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<https://meae.journals.ekb.eg/>**Marketing Efficiency for Maize Crops in the Al- Sharkia Governorate.**

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**ABSTRACT**

The maize crop is one of the most important crops cultivated in Egypt in terms of economic and food importance, The marketing of the maize crop is linked to three structures: the structure of producers, traders, and consumers, and the objectives for which each of these three structures operates vary.

was The marketing costs of the (white) and (corn) maize crops are equal in marketing costs, including transportation, storage, converting maize from Corn cob into grains, packaging, and worker. The average marketing costs were the highest cost for the wholesaler and amounted to about 347.94 pounds/ton, followed by a trader at about 281.2 pounds/ton, followed by the retailer at about 212.27 pounds/ton, and finally, a broker trader who does not bear any marketing costs on the maize crop, while taking a commission on the supply of tons of maize.

The net return from (white) Maize above for the wholesaler was 610.47 pounds/ton, followed by the village trader at 539.15 pounds/ton, then the retailer at 374.96 pounds/ton, and finally an intermediary trader at about 47.43 pounds/ton. The net return from (corn) maize reached the highest net return of the village trader at 645.57 pounds/ton, followed by the retailer at 611.77 pounds/ton, then the wholesaler at 610.74 pounds/ton, and finally a broker trader at about 50.37 pounds/ton.

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**Introduction: -**

The maize crop is considered one of the most important crops of cereals cultivated in Egypt, it is coming in third place after wheat and rice in terms of economic and food importance, and the main motivation for expanding the cultivation of the maize crop is the desire to rise by self-sufficiency in the country because it enters the nutrition of man and animal as it enters in many industries such as the industry of starch, glucose, oils, alcohol, yeast, In addition, it is very important in the rise of the white and red meat, eggs and dairy, where it enters a high percentage in the manufacture of synthetic feed. The marketing of the maize crop is linked to three structures, namely the structure of producers, traders, and consumers, and of course, the objectives of each of these three structures vary, with the aim of the structure of producers to a marketing system that produces them to obtain the highest price levels of the crop, and the structure of traders from the performance of marketing services aims to achieve as much marketing differences as possible or as much return as possible in exchange for the marketing services it performs. Consumers have a marketing system that achieves them to get their good's needs of the right quality at the right time and place and at the lowest possible price levels.

**Problem:**

Maize farmers face price problems in marketing the maize crop ,which leads to fluctuating marketing efficiency and increasing marketing margins for brokers ,in exchange for a few marketing functions ,which require studying the marketing conditions of the maize crop.

**Research goal: -**

The research aims to study the marketing efficiency indicators of the (white) maize and maize (corn) crops by:

- 1- Study jobs and marketing.
- 2- Study marketing margins and marketing efficiency.
- 3- Consumer pound Distribution Study
- 4- Come up with some proposals to improve marketing efficiency.

**Research method and data sources:**

The study relied on descriptive and quantitative statistical methods to analyze marketing efficiency indicators for the marketing of the maize crop, including marketing efficiency indicators, and the distribution of consumer pound to both the product and the trader, as well as marketing margins, and was obtained from the initial data based on a random sample of wholesalers, village traders, brokers and retailers in Al- Sharkia governorate in Minya alkmh and belbies, through the interview using a questionnaire form specifically designed for it.

**First: Choose a sample study (traders):**

To learn about the information and marketing data of the maize crop, preliminary data are relied upon for a field study to analyze the opinions of marketers regarding the different stages of marketing and the most important processes that are conducted on the crop through a

questionnaire form designed for that purpose, and in line with the problem and objective of the study.

In the absence of official records of maize traders, 50 merchant forms were compiled in the marketing of the maize crop in the Al- Sharkia governorate, Minya alkmh, and belbies, it is the most productive of the (white) Maize and Maize (corn) respectively. The sample is distributed between 15, village traders 15, brokers 5, wholesalers, and 15 retailers.

#### **A. Marketing intermediaries <sup>(1)</sup>:**

##### **1- Village trader: -**

It is the first episode of the series of intermediaries, and the trader buys maize directly from farmers and then sells to feed factories or wholesalers with some of the services performed on the crop such as the process of converting maize from corn cob into grains by separating grains from corn cob, transporting and storing, or selling them to the consumer in the form of corn cob.

##### **2- Broker trader:**

The Broker trader works by selling the crop to others to receive a certain percentage as a result of his efforts in the search for the crop in the villages.

##### **3- Wholesaler:**

He is a trader who deals in large quantities of the crop on his account, buys directly from the intermediaries or farmers directly in the form of corn cob, and then sells to feed factories or retailers with some of the services he performs on the crop, such as the process of converting maize from Corn cob into grains by separation of grains from the corn cob.

##### **4- Retailer:**

It is the last episode in the marketing behavior of the commodity where it buys the crop from the wholesaler in the form of grains and then distributes it in the form of quantities suitable for the final consumer.

#### **B- Marketing functions and services (marketing way) for the maize crop:**

Marketing functions and services are defined as the jobs and services needed to assemble goods from their scattered production places in their raw or prepared form until they reach the final consumer, agricultural products are characterized by the nature of production and their susceptibility to damage, functions and marketing services can be divided as follows:

##### **1- Reciprocal services:**

Is the transfer of ownership of the commodity from the farmer to the consumer through the processes of buying and selling, where there is more than one form and pattern of marketing of maize where maize is traded in the form of corn cob or grains. The weight of maize varies according to the form of trading where it prevails among farmers that the average maize ardab in the form of corn cob ranges from 190 to 220 kg /ardab according to humidity and the date of trading, but according to the weight

of the corn in the form of grains 140 kg/ardab. In contrast, the sale price for the farmer is determined by the prevailing price and humidity of the crop.

## 2- Physical services:

- **Collect :**

It is intended to concentrate and collect the commodity from its production places usually dispersed in large quantities until it reaches the appropriate size to market to the consumer, usually, the trader collects the crop purchased from several farmers in the form of corn cob and transfers it to its stores to perform marketing operations on it.

- **converting maize from Corn cob into grains:**

It is meant to separate grains from the solid part (stalks)

- **roasting:**

It is intended to expose the grains to sunlight or use dryers to get rid of moisture to preserve the crop for as long as possible without exposure to damage or corruption.

- **packaging:**

The packaging process is to place the crop in the appropriate packaging by the nature of the crop to facilitate the carrying, and transportation, of the crop and is considered one of the main marketing functions. The packing process is carried out in a rudimentary manner by the farmer and is filled for home storage or marketing and sale to traders, and there are two methods of packing, filling the farmers to the crop in the form of peeled corn cob in a weight of 40-60 kg and the second method is that the trader filling the crop in the form of grains in a weight of 50 kg.

- **transportation:**

Transport is one of the most important marketing processes for linking production areas to consumption areas, and usually, the transportation includes assembly, unloading, shipping, and distribution of wholesalers and retailers to consumers. The crop is transported by a farmer from the place of cultivation to the house for consumption and sale to the trader, the farmer bears the costs of transportation, the merchant bears the costs of transportation when purchasing from the farms, and the cost of transportation to feed factories.

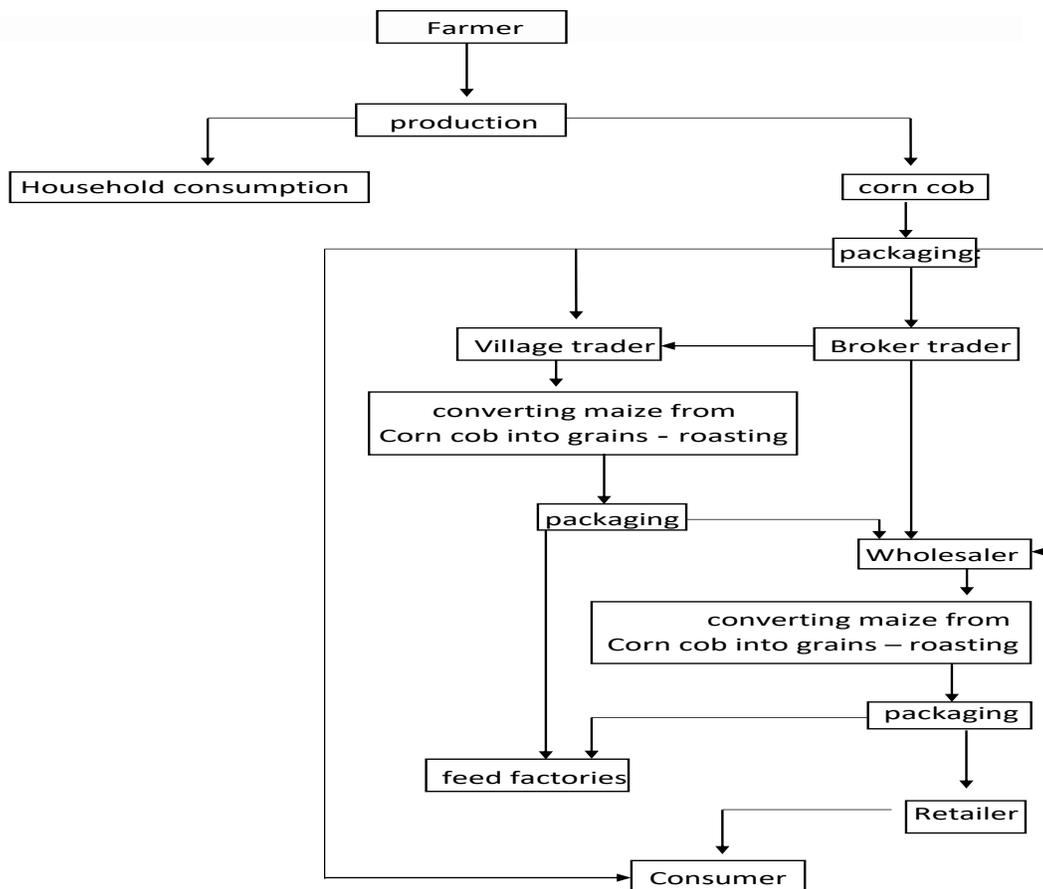
- **Storage:**

The storage of agricultural goods in general and maize, in particular, is one of the most important marketing stages so that the flow of these goods can be regulated to the consumer throughout the year according to production season, which adds a time benefit to the commodity to obtain a better price or for personal consumption, and the more storage time increases the marketing costs.

**C- The marketing way of the maize crop:**

The marketing course is expressed by all the efforts that are to transport the crop from the product to the consumer in the form, place, and time required, and the marketing course varies according to the nature of the crop and the processes that take place to reach the final consumer. It should be noted that in the case of selling the crop to a local merchant selling the crop in the form of corn cob, the price of the crop or part of it is delivered according to the agreement, and the price is determined according to the prevailing prices in the market and the humidity in the corn cob. In case of purchasing the crop in the form of grains, the trader performs marketing operations on the crop, whether converting maize from Corn cob into grains, roasting, packing, and then selling from a local trader to a wholesaler or feed factory. Or a consumer, from a wholesaler to a retailer or feed factory, and from a retailer to a consumer.

**Form (1):** The marketing way of the maize crop at the level of the study sample in the Al- Sharkia governorate



Source: From merchant form data.

## **Second: Marketing efficiency indicators for the (white) Maize crop of traders at the level of the study sample.**

The marketing efficiency of the (white) Maize crop includes price levels, marketing costs, the net return, merchant incentive, the profitability of the pound spent, distribution of consumer pound between farms, village traders, and retailers, marketing differences, marketing efficiency, relative marketing margins for sale, and relative marketing margins for purchase.

### **1- Marketing costs:**

The results of table (1) indicate the marketing costs that take place on the (white) Maize crop, including transportation, storage, converting maize from Corn cob into grains, packing, and working. The average marketing costs were the highest cost for the wholesaler and amounted to about 347.94 pounds/ton, followed by a Village trader at about 281.2 pounds/ton, followed by the retailer at about 212.27 pounds/ton, and finally, a broker trader who does not bear any marketing costs on the maize crop, while taking a commission on the supply of tons of maize.

The highest cost of these marketing costs is the cost of transportation and amounts to about 160.5, 150.1 pounds/ton and takes the same arrangement respectively to traders, while the retailer does not bear the cost of transportation, as the transfer is divided into two stages, the first stage the crop is transferred from the place of production, which is the farmer to the store of the trader, while the second stage is transported the crop from the store of the trader to the feed factories or the place of sale.

This is followed by the cost of the worker by 120 pounds/month and is for the retailer only. This is followed by the cost of storage of approximately 73.57, 54.6 pounds/ton respectively for the retailer, wholesaler, and village trader, and the cost of storage is equal to that of the wholesaler and the village, which included anti-pest, electricity, storage, and the worker salary.

It is followed by a grinding operation of 56.4 pounds/ton and the wholesaler only does the process. This process is carried out by the village trader and the sentence, and the cost is equal, converting maize from cob into grains, while the included wages of the worker and the machine that carried out the operation.

### **2- Purchase and sale price:**

Table (1) results indicate that the purchase price of (white) Maize cob was 2273.4, 2318.34, 2724.51 pounds/ton respectively broker trader, village trader wholesaler, the price of the retailer grain was 5173.02 pounds/ton, and the sale price of (white) maize grains was 38611 4619.8, 5760.25 pounds/ton respectively village trader, wholesaler, retailer, while marketing margins were calculated as the sale price of white corn ton 2320, 3129.03, 3682.95 pounds/ton respectively broker trader, village, wholesale, to Grains and stalks, which filtered the ton of maize from the process of converting maize from Corn cob into grains in the sample of the study to convert the ton of corn cob to 730 grains and 230 stalks as the average sample and calculated on this basis, to reward the prices of a ton with each other.

### 3- Net return per ton:

It is an important measure of economic efficiency and the results of table (1) indicate that the net return of maize reached the highest net return of the wholesaler about 610.47 pounds/ton, followed by the village trader at about 529.49 pounds/ton, then the retailer at about 374.96 pounds/ton, and finally a broker trader about 47.43 pounds/ton.

### 4- Trader's incentive and pounds profitability:

Table (1) results indicate that the trader's incentive and profitability of the pound of maize reached the highest value of the wholesaler at about 22.40 pounds/ton, 0.22 pts per pound respectively, followed by the village trader at about 16.92 pounds/ton 0.23 pts per pound, then the retailer at 6.5 pounds/ton, 0.07 pts per pound respectively, and the broker was about 2 pounds/ton, 0.02 pts per pound respectively.

### 5- Margins and marketing efficiency:

The results of table (1) indicate that the price study for the maize crop shows that the marketing difference of the maize crop reached the highest value of the wholesaler at about 958.44 pounds/ton, followed by the village trader, then the retailer, and the broker by 810.69, 587.23, 47.43 pounds/ton, respectively. The marketing efficiency of the crop was also calculated, showing the ratio between inputs and outputs for various marketing services, and marketing efficiency was 26.63%, 26.55%, 25.75%, respectively, trader wholesaler, retailer, village  
Sales marketing margins from the top indicate 35.18%, 34.96%, 11.35%, and 2.08%, respectively, for wholesaler, village, retailer, and broker. The same order of marketing margins were 26%, 25.9%, 10.19%, and 2.04%, respectively, wholesaler, village, retailer, and abroker.

### 6- Consumer pound:

The results of table (1) indicate an estimate of the share of the product of the consumer pound of the (white) maize crop, which reached 74.09%, and the share of the village merchant of the consumer fairly about 25.91%, was calculated from the village trader to the feed factories (3129.0 3 tons = grains + stalks), while the share of the product in 60.95% and the wholesaler's share of the consumer pound was about 39.05%, calculated from wholesaler to retailer (4469.4 tons = grains + stalks).

**Table (1):** Revenues, margins, and marketing costs for the (white) Maize crop for traders in the field study sample in Al- Sharkia governorate during the 2020/2021 agricultural season.

Statement	Transactions of (white) Maize traders				
	Unity	average price of (white) Maize			
		Broker Trader	Village Trader	Wholesaler	Retailer
transportation	Pound/ton	There is no, He takes a commission on a ton.	150.1	160.5	-
warehousing	Pound/ton/month		54.6	54.6	73.57
converting maize from Corn cob into grains	Pound/ton		53.69	53.69	-
Crunches	Pound/ton		0	56.4	-
packaging	Pound/ton		22.75	22.75	18.7
worker	Pound/month		-	-	120
Total marketing costs	Pound/ton		281.2	347.94	212.27
Cost of producing a ton <sup>(1)</sup>	Pound/ton	1640	1640	1640	
Purchase price	Pound/ton	2273.48	2318.34	2724.51	5173.02
Sale price <sup>(2)</sup>	Pound/ton	2320.91	3129.03	3682.95	5760.25
Net return <sup>(3)</sup>	Pound/ton	47.43	529.49	610.47	374.96
Trader Incentive <sup>(4)</sup>	Pound/ton	2	16.92	22.40	6.5
Profitability of the pound spent <sup>(5)</sup>	Pound/ton	0.02	0.23	0.22	0.07
Marketing differences <sup>(6)</sup>	Pound/ton	47.43	810.69	958.44	587.23
Marketing efficiency <sup>(7)</sup>	%	0	25.75	26.63	26.55
Marketing margins for sale <sup>(8)</sup>	%	2.08	34.96	35.18	11.35
Marketing margins for purchase <sup>(9)</sup>	%	2.04	25.9	26	10.19
Product share of consumer pound <sup>(10)</sup>	%	-	74.09	60.95	-
Trader's share of the consumer pound <sup>(11)</sup>	%	-	25.91	39.05	-

1- The cost of producing a ton = the average cost of producing a ton for the farmer's sample.

2- The sale price = (ton = grains + stalks) shows that the purchase is made in the form of corn cob while the sale is done in the form of grains, which has been made the filtered ratio of maize corn cob to grains and stalks resulting in the same average filtered ratio (730 Kg grains, (270 kg of stalks) and the price of a ton of stalks was 1150 pounds, and the sale price of a ton of maize (white) grains was 3861, 4619.8 pounds, respectively a village trader, a wholesaler.

The sale price of the retailer = with no stalks in mind.

3- Net return = marketing differences - marketing costs.

4- Trader Incentive = (net return per ton/ ton selling price) \*100.

5- Profitability of the pound spent = net return/. Purchase price per ton

6- Marketing Differences = Ton Sale Price - Purchase price per ton

7- Marketing efficiency = {100 - (marketing differences / marketing differences + marketing costs)} \* 100.

8- Marketing margins for sale = (sale price - purchase price)/purchase price \* 100.

9- Marketing margins for purchase =( sale price - purchase price)/sale price \* 100.

10- Product share of consumer fair = product price / final sale price (village trader - feed factories).  
= Product price/final sale price (wholesaler - retailer).

11- The trader's share of the consumer pound = 100 – the share of the product in the consumer pound.

**Source:** Collected and calculated from the field study sample data in Al- Sharkia governorate during the 2020/2021 agricultural season.

### **Third: Marketing efficiency indicators for the (corn) Maize crop of traders at the level of the study sample.**

The marketing efficiency of the (corn) maize crop includes price levels, marketing costs, the net return, merchant incentive, the profitability of the pound spent, distribution of consumer pound between farms, village trader and retailer, marketing differences, marketing efficiency, relative marketing margins for sale, and relative marketing margins for purchase.

#### **1- Marketing costs:**

The results of table (2) indicate the marketing costs that take place on the (corn) Maize crop, including transportation, storage, converting maize from Corn cob into grains, packing, and working. The average marketing costs were the highest cost for the wholesaler and amounted to about 347.94 pounds/ton, followed by a Village trader at about 281.2 pounds/ton, followed by the retailer at about 212.27 pounds/ton, and finally, a broker trader who does not bear any marketing costs on the maize crop, while taking a commission on the supply of tons of maize.

The highest cost of these marketing costs is the cost of transportation which amounts to about 160.5, 150.1 pounds/ton and takes the same arrangement respectively to traders, while the retailer does not bear the cost of transportation, as the transfer is divided into two stages, the first stage the crop is transferred from the place of production, which is the farmer to the store of the trader, while the second stage is transported the crop from the store of the trader to the feed factories or the place of sale.

This is followed by the cost of the worker at 120 pounds/month and is for the retailer only. This is followed by the cost of storage of approximately 73.57, and 54.6 pounds/ton respectively for the retailer, wholesaler, and village trader, and the cost of storage is equal to that of the wholesaler and the village, which included anti-pest, electricity, storage, and the worker salary.

It is followed by a grinding operation of 56.4 pounds/ton and the wholesaler only does the process. This process is carried out by the village trader and the sentence, and the cost is equal, converting maize from Corn cob into grains, while the included wages of the worker and the machine that carried out the operation

#### **2- Purchase and sale price:**

Table (2) results indicate that the purchase price of (corn) maize, Corn cob was 2432.73, 2467.63, 2988.74 pounds/ton respectively intermediate trader, village trader wholesaler, the price of the retailer grain was 5568.06 pounds/ton, and the sale price of (corn) maize grains was 4361.15, 5009.5, 6392.1 pounds/ton respectively village trader, wholesaler, retailer, while marketing margins were calculated as the price of a ton of (corn) maize 2483.1, 3394.39, 3947.43 pounds/ton respectively broker trader, village, wholesale, To grains and stalks, which was filtered a ton of maize from the process of converting maize from Corn cob into grains in the sample of the study to convert the ton of corn cob to 730 grains and 230 stalks as an average sample and was calculated on this basis, to reward the prices of a ton with each other.

### 3- Net return per ton:

It is an important measure of economic efficiency and the results of table (2) indicate that the net return of maize reached the highest net return of the village trader about 645.57 pounds/ton, followed by the retailer at about 611.77 pounds/ton, then the wholesaler about 610.74 pounds/ton, and finally a broker trader about 50.37 pounds/ton

### 4- Trader's incentive and pound profitability:

The results of table (2) indicate that the incentive of the trader and the profitability of the pound of maize reached the highest value of the village trader at about 19.2 pounds/ton, 0.26 pts per pound respectively, followed by the wholesaler at about 15.47 pounds/ton, 0.20 pts per pound, then the retailer at about 9.57 pounds/ton, 0.04 pts per pound respectively, and the broker of about 2 pounds/ton, 0.02 pts per pound respectively.

### 5- Margins and marketing efficiency:

Table (2) results indicate that the price study for the maize crop shows that the marketing difference of the maize crop reached the highest value of the wholesaler at 958.58 pounds/ton, followed by the village trader, then the retailer and the broker at 926.76, 824.04, 50.37 pounds/ton, respectively. The marketing efficiency of the crop was also calculated, showing the ratio between inputs and outputs for various marketing services, and marketing efficiency was 26.6%, 23.27%, 20.48%, respectively, trader wholesaler, Village, retailer.

Sales marketing margins from the top indicate 37.55%, 32.1%, 14.8%, and 2.07%, respectively, village trader, wholesaler, retailer, broker. The same order of marketing margins Purchase was 27.3%, 24.28%, 12.89%, and 2.03%, respectively, wholesaler, village, retailer, and a broker.

### 6- Consumer pound:

The results of table (2) indicate an estimate of the share of the product of the consumer pound of the maize crop, which amounted to 72.79%, and the share of the village merchant of the consumer fair about 27.31 %, was calculated from the village merchant to the feed factories (3394.39 Ton = grains + stalks), while the share of the product in 60.61% and the wholesaler's share of the consumer pound was about 39.39%, calculated from wholesaler to retailer (4930.73 tons = grains + stalks).

**Table (2):** The (corn) maize crop's revenues, margins, and marketing costs for traders in the field study sample in Al- Sharkia governorate during the 2020/2021 agricultural season.

Statement	Transactions of (corn) maize traders				
	Unity	average price of (corn) Maize			
		Broker Trader	Village Trader	Wholesaler	Retailer
transportation	Pound/ton	There is no, He takes a commission on a ton.	150.1	160.5	-
warehousing	Pound/ton/month		54.6	54.6	73.57
converting maize from Corn cob into grains	Pound/ton		53.69	53.69	-
Crunches	Pound/ton		0	56.4	-
packaging	Pound/ton		22.75	22.75	18.7
worker	Pound/month		-	-	120
Total marketing costs	Pound/ton		281.2	347.94	212.27
Cost of producing a ton <sup>(1)</sup>	Pound/ton	1640	1640	1640	-
Purchase price	Pound/ton	2432.73	2467.63	2988.74	5568.06
Sale price <sup>(2)</sup>	Pound/ton	2483.1	3394.39	3947.43	6392.1
Net return <sup>(3)</sup>	Pound/ton	50.37	645.57	610.74	611.77
Trader Incentive <sup>(4)</sup>	Pound/ton	2	19.2	15.47	9.57
Profitability of the pound spent <sup>(5)</sup>	Pound/ton	0.02	0.26	0.20	0.04
Marketing differences <sup>(6)</sup>	Pound/ton	50.37	926.76	958.68	824.04
Marketing efficiency <sup>(7)</sup>	%	0	23.27	26.6	20.48
Marketing margins for sale <sup>(8)</sup>	%	2.07	37.55	32.1	14.80
Marketing margins for purchase <sup>(9)</sup>	%	2.03	27.3	24.28	12.89
Product share of consumer fair <sup>(10)</sup>	%	-	72.79	60.61	-
Trader's share of the consumer pound <sup>(11)</sup>	%	-	27.31	39.39	-

1- The cost of producing a ton = the average cost of producing a ton for the farmer's sample.

2- The sale price = (ton = grains + stalks) shows that the purchase is made in the form of corn cob while the sale is done in the form of grains, which has been made the filtered ratio of corn cob to grains and stalks resulting in the same average filtered ratio (730 Kilo grains, (270 kilos of stalks) and the price of a ton of stalks was 1150 pounds, and the sale price of a ton of (corn) maize grains was, 4361.5, 5009.5 pounds, respectively a village trader, a wholesaler.

The sale price of the retailer = with no stalks in mind.

3- Net return = marketing differences - marketing costs.

4- Traders Incentive = (net return per ton/ ton selling price) \*100.

5- Profitability of the pound spent = net return/ Purchase price per ton.

6- Marketing Differences = Ton Sale Price - Purchase price per ton.

7- Marketing efficiency = {100 - (marketing differences / marketing differences + marketing costs)} \* 100.

8- Marketing margins for sale = (sale price - purchase price)/purchase price \* 100.

9- Marketing margins for purchase = (sale price - purchase price)/sale price \* 100.

10- Product share of consumer pound = product price / final sale price (village trader - feed factories).

= Product price/final sale price (wholesaler - retailer).

11- The trader's share of the consumer pound = 100 - the share of the product in the consumer pound.

**Source:** Collected and calculated from the field study sample data in Al- Sharkia governorate during the 2020/2021 agricultural season.

**Recommendations:**

- 1- Establish a satisfactory marketing margin for the trader ,while increasing the marketing margin of the farmer.
- 2- Reduce the marketing way of the crop until it reaches the final consumer ,which reduces the number of intermediaries and thus reduces marketing costs and increases marketing efficiency.
- 3- To create a fair and rewarding price policy for farmers that increases the production of maize, so that the price is rewarding for farmers and acceptable for traders and the ultimate consumer.
- 4- The need to coordinate with feed factories through the Ministry of Agriculture to receive the crop from farmers to raise their supply price.

**References**

1. Mohammed Saeed Zayed, Siham Abdul Aziz Marwan, Lectures in Marketing and Cooperation, Department of Agricultural Economics, Faculty of Agriculture, - Ain Shams University, 2002, p. 188.
2. Yahya Abdul Rahman Yahya, Doaa Mamdouh, and Mohamed Hassan Ahmed (2020). The Value Chain of the Maize Crop and the Role of Agricultural Cooperatives, Egyptian Journal of Agricultural Research, Agricultural Economics Research Institute, Agricultural Research Center, Volume 98, Issue 2, p. 396-359.
3. Shaker Juma Ahmed and Imad al-Din Abdul Rahman Al-Sharbini (2020). Economic study for the production and marketing of rice and maize in Daqahliya governorate, Journal of Agricultural Economy and Social Sciences, Faculty of Agriculture, Mansoura University, Volume 11, Issue 8, p. 483-477
4. Iman Rajab Hassan Suleiman (2015). Economics of the production and marketing of maize crops in Egypt, Ph.D., Department of Agricultural Economics, Faculty of Agriculture, Zagazig University, p. 196.
5. Ashraf Mohammed al-Dalla, (2017). The role of contractual agriculture in closing the food gap of the maize crop in Egyptian agriculture, Journal of Agricultural Economics and Agricultural Sciences, Faculty of Agriculture, Mansoura University, Volume 8, Issue 7, p. 483-475.

## الكفاءة التسويقية لمحصول الذرة بمحافظة الشرقية.

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### الملخص:

يعتبر محصول الذرة الشامية من محاصيل الحبوب الهامة المنزرعة في مصر والغذائية، إذ يأتي في المركز الثالث بعد القمح والأرز من حيث الأهمية الاقتصادية والغذائية، والدافع الرئيسي للتوسع في زراعة محصول الذرة الشامية هو الرغبة في الارتفاع بنسبة الاكتفاء الذاتي للدولة، لأنه يدخل في تغذية الإنسان والحيوان.

ويرتبط بتسويق محصول الشامية ثلاث هياكل أساسية وهي هيكل المنتجين والتجار والمستهلكين وبطبيعة الحال تتباين وتختلف الأهداف التي يعمل لها كل هيكل من هذه الهياكل الثلاثة. وتمثلت المشكلة البحثية في أن تذبذب الكفاءة التسويقية لمحصول الذرة الشامية نتيجة لوجود بعض المشاكل السعرية للمزارع التي يترتب عليه التأثير على الإيراد الكلي وصافي العائد للمحصول، بالإضافة إلي أن التجار تكون الهوامش التسويقية كبيرة، في حين انه يقدم وظائف تسويقية قليلة، مما يتطلب دراسة الأوضاع التسويقية لمحصول الذرة الشامية، والتوصل إلي بعض المقترحات لتوزيع السعر العادل للمزارع والتجار. وأوضحت نتائج البحث إلي أن تكاليف التسويق التي تجري على محصول الذرة الشامية البيضاء والصفراء متساوية في التكاليف التسويقية، والتي من بينها عملية النقل والتخزين والتفريط والجرش والتعبئة وأجر العامل. وكانت متوسط التكاليف التسويقية بالنسبة لتاجر الجملة 347.94 جنيه/طن، يليه تاجر القرية بنحو 281.2 جنيه/طن، يليه تاجر التجزئة بنحو 212.27 جنيه/طن، وأخيراً تاجر وسيط وهو لا يتحمل اي تكاليف تسويقية تجري على محصول الذرة الشامية، بينما يأخذ عمولة على توريد طن الذرة الشامية.

بالنسبة لصافي العائد من الذرة البيضاء اعلاه لتاجر الجملة بنحو 610.47 جنيه/طن، يليه تاجر القرية بنحو 529.49 جنيه/طن، ثم تاجر التجزئة بنحو 374.96 جنيه/طن، وأخيراً تاجر وسيط بنحو 47.43 جنيه/طن. إلي أن صافي العائد من الذرة الصفراء بلغ أعلى صافي عائد لتاجر القرية بنحو 645.57 جنيه/طن، يليه تاجر التجزئة بنحو 611.77 جنيه/طن، ثم تاجر الجملة بنحو 610.74 جنيه/طن، وأخيراً تاجر وسيط بنحو 50.37 جنيه/طن. وأن حافز التاجر واربحية الجنيه من الذرة البيضاء بلغ اعلي قيمة لتاجر الجملة بنحو 22.40 جنيه/طن، 0.22 قرش للجنيه على التوالي، يليه تاجر القرية بنحو 16.92 جنيه/طن، 0.23 قرش للجنيه على التوالي، ثم تاجر التجزئة بنحو 6.5 جنيه/طن، 0.07 قرش للجنيه على التوالي، وأخيراً التاجر الوسيط بنحو 2 جنيه/طن، 0.02 قرش للجنيه على التوالي. بينما بلغ في الذرة الصفراء أعلى قيمة لتاجر القرية بنحو 19.2 جنيه/طن، 0.26 قرش للجنيه على التوالي، يليه تاجر الجملة بنحو 15.47 جنيه/طن، 0.20 قرش للجنيه على التوالي، ثم تاجر التجزئة بنحو 9.57 جنيه/طن، 0.04 قرش للجنيه على التوالي، وأخيراً التاجر الوسيط بنحو 2 جنيه/طن، 0.02 قرش للجنيه على التوالي.

كما تم حساب نصيب المنتج من جنيه المستهلك من محصول الذرة البيضاء حيث بلغ 74.09% كما بلغ نصيب تاجر القرية من جنيه المستهلك حوالي 25.91%، تم حساب من تاجر القرية الي مصانع الاعلاف (3129.03 طن= حبوب + قوالج)، بينما بلغ نصيب المنتج في 60.95%، وبلغ نصيب تاجر الجملة من جنيه المستهلك حوالي 39.05%، تم حساب من تاجر الجملة الي تاجر التجزئة (4469.4 طن= حبوب + قوالج). بينما بلغ نصيب المنتج من جنيه المستهلك من محصول الذرة الصفراء حيث بلغ 72.79% كما بلغ نصيب تاجر القرية من جنيه المستهلك حوالي 60.61%، تم حساب من تاجر القرية الي مصانع الاعلاف (3394.39 طن= حبوب + قوالج)، بينما بلغ نصيب المنتج 60.61%، وبلغ نصيب تاجر الجملة من جنيه المستهلك حوالي 39.39%، تم حساب من تاجر الجملة الي تاجر التجزئة (4930.73 طن= حبوب + قوالج).