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Hassan Thamer  
Zanzal\*  
Amal Jamal Yusuf

## Marketing efficiency of the tomato crop in Iraq for the year 2020 (Salah al-Din Governorate as a model and application)

Department of  
Economics and  
Agricultural Extension,  
Tikrit University, Iraq

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### ABSTRACT

The tomato crop is one of the most important daily consumer food crops that enters the consumer basket and its importance called for necessity Study it through a random sample consisting of (145) questionnaires, of which (75) are intended for farmers and (35) are designated for each of the wholesalers and (35) for retailers in the governorate Salah al-Din, and it is necessary to refer to the average number of dunams planted with the crop for the research sample (5.2) dunams, as the production of one dunam amounted to an average of (4.8) tons / dunam, and the average prices of the crop for the producer, wholesaler and retailer amounted to (382-504.4-701.7) dinars/ kg, respectively, the average absolute marketing margin between wholesaler - producer, retailer - wholesaler, retailer - producer amounted to (81.86 - 197.3 - 319) dina / kg, respectively, while the relative marketing margin between wholesaler - farms, wholesaler The retailer, the retailer-farmer (producer) amounted to (19.50%, 26.11%, 42.37%) respectively, and the profits of the retailer from the absolute marketing margin ranked first, while the profits of the wholesaler ranked second, and the marketing efficiency was measured, amounting to The average marketing efficiency according to the three laws of scale (1) amounted to (59.93%), For scale (2) it reached (65.41 %, 43.95%, 32.66%), and for scale (3) it reached (63.16%), it was concluded that it is low when compared with the marketing systems of the rest of the world. (319) dinars, while the profits of the wholesaler from the marketing margin averaged (197.3) dinars. The reason for this is attributed to the ability of the retailer to bargain without providing marketing services. There is scarcity and shortage in wholesale markets, and this in turn leads to many wholesalers monopolizing the crop and selling it at prices that suit them, as well as the necessity for the owners of wholesale offices to perform the necessary marketing functions (sorting, grading, classifying and packing) This study recommended opening new outlets for wholesale sales and expanding wholesale offices, as the study showed that there is a scarcity and shortage in wholesale markets, and this in turn leads to many wholesalers monopolizing the crop and selling it at prices that suit them

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### INTRODUCTION

The tomato is one of the important and necessary crops, and it is a good source of income for farmers from the various groups of society for this crop and the importance of this crop in terms of food and marketing and its connection to the family's daily basket and because it is one of the crops that generates a rewarding income for the farmer and because there are many marketing problems that prevent the crop from reaching the consumer in the form and price that it Satisfies his desires, as the high marketing margin due to the high marketing costs, called for the necessity to study the most important marketing episodes that the crop passes through from the stage of harvesting to the final consumer. A specific market and its end by a marketing facility or agency, or

\* Corresponding author: E-mail: [Hassan.thamer@tu.edu.iq](mailto:Hassan.thamer@tu.edu.iq)

it is the difference between the price at which the product is sold (the farm gate price) and the price at which the consumer buys (Al-Shammari, 2002, 58), and thus consumers face two types of prices: the price of the farm and the price of marketing margins and these prices It reflects the production costs of agricultural products and the costs of marketing services, and also reflects consumers' desires for these products (Al-Hadithi, 1993, 267.)

#### **research importance:**

The importance of the research lies in the importance of the studied crop and the importance of the study to find out the low marketing margins and the marketing efficiency to know the services added to the farm gate price or not.

#### **Research problem:**

The research problem lies in the high marketing costs of the crop, the low marketing margin and the marketing efficiency of the studied crop due to weak government support, which makes the crop production cycle high due to the high prices of labor, fertilizers, pesticides, seeds and plastic covers, which makes the cost prices high, which makes the price of the farm door high compared to the prices of imported crops.

#### **Research goal:**

1- Studying the marketing margins and the share of the producer, wholesaler and retailer from the distribution of consumer dinars to judge the efficiency of marketing performance.

2- Calculating the marketing efficiency and knowing the level of efficiency for each of the producers, intermediaries, singular and wholesale traders and retailers.

#### **Research Hypothesis:**

1. Low marketing efficiency The reason is due to low marketing costs compared to productivity costs. 2. Low marketing margins added to farm products so that no operations are conducted on the farm door crop.

Estimating the marketing margins between the different marketing stages of the studied tomato crop in Salah El-Din Governorate. The marketing margin is defined as the difference between the price paid by the consumer and the price charged by the farmer (the producer). (Thamer, 2013, 45), expresses the marketing margins either in an absolute value, which represents the difference between the buying and selling prices in two different stages known as monetary units, or in relative value (Percentile) It is the difference between the absolute margin divided by the selling price and multiplied by

\*100. (Al-Tarwana, 2010, 76).

1- The marketing margin between the stages of the wholesaler and the farmer (producer): as shown in Table (1), the absolute marketing margin between the stages of the wholesaler and the producer, the average amounted to (81.8) dinars / kg during the study period, while the marketing margin in percentage at this stage of the crop was: The average was (19.50%) during the study period. It was calculated using the following mathematical formula:

Absolute marketing margin between wholesale and product prices (1) = wholesale price - product price. Absolute marketing margin between wholesale and product prices for the month of May = 504.4 - 382 = 112.4

Absolute marketing margin between wholesale and product prices for the month of June = 310 - 250 = 60.

The absolute marketing margin between the wholesale and product prices for the month of July = 433.2 - 360 = 73.2

Wholesale price - product price. Relative marketing margin between wholesale price and product

$$= \frac{\text{wholesale price} - \text{product}}{\text{wholesale price}} * 100$$

$$= \frac{112.4}{770} * 100 = 22.28\%$$

The relative marketing margin between the wholesale price and the product for the month of May

$$= \frac{\text{wholesale price} - \text{product}}{\text{wholesale price}} * 100$$

$$= \frac{60}{310} * 100 = 19.35\%$$

The relative marketing margin between the wholesale price and the product for the month of June

$$= \frac{\text{wholesale price} - \text{product}}{\text{wholesale price}} * 100$$

$$= \frac{73.2}{433.2} * 100 = 16.89\%$$

Marketing margins are low, and the reason is due to the lack of services on the farm's gate production. 2- Marketing margin between the retailer and wholesaler stages:

With regard to the absolute marketing margin between the stages of the retailer and the wholesaler, the average amounted to (197.2) dinars / kg, as for the marketing margin in percentage at this stage for the tomato crop, the average amounted to about (26.10%) and it was calculated through the following mathematical formula:

The absolute marketing margin between the retail and wholesale prices (3) = the retail price - the wholesale price

The absolute marketing margin between the retail and wholesale prices for the month of May

$$= 1105 - 770 = 335$$

The absolute marketing margin between the retail and wholesale prices for the month of June

$$= 375 - 310 = 65$$

The absolute marketing margin between Retail and wholesale prices for the month of July

$$= 625 - 433.2 = 191.8$$

The relative marketing margin between the retail and wholesale price (4)

$$= \frac{\text{the retail price} - \text{the wholesale price}}{\text{wholesale price}} * 100$$

x the retail price The relative marketing margin between the retail and wholesale price for the month of May( Al-Tarwana, 2010,37).

$$= \frac{335}{1105} * 100 = 30.32\%$$

The relative marketing margin between the retail and wholesale price for the month of June

$$= \frac{65}{375} * 100 = 17.33\%$$

The relative marketing margin between the retail and wholesale price for the month of July =

$$= \frac{191.8}{625} * 100 = 30.69\%$$

Low relative marketing margin for lack of added services to the wholesaler on the farm door crop

3- Marketing margin between the retailer and producer stages:

With regard to the absolute marketing margin for three months (May, June, July) between the retailer and producer stages, it averaged

It has (319.3) dinars / kg. As for the marketing margin in percentage at this stage for the tomato crop, the average has reached the retail price - the price of the product. The relative marketing margin between the retail price and the product (6) = - 100 x retail price

(42.37%)

. Table (1) shows the marketing margin, and it was calculated using the following mathematical formula:

The absolute marketing margin between the retail and product prices (5) = the retail price - the product price  
The absolute marketing margin between the retail and product prices for the month of May = 1105 - 537 = 568

The absolute marketing margin between the retail and product prices for the month of June = 375 - 250 = 125

The absolute marketing margin between Retail and product prices for the month of July = 625 - 360 = 265

The relative marketing margin between the retail price and the product for the month of May  

$$= \frac{568}{1105} * 100 = 51.40\%$$

The relative marketing margin between the retail price and the product for the month of June  

$$= \frac{125}{375} * 100 = 33.33\%$$

The relative marketing margin between the retail price and the product for the month of July  

$$= \frac{265}{625} * 100 = 42.4\%$$

Low relative marketing margin for lack of added services for the retailer on the farm door crop

**Table (1): Marketing margins between the different marketing stages of the tomato crop in Salah El-Din Governorate for the agricultural season**

Tomato crop for months	marketing margin					
	sentence - Product		fragmentation - sentence		segmentation - product	
	absolute	relative%	Absolute	relative%	absolute	relative%
May	112.4	22.28	335	30.32	568	51.4
June	60	19.35	65	17.33	125	33.33
July	73.2	16.89	191.8	30.69	265	42.4
Average	81.86	19.50	197.3	26.11	319	42.37

Source: Prepared by the researcher based on the questionnaire.

### Wholesaler and Retailer Profits:

We can now obtain the profits of each of the farmer (the producer), the wholesaler and the retailer through the following mathematical formulas:

1. Product profits = product price (total production and marketing costs of the farmer (product))  
2. Wholesaler profits Wholesale price - (product price + Total costs of marketing operations for the wholesaler).

3. Retailer's Profit = Retail Price - (Wholesale Price + Total Marketing Operations Costs of the Retailer). The following table shows the results that were reached, as follows: Table (2) the costs of marketing operations and the profits of the wholesaler and retailer for the tomato crop in Salah al-Din governorate for the season agricultural 2020

Low relative marketing margin for lack of added services for the retailer on the farm door crop

**Table (2) Marketing margins between the different marketing stages of the tomato crop in Salah El-Din Governorate for the agricultural season 2020**

The price that the farmer receives (product) dinars / kg	Wholesaler price dinars/kg	Selling price to the consumer in dinars/kg	total production	Costs of marketing operations for farms dinars/kg	The costs of marketing operations for the wholesaler, dinars / kg	The costs of marketing operations for the retailer dinars / kg	Total costs of marketing operations for farms, wholesaler and retailer	Producer profits	Profits of the wholesaler dinar / kg	The profits of the retailer dinar / kg
382	504.4	701.7	154.73	51.2	6	46.25	103.45	330.8	116.4	151.03

Source: Prepared by the researcher based on the questionnaire table.

**Marketing Efficiency Measurement:**

Marketing efficiency is one of the most important economic criteria used in measuring market performance, and improving the measurement of marketing efficiency is the most important goal for each of service providers (marketers), producers, consumers and society in general (Al-Faraji, 2014, 50) First: Measuring the marketing efficiency of the tomato crop in the governorate Salah al-Din through the formula that reflects the ratio between the total marketing costs and the total costs (production and marketing) as follows:

$$\begin{aligned} \text{Marketing efficiency (1)} &= 100 - \frac{\text{total marketing costs}}{\text{total costs (production and marketing) as follows}} * 100 \\ &= 100 - \frac{103.45}{258.18} * 100 \\ &= 59.93\% \end{aligned}$$

Using this scale, the results of the marketing efficiency of the tomato crop (59.93%) This clear discrepancy in the results of the marketing efficiency shows low production costs and high marketing costs, but without marketing services on the farm door price resulting from a discrepancy in production costs and marketing costs of the crop.

Second: Measuring the marketing efficiency of measures (2) as in Table (4) through the following scale:

$$\text{Marketing Efficiency (2)} = 100 - \left\{ \frac{\text{Absolute Marketing Margins}}{\text{Marketing margins} + \text{production costs}} * 100 \right\} \text{Type equation here.}$$

$$\text{Product and wholesale} = 100 - \left\{ \frac{81.86}{81.86+154.73} * 100 \right\} = 65.41\%$$

$$\text{Retail and wholesale} = 100 - \left\{ \frac{197.3}{197.3+154.73} * 100 \right\} = 43.95\%$$

$$\text{Retail and Product} = 100 - \left\{ \frac{319}{391+154.73} * 100 \right\} = 32.66$$

$$\begin{aligned} \text{Marketing Efficiency (3)} &= 100 - \left\{ \frac{\text{Total production and marketing costs}}{\text{(the value of the marketed commodity (consumer price))}} * \right. \\ &100 \left. \right\} \text{Total} \\ &= 100 - \left\{ \frac{258.45}{701.7} * 100 \right\} = 63.16\% \end{aligned}$$

Through this formula, the marketing efficiency was calculated and it was found that it was about (63.160) for the tomato crop, and from this we conclude that there is a difference in marketing efficiency in the three relationships, and these three relationships are used according to the availability of data for the researcher.

**Table (3): Measuring marketing efficiency according to the first and third formulas for the tomato crop in Salah Al-Din Governorate for the 2020 production season**

The price received by the farmer is dinars / kg	Consumer price per kg dinars / kg	Production costs per ton thousand dinars / kg	Marketing costs of the product, wholesale and retail, thousand dinars / kg	Marketing costs + production costs, thousand dinars / ton	Marketing efficiency through the first relationship	Marketing efficiency through the third relationship
382	701.7	154.73	103.45	258.18	%59.93	%63.16

Source: Calculated by the researcher based on Table (2).



**Table (4): Marketing Margin and Marketing Efficiency According to Formula (2) for Marketing Stages Wholesaler, farms, retailer, wholesaler, farms and retailer**

sequence	Marketing stages	marketing margin	optimum production costs	Marketing Efficiency %
1	Wholesaler and farmer stage	81.86	154.73	65.41
2	Retailer and wholesaler stage	197.3	154.73	43.95
3	stage farmer and retailer	319	154.73	32.66

The source was calculated by the researcher based on the data in Table (3).

## CONCLUSIONS

1. The research concluded that the average marketing costs for the producer, wholesaler and retailer are (51200 - 6000 - 46250) dinars / ton, respectively. The total marketing costs amounted to (103450) dinars / ton, which indicates the high marketing costs of the crop from the consumer dinar
2. I concluded that there is an increase in the absolute importance of the marketing margin between the price of the product - the consumer. The reason is due to the fact that Allawi wholesale (offices) did not conduct any actual and facilitating marketing functions (collecting, sorting, grading, packaging, cold storage) as for what is related to The absolute importance of the marketing margins for retailers has been very high due to the difference in prices between the wholesale market and the retailer's price without performing any marketing functions. As for the importance of the relative marketing margin between the price of the product and the consumer, it also represents a high percentage of what the consumer pays, reaching as an average (42.37). %, which means that (42.37) of a dinar of the price paid by the consumer to obtain a kilogram of the tomato crop, his profits go to intermediaries (wholesaler and retailer).

## RECOMMENDATIONS

1. This study recommended opening new outlets for wholesale sales and expanding wholesale offices, as the study showed that there is a scarcity and shortage in wholesale markets, and this in turn leads to many wholesalers monopolizing the crop and selling it at prices that suit them.
2. Also, the necessity for the owners of wholesale offices to carry out the necessary marketing functions (sorting, grading, classifying and packing).

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### الكفاءة التسويقية لمحصول الطماطة في العراق لعام 2020 (محافظة صلاح الدين نموذجاً وتطبيقاً)

آمال جمال يوسف

حسن ثامر زنزل

قسم الاقتصاد والارشاد الزراعي- كلية الزراعة - جامعة تكريت - تكريت - العراق

#### الخلاصة

يعد محصول الطماطة من أهم محاصيل الغذائية الاستهلاكية اليومية والتي تدخل في سلة المستهلك ولاهيمته دعت الضرورة 1- دراسته من خلال عينة عشوائية مكونة من (145) استمارة استبيان منها (75) مخصصة للمزارعين و(35) استمارة مخصصة لكل من تجار الجملة و(35) لتجار التجزئة في محافظة صلاح الدين، ولا بد للإشارة الى متوسط عدد الدونمات المزروعة بالمحصول لعينة البحث(5.2) دونم، حيث ان انتاج الدونم الواحد بلغ كمعدل (4.8)طن/دونم، وبلغ متوسط اسعار المحصول للمنتج وتاجر الجملة وتاجر التجزئة (382-504.4-701.7) دينار/كغم على التوالي، ان متوسط الهامش التسويقي المطلق بين تاجر جملة - منتج، تاجر تجزئة- جملة، تاجر تجزئة- منتج بلغ (81.86- 197.3- 319)دينا/كغم على التوالي، اما الهامش التسويقي النسبي بين تاجر الجملة-المزارع، تاجر الجملة-تاجر التجزئة، تاجر التجزئة-المزارع(المنتج) بلغ (19.50%، 26.11%، 42.37%) على التوالي، واحتلت ارباح تاجر التجزئة من الهامش التسويقي المطلق بالمرتبة الاولى، اما ارباح تاجر الجملة فقد احتلت المرتبة الثانية، وتم قياس الكفاءة التسويقية، بلغ متوسط الكفاءة التسويقية حسب القوانين الثلاثة للمقياس (1) بلغت(59.93%)، وللمقياس (2) بلغت (65.41%، 43.95%، 32.66%)، اما للمقياس (3) بلغت (63.16%)، استنتجت انها منخفضة عند مقارنتها مع النظم التسويقية لباقي دول العالم، نلاحظ ارتفاع ارباح تاجر التجزئة من الهامش التسويقي حيث بلغت كم متوسط (319) دينار ، في حين كانت ارباح تاجر الجملة من الهامش التسويقي كم متوسط (197.3) دينار ويعزى سبب ذلك الى قدرة تاجر التجزئة على المساومة من دون ان يقدم خدمات تسويقية، وصت هذه الدراسة الى فتح منافذ جديدة للبيع بالجملة وتوسيع مكاتب الجملة حيث اظهرت الدراسة ان هناك شحة وقلة في اسواق الجملة وهذا بدوره يؤدي الى احتكار الكثير من تجار ال الجملة للمحصول وبيعه باسعار تناسبهم، وكذلك ضرورة قيام اصحاب مكاتب البيع بالجملة بالوظائف التسويقية الضرورية من (فرز وتدرج وتصنيف وتعبئة) وصت هذه الدراسة الى فتح منافذ جديدة للبيع بالجملة وتوسيع مكاتب الجملة حيث اظهرت الدراسة ان هناك شحة وقلة في اسواق الجملة وهذا بدوره يؤدي الى احتكار الكثير من تجار ال الجملة للمحصول وبيعه باسعار تناسبهم.

#### الكلمات المفتاحية:

الكفاءة التسويقية ، الهامش التسويقي، كفاءة تسويق محصول الطماطة