



## **An Analytical Study of The Competitive Ability of the Egyptian Agricultural Exports of Some Vegetables and Fruit Crops in the Kingdom of Saudi Arabia Market**

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**Abstract:** Agricultural trade is essential for growth, poverty reduction, and provide currency to achieve the economic development in Egypt, Egyptian agricultural exports suffer from the low market share in the Saudi market, which indicates the weak competitiveness of Egyptian agricultural exports of products, such as onions, grapes and oranges. Therefore, the primary objectives of this research were to identify and analyze the competitiveness and the potentials of Egypt's three main agricultural export commodities "onions, grapes and oranges". through studying the current situation in the World and in the Saudi Arabia market and study the most important factors effecting its competitiveness capabilities in the in Saudi Arabia market, To achieve the research objectives, the research used descriptive and analytical statistical methods, The results revealed that Although Egypt suffers from limited water resources, Egypt has a comparative advantage to produce some fruits and vegetables, especially during the off-season periods, on the other hand, Egypt doesn't have good export competitiveness, due to the lack of accurate data about the actual cultivated area and production, and hence the inaccuracy in estimating the surplus for export, lack of marketing researches on the foreign markets, the lack of promotional programs. Additionally To increase our export base in international markets and KSA market the research results had recommended that: Establishment of accurate and a comprehensive database for the Egyptian Agricultural exported products and share this information with producers, in addition to studying the major and promising markets to Egyptian of Agricultural exported products, Attracts foreign direct investment to support the competitiveness of Egyptian Agricultural exports.

[Dr. Ekram Ahmed Elsayed, Dr. Esam Mohamed Zaki, Dr. Nashwa M Mohamed Samir. **An Analytical Study of The Competitive Ability of the Egyptian Agricultural Exports of Some Vegetables and Fruit Crops in the Kingdom of Saudi Arabia Market.** *Nat Sci* 2020;18(12):31-41]. ISSN 1545-0740 (print); ISSN 2375-7167 (online). <http://www.sciencepub.net/nature>. 5. doi:[10.7537/marsnsj181220.05](https://doi.org/10.7537/marsnsj181220.05).

**Keywords:** Competitiveness, agricultural exports, onions, grape, and orange, Egypt, KSA.

### **Introduction:**

The agricultural sector is the third largest economic sector; its share about 16% in the GDP, in the 1990s declined to 11.5% year 2019, there for the Egyptian government has been interested to strength the competitiveness of agricultural products in local and international markets, with the aim of obtaining the largest share of markets, by improve productivity and raise the level of performance and effectiveness and then increase wealth and prosperity, which requires the integration of performance between human and productive institutions and country, with the legislative framework; the competitiveness of a country cannot increase based on an economic activity, but rather is the competition and integration of all activities in the country; However, Grapes, oranges, potatoes and onions considered the main export Crops in Egypt, Identification of products which are highly competitive in the world market. Identification of the markets for agricultural products is the first steps for development for crops, and

provides an insight to the farmers to decide on what individual crops can be grown in order to reap economic benefits, it was noted that the major export destinations of Egypt agricultural products are the United Arab Emirates, and Saudi Arabia. Saudi Arabia market was found to be the major export destinations for the products that are highly competitive, and currently suffer from fluctuations in quantities and value. This paper explores and analyzing the competitive situation of Egyptian agricultural exports in the Saudi market by measuring competitive indicators for selected crops, onions, grapes and oranges in the Saudi market.

### **Country Selection:**

The Kingdom of Saudi Arabia was chosen due to, Saudi Arabia is the largest economy in the Middle East and one of the richest Arab country therefore Saudi customers have high purchasing power, which reflects positively on their purchasing capabilities, as

well as the dependence of Saudi Arabia to meet most of its food needs on import, Saudi Arabia is a consumption oriented economy, Saudi people are highly adaptive to change, the similarity of consumer desire, tastes and preferences, which will help to oriented exports, in addition to the proximity of distance and the multiplicity of transportation between Saudi Arabia and Egypt.

**The Problem of the study:**

Egyptian policies makers seek to develop exports and improve the export capacity through the adoption of the Agricultural Sustainable Development Strategy 2030 (ASDS), which aimed to enhance and increasing the competitiveness of agricultural export in international markets (MALR, 2009), world trade increases the level of competition faced by Egyptian local producers in international markets, therefore, the problem statement of this study was; Egyptian agricultural exports suffer from the low market share in the Saudi Arabia market, which indicates the weak competitiveness of Egyptian agricultural exports of products, such as onions, grapes and oranges.

**Objectives of the study:**

The primary objectives of this research were to identify and analyze the potentials of Egyptian of Some Vegetables and Fruit Crops export " onion, grape and orange " through studying the current situation in the World and in the Saudi Arabia market, and study the most important factors effecting its competitiveness abilities in the Saudi Arabia market, and will be used as baseline for proposing strategies that can be used to the level of competitiveness.

**Methodology and data sources:**

The research used the descriptive and quantitative method, to study the Competitive Situation of Egyptian Exports of Some Vegetables and Fruit Crops in the Saudi Arabia Market. The research relied on achieving its goals on the published and unpublished secondary data and reports of Ministry of Agriculture, the Central Agency for Public Mobilization and Statistics,... etc., in addition to in addition to websites, reports and studies issued by the authorities concerned with the subject of the research and was used to measure the competitiveness indicators.

The regression model was used to explain the factors that affect demand on the most important Egyptian agricultural exports in the Kingdom of Saudi Arabia market, as well as indicators of the Egyptian agricultural exports competitiveness, the research also conducts stepwise regression analysis to determine most important factors affecting the demand of selected crops, and the model was formulated as follows:

**Egyptian agricultural export competitiveness indicators:**

- **Relative Comparative Advantage:** is measured by the following equation, (Balassa, B., 1989);

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

$X_e^j$  : The exports value of a commodity j for country e

$X_e^a$  : Total value of agricultural exports of the country e.

$X_w^j$  : The total world exports value of commodity j.

$X_w^a$  : The total value of world agricultural exports.

- **Price Competitiveness:** ( $P_{ci}/P_{it}$ ), where;

$P_{ci}$ : The exports price of a commodity i for a competing country c.

$P_{ei}$ : The exports price of a commodity i for country e.

- **Market Penetration Rate:**

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

$EX_{ij}$  : The quantities of Country's export of a commodity j to importing country i.

$Q_{ij}$  : The production of importing Country i of a commodity j.

$M_{ij}$  : The imports of importing country i of a commodity j.

$X_{ij}$  : The exports of importing country i of a commodity j.

- **Market Share:**

$$\frac{X_{ij}}{M_{ik}} * 100$$

Where;

$X_{ij}$  : Exports of the exporting country j of the commodity

$M_{ik}$  : total imports of the importing country i.

**stability Coefficient** (Ahmed; 1985):

$$\frac{|(y_i - \hat{y}_i)|}{\hat{y}_i} * 100 \text{ where:}$$

$y_i$  : actual value of exports variable;

$\hat{y}_i$  : IS estimated value of exports variable.

**Export Capacity:**

$$\frac{X_{ij}}{P_{ij}} * 100$$

: where;

$X_{ij}$  : Exports of the exporting country j of the commodity i.

$P_{ij}$  : The production of exporting Country i of a commodity j.

**Factors affecting the most important Egyptian agricultural exports of the Saudi market:** is measured by the following equation;

$$\hat{Y} = a \pm b_1x_1 \pm b_2x_2 \pm b_nx_n \text{ where;}$$

$\hat{Y}$  : The quantities of Country's export of a commodity j to importing country i.

$x_1$ : Percentage of the competing country's exports of commodity j to Egypt's exports of commodity j.

$x_2$ : Percentage of the exporting price of competing country's to Egypt's export price of commodity j.

$x_3$ : Non- stability Coefficient of Egypt's exports quantities or competing countries for a commodity j.

$x_4$ : Market penetration rate of Egypt or competing countries for a commodity j.

**3. Results:**

**Competitiveness** was defined as the degree of flexibility that enables the economy to adapt to the structural variables that are expected to occur at the local and international levels, or, they are some measures that improve the country's commercial performance, which reflects positively on the trade balance and / or that lead to a noticeable shift in the composition of exports towards added value or high technology. The concept of competitiveness varies according to the subject of the study. Sector level competitiveness, It is the ability of companies of a specific sector in a country to achieve continuous success in international markets without relying on government support and protection, or is the institution's ability to compete in terms of internal quality and efficiency in the use of its resources in order to ensure conditions for economic viability and productivity, or is the ability of the commodity or service productive sector to achieve high added value, within a business environment, with flexible and organized legislation, appropriate to economic developments, and within effective mechanisms of market forces, in terms of suppliers and consumers, as well as freedom to enter and exit from the labor market. **Export competitiveness** was defined as the

ability of a firm to compete in domestic and international markets. **The determinants of competitiveness** may be a hindrance or a catalyst for success in global competition, some factors can be controlled, while others are difficult to control. Michael Porter has identified three pillars of the national competitive system that contributed to shaping the climate for corporate performance. First: the availability of Production elements: such as employment, arable land, natural resources, infrastructure, and capital. Second: local demand: domestic demand precedes future expectations for global demand, and thus contributes to giving a vision to institutions for their use in their production and marketing strategies, Third: connected and supportive industries that arise through technology Common distribution channels, skills and clients, and thus contribute to raising the level of innovation.

**The Egyptian agricultural trade performance during the average period (2000-2018):**

Analysis the agricultural sector and its performance over time identifies constraints to increasing production and exports, Fig (1), showed that the Egyptian agricultural export witnessed an increase from 2007-2010 reach to its peak, then declined during (2011- 2012), it began to increase gradually during since 2013 till now.

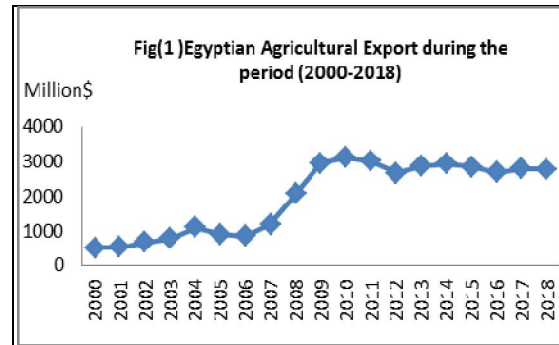


Table (1) clarified that the value of agricultural exports reported significant statistically increase about 4.7% of the average, as was the coefficient of determination was about 0.79, which means that 79% of the changes in the agricultural exports due to factors which reflect the impact the factor of time. As to agricultural imports, reported statistically significant increasing trend, at an annual rate of 6.3%. Table (1) clarified that there is a deficit in the Egyptian agricultural trade balance, reported statistically significant increase, amounted to about 3.7% of the average.

**Table (1): General trend equations for The Egyptian agricultural trade performance during the average period (2000-2018).**

variable	$\alpha$	$\beta$	T test	average	growth rate	R <sup>2</sup>	F
Agricultural exports (\$ billion)	265.7	174.4	2.93**	1.92	9.1	0.79	8.6**
Agricultural imports (\$ billion)	1612.5	250.6	3.37**	3.99	6.3	0.41	11.4**
agricultural trade balance (\$ billion)	1346.8	-76.2	4.77**	1135	6.5	0.08	22.8**

\*\* Significant at 0.01 \* significant at 0.05 Source: Central Agency for Public Mobilization and Statistics, (CAPMAS).

### Geographical distribution of Egyptian agricultural crops exports:

The geographical distribution of Egyptian agricultural exports as shown in table (2), It can be noted that Arab countries and European Union are

major trade partners with Egypt, in quantities and values, while exports to Africa countries is still decline. This is indicating that Egypt's agricultural trade is concentrated in a limited number of countries.

**Table (2): Geographical distribution of Egyptian agricultural crops exports during ( 2014-2015-2015/2016).**

	2014/15		% of exports to total quantity	% of exports to total value	2015/16		% of exports to total quantity	% of exports to total value	Change %	
	Quantity 1000 ton	Values million \$			Quantity 1000 ton	Values million \$			quantity	value
Arab Countries	1440	836	48.9	50.8	1634	889	50.4	48.6	13	6.3
European Union Countries	616	402	20.9	24.4	703	487	21.7	26.6	14	21
European Countries	685	287	23.2	17.4	605	272	18.7	14.9	-12	-5
Asia	183	96	6.2	5.8	273	151	8.4	8.3	49	57
Africa	15	11	0.51	0.67	16	13	0.49	0.71	11	18
Americas & Australia	17	14	0.24	0.85	11	18	0.34	0.98	49	32
Total	2947	1646	100.0	100.0	3243	1830	100.0	100.0	10	11

Source: Agriculture Export council (AEC). Electronic bulletin No 29, May 2016.

### Relative importance of Egyptian agricultural crops exports:

Egypt's major export for world and Saudi market are Fruits and vegetables due to increased demand. Table (3) clarified that the relative importance of the value of Egyptian agricultural crops exports, orange,

onion, potatoes and grapes representing about 28.42%, 12.4%, 9.3% and 4.9% respectively in 2015/2016 of the exported commodities. It was clear that the selected crops represent about 45.63% of the total value of Egyptian agricultural exports year 2015/2016.

**Table (3): Relative importance of Egypt's agricultural crops exports year 2015/2016.**

Crops	2015/16	
	% of exports to total quantity	% of exports to total value
Fresh Oranges	41.1	28.4
Onion	17.1	12.4
Potatoes	12.0	9.3
Grapes	1.23	4.9
Others	28.65	45.1
Total	100.0	100.0

Source: Agriculture Export council (AEC). Electronic bulletin No 29, May 2016.

It is clear from Table (4) Arab countries which exports agricultural crops from Egypt are limited as Saudi Arabia, Kuwait, the United Arab Emirates, Jordan, and the Kingdom of Saudi Arabia represent about 19%, 17.4% of the total amount and value of Egyptian agricultural exports in 2015/2016.

#### Egyptian agricultural exports:

Increasing competitiveness of Egyptian agricultural commodities depends on commit to the

required specifications, such as the decline of pesticide residues in agricultural exports, and the permissible percentage of chemical fertilizers, in addition to many factors, such as the response of the demand for Egyptian agricultural exports to the change in the ratio of international prices to local prices, the efficiency of export performance, and etc. the indicators of international trade of some Egyptian agricultural commodities:

**Table (4): Egyptian agricultural exports Destinations, year 2015/2016.**

Country	2015/16	
	% of exports to total quantity	% of exports to total value
Saudi Arabia	18.99	17.38
Kuwait	7.31	8.42
United Arab Emirate	6.23	5.74
Jordan	2.74	2.73
Russian Federation	15.88	11.91
Netherland	5.03	5.25
United Kingdom	4.41	6.01
Lebanon	3.33	2.84
Italy	3.02	3.99
Libya	2.93	2.30
India	2.53	2.51
Bangladesh	2.07	1.75
Belgium	1.97	2.30
Germany	1.63	3.61
Oman	1.60	1.26
Others	20.32	21.97
Total	18.99	17.38

Source: Agriculture Export council (AEC). Electronic bulletin No 29, May 2016

Table (5) clarified the onion export quantities, values and prices, reported a statistically significant increase during the average period (2000-2018), The quantity and value of onion exports have increased annually by 6.64%, 14.4% and 10.4% respectively, which reflect the relative importance of onion exports value to agricultural export value ranged between a minimum limit of 2.4% in 2000 and a maximum limit of 8.9% in 2015, with an average 4.78% during the period (2000-2018).

The quantities, values and price of orange export reported a statistically significant increase trend during the average period (2000-2018), with an annual

growth rate by 11.7%, 13.7% and 5.8% respectively, which reflect the relative importance of orange exports value to agricultural export value fluctuating by 11.9% during the average period (2000-2018).

Table (5) clarified the quantity, value and price of grapes exports have growth annually rate of 12.13%, 15.8% and 10.8% respectively during the average period (2000-2018), with relative importance of grape exports value to agricultural export value ranged between a minimum limit of 0.2% in 2000 and a maximum limit of 8.4% in 2012, with an average 4.48% during the average period (2000-2018).

**Table (5): General trend equations for the value and quantity of Egypt Oranges, grapes, and onions exports during the average period (2000-2018).**

Crops	Annual growth rate %			Relative importance	
	Quantity	Value	Price	Minimum Limit	Maximum Limit
Onion	6.64	14.43	10.4	2.4	8.9
Oranges	11.7	13.7	5.8	3.9	18.3
Grapes	12.13	15.8	10.8	0.2	8.4

Source: Agriculture Export council (AEC). Electronic bulletin No 29, May 2016.

**Revealed Comparative Advantage:**

The Revealed Comparative Advantage (ARC), divides a certain country's exports of a specific good by the total international exports of that good (Porter, 1990; Sanjaya, 2001), Egypt has the comparative advantage in producing some vegetables and fruits, the value of Revealed Comparative Advantage is affected by internal and external factors, Such as climate, irrigation water availability and rain, availability of labor and its cost, price of competitors, the competition policies that follow Competing countries,

and quantity of production, in addition, the conditions, specifications and standards required by international markets for these products. table (6) clarified the analyses of revealed comparative advantages indicator for Egypt's orange, grapes and onion exports, Egypt's has relative advantage in the global markets, the value of revealed advantage coefficient of orange, grapes and onion crops has exceeded than one during the average period (2000 - 2018), and it was estimated at 14.15, 2.91 and 10.61 respectively.

**Table (6): Competitiveness of Egypt's Oranges, grapes, and onions exports in the world markets during the average period (2000-2018).**

Crops	RCA	stability rate (STR) %		export capacity
		Price	Quantity	
Oranges	14.15	25.5	34.4	24.2
Onions	10.61	34.3	24.2	23.04
Grapes	6.61	29.1	57.5	7.2

Central Agency for Public Mobilization and statistics (CAPMAS). - [www.Comtrade.com](http://www.Comtrade.com)., Food and Agriculture Organization (FAO).

**Non-stability Coefficient:**

To expresses the degree of stability of the country in prices and quantities of exports of a particular crop, higher value of coefficient, reflect on higher degree of instability.

Table (6) clarified the Non-stability of prices and quantities of studied crops export, the Non-stability coefficient of orange exports price and quantity estimated of 25.5%, 34.4% respectively, during the average period (2000-2018). Non-stability coefficient for grapes price and quantity about 29.1%, 57.5% during the average period (2000-2018) respectively. Non-stability coefficient of onion exports price and quantity about 34.3%, 24.2% respectively, during the average period (2000-2018).

**Export Capacity:** The value of export capacity coefficient is directly proportional to the competitiveness ability of the country's exports of a particular crop. table (6) shown export capacity coefficient of orange, grapes, onion exports estimated of 24.2%, 7.18% and 23.04% during the average period (2000-2018) respectively.

The export price is an important indicator, in order to attract more import markets in light of the qualitative convergence of the commodity. Table (7) shows that Egypt can sell orange at a lower price than some competitor as it can produce them at a lower opportunity cost, This means having a price advantage for the exported commodity and better competitiveness, Egypt enjoys the lowest price of orange exports at\$ 468 per ton during the average period (2012-2018), Egyptian orange export price were less than competitors such as South Africa, Turkey, Morocco, Spain \$529,582,592,764 per ton during the average period (2012-2018), the results show that Egyptian grapes export price were less than competitors such as Spain, Italy and China and Egypt the lowest price, at 2030 per ton during the average period (2012-2018). While Egyptian onions exports are the lowest price at \$469 per ton during the average period (2012-2018), Egypt can sell onions at a lower price than the competitor as China, and USA.

**Table (7): Oranges, grapes, and onions export prices in Egypt and competitors countries in the world market during average period (2012-2018).**

Orange export prices										
Country	Greece	Egypt	South Africa	Turkey	Morocco	Spain	Italy	Australia	Netherland	USA
Price \$/ton	465	468	529	582	592	764	868	948	981	1008
Price ratio	0.99	1.00	1.13	1.24	1.26	1.63	1.85	2.03	2.10	2.15
grapes export prices										
Country	Turkey	South Africa	Chili	Egypt	Spain	Italy	China			
Price \$/ton	1464	1643	1933	2030	2039	2360	2707			
Price ratio	0.72	0.81	0.95	1.00	1.00	1.16	1.33			
onions export prices										
Country	Turkey	Pakistan	India	Russia Federation	Iran	Egypt	China	USA		
Price \$/ton	160	206	294	298	309	469	540	705		
Price ratio	0.34	0.44	0.63	0.64	0.66	1.00	1.15	1.50		

Source: Food and Agriculture Organization (FAO). - Central Agency for Public Mobilization and statistics (CAPMAS). - [www.Comtrade.com](http://www.Comtrade.com)

#### Export Calendar for Studied Crops to the Kingdom of Saudi Arabia in 2017:

Egypt has a opportunity to export some fruits and vegetables to the Kingdom of Saudi Arabia market, especially during the off-season periods, The total number of main markets to which Egypt exports grapes is about 12 markets, and the most important Arab markets for exporting Egyptian grapes are: United Arab Emirates, Saudi Arabia, Kuwait and Oman. Exporting Egyptian grapes in Saudi market is the longest period of export, where exports to market start from May to November, Table (8). The total quantity of exporting Egyptian oranges amounted to 1.243 million tons, as the number of main markets to which Egypt exports oranges reached about 16

markets, and the most important Arab markets for the export of Egyptian oranges are Saudi Arabia, United Arab Emirates, Iraq, Kuwait and Jordan. The Saudi market is the most important imported markets for orange crop, which absorbs about 16.2% of the total Egyptian exports of oranges, where it imports throughout the year Table (8). The total exported quantity of onions amounted to 427 thousand tons, and the most important Arab markets for exporting Egyptian onions are the Kingdom of Saudi Arabia, United Arab Emirates, Oman, Libya, Iraq and Lebanon. Egyptian onions are exported during the year due to its capability for storage. The Saudi market is considered one of the most important markets for onions crop.

**Table (8): Egypt's Agricultural Exporting Agenda For a Selective group of Fruit & Vegetable Crops to Saudi Arabia year 2017 (thousand ton ).**

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total	%
Grapes	0.0	0.0	0.01	0.0	0.4	4.99	2.4	1.1	0.49	0.52	0.07	0.02	9.1	6.5
Oranges	34.5	33.4	38.9	18.7	23.5	7.6	3.14	0.34	0.0	0.03	11.1	30.3	201.5	16.2
Onion	6.6	3.3	3.7	5.02	22.4	15.8	19.1	17.2	10.7	20.1	20.4	20.4	164.7	38.6

Source: MALR, Central Administration of Agricultural Quarantine, General Union of Producers and Exporters of Horticultural Crops, Arab Republic of Egypt, Ministry of Agriculture and Land Reclamation, 2017.

**Market Share of Egyptian Oranges, grapes, and onions exports in the Saudi market during (2000-2018):**

Egypt export basket to KSA consists of orange, grapes and onions. Egypt's share in KSA oranges, onions and grapes import about 34.55%, 59.04%, 10.91% respectively, during the average period (2012-2018) average, Table (9) shows the results obtained from price competitiveness it was found that Egyptian onions don't have a competitive price advantage in the Saudi market, as the value of Price Competitiveness

Index reached about 0.251 of average (2012-2018), although it contribution 59.04% of the market share. the Egyptian oranges don't have a price competitive advantage in the Saudi market, the price competitiveness index of reached about 0.29 of average period (2012-2018), Likewise, Egyptian grapes don't have a competitive price advantage in the Saudi market, where the price competitiveness index of Egyptian grapes reached about 0.01 of average (2012-2018), this negatively affected the market share of Egypt in the Saudi market of grapes.

**Table (9): Market Share and Market Penetration of Egyptian Oranges, grapes, and onions exports in the Saudi market during (2000-2018).**

description	Market Share			Market penetration rate		
	oranges	grapes	onions	oranges	grapes	onions
(2000-2005)	31.86	0.59	69.13	0.32	0.002	0.44
(2006-2011)	10.08	3.63	42.04	0.10	0.010	0.40
2012	52.55	3.71	45.58	0.537	0.01	0.36
2013	47.58	3.84	39.39	0.484	0.02	0.29
2014	58.47	27.32	60.58	0.602	0.35	0.51
2015	29.55	8.55	57.47	0.303	0.13	0.50
2016	53.70	11.28	62.97	0.559	0.20	0.54
2017	0.01	12.44	50.82	0.0001	0.08	0.44
2018	0.01	9.23	65.68	0.0001	0.06	0.56
Average (2012-2018)	34.55	10.91	59.04	0.355	0.121	0.42
price competitiveness index	0.29	0.01	0.251			

Source: [www.campas.gov.eg](http://www.campas.gov.eg), [www.comtrade.un.org](http://www.comtrade.un.org) [www.fao.org](http://www.fao.org)

**Market penetration rate of Egyptian Oranges, grapes, and onions exports in the Saudi market during (2000-2018):**

The exports competitiveness of crop is positively with Market penetration rate, Table (11), showed that the import penetration rate in the KSA market orange, grape, and onion markets during the period (2012-2018). The KSA market penetration rate of orange, grape, and onion were about 0.36%, 0.12%, 0.42%, respectively during the average period (2012-2018) and characterized by generally non stable during the study period. The low value market penetration rates in the KSA market refers to the decreasing adoption of KSA markets to imports of Egyptian oranges, grapes, and onions to satisfy domestic demand, which means easier increase in the Egyptian exports of orange, grape, and onion to these market in the future.

**The factors affecting the demand of Egyptian Oranges, grapes, and onions exports in Saudi market:**

Studying the relationship between the average quantity of Egyptian Oranges, grapes, and onions imports to KSA market to that market as a continued, and explanatory factors which may affect the dependent variable, the liner form with Stepwise analysis are the best mathematical formulas to represent that relationship, It is clear from model that the most important factors affecting quantity of Egyptian **Oranges, grapes, and onions** imports to KSA market is determined, the \$1 increase in the price of a ton of Moroccan oranges, and \$1 billion increase in the Saudi GDP would result in statistically significant increasing in Egyptian oranges exports quantities, by 0.23 and 0.25 ton, respectively.



Table 10: The factors affecting the demand of Egyptian oranges exports in Saudi market during the average period (2000-2018).

Statistic	Explanatory Variables	
	X <sub>4</sub>	X <sub>8</sub>
β	0.23	0.25
T	3.23	3.87
Sig	*	*
F= 13.42* R <sup>2</sup> = 0.63		

Where: X<sub>1</sub>: Egyptian oranges exports price: US\$/ton. X<sub>2</sub>: Saudi Arabia's import capacity:/tons. X<sub>3</sub>: Spanish oranges exports price: US\$/ton. X<sub>4</sub>: Moroccan oranges exports price: US\$/ton. X<sub>5</sub>: Turkish oranges exports price: US\$/ton. X<sub>6</sub>: Australian oranges exports price: US\$/ton. X<sub>7</sub>: South African oranges exports price: US\$/ton. X<sub>8</sub>: GDP of Saudi Arabia: \$1 billion.

Source: [www.comtrade.org](http://www.comtrade.org), [www.albankaldawli.org](http://www.albankaldawli.org).

As shown in the Table (11), Egyptian grapes exports in Saudi market. The results show that \$1 decrease in the price of a ton of Egyptian oranges, \$1 billion increase in the Saudi GDP and \$1 increase in

the price of a ton of Turkish oranges would result in statistically significant increasing in Egyptian grapes exports quantities, by 0.001, 0.003 and 0.005 ton, respectively.

Table ( 11): The factors affecting the demand of Egyptian grapes exports in Saudi market during the average period (2000-2018).

Statistic	Explanatory Variables		
	X <sub>1</sub>	X <sub>4</sub>	X <sub>5</sub>
β	-0.001	0.003	0.005
T	-2.07	6.28	8.19
Sig	*	*	*
F= 73.53* R <sup>2</sup> = 0.90			

Where: X<sub>1</sub>: Egyptian grapes exports price: US\$/ton. X<sub>2</sub>: Saudi Arabia's import capacity:/tons. X<sub>3</sub>: South African grapes exports price: US\$/ton. X<sub>4</sub>: GDP of Saudi Arabia: \$1 billion. X<sub>5</sub>: Turkish grapes exports price: US\$/ton. X<sub>6</sub>: Chinese grapes exports price: US\$/ton.

Source: [www.comtrade.org](http://www.comtrade.org), [www.albankaldawli.org](http://www.albankaldawli.org)

Table (12), Showed there is 1 ton increase in Saudi Arabia's import capacity would result in

statistically significant increasing in Egyptian onions exports quantities, by 0.66 ton.

Table (12): The factors affecting the demand of Egyptian onions exports in Saudi market during the average period (2000-2018).

Statistic	Explanatory Variable
	X <sub>2</sub>
β	0.66
T	5.79
Sig	*
F= 33.62* R <sup>2</sup> = 0.66	

Where: X<sub>1</sub>: Egyptian onions exports price: US\$/ton. X<sub>2</sub>: Saudi Arabia's import capacity:/tons. X<sub>3</sub>: American onions exports price: US\$/ton. X<sub>4</sub>: Chinese onions exports price: US\$/ton. X<sub>5</sub>: GDP of Saudi Arabia: \$1 billion. X<sub>6</sub>: Indian onions exports price: US\$/ton.

Source: [www.comtrade.org](http://www.comtrade.org), [www.albankaldawli.org](http://www.albankaldawli.org)

### **The challenges facing Egyptian agricultural exports:**

Many challenges and opportunities were faced the Egyptian agricultural trade, at the " local, regional and global" levels, due to changes in the financial, monetary" devaluation of their currencies", trade and industrial policies of importing countries, there for The competitive strength of agricultural exports are affected by various forms of restrictions, policies and trade negotiations between countries, Identifying the challenges facing agricultural exports is necessary to assist Egyptian vegetable and fruit exporters to enter foreign markets as follows:

1. The lack of accurate data on the actual cultivated area and production, and hence the inaccuracy in estimating the surplus for export.
2. Lack of technical expertise for agricultural labor in line with international standards for foreign markets.
3. The high percentage of waste due to the weak efficiency of transport and storage.
4. The futility of the policy of reducing export prices to increase competition if it is not accompanied by a high level of quality and quality in line with foreign markets.
5. Insufficient insurance and the risks of agricultural exports.
6. Lack of marketing researches on the foreign markets.
7. lack of promotional programs.

### **The role of the Egyptian government in increasing the competitiveness of agricultural exports:**

Agricultural exports of country can be increased by promote their competitiveness, via pricing in the markets which have a growing demand for these exports, there for Egyptian Government should be responsible for creating an environment for investment, and production that matches the most competitive environments in the world, This requires entering new countries, and partnership with the world for increasing the competitiveness of goods, there for, Ministerial Decision No. 67 of 2017 on the system of agricultural exports has been implemented. The implementation spans crops and the countries contributing to the increase in export facilitation inspection procedures by sending the engineer of the quarantine of the filling stations in the sorting of the source contributing of the procedures and increase the exports (MALR, 2019), In addition to:

**Financial incentives:** These include the Egyptian government providing facilities to obtain loans from banks and reducing interest rates on loans.

**Tax incentives:** The burdens are reduced, such as tax release and exceptions from import duties on raw materials, intermediate inputs and capital goods,

and the exemption or reduction of customs duties rates on exports.

**Indirect Incentives:** The Egyptian government grants facilities such as infrastructure, and increasing technological capabilities for productive activities.

#### **Suggestions to improve competitiveness:**

Commitment to international quality specifications, technological development, qualification of workers, adaptation of the education system to market needs, interest in research and development, studying foreign markets, and the development of the information system (information technology), Establishment of accurate and a comprehensive database for the Egyptian Agricultural products and share this information with producers, improving technological used in packaging and storage, Activate The role of agricultural extension needs to be exploited, and Attracts foreign direct investment to support the competitiveness of Egyptian Agricultural exports.

#### **Summary:**

Egyptian agricultural exports suffer from the low market share in the Saudi market, which indicates the weak competitiveness of Egyptian agricultural exports of products, such as onions, grapes and oranges. Therefore, the primary objectives of this research were to identify and analyze the potentials of Egyptian of Some Vegetables and Fruit Crops export " onion, grape and orange " through studying the current situation in the World and in the Saudi Arabia market and study the most important factors effecting its competitiveness capabilities in the in Saudi Arabia market, To achieve the research objectives, the research used descriptive and analytical statistical methods to calculated some of the economic indicators to determine the competitiveness situation in the Saudi Arabia market, Results indicated that:

- Egypt's oranges, grapes and onions exports has relative advantage in the world markets, as the value of relative advantage coefficient in the average period (2000 - 2018), estimated at 14.15, 6.61 and 10.61 respectively, The value of export capacity coefficient of orange, grapes, onion exports estimated of 24.2%, 7.18% and 23.04% of the average period's respectively.

- Saudi Arabia market is the main market of the Egyptian exports of orange and onion crops represent about 34.55%, 59.04%, of total Saudi Arabia imports respectively, **during the average period (2012-2018)**, While the market share of Saudi Arabia of exporting Egypt's grape is about 10.91% of the average period's (2012-2018).

- The results indicate that, there is a great opportunity to increase Egyptian exports of oranges, grapes, and onions to the Saudi market, as the

penetration rate of orange, grape, and onion exports to the Saudi market was about 0.36, 0.12, 0.42, respectively of average (2012-2018).

- Identifying the most important factors that may affect in the Saudi Arabia market demand of Egyptian oranges, grapes, and onions to the Saudi market, **Egyptian oranges** The results indicate that \$1 increase in the price of a ton of Moroccan oranges, and \$1 billion increase in the Saudi GDP would result in statistically significant increasing in Egyptian oranges exports quantities, by 0.23 and 0.25 ton, respectively.

The results of Egyptian **grapes** indicate that \$1 decrease in the price of a ton of Egyptian grapes, \$1 billion increase in the Saudi GDP and \$1 increase in the price of a ton of Turkish grapes would result in statistically significant increasing in Egyptian grapes exports quantities, by 0.001, 0.003 and 0.005 ton, respectively.

- **Egyptian onions**, the results indicate that 1 ton increase in Saudi Arabia's import capacity would result in statistically significant increasing in Egyptian onions exports quantities, by 0.66 ton.

The results show that Egypt doesn't have a good export efficiency, due to The lack of accurate data about the actual cultivated area and production, and hence the inaccuracy in estimating the surplus for export, lack of marketing researches on the foreign markets, Lack of technical expertise for agricultural labor in line with international standards for foreign markets, The high percentage of losses due to the weak efficiency of transport and storage, the lack of promotional programs. Additionally, the research results had recommended increasing competitiveness for Egyptian exports of orange, grapes, onion exports in the international market and Saudi Arabia Market through Establishment of accurate and a comprehensive database for the Egyptian Agricultural exported products and share this information with producers, improving technological used in packaging and storage, The efforts of Egyptian exporters should be focused on promotion of export of vegetables and fruits products to the Saudi market, in addition to studying the major and promising markets to Egyptian of Agricultural exported products, encourage and Facilitating finance of R & D, Activate The role of

agricultural extension needs to be exploited, and Attracts foreign direct investment to support the competitiveness of Egyptian Agricultural exports.

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12/4/2020