Article

The Economics of Marketing the Cucumber Crop in Salah al-Din Governorate, Tikrit district, as a model for The Summer Production Season 2021

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ABSTRACT

The importance of the cucumber crop is highlighted because it is important from a nutritional and health point of view for humans because of its importance in the economy. A random sample was selected for this research estimated at.(75) farmers from the producers of the cucumber crop in Salah al-Din Governorate - Tikrit district. Moreover, the Data was taken from farmers using a questionnaire form. Information about The merchants was taken from the wholesale market in the Tikrit district using (34) A questionnaire, as well as collecting (46) From the retailers' forms. The results showed that the commission rate increased to (5%) of the product prices, and this is the reason for the high price of the product among retailers. The share of the product from consumer spending for the cucumber crop has reached (49.46%). As for the wholesaler's share of consumer spending for the crop under study (18.53%). As for the retailer's share of consumer spending for the crop under study (32%). As for the mediators' share of the consumer's dinar for the crop under study (50.53%). The results showed that the marketing margin between the wholesalers' stage and the product was (27.25%) dinars/kg. In comparison, the relative margin for the wholesalers and retailers stage amounted to (32%) and the margin between the retailers stage and product (50). The study showed a rise in the profits of the retailer from the margin, as it ranked first, as it reached an average of the cucumber crop of about (218.44 dinars - kg), while the profit for the wholesaler amounted to about (132.57 dinars/ kg The product profits amounted to about (98.655) dinars - kg. The researcher recommended working to provide production requirements and agricultural marketing requirements for the cucumber crop with good quality and appropriate prices, which have an effective role in reducing production and marketing costs.

Key Words: The Economics, Marketing, Cucumber Crop.

INTRODUCTION

Cucumber is one of the important crops that the consumer wants to consume, as it is consumed either fresh or pickled. It is currently available all year round due to protected agriculture, knowing that it needs a warm and short season. The cucumber crop is also a profitable and important vegetable crop if it *is* given care

and order. The cucumber crop is of great importance in terms of its nutritional value, as it is rich in minerals and salts and contains a good amount of vitamins, carbohydrates, proteins, sugars, albumins and fats, which help digestion and equalize stomach acid for humans, in addition to being a large part of our daily needs and for various categories of consumers. The production of the cucumber crop has many advantages, as it is fast-growing and highly profitable, achieving a large and rapid return [1]. The state encourages this sector for production and marketing in the agricultural field [2], as well as the role played by vegetable farmers in developing the state's economy through the jobs they perform in the field of marketing and agricultural production [3]. It is the science that is concerned with studying the activities related to the transfer of ownership of agricultural products and any change in their form to increase their economic benefit. As for what he said [4] for agricultural marketing, it is the business that is intended to transfer the economic commodity from the farmer of the producer to the table of the consumer [5]. This leads to an improvement in the level of the economic aspect and the social aspect of it.

Moreover, the gap is between discovering ideas, their spread and their application, [3]. The first refers to how food marketing methods and their social and economic functions are ranked highly efficient and how they change over time [6]. Thus, the agricultural market is one of the important and basic aspects of the agricultural aspect. From a physical point of view, it starts directly from the producers (farmers) sorting and grading their products, packing them and transporting them to the markets with jobs and services that help reach these products to consumers' tables [7]. Measuring marketing margins is the first step to identifying the total marketing costs resulting from the flow of goods and products from the production areas to the places of consumption through the markets (the marketing paths) until they reach the hands of the final consumer [8].

Problem statement:

The problem of the research is the effect on the efficiency of marketing and its decline due to the increase in the margin for marketing resulting from the high cost of marketing and the profit of the intermediary, which leads to an increase in the prices paid by the individual (the consumer) and this consequently leads to a decrease in profits for producers.

Research objectives:

Estimate the marketing margins for the cucumber crop among the different marketing stages in Salah El-Din Governorate - Tikrit District.

Estimation of the items of marketing margins and marketing costs of cucumber crop in Salah al-Din Governorate - Tikrit District.

Measuring the marketing efficiency of the cucumber crop under study.

MATERIAL AND METHODS

The use of the descriptive method when exposed to the concepts related to the study, considering the discussion of the basic marketing curricula. The goal of the study is achieved, and these appropriate methods are used in order to achieve the goal and obtain data and facts in time d[9], after which the data and facts are classified and unloaded to be processed through analysis. Show the association to extract its connotations and reach full For the accuracy of the results in the phenomenon under study [10]. The use of statistical analysis to measure the temporal trend and the use of the (SPSS) statistical. The primary data was obtained through personal interview questionnaire forms that were designed for each of the (Farmers, wholesalers and retailers), where data were collected for the product on (76) farms as a stratified random sample representing (10%) of the

study population consisting of (754) farms of the cucumber crop in the Tikrit district. Hash (46) as a random sample from the study population.

RESULTS

Estimating the total production costs of the cucumber crop for the 2021 production season. A group of farmers for this crop in Tikrit district was identified based on the questionnaire, where the average fixed production costs per acre amounted to (405 dinars/dunum, and the average variable production costs per acre) reached (583). (JD / dunum. The average total production costs per acre can be obtained through the following mathematical relationship (average fixed costs + average variable costs) = (988) dinars/dunum, as shown in Table (1,2,3). As for the average productivity of one dunum, it amounted to (4.4) tons, while the average cost of productivity per ton amounted to (224.545) dinars/ton, as shown in Table (4).

Variable cost items	The value is a thousand dinars,	Relative importance
robotic work	47	**8.1**
hired work	165	**28.30**
Seeds	42	**7.20**
Fertilizers	62	**10.64**
Pesticides	39	**6.68**
Fuel	85	**14.58**
maintenance expenses	27	**4.63**
plastic tunnels	88	**15,1**
Other expenses	28	**4.80**
the total	583	**%100**

Table 1. Shows the average variable costs of cultivating one dunum of the studied cucumber crop in Salah al-Din Governorate / Tikrit District. Source: The researcher obtained it through the questionnaire form.

Fixed cost items	The value is a thousand dinars,	Relative importance
land rent	37	**9.13**
Extinction	98	**24.2**
family business	270	**66.67**
the total	405	**%100**

Table 2. shows the average fixed costs of cultivating one dunum of the cucumber crop in / Tikrit District. Source: The researcher obtained it through the questionnaire form

Total cost items	The value is a thousand dinars,	Relative importance
Variable costs	583	**59.01**
Fixed cost items	405	**40.99**
the total	988	**%100**

Table 3. shows the Average cultivating of the cucumber crop in Salah al-Din Governorate / Tikrit District. Source: The researcher obtained it through the questionnaire form

The average total cost of culti-vating one acre of the crop is dinars	The average productivity of a dunum (tons)	Average production costs per ton
988	4.4	224.545

Table 4. Shows the average total production costs per dunum, the average productivity per dunum, the revenue per dunum, and the average production costs per ton of cucumber. The source was calculated and compiled by the researcher based on Table (3,2,1).

Estimating the costs of marketing operations for the cucumber crop under study

The cucumber crop needs special attention from all parties in the marketing process, and they are

First: Farmers: Farmers are considered the main link in the agricultural marketing cycles and the main pillar as the farmer is the producer and the marketer. Moreover, among the costs incurred by the agricultural product, as shown in Table (5), the cost of packaging is one of the important marketing costs, and this cost varies from one crop to another, knowing that they are used in packing. The crop is used in plastic boxes that are traded and bought by wholesale farmers and used more than once at a price of (1000) dinars for a large box with a capacity of (25) kg, where one ton needs a crop (cucumber) and the cost was calculated according to the period used for each season and is estimated at 400% For 3 years use, the costs of one box are (300 dinars) and amount to (12,000) per ton, at a rate of (25.10%) of marketing costs. As for packaging costs, it is the process that comes after the process of picking, cleaning, sorting, and grading the fruits, and it is one of the stages of preparing the crop before shipping it to the market. The packing process takes place in the field directly using special packages. As for the loading carried out by the farmer to load the crop for marketing to wholesalers, it amounted to (6300) dinars/ton and a rate of (13.18%) of marketing costs. As for the transport fees, according to the difference in the capacity of the means of transport, the distance traveled and the weight of The shipment and the conditions of the region, where the average transportation costs for one ton of the tomato crop amounted to (25,000) dinars on a car whose payload is approximately (2) tons of the total marketing costs, as it constituted a percentage (52.30%) as shown. The commission for the entry fee of the bonus is estimated according to the load and size of the car. It amounts to a car with a load of (1-2) tons up to (4500) dinars. It is called the entry fee, and it varies according to the size of the car and its cargo. Of the total marketing costs, which constituted (9.42%)

Marketing cost items	per ton in dinars	Relative importance
Packaging cost	12000	**25.10**
Loading packing fee	6300	**13.18**
transportation fees	25000	**52.30**
Market commission fee	4500	**9.42**
total marketing costs	47800	**%100**

Table 5. shows the items of marketing costs per ton for the cucumber crop in Salah al-Din / Tikrit district.Source: The researcher obtained it through the questionnaire form

Extracting product profits

We can extract product profits per ton through the following mathematical formula: Product (farm) profits = revenue - (production costs + marketing costs

Production costs dinars/ton	Marketing costs dinars/ton	Total production and marketing costs dinars/ton	Revenue (TR) dinars/tons	Profit dinar/ton
224545	47800	272345	371000	**98655**

Table 6. shows the producer's profits per ton of the cucumber crop. Source: - through the tables (6,5).

From above, it is clear that marketing to 272345 and the r+evenue is 371,000, while the profits of the product per ton of the studied cucumber crop amounted to (98655) dinar/ton.

Wholesalers

It is the place to which crops are transported as for the costs borne by the wholesaler in a locality, from (the rent of a shop, the wages of workers, the rent of water and electricity, other wages represented by cleaning and joint night guards). These costs were obtained based on the questionnaire form (2). It can be seen in Table (7) the marketing costs of wholesalers, where the average rent of the shop was (240000) dinars, the rent of water and electricity (97000) dinars, and the average wage of workers number (2), which was the highest costs for wholesalers and amounted to about (420000) dinars, and the average costs of guarding And cleaning (80000) so that the total costs borne by the wholesaler in his shop amounted to (837000). In contrast, the average quantities sold monthly in wholesale shops amounted to (6430) kg/ton of the cucumber crop under study.

The costs of marketing operations borne by the wholesaler are calculated during a month through the following formula:

month during (marketing operations costs average)/(((month during (sold quantities average)) = wholesale to merchant marketing costs average

$$= \frac{Dinar(\ 700000\ )}{kg(\ 130000\ )} = \mathbf{6340} \quad \text{dinars/ton}$$

Wholesaler cost items	value in dinars	Relative importance
shop rent	240000	**28.67**
Workers' wages	420000	**50.18**
Water and electricity costs	97000	**11.59**
Custody and cleaning costs	80000	**9.56**
Total marketing costs for the wholesaler dinars/ton	837000	**%100**
The average marketing cost for the wholesaler is 6.43 dinars/kg		

Table 7. shows the marketing costs borne by the wholesaler per ton of the option. Source: The researcher obtained it through the questionnaire form.

Retailer

It is the markets that are located in the Tikrit district and its markets, as the cucumber crop is delivered to these markets either by purchasing from wholesale markets or directly from farmers. These prices were calculated within a month by meeting some of them and contacting others According to the prices shown in Table (9).

Costs borne by the retailer

It turns out that the costs of marketing and transportation operations from the wholesaler to the retailer are borne by the retailer, including operations carried out by the retailer (transportation costs, damaged costs, shop wages, electricity water fees, workers' wages, and other wages Represented by the price of selling bags, cleaning services, etc.), and the costs of these paragraphs were obtained based on the questionnaire. The average transportation costs amounted to (15000), the costs of damaged quantities (2000), the costs of the shop's rent (280,000) dinars, the cost of water and electricity (60,000) dinars and the wages of workers (480,000) dinars, and the costs of bags and boxes (4000). It was found that the highest costs were labor wages, at a rate of (57.07%), so the total costs borne by the wholesaler in his shop were up to (841,000). In contrast, the average quantities sold during a month in wholesale shops were (21.56 dinars/kg) of the cucumber crop.

The costs of marketing operations borne by the retailer during a month are calculated through the following formula

month during (marketing operations costs average)/(((month during (sold quantities average)) = retail to merchant marketing costs average

$$= \frac{Dinar(\ 841000\ )}{kg(\ 4000\ )} = 21.56 \text{ dinars/ton}$$

The average selling price per kilogram during May was estimated to be (21.56) dinars/kg, and Table (8) illustrates this.

Retailer cost paragraphs	value in dinars	Relative importance
Transportation costs to the retailer	15000	1.78
Costs for damaged quantities	2000	0.24
shop rent	280000	33.29
labor wages	480000	57.07
Electricity and water costs	60000	7.13
The costs of bags and boxes	4000	0.48
Total marketing costs for the retailer dinars/ton	841000	100
The average marketing cost for the wholesaler is 21.56 dinars/kg		

Table 8. shows the total costs incurred by the retailer for the cucumber crop.Source: The researcher obtained it through the questionnaire form (3).

Measuring marketing margins and the relative importance of margin items and measuring the marketing efficiency of cucumber crops.

The evolution of farm prices wholesale and retail prices for the cucumber crop under study.

Farm prices: The average farm price of cucumber crops was (371) dinars/kg.

Wholesale prices: The average wholesale price of cucumbers is (510) dinars/kg.

Retail prices: The average retail prices of the cucumber crop amounted to (750) dinars/kg. Table (9) shows this.

The percentages of shares for all intermediaries, including producers, wholesalers and retailers.

The share of the farmed product from the consumer dinar: With regard to the producer's share of the consumer dinar for each (cucumber), the average share of the producer reached about (49.46%).

The wholesaler's share of the consumer's dinar: - With regard to the wholesaler's share of the consumer's dinar of the cucumber crop, the average share of the wholesaler was about (18.53%).

The retailer's share of the consumer's dinar:- With regard to the retailer's share of the consumer's dinar of the cucumber crop, the average share of the retailer was about (32%)

The mediators' share of the consumer's dinar: With regard to the intermediaries' share of the consumer's dinar of the cucumber crop, The average share of brokers is about (50.53%), and Table (9) shows this.

Prices are dinars/kg			Distribution. of the consumer_ dinar			
Farm	Sentence	Retail	farmer's share	Wholesaler's share	Retailer share	**Brokers' share**
371	510	750	49.46	18.53	32	**50.53**

Table 9. It shows the prices and marketing shares of the product, wholesale and retail, from the buyer's dinars.Source: Calculated using the questionnaire (6,7,8).

$$\text{farmer's share}(4) \frac{farm}{Retail} \times 100$$

$$\text{Wholesaler's share } (5) \frac{sentence - farm}{Retail} \times 100$$

$$\text{Retailer share } (6) \frac{Retail - sentence}{Retail} \times 100$$

Brokers' share(7)= Wholesaler's share+ Retailer share

Estimation of marketing margins for cucumber crop in Salah al-Din Governorate / Tikrit District

Margins for marketing: It is some of the expenses that the consumer goes to the institutions, that is, what is paid by the consumer to buy the agricultural product. Activity and marketing work [11]. included

Marketing margins between wholesalers and producers: the marketing margin between wholesalers and producers reached (139), and the relative marketing margin for wholesalers and producers reached about (27.25%) dinars/kg

Marketing margins between wholesalers and retailers: The absolute marketing margin for the two phases of wholesale and retail was (240) dinars/kg, while the relative marketing margins between them amounted to (32%) dinars/kg.

The Marketing margins for each of the retailers and producers: the absolute margin between them amounted to (379) dinars, and the relative margin between them amounted to (50.53%) dinars. Table (10) shows this.

Marketing Margins					
Joomla – Product		fragmentation - sentence		segmentation - product	
ABSOLUTE	relative	Absolute	relative	Absolute	relative
139	%27.25	240	%32	379	% 50.53

Table 10. Shows the marketing margins for the marketing stages of the crop (cucumber .)Source: compiled and It is identified by the table (9).

Extracting retail and wholesale profit:

We Can extract the profit   of the wholesaler and retailer through the following mathematical formula

Wholesale profit = its price - (product price + marketing process cost).

Retailer's profits = consumed price - (wholesale price + all retail marketing costs.

price that the farmer receives (product) (JD/kg	Total costs of marketing operations incurred by the product (JD/kg	The total costs of marketing operations for the wholesaler (JD / kg	Wholesale price) (JD/kg	Profits of the wholesaler (JD/kg	Total costs of marketing operations for the retailer (JD / kg	Selling price to the consumer (JD/kg	Retailer's Profits (JD/kg
371.00	47.800	6.43	510	132.57	21.56	750	218.44

Table 11. shows components of the marketing margin for the cucumber crop.The source was calculated by the researcher in tables (6, 7.8.9).

Measuring the marketing efficiency of cucumber crop in Salah al-Din Governorate / Tikrit District.

Market efficiency was calculated by the presence of the total cost, which includes productivity and marketing: [8] and according to formulas or standards. Next.:.

First: Measuring marketing efficiency through the first relationship.

$$\text{Marketing Efficiency} = 100 - \frac{\textbf{wholesale marketing costs}}{\textbf{Productivity + Marketing (total costs)}} \times 100$$

This measure is used when data on the production costs of the cucumber crop under study are available [12], and when measuring the marketing efficiency of the average cucumber crop according to the, it was (82.44%) Table 12 shows that.

Second: Measuring marketing efficiency through the second relationship.

$$\text{Marketing Efficiency} = 100 - \frac{\textbf{Productivity and marketing costs}}{\textbf{(consumer price) the marketed commodity's value}} \times 100$$

When calculating the marketing efficiency of the average for the cucumber crop according to the second formula, it was found that it amounted to about 63.68%. There is a difference in marketing efficiency due to consumer prices and production and marketing costs. This difference in the results of marketing efficiency is due to the difference in production costs, knowing that the marketing path is similar. According to the data they used available to Researchers.

Production costs per ton dinars/ton	The price that the farmer receives is dinars/ton	Consumer price per ton dinars/ton	Marketing costs dinars/ton	Absolute marketing margin dinars/ton	Marketing costs + production costs, dinars/ton	Marketing efficiency according to the first criterion	Marketing efficiency according to the second criterion
224.545	371.000	750.000	379.000	47800	272345	82.44	**63.68**

Table 12. shows the measurement of Efficiency results for marketing and all results for the crop in / Tikrit District.

DISCUSSION

Margins for marketing: It is some of the expenses that the consumer goes to the institutions, that is, what is paid by the consumer to buy the agricultural product—activity and marketing work [11]. Moreover, market efficiency was calculated by the presence of the total cost [8].

CONCLUSIONS

The results showed the difference in the type, form and tasks of the marketing process. The high profits of intermediaries, the irregularity and the linkage of each stage and marketing ring between the producer and the consumer. It was also found that the prices of production and marketing inputs were high, which led to an increase in production and marketing costs at the level of each ton of the crop. The total production and marketing costs amounted to 272345 dinars per ton, and thus weak competition with the imported crop in terms of prices and other specifications. The weakness of the marketing operations carried out by the farmer on the marketed cucumber crop in terms of cleaning, sorting, grading, packaging and quality specifications in terms of color, size and taste, which weakened competition with imported crops that are characterized by quality specifications of color, size and consistent and organized packing. The increase in retail prices is due to the increased fees in the markets, as it reaches 12% in the wholesale markets . The high percentage of the marketing margin for the distribution activity (wholesale and retail traders), as the absolute marketing margin reached 379,000, due to the high amount of profits Charged by these distributors, even though the number and type of marketing services provided by them are often few and weak The marketing efficiency of the cucumber crop is low as it reached (63.68), which has undesirable negative effects that affected the marketing of these crops internally. As for the factors that adversely affect marketing efficiency, they were (transportation, marketing costs, packaging, and loading).

Recommendations:

Work to provide production requirements and agricultural marketing requirements for the cucumber crop with good quality and appropriate prices,

which have an effective role in reducing production costs and agricultural marketing, and developing the infrastructure Through the development of private factories for fertilizers and pesticides factories, providing and facilitating the means of manufacturing, transportation and storage, and encouraging investment for all projects Work on activating the role of the General Federation of Agricultural and Cooperative Societies. Providing trained and qualified labor to perform services and various marketing operations such as collecting, sorting, grading, mobilizing, transporting and storing, and that these workers concerned are trained, skilled and experienced. In agricultural marketing, providing means of transporting crops From the beginning of production to the end of marketing, provided that they are equipped with cooling means to reduce the percentage of loss and damage to the cucumber crop during marketing services.

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