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An Analytical Study of the Production, Consumption and Exports of Potatoes in Egypt

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Abstract

Although Egypt's production of the potatoes crop amounted to about 6,786 million tons, the amount of Egyptian potatoes exports is estimated at about 636 thousand tons, representing about 9.4% of the total potatoes production, which is estimated at about $222 million in 2020.

This indicates a decrease in the quantity of Egyptian exports of the potatoes crop, and the exposure of Egyptian potatoes exports to intense competition within the most important global import markets, which results in instability, fluctuation, and decline in Egyptian potatoes exports, The results of the research indicated that the average cultivated area of the potatoes crop, which is considered one of the most important agricultural export crops in Egypt during the period (2010-2020), was estimated at about 414 thousand Fadden, and it is increasing at an annual rate of change estimated at about 2.9% of the average cropped area. The average production reached 1504 thousand tons. It was found that there was a significant increase in the production of the potatoes crop, at an annual rate of change estimated at 3.6% ،While the average consumption of the potatoes crop amounted to about 2913 thousand tons, and it is increasing at an annual rate of 11.3%., The average exported quantity of potatoes was about 517,000 tons, estimated at about $232 million, and the average export price of Egyptian potatoes was about $450/ton. The results also show that Egypt occupies the sixth position in the world among potatoes exporting countries, with an export value of $206 million, representing 5.9% of the average value of global exports during the study period, with an average amount of exports amounting to about 572 thousand tons, representing about 5.4% of the global export quantity. One of the most important markets for importing Egyptian potatoes is the Russian market, with an average quantity of Egyptian potatoes exports amounting to about 218,151 thousand tons, an estimated rate of about 34.2% of the average amount of Egyptian potatoes exports, with an average value of Egyptian potatoes exports amounting to about $70,786 thousand, representing about 31.8%, with an average price of about $337/ tons, Market with an average quantity of about 7,633 thousand tons, representing about 12% of the average total quantity of Egyptian potatoes exports, with an average value of exports amounting to about $26,699 thousand, representing about 12% of the average total value of Egyptian potatoes exports, at an average price of about $350.4/ton. The Lebanese market also

ranked third, with an average quantity of about 40.44 thousand tons, representing about 9% of the average total amount of Egyptian potatoes exports, estimated at about $19,246 thousand, representing about 8.6% of the average total value of Egyptian potatoes exports, at an average price of $372.4/ton.

Key words: potatoes production, export power, foreign trade, international markets

Introduction

Export is a fundamental pillar on which the economic launch is based in providing permanent sources of foreign exchange, and a means to reduce the deficit in the Egyptian trade balance. Export is also an integral element with the elements of the economic and social development policy, and its encouragement leads to long-term positive results.

Egypt enjoys competitive advantages through which different competitive foundations can be laid for developing production, improving quality and linking to international standards, as well as comprehensive quality systems that ensure environmental considerations are taken into account in the production process, in order to reach the greatest possible level of competition in foreign markets.

Research problem:

Although Egypt's production of the potatoes crop amounted to about 6,786 million tons, the amount of Egyptian potatoes exports is estimated at about 636 thousand tons, representing about 9.4% of the total potatoes production, which is estimated at about $222 million in 2020.

This indicates a decrease in the quantity of Egyptian exports of the potatoes crop, and the exposure of Egyptian potatoes exports to intense competition within the most important global import markets, which results in instability, fluctuation, and decline in Egyptian potatoes exports.

Search Aims:

The research aims to study the current situation for the production, consumption and export of the Egyptian potatoes crop through:

1- Studying the development of the cultivated area and the quantity of Egyptian and international production and consumption of the potatoes crop.
2- Studying the development of the quantity, value and price per ton of exporting of Egyptian and world potatoes.
3- Determining the most important potatoes producing countries in the world.
4- Identifying the most important global importing markets for the potatoes crop.
5- Identifying the most important global exporting markets for the potatoes crop and Egypt's ranking in relation to these countries.
6- Studying the geographical distribution of Egyptian potatoes exports and the most important international markets.

Research method and data sources:

To achieve the goal of the research, descriptive and quantitative analytical methods were used to estimate the various economic indicators and relationships.

The research relied on many sources in obtaining published and unpublished secondary data, which were collected from agricultural statistics bulletins, the Ministry of Agriculture and Land Reclamation, the Central Administration for Agricultural Economy, and the records of the Central Agency for Public Mobilization and Statistics, in addition to the database of the Food and Agriculture Organization (FAO) and trade data.

Results and discussion:

Studying the development of the cultivated area and the quantity of Egyptian and international production and consumption of the potatoes crop during the period (2010-2020).

A. The development of the Egyptian and World potatoes crop area

The data of Table (1) refer to developments in the potatoes crop area, where the average world potatoes crop area reached about 42.25 million Fadden, and the average Egyptian potatoes crop area reached 402 thousand Fadden, representing 0.95% of the global potatoes crop area during the study period (2010-2020).

By studying the equation of the general time trend for the development of the potatoes crop area during the period (2010-2020) using different mathematical models, it was found that the linear model is better at expressing these developments, as follows:

Equation No. (1) in Table (2) shows that there is a statistically significant annual decrease in the world potatoes area estimated at about 0.53 million Fadden, at an annual rate of change of about 1.3%, and the value of the determination coefficient indicates that about 83% of the changes occurring in The global potatoes crop area is due to variables whose effect reflects the time factor. While Equation No. (2) In Table (2) shows that there is a statistically insignificant annual increase, which indicates that the increase in the potatoes crop area is very slight, and the area data is close to the average during the study period (2010-2020).

Table (1): The development of the area, production and consumption of the Egyptian and world potatoes crop during the period (2010-2020).

Year	Area (million Fadden)			Production (million tons)			Consumption (million tons)		
	World	Egypt	%	World	Egypt	%	World	Egypt	%
2010	43.27	0.335	0.77	328.66	3.64	1.11	345.46	3.60	1.04
2011	44.52	0.391	0.88	368.98	4.34	1.18	364.74	3.86	1.06
2012	44.52	0.422	0.95	362.05	4.76	1.31	365.83	4.12	1.13
2013	44.06	0.381	0.87	366.21	4.27	1.16	369.26	3.97	1.08
2014	42.98	0.410	0.95	370.01	4.61	1.25	359.63	4.14	1.15
2015	43.00	0.438	1.02	366.06	4.96	1.35	367.82	4.55	1.24
2016	41.41	0.377	0.91	353.99	4.11	1.16	365.41	3.99	1.09
2017	41.51	0.415	1.00	370.11	4.84	1.31	370.36	4.36	1.18
2018	40.94	0.408	1.00	365.67	4.96	1.36	367.02	4.71	1.28
2019	39.23	0.423	1.08	354.81	5.20	1.47	368.59	4.40	1.19
2020	39.27	0.425	1.08	359.07	5.22	1.45	367.81	4.56	1.24
Average	42.25	0.402	0.95	360.51	4.63	1.28	364.72	4.21	1.15
Minimum	39.23	0.335	0.77	328.66	3.64	1.11	345.46	3.60	1.04
Maximum	44.52	0.438	1.08	370.11	5.22	1.47	370.36	4.71	1.28

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

B. The development of the Egyptian and World potatoes production

The average world potatoes production reached about 360.5 million ton, and the average Egyptian potatoes production reached 4.63 million ton, representing 1.28% of the world potatoes production as shown in table (1).

Equation No. (3) In Table (2) shows that there is a statistically insignificant annual increase, which indicates that the increase in the potatoes production is very slight, and the production

data is close to the average during the study period (2010-2020). While Equation No. (4) In Table (2) shows that there is a statistically significant annual increase in Egyptian potatoes production estimated at 0.114 million tons, an annual rate of change of about 2.5%, and the value of the coefficient of determination. It indicates that about 55% of the changes that occur in Egyptian potatoes production are due to variables whose effect reflects the time factor. This confirms Egypt's interest in increasing production to meet domestic consumption and increase exports.

Table(2): General linier model for the development of the area, production and consumption of the Egyptian and world potatoes crop during the period (2010-2020).

Variables	Eq. No.	Countries	General linier model	T-Test	R2	F-Test	Annual rate of change (%)
Area (million Fadden)	1	World	$\hat{Y_i}$= 45.4 – 0.53 x_i	7.14*	0.83	51.1*	1.3
	2	Egypt	$\hat{Y_i}$= 0.37 + 0.005 x_i	2.17	0.27	4.73	1.4
Production (million tons)	3	World	$\hat{Y_i}$= 355.17 + 0.891 x_i	0.76	0.44	0.58	0.3
	4	Egypt	$\hat{Y_i}$= 39.4 + 0.114 x_i	3.64*	0.55	13.4*	2.5
Consumption (million tons)	5	World	$\hat{Y_i}$= 357.2 + 1.26 x_i	2.23	0.29	4.99	0.4
	6	Egypt	$\hat{Y_i}$= 3.69 + 0.085 x_i	4.44*	0.65	19.7*	2.1

haythu: Y_i ^^ = alqimat altaqdiriatughir altaabie , xi = lilmutaghayir almustaqili (mutaghayar alzaman) khilal fatrat aldirasa
i = 3,2,1 , ... , 11 , (*) mustawi almaenawia (0,01) , (**)

C. The development of Egyptian and World potatoes consumption

The average world potatoes consumption reached about 364.7 million ton, and the average Egyptian potatoes production reached 4.21 million ton, representing 1.15% of the world potatoes production as shown in table (1).

Equation No. (5) In Table (2) shows that there is a statistically insignificant annual increase, which indicates that the increase in the potatoes consumption is very slight, and the consumption data is close to the average during the study period (2010-2020), While Equation No. (6) In Table (2) shows that there is a statistically significant annual increase in Egyptian potatoes consumption estimated at 0.085 million tons, an annual rate of change of about 2.1%, and the value of the coefficient of determination. It indicates that about 65% of the changes that occur in Egyptian potatoes consumption are due to variables whose effect reflects the time factor.

The development of the quantity, value and price per ton of exporting of Egyptian and world potatoes.

A. The evolution of the quantity of Egyptian and World potatoes exports

The average amount of world exports of potatoes was about 12,786 tons, and Egypt's average potato exports amounted to 554 thousand tons, representing 4.3% of global potato exports during the study period (2010-2020), as shown in Table No. (3).

Equation No. (1) in Table (4) shows that there is a statistically significant annual increase in the amount of global exports of potatoes estimated at about 249 thousand tons, at an annual rate of change of about 2%, and the value of the determination coefficient indicates that about 82% of the changes that occur In global potato exports, it is due to variables whose impact reflects the time factor, While Equation No. (2) in Table (4) shows that there is an annual increase that is not statistically significant in the amount of Egyptian exports of potatoes, which

indicates that the increase in the amount of Egyptian exports of potatoes is very slight, and the data for the amount of exports is close to the average during the study period (2010-2020).

Table (3): The development of the quantity, value and price per ton of Egyptian and world potatoes exports during the period (2010-2020).

	Quantity (thousand tons)			Value (million dollars)			Price (USD/ton)		
Year	World	Egypt	%	World	Egypt	%	World	Egypt	%
2010	11213	300	2.7	3633	132	3.63	324.00	440.00	135.80
2011	12537	637	5.1	4701	251	5.33	375.00	393.00	104.80
2012	11677	263	2.3	3705	127	3.44	317.00	484.00	152.68
2013	12569	428	3.4	4746	206	4.34	378.00	481.00	127.25
2014	12272	685	5.6	4332	327	7.54	353.00	477.00	135.13
2015	12431	595	4.8	3693	232	6.27	297.00	389.00	130.98
2016	12772	408	3.2	3999	147	3.68	313.00	361.00	115.34
2017	13556	808	6.0	4342	272	6.27	320.00	337.00	105.31
2018	13473	725	5.4	4372	207	4.73	324.49	285.00	87.83
2019	14020	685	4.9	5162	266	5.16	368.19	389.00	105.65
2020	13929	561	4.0	4419	222	5.02	317.25	395.00	124.51
Average	12768	554	4.3	4282	217	5.04	335.18	402.82	120.48
Minimum	11213	263	2.3	3633	127	3.44	297.00	285.00	87.83
Maximum	14020	808	6.0	5162	327	7.54	378.00	484.00	152.68

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

B. Evolution of the value of Egyptian and World potatoes exports

The average value of global potato exports amounted to about 4,282 million dollar, and the average value of Egypt's potato exports amounted to 217 million dollar, representing 5.04% of the value of global potato exports during the study period (2010-2020), as shown in Table No. (3).

Equations (3,4) in Table (4) show that there is an annual increase that is not statistically significant in the value of Egyptian and world exports of potatoes, which indicates that the increase in the value of potato exports is very slight, and the data for the value of exports is close to the average during the study period (2010-2020),

Table (4): General linier model for the development of the quantity, value and price per ton of Egyptian and world potatoes exports during the period (2010-2020).

Variables	Eq. No.	Countries	General linier model	T-Test	R2	F-Test	Annual rate of change (%)
Quantity (thousand tons)	1	World	$\hat{Y_i}$= 11275 + 249 x_i	6.92*	0.82	47.9*	2.0
	2	Egypt	$\hat{Y_i}$= 370.5 + 30.6 x_i	2.05	0.24	4.22	6.6
Value (million dollars)	3	World	$\hat{Y_i}$= 3920 + 60.3 x_i	1.34	0.08	1.82	12.5
	4	Egypt	$\hat{Y_i}$= 178.9 + 6.38 x_i	1.07	0.07	1.16	3.7
Price (USD/ton)	5	World	$\hat{Y_i}$= 345.8 – 1.77 x_i	0.64	0.07	0.41	0.5
	6	Egypt	$\hat{Y_i}$= 470.6 – 11.3 x_i	2.2	0.28	4.84	2.9

haythu: Y_i ^^ = alqimat altaqdiriatughir altaabie , xi = lilmutaghayir almustaqili (mutaghayar alzaman) khilal fatrat aldirasa
i = 3,2,1 , ... , 11 , (*) mustawi almaenawia (0,01) , (**)

C. Evolution of the price of a ton of Egyptian and World potatoes exports

The average price of a ton of global exports of potatoes was about 335 dollar/ton, and the average price of a ton of Egyptian exports of potatoes was 402/dollar/ton, as the average price of Egyptian potato exports is greater than the average global export price by about 20.48% during the study period (2010-2020). , as shown in Table No. (3)

Equations (5, 6) in Table (4) show that there is a non-statistically significant annual decrease in the prices of Egyptian and world exports of potatoes, which indicates that the decrease in the prices of potato exports is very slight, during the study period (2010-2020).

Determining the most important potatoes producing countries in the world

The potato crop is one of the waist crops of great nutritional importance, as it is considered the main food in many regions of the world, and it is also considered an important alternative to cereals, whose prices have increased significantly in recent years, which called many countries of the world to pay attention to this crop and develop its production in order to alleviate the problem of food shortage. Where there are many nutrients in a balanced way, in addition to being an important source of carbohydrates, it also contains good amounts of protein and some mineral elements such as calcium, iron, magnesium, phosphorus, potassium, sodium and sulfur, and it contains many vitamins. It is one of the crops of great importance as it achieves self-sufficiency and is well cultivated in most of the lands

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Table (5): The development of the average relative importance of the most important potatoes producing countries in the world during the period (2016-2020).

Countries	Production (million tons)	%	Rank
China, mainland	83.49	23.14	1
India	48.96	13.57	2
Russian Federation	21.65	6.00	3
Ukraine	21.51	5.96	4
United States of America	19.87	5.51	5
Germany	10.75	2.98	6
Bangladesh	9.74	2.70	7
France	8.12	2.25	8
Poland	7.94	2.20	9
Netherlands	6.79	1.88	10
Belarus	5.92	1.64	11
United Kingdom	5.50	1.52	12
Canada	5.33	1.48	13
Peru	5.06	1.40	14
Egypt	4.87	1.35	15
Turkey	4.86	1.35	16
Algeria	4.74	1.31	17
Other Countries	85.65	23.74	
World	360.73	100.00	

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

Table (5) shows the most important potato producing countries in the world, namely China, mainland, India, Russian Federation, Ukraine, United States of America, Germany, Bangladesh, France, Poland, Netherlands, Belarus, United Kingdom, Canada, Peru, Egypt Turkey, Algeria, where the production of these countries amounted to about 83.49, 48.96, 21.65, 21.51, 19.87, 10.75, 9.74, 8.12, 7.94, 6.79, 5.92, 5.50, 5.33, 5.06, 4.87, 4.86, 4.74 million tons on average during the period (2016-2020) representing about 23.14%, 13.57%, 6.00%, 5.96%, 5.51%, 2.98%, 2.70%, 2.25%, 2.20%, 1.88%, 1.64%, 1.52%, 1.48%, 1.40%, 1.35%, 1.35%, 1.31% of the total global production estimated at about 36073 million tons

The most important world exporting markets for the potatoes crop and Egypt's ranking in relation to these countries.

Table No. (6) shows that the most important potatoes exporting countries are France, Netherlands, Germany, Belgium, Egypt, Iran, Islamic Republic of, Canada, United States of America, Pakistan, China, India, Spain, Kazakhstan, Turkey, South Africa The average volume of exports of these countries was estimated at 2187, 1960, 1926, 1028, 637, 621, 515, 515, 480, 463, 322, 290, 220, 194, 158 thousand tons, representing 80% of the total world potatoes exports amounting to 13550 Thousand tons.

The average value of potatoes exports from those countries amounted to about 673, 828, 392, 218, 223, 141, 249, 236, 93, 291, 65, 136, 22, 29, 48 million dollars, representing about 80%. value of world imports. Of potatoes estimated at about 4459 million dollars, the average price per ton of exports to those countries was about 308, 423, 203, 212, 350, 228, 483, 459, 194, 630, 203, 471, 102, 148, 308 dollars/ton, with an average export price estimated at 314 dollar/ton.

Table (6): The development of the average relative importance of the most important potatoes exporting countries at the world level during the period (2016-2020).

Countries	Quantity (thousand tons)			Value (million dollars)			Price (USD/ton)		
	Value	%	Rank	Value	%	Rank	Value	%	Rank
France	2187	16.1	1	673	15.1	2	308	97.9	7
Netherlands	1960	14.5	2	828	18.6	1	423	134.5	5
Germany	1926	14.2	3	392	8.8	3	203	64.7	11
Belgium	1028	7.6	4	218	4.9	8	212	67.4	10
Egypt	637	4.7	5	223	5.0	7	350	111.2	6
Iran, Islamic Republic of	621	4.6	6	141	3.2	9	228	72.5	9
Canada	515	3.8	7	249	5.6	5	483	153.6	2
United States of America	515	3.8	8	236	5.3	6	459	146.0	4
Pakistan	480	3.5	9	93	2.1	11	194	61.8	13
China	463	3.4	10	291	6.5	4	630	200.5	1
India	322	2.4	11	65	1.5	12	203	64.4	12
Spain	290	2.1	12	136	3.1	10	471	149.9	3
Kazakhstan	220	1.6	13	22	0.5	15	102	32.5	15
Turkey	194	1.4	14	29	0.6	14	148	47.1	14
South Africa	158	1.2	15	48	1.1	13	308	97.9	8
Other Countries	2036	15.0		813	18.2		308	98.0	
World	13550	100.0		4459	100.0		314	100.0	

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

It is also clear from the same table that there are exporting countries working to reduce prices to increase sales at the expense of quality, and other countries negotiating to obtain the highest price for quality, and other countries working to reduce the amount of exports to maintain higher price levels during the period (2016-2020).

Egypt occupies the fifth position in the world among potatoes exporters by exporting about 637 thousand tons, representing 4.7% of the total global potatoes exports. $350/ton, which is higher than the global average price by about 11.2%, which is estimated at 314 dollar/ton.

The most important world importing markets for the potatoes crop

The data of Table (7) shows that the most important potatoes importing countries are Belgium, Netherlands, Spain, Germany, Italy, United States of America, Iraq, and Portugal. Russian Federation, France, Uzbekistan, Nepal, United Arab Emirates, Malaysia, Czech Republic, United Kingdom, where the average amount of imports of these countries was estimated at 2599, 1760, 794, 654, 637, 480, 429, 411, 407, 402, 297, 279, 249, 235, 217, 214 thousand tons representing 70% of the total world imports of potatoes, amounting to 14523 thousand tons.

Table (7): The development of the average relative importance of the most important potatoes importing countries at the world level during the period (2016-2020).

Countries	Quantity (thousand tons)			Value (million dollars)			Price (USD/ton)		
	Value	%	Rank	Value	%	Rank	Value	%	Rank

Belgium	2599	17.9	1	580	12.3	16	224	69.7	13
Netherlands	1760	12.1	2	364	7.7	15	207	64.3	14
Spain	794	5.5	3	281	5.9	14	348	108.3	5
Germany	654	4.5	4	276	5.8	13	421	130.9	3
Italy	637	4.4	5	212	4.5	11	331	103.0	7
United States of America	480	3.3	6	240	5.1	12	501	155.9	2
Iraq	429	3.0	7	112	2.4	6	256	79.7	11
Portugal	411	2.8	8	115	2.4	7	280	87.0	9
Russian Federation	407	2.8	9	161	3.4	10	398	123.7	4
France	402	2.8	10	128	2.7	8	317	98.7	8
Uzbekistan	297	2.0	11	41	0.9	1	133	41.3	16
Nepal	279	1.9	12	54	1.1	2	194	60.3	15
United Arab Emirates	249	1.7	13	69	1.5	4	276	85.8	10
Malaysia	235	1.6	14	78	1.6	5	332	103.3	6
Czech Republic	217	1.5	15	54	1.1	3	246	76.5	12
United Kingdom	214	1.5	16	128	2.7	9	607	188.7	1
Other Countries	4459	30.7		1843	38.9		395	122.9	
World	14523	100.0		4735	100.0		322	100.0	

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

The average value of potatoes imports by those countries amounted to about 580, 364, 281, 276, 212, 240, 112, 115, 161, 128, 41, 54, 69, 78, 54, 128 million dollars, representing about 60% of the value of global imports. Of potatoes estimated at about $4,735 million, and the average price per ton of imports for those countries was about 224, 207, 348, 421, 331, 501, 256, 280, 398, 317, 133, 194, 276, 332, 246, 607 dollars/ tons, with an average global price estimated at $322/ton.

As it is clear from the same table that there are countries that are negotiating to get the lowest price in return for the largest amount of imports, and other countries prefer to get high quality in return for the increase in price, while there are countries that are working to determine the amount of imports to fix prices during the period (2016-2020).

The geographical distribution of Egyptian potatoes exports and the most important international markets.

The data of Table (8) shows that the most important importing countries for Egyptian potatoes are the Russian Federation, Greece, Lebanon, Italy, United Arab Emirates, Germany, Kuwait, Syrian Arab Republic, and Slovenia, where the average amount of imports of these countries was estimated at 218, 76, 57, 52, 44, 33, 22, 18, 18 thousand tons, representing more than 70% of Egypt's total exports of potatoes, which are estimated at 637 thousand tons.

Table (8): The average relative importance of the most important importing countries of the Egyptian potatoes crop during the period (2016-2020).

	Quantity (thousand tons)			Value (million dollars)			Price (USD/ton)		
Countries	Value	%	Rank	Value	%		Value	%	Rank
Russian Federation	218	34.2	1	70.8	31.7	1	337	95.2	9

Greece	76	12.0	2	26.7	12.0	2	350	99.2	5
Lebanon	57	9.0	3	19.2	8.6	4	337	95.3	8
Italy	52	8.1	4	19.4	8.7	3	372	105.4	3
United Arab Emirates	44	6.9	5	15.1	6.8	5	347	98.1	6
Germany	33	5.2	6	12.8	5.7	6	388	109.7	2
Kuwait	22	3.4	7	7.9	3.5	7	367	103.8	4
Syrian Arab Republic	18	2.9	8	6.2	2.8	9	404	114.4	1
Slovenia	18	2.8	9	6.4	2.9	8	338	95.7	7
Other Countries	99	15.5		38.6	17.3		390	110.3	
World	637	100.0		223.0	100.0		353	100.0	

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

The average value of these countries' potatoes imports amounted to about 70.8, 26.7, 19.2, 19.4, 15.1, 12.8, 7.9, 6.2, 6.4 million dollars, representing more than 60% of Egypt's total potatoes exports, estimated at about 223 million dollars of Egyptian potatoes exports to these countries are about 337, 350, 337, 372, 347, 388, 367, 404, 338 dollars/ton, with an average international price estimated at about 353 dollars/ton.

As it is clear from the same table that there are countries working to negotiate to get the lowest price in exchange for the largest amount of imports, such as the Russian Federation and other countries that prefer to obtain high quality in exchange for an increase in price, such as the Syrian Arab Republic and Slovenia, while there are countries working to determine the quantity of imports To fix prices such as Lebanon and Italy during the period (2016-2020).

Recommendations:

1- Expanding potatoes cultivation in the new lands, in addition to providing production requirements, following up on cultivation, and facilitating foreign marketing to maintain the market share in the countries of geographical concentration.
2- Activating the role of contract farming to provide important crops with external demand and high geographical concentration in accordance with quality standards and competitive prices in each country.
3- Making bilateral agreements in countries where the demand for potatoes is concentrated
4- Preserving the current markets and working to open new export markets in Africa, America and the Mediterranean countries.
5- Developing a marketing map based on the data of the domestic product and per capita in the countries of geographical concentration, the most important factors affecting the development of potatoes crop exports in those countries.

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