1	0,4	1,6
Germany	17,438	310,5	1225,1	35,4	1,2
Italy	17,254	22,1	7649,7	474,6	0,2

Source: Compiled and calculated from FAO ،www.fao.org

*Price Ratio Index of Egyptian Grape Export Price Compared to Competing Markets***:**

The competitive position is affected by the price ratio among the main competing countries of the exporting countries. It is clear from the data in table (4) the increase in the price ratio of Egyptian grapes compared to the competing markets. For the Netherlands it was 2.13% , for Germany it weas1.91% , for the Russian Federation it reached about 1.19%, indicating Egypt's weakness in terms of price competitiveness of the grape crop due to its high export prices compared to other countries' markets.

Table (4): Price Ratio Index among the Most Important Countries of Egyptian Agricultural Exports of Grapes during the period (2010 – 2018)

Country	
United Kingdom	2.37
Italy	2.18
Netherlands	2.136
Germany	1.914
United Russia	1.194
Average	1.96

Source: Compiled and calculated from FAO ،www.fao.org

*Geographical Concentration Index (Gini Hirschman) for the most important Egyptian agricultural exports of grapes***:**

Geographical Distribution of Egyptian Grape Exports

Table (5) shows the multiplicity of international markets for importing Egyptian grapes, where there are several international markets for importing Egyptian grapes such as the United Kingdom, Netherlands, Germany, Italy, Russia, Belgium, UAE, Saudi Arabia, Kuwait, Sudan, Libya, Oman, Slovenia, South Africa, other countries. By studying the geographical distribution of the quantity and value of Egyptian grape exports during the average period (2010-2018), it was found that the UK ranked first in importing Egyptian grapes, with the average quantity of grapes exported to it reached 73,973 thousand tons representing about 34.87% of the average total quantity. Egyptian grape exports amounting to about 212.15 thousand tons with a value of about 74,319 million dollars representing about 35.05% of the average value of Egyptian grape exports of about 212.04 million dollars during the period (2010-2018) .While the Netherlands ranked second in the quantity of Egyptian grape imports, where the average quantity of grapes

exported to about 40.6 thousand tons, representing about 19.1% of the average total Egyptian exports of grapes, worth about 43.1 million dollars representing about 20, 3% of the average value of Egyptian grape exports, followed by Germany, Italy, Russia, Belgium, UAE, and Saudi Arabia with a percentage of 8.22%, 8.13%, 5.45%, 5.1%, 2.9%, 2.2%, respectively, of the total quantity of Egyptian grape exports during the period (2010– 2018) . It was also found that the geographic concentration of grape exports amounted to about 37%, while the geographic concentration of the value of grape exports was about 43% during the average period (2008-2016 .

It was also found that the average export price of Egyptian grapes among the different importing countries ranged from a minimum of about $ 706.8 / ton to Belgium and a maximum of about $ 1241 / ton for Slovenia.

*The apparent relative advantage of Egyptian grape exports in the most important world markets***:**
Data from Table (6) shows that the apparent comparative advantage index for Egyptian grape exports ranged from a minimum of about 8.77% in 2008 to a maximum of about 16.92% in 2016 with an average of about 13.14% during the average period (2010-2018). It was also found that the value of the apparent relative advantage index of Egyptian grape exports exceeded the correct one, which means that Egypt has a virtual comparative advantage in the export of grapes during the period (2010-2018). Exporting Egyptian Grapes.

*The instability index of Egyptian grape exports***:**
Data from table (7) shows that the instability index for the quantity of Egyptian grape exports was unstable and varied widely, ranging from a minimum of about 13.98% in 2009 and a maximum of about 274.23% in 2011, with an annual average of about 50, 5% during the period (2010-2018).

Table (5): Geographical Distribution of Egyptian Grape Exports During the Average Period (2010-2018)

Country	**Egyptian grape exports**	%	**Coefficient of geographical concentration of quantity**	**The value of Egypt's grapes exports**	%	**Coefficient of geographical concentration of value**	**Export price USD / ton**
United kingdom	73.973	34.87	0.122	74.319	35.05	0.123	1004.7
Netherlands	40.566	19.12	0.007	43.124	20.34	0.041	1063.1
Germany	17.438	8.22	0.001	18.056	8.52	0.007	1035.4
Italy	17.254	8.13	0.001	14.091	6.65	0.004	816.7
United Russia	11.557	5.45	0.001	12.454	5.87	0.003	1077.6
Belgium	10.797	5.09	0.001	7.631	3.6	0.001	706.8
UAE	6.139	2.89	0	6.641	3.13	0.001	1081.8
Saudi	4.67	2.2	0	4.972	2.34	0.001	1064.7
Sudan	3.422	1.61	0	2.667	1.26	0	779.4
Kuwait	3.371	1.59	0	3.355	1.58	0	995.3
Libya	2.531	1.19	0	2.519	1.19	0	995.3
Oman	2.522	1.19	0	2.836	1.34	0	1124.5
Slovenia	2.344	1.1	0	2.909	1.37	0	1241
South Africa	2.21	1.04	0	2.682	1.26	0	1213.6
other countries	13.353	6.29	0.001	13.783	6.5	0.004	1032.2
Total	**212.15**	**100**	**0.37**	**212.04**	**100**	**0.43**	**706.8**

Source: Compiled from: Central Agency for Public Mobilization and Statistics, International Trade Bulletin, different Issues, www.capmas.gov.eg

Table (6): Evolution of the Index of Comparative Advantage of Grape Exports during the Period (2010-2018)

Year	**Grape**
2010	8.77
2011	14.69
2012	12.77
2013	11.07
2014	13.11
2015	15.43
2016	11.28
2017	16.58
2018	16.92
Average	**13.14**

Source: Compiled and calculated from FAO ،www.fao.org

Table (7): The Evolution of the Instability Index for the Quantity of Egyptian Exports of Potatoes and Grapes Exports during (2010-2018).

Year	Potatoes	Grape
2010	13.77	62.85
2011	35.89	13.98
2012	32.05	81.26
2013	52	274.23
2014	38.19	54.39
2015	22.88	54.99
2016	17.32	15.58
2017	25.34	45.58
2018	14.26	51.75
Average	**25.47**	**50.54**

Source: Compiled and calculated from FAO ،www.fao.org

Third: Standard Estimation of External Demand Functions for Grapes in world Markets (2010-2018):

Standard Estimation of the Determinants of External Demand for Grapes

The standard estimation of the external demand functions of grapes in the world markets during the period (2002-2018) to identify the most influential variables in the demand for Egyptian agricultural exports from grapes in the world markets, after the use of different mathematical images of the functions are linear and semi-logarithmic and double logarithmic, where the best of these images were selected based on the t-values of the regression coefficients for the independent variables contained in the functions as well as the F and R^{-2} tests. The following is a review of the results of the standard estimation of external demand functions on Egyptian agricultural exports of grapes in the world markets during the period (2010-2018).

Standardization of External Demand for Egyptian Grape Exports in the World Markets

The estimation of the demand for Egyptian grapes in the international markets during the period (2002-2018) shows that the regression coefficients are consistent with the statistical and economic logic in terms of signal. International markets (Y) depend on the export price of Egyptian grapes in US dollars / ton (X_3), the quantity of US grape exports in thousand tons (X_5), and the export price of US grapes in US dollars / tons (X_7). Quantity of Egyptian Grape Exports Exported to International Markets.

$$\hat{Y} = 1151.8 - 0.205\,X_3 - 1.215\,X_5 + 0.421\,X_7$$
$$(-5.62)^{**} \quad (2.85)^{**} \quad (7.51)^{**}$$
$$F=20.8 \quad R^{-2}=0.788 \quad D.W=2.0$$

The linear model showed an inverse relationship between the quantity of Egyptian grape exports (Y) and the export price of Egyptian grapes in dollars / ton (X_3), where it was found that a single unit increase in the export price of Egyptian grapes leads to a decrease in the quantity of Egyptian grape exports about 0.205 thousand tons .It was also found that there was an inverse relationship between the quantity of Egyptian grape exports (Y) and the quantity of American grape exports per thousand tons (X_5), where it was found that a one-unit increase in US grape exports leads to a decrease in the quantity of Egyptian grape exports by about 1.215 thousand tons.

It was also found that there is a direct relationship between the quantity of Egyptian grape exports (Y) and the export price of US grapes in dollars / ton (X_7), where it was found that a single unit increase in the price of exporting American grapes leads to an increase in the quantity of Egyptian grape exports by about 0.421 thousand tons.

Fourth: The Future of Egyptian Agricultural Exports of Grapes:

This section discusses the future prospects of Egyptian agricultural exports and the value of agricultural exports of grape crops in Egypt until 2024.

Future projections of the value of Egyptian agricultural exports of grapes in Egypt up to 2024 using Asian smoothing models

Three prediction models were used: Single Asian Smoothing Model, Double Asian Smoothing Model (Brown Single-Teacher Method), and Holt Teacher Model. The preference of the model is based on the signature of the actual data in a graph to see if the data is static, ie random, meaning that it does not include a trend. In this case, the single Asian smooth smoothing model is best suited for forecasting, whereas if the data after its signature includes a trend (up or down) in this case Both the single-parameter Braun method and the teacher-specific Holt method are suitable for prediction in this particular case, and this is the requirement of the model's efficiency to predict depending on the lowest RMSE value because it is the best criterion for estimation (nonlinear estimation by OLS.

Table (8): External Variables Demand of Egyptian Grapes in world Markets During the Period (2002-2018)

Year	Export quantity	Local prod-uction	Local consu-mtion	Egyptian price export	Exported quantity from Chilly	Exported quantity from USA	Price export of Chilly	Price export of USA	Exchange rata
	10^3 ton	10^3 ton	10^3 ton	USD/ton	10^3 ton	10^3 ton	USD/ton	USD/ton	LE/USD
2002	2.9	1075	1074	415	481	599	1038	1038	3.472
2003	4.6	1079	1075	284	559	629	1042	1031	3.973
2004	6	1074	1068	303	1066	583	753	1173	4.5
2005	7.4	1179	1190	395	1268	602	738	1318	5.851

2006	14	1275	1261	741	1286	691	787	1316	6.196
2007	25	1392	1369	684	1234	489	878	1791	5.779
2008	28	1432	1405	786	1371	508	825	1814	5.733
2009	54	1485	1431	1110	1587	587	899	1858	5.635
2020	196	1531	1338	823	1423	529	925	1986	5.433
2011	155	1370	1236	1457	843	566	1775	2057	5.545
2012	274	1360	1088	725	924	564	1764	2322	5.622
2013	623	1321	700	337	886	553	1814	2459	5.933
2014	83	1379	1261	2690	924	607	1903	2422	6.056
2015	89	1435	1027	2058	798	597	2106	2409	6.87
2016	246	1597	1356	986	813	512	1827	2433	7.078
2017	124	1687	1525	1940	763	645	2016	1921	7.726
2018	117	1691.1	1559	1782	849	512	1307	2366	10.187
Ave-rage	**121**	**1374**	**1233**	**1030**	**1004**	**575**	**1317**	**1866**	**5.976**

Source: Compiled from:
1- Central Agency for Public Mobilization and Statistics website: www.capmas.gov.eg
2. Website of the Foreign Trade Map www.trademap.org

Table (9) shows the future projections of the value of Egyptian agricultural exports grapes up to 2024 through the trade-off between the exponential smoothing models mentioned above .The study of the results of the prediction of the selected models until 2024 shows the preference of the teachers' Holt method. It is expected that the value of agricultural exports of the value of grape exports is expected to reach about $ 319.4 million in 2024, an increase of 52.7% over that of 2018.

Table (9): Future Outlook for the Value of Major Agricultural Exports of Grapes in Million Dollars to 2024 Using Asian Smoothing Models

Variable	2020	2021	2022	2023	2024
Value of grape expoerts	249.3	269.8	289.4	309.3	319.4

Source: Calculated from the results of the analysis of data table (1).

Table (10): The trade-off between Asian smoothing models used in the prediction of selected models

Item	**Root Mean Square Error (RMSE)**			**Model**
	Single	**Brawn**	**Holt**	
Value of grape exports	37.7	40.6	35.4	Holt

Source: Compiled from:Central Agency for Public Mobilization and Statistics, Bulletin of Foreign Trade, various issues. www.capmas.gov.eg

Fifth: Means of developing Egyptian agricultural exports in the light of globalization

This section includes some ways to develop Egyptian agricultural exports in the context of globalization through the use of some studies and research that have been interested in this area, and some ways that may have a positive impact on the development of Egyptian agricultural exports to the global market can be developed as follows:

• Take a number of encouraging measures to increase Egyptian exports, which are represented in legislation and institutional measures that support the business climate in general, such as reviewing the legislation regulating the import and export law and regulations, and simplifying export and import procedures.

• Studying global demand trends to identify promising and future export sectors.

• Work to build and develop the export capabilities of Egyptian exporters through the development and delivery of technical support programs to develop facilities for export.

• Organizing and developing Egyptian participation plans in international exhibitions.

• Prepare training programs for Egyptian exporters on the concepts of e-commerce and e-marketing in accordance with the best standards and specifications to ensure compliance with the requirements and requirements of importing countries.

• Taking advantage of the comparative and competitive advantages enjoyed by Egypt in many agricultural crops, especially horticultural crops of vegetables and fruits and non-traditional agricultural crops such as medicinal and aromatic plants and cut flowers.

• Assisting small and medium-sized farmers in aggregating agricultural exploitation and following good agricultural practices throughout the production stages in order to meet the European and foreign export conditions and specifications (Euro Gap - Global Gap).

• Taking advantage of the foreign, regional and Arab agreements in which Egypt participates (WTO, GAFTA, COMESA, EU), in addition to bilateral agreements and protocols between Egypt and other countries such as Russia and China.

• Establishing a specialized center to examine Egyptian exports accredited by international accreditation bodies.

• The application of an intelligent market information system that provides all the data on the market, especially importers around the world and gives an order to the credible importers in dealing.

• Preparing specialized promotional campaigns inside and outside Egypt to introduce and promote the quality of the Egyptian product.

• Encourage investment in marketing methods such as the development of internal transport and the use of advanced vehicles equipped with refrigerators to accelerate the process of transport and protection of marketed goods from inappropriate weather conditions and the use of modern technology in loading and unloading.
• The need to follow the registration code numbering on each package exported abroad by magnetic strips translated into recognized data required to help the speed of circulation and accounting and registration and data storage and electronic data.
• Adoption of environmental standards in the field of agricultural, food and export industries, which is known as the model (ISO19000), which requires the use of chemical fertilizers and pesticides and the expansion of the use of biological control.
• Production for export should be a general and comprehensive target for all agricultural producers in the sense that it is for all agricultural commodities produced, not just the part exported.
• Meet the quality requirements as one of the most important elements and build the competitiveness of the Egyptian agriculture and industry to face the challenges faced by the Egyptian product in the local or international markets, especially in light of the openness of the markets and the competition witnessed to satisfy the consumer and provide its requirements and needs.

Conclusion

Foreign trade plays an important role in any economy. Through foreign trade, countries can get everything they need from others in exchange for exporting their surplus production and benefit from the field of international specialization on which it is based. Export is one of the main pillars on which the Egyptian national economy depends on providing its foreign exchange needs that can be used to finance economic development programs in general.

Egyptian agricultural foreign trade is characterized by special features, most notably: the majority of Egyptian agricultural exports of raw materials, and the low relative importance of exports from manufacturing industries. In the world economy, the establishment of the World Trade Organization and some other economic blocs poses a reality that poses a challenge to agricultural exports in particular. But the Egyptian agricultural exports in the coming years, especially after the establishment of the World Trade Organization. Based on the research problem, the research aims in general to study the reality and the future of Egyptian agricultural exports grapes and means of development in the light of globalization.

The competitiveness of exports of grapes was measured by calculating some of the competitiveness indicators including market share index, market penetration rate, price ratio index, virtual comparative advantage index, geographical concentration index (Gini Hirschman) and the index of instability. The measurement of the external demand function on the quantity of Egyptian exports of grape in the world markets depends on the export price of the Egyptian grape, the amount of exports of American grapes, and the export price of the American grape. These variables also explain about 78.81% of the changes in the quantity of Egyptian exports to the world markets.

A study of the forecast results of the selected models until 2024 shows that the export value of grapes crop are expected to reach about $ 319.4 million in 2024, with an increase of about 52.7% compared to 2018. The research showed some tools to develop Egyptian agricultural exports in the light of globalization.The research, based on its findings, reached some recommendations that could benefit the Egyptian economic policy makers in this field.The research based on its findings, reached some recommendations that could benefit the Egyptian economic policy makers in this field.

References

[1]Abbas, Abu Deif (2008), Economic Study for the Development of Agricultural Exports to Arab Countries, Master Thesis, Department of Agricultural Economics, Faculty of Agriculture, Al-Azhar University..
[2] Abdel-Latif, Hanaa (2007). Some Determinants of Egyptian Potato Demand in its Most Important International Markets, Egyptian Journal of Agricultural Economics, Volume XVII, Number 2, June.
[3] Bassyouni, Gaber and others (2009). A standard model for the impact of the efficiency of national and agricultural investment in the Arab Republic of Egypt in light of the global economic crisis, the Egyptian Association for Agricultural Economics, the seventeenth conference of agricultural economists, from 14 to 15 October .
[4] Bassyouni,Gaber (2013), Contemporary Trends in Agricultural Marketing and Total Quality Management, Dar Al Wafaa for Printing and Publishing, Alexandria, Egypt.
[5] Bassyouni,Gaber (1998). The Importance of Products Quality, CIHEAM, Mediterranean Agronomic Institute of Zaragoza, Spain, November 1998.
[6] Bassyouni,Gaber (2009). An Economic Study of Egyptian Foreign Agricultural Trade and its Relationship with European Union, 2nd International Economic Conference, Kaposvar University, Kaposvar, Hungary, 2-3 April 2009.
[7] El-Gabry, Amal (2018).The Future of Egyptian Agricultural Exports and Means of Development in the Context of Globalization, Ph.D. Thesis, Department of Economics and Agribusiness Management, Faculty of Agriculture, Alexandria University.
[8] Mohamed, Abdel-Wakil and. HamedAmer (2009). Estimating the Demand Functions of Egyptian Potato Exports to the EU Using the Optimal Demand Model, The Egyptian Journal of Agricultural Economics, Volume 19, Issue 4, December.
[9] Toaima, Engy (2016)., Analytical Economic Study of the Most Important Exports of Egyptian Food Industries, PhD Thesis, Department of Economics and Agribusiness Management, Faculty of Agriculture, Alexandria University.
[10] Ministry of Agriculture and Land Reclamation (2013). Economic Affairs Sector, Agricultural Statistical Bulletin.
[11]Websites
FAO website www.fao.org
Trade Map website www.trademap.org
The website of the Central Agency for Public Mobilization and Statistics www.capmas.gov.eg