

# Analysis of value chains and added value for the production and marketing of the tomato crop in Salah al-Din Governorate for the year 2021 (Al-Ishaqi - a model)

Faisal Hussein Saud al-juwani<sup>1</sup> faisal.h.soud@st.tu.edu.iq

Firas Ibrahim arahim<sup>2</sup> Firas.ibrahim@tu.edu.iq

<sup>1,2</sup>Department of Agriculture Economic and Extension, College of Agriculture, Tikrit University, Tikrit, IRAQ.

- Date of research received 20/08/2023 and accepted 03/09/2023.
- Part of MSc. dissertation for the first author.

#### **Abstract**

The study of tracking product flows, showing the stages of value added, determining relationships with other actors in the chain are aimed at identifying the problems and obstacles of the value chain link of tomato crops, calculating the costs and revenues of production and marketing, calculating value added and related indicators. The study was conducted by the governor of Salah al-Din (al-ishaqi-as a model) and the initial data for the study were collected according to a random sample containing samples of actors within the value chain link of tomato crops and used a questionnaire form created specifically for this link. Through the use of quantitative indicators to draw conclusions, which are indicators for analyzing and calculating costs and revenues, the study reached the most important results, the production cycle has achieved an average gross value added (159.156) dinars/kg, according to the conclusion, based on the most important issues and limitations of the production cycle of tomato crops, the total cost of production has reached (1149677) thousand dinars. and the Results the total marketing costs amounted to about (208,712) dinars / dunum, (42,594) dinars / ton and (42,594) dinars/kg, and the marketing costs ranked third in terms of relative importance of the total total costs by (15.4%). The study recommends the need to activate the role of agricultural extension in considering quality conditions and increase farmers 'awareness of the importance of increasing supply over demand.

Key words: Value added chain, marketing, tomato crop, Al-Ishaqi

Citation: Saud, F., & arahim, F. (2023). Analysis of value chains and added value for the production and marketing of the tomato crop in Salah al-Din Governorate for the year 2021 (Al-Ishaqi - a model). *Kirkuk University Journal For Agricultural Sciences*, 14(3), 306-316. doi: 10.58928/ku23.14332

Correspondence Author: Faisal Hussein Saud al-juwani - faisal.h.soud@st.tu.edu.iq

Copyright: This is an open access article distributed under the terms of the creative common's attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are credited.

#### Introduction

The added value is the amount of wealth that a company can generate from its property, with the help of the efforts of its employees during a period, and the added value is generated at different stages by various actors in the value chain[5], one researcher defined it as an indicator that expresses the value achieved for the company during a year, as measured by the difference between inputs and outputs and expressed in monetary units [2], where one researcher believes[1] that the value expresses the principles that guide the company to achieve its goals, so each company must decide and determine the appropriate values a special production process, or a certain chain, for the growth of the economy While another study[6] confirmed that the added value of shareholders indicates the increase in the value of the project during a certain period. One of the researchers added that now senior management has a much greater awareness that real competitiveness stems from productivity measured by value added. Market forces have led to an increase in opportunities for product differentiation and the added value of raw goods due to increased consumer requirements regarding health, nutrition, convenience, as well as the efforts made by all food processors to improve their productivity[7], while one study shows that value added is the most appropriate criterion for resource allocation, so that the productivity of various means of production can be measured by the amount of value added by [5]. As confirmed by another study [9], there are many supporters of the use of "value added" as a strategy to achieve a competitive advantage in business environment in which competition increasingly growing. Our definition of value added focuses on additional activities that transform the bulk of the product (commodity) into a more differentiated product. In other types of analysis, activities that transform raw materials into a product are called Value-Added or total value[4], value-added opportunities help to analyze various financial situations and the value chain is used to identify the basic resources and processes that represent strength and logic and which are in

need of improvement, and opportunities for the development of competitive advantage [3]. The tomato crop is one of the crops of great importance through its daily consumption, whether fresh, cooked or processed, for a large part of the population, as the consumption of crops is related to the amount of availability, and therefore the tomato is one of the crops rich in salts, vitamins and minerals necessary for the human body, it belongs to the nightshade family, as this family contains (90) genera[3] and approximately (2000) types of vegetable crops[3] and tomatoes are selfpollinated crops, and we often find that local production is not enough to meet the need for local consumption or manufacturing, which requires importing whether manufactured as tomato paste, fresh or processed products It is one of the main and important vegetable crops in Iraq.

The problem of research: - the problem of research lies in the weakness of proper planning or making the necessary decisions, procedures and programs to not diagnose reality correctly for all the main and supporting episodes in order to enhance the added value. Iraq's dependence on oil revenues has become mainly one of the reasons for the decline in development plans in general and agricultural ones in particular.

**Research objectives** 1-calculation of production and marketing costs, revenues and profits achieved by participants in the value chain of the crop. 2. calculation of value added and some indicators associated with the value chain links.

#### The importance of the research:

the importance of the research lies in the fact that it studies the value chain of one of the most important crops that have a prominent nutritional and economic position globally, Arab and local, and ranks fourth in the list of strategic crops after wheat, rice and corn, and the tomato crop can contribute to enhancing the added value of the agricultural sector in Iraq, and can give a thorough analysis of the market, provide the necessary information to all

beneficiaries (actors) as well as decision makers and related parties, and indicate what adds The Ring of local agricultural production.

#### The research hypothesis:

the research hypothesis is based on the fact that the tomato crop in Al-ishaqi achieves an added value to the agricultural GDP, as the high costs per and Prices fall at peak productionlink of the value chain negatively affect the enhancement of the added value of this crop.

#### **Data sources:**

the study of the value chain analysis of requires obtaining initial crop information and data from its field sources. personal interviews using questionnaire form prepared for this purpose, which is tailored to each level in the chain to obtain the required information and data in the field, where random samples were selected representing the main professionals in the study area (al-ishaqi).

#### **Analysis method:**

descriptive and quantitative analysis will be relied on through the use of mathematical formulas for the most important economic criteria and mathematical tools, and the most important of these criteria is the added value that is assumed at each link along the value chain, so this method evaluates what each activity adds to the product or service performed by the establishment according to competitive criteria on the basis of the following equation:. Value added = production value – the value of production supplies

#### The production loop is divided into:

#### **Tomato crop production costs**

are the costs of agricultural production inputs, and they differ from the costs in other economic activities, as the bulk of the costs in agriculture does not change its production, and this part is called fixed costs, while in most industries variable costs make up the bulk of them, In general," the costs are the sum of the value of what is paid for all the services of economic elements used in the production process and the costs are the basis and indicator on which the farmer relies to determine the

volume of his production and the size of the legitimate, and the change in the volume of production requires an adjustment in the quantity used in some production elements such as labor and raw materials, while the change of the project requires an adjustment in all elements, and economists call the time period that allows for the change in the size of the project ( the average period), in which he divides fixed costs and variable costs, fixed costs depend on the quantity of production, and include the costs of extinction, family labor, land rent and capital interest, as for the costs The purchase costs include wages of workers, mechanical work and others.

#### Estimate costs of production factors:-

The costs can be divided into costs (variable and fixed), through the information obtained from farmers through the questionnaire form when I returned to obtain data on the tomato crop, as shown in Table (1).

#### A-variable cost variable costs:

are the costs that change with the change in the size of the activity, as they increase with the increase in the size of the activity and decrease with the decrease in the size of the activity in the same proportion, therefore, the share of one unit of them is fixed and fixed, such as the direct cost of materials and the cost of direct wages.

1-costs for the purchase of seeds and seedlings:. The most important thing that affects the increase in productivity is the improved seeds, which are of high productivity in exchange for the use of fertilizers and pesticides of good quality, as the cost per acre is about (88550) thousand dinars/dunum, while the cost of buying seeds and seedlings at the level of One Ton has reached (18071) dinars/ton. It accounted for the relative importance of its value (9.99%) and ranked third among variable cost items.

2-the costs of automated work:. These costs include the costs of machinery and machines used in agricultural operations, as these agricultural operations include leveling plowing and pumps as well, as their value

amounted to (66,360) dinars / dunum, while they amounted to (13,543) dinars/ton, while their relative importance accounted for (7.49%), occupying the fifth place of the total variable costs.

3-the costs of leased labor:. In addition to manual labor, we need hired labor in our tomato crop cultivation, and the wages of workers are rising because they have skills and experience, and this is what caused an increase in the costs of leased labor, and the costs of leased labor at the level of a dunum (188,250) thousand dinars /dunum, while the costs of leased labor at the level of one ton have reached (38,418) thousand dinars/ ton, while the relative importance of the costs of leased labor occupied the second place, reaching about (21.25%) of the total variable costs.

4- transportation costs:. Transportation costs refer to the costs borne by farmers in transporting seeds and seedlings from the area of purchase to the place of cultivation.the cost of Transportation borne by farmers may vary depending on the purchased quantities and also according to the length of the distance between the places of sale and the places to which they are transported, as the transportation costs amounted to (24560) thousand dinars/dunum and(5012) thousand dinars/ton. It ranked tenth in terms of relative importance, accounting for (2.77%) of the total variable costs.

5- nylon purchase costs:. These costs include the cost of nylon, which is purchased for the agricultural process, and the costs reached at the level of a dunum (265,000) thousand dinars / dunum, while at the level of a ton (54,081) thousand dinars/ton. It reached the relative importance (29.9%) and ranked first among the total variable costs.

6-fertilizer costs:. The cost of fertilizers varied according to the cost of purchasing each fertilizer, including urea, dab and other fertilizers used in the production of tomato crop, and the cost of fertilizer amounted to(85,000) thousand dinars/dunum, while its cost amounted to (17,347) thousand dinars /ton. The relative importance occupied the fourth

place of the total variable costs, amounting to about (9.6%).

7-pesticide costs:. Pesticides are one of the main obstacles to agricultural production in Iraq due to the nature and variety of agricultural pests and environmental pollution. These pests are represented by insects, rodents, plant diseases, weeds, various animals and birds, as the annual losses resulting from these agricultural pests are estimated at about (35-50%) of the total agricultural production, and to treat and control these agricultural pests, intensive use of chemical pesticides should be used to protect agricultural production. the cost of pesticides reached (64169) thousand dinars / acre and (13096) thousand dinars / ton, as the cost of pesticides in terms of relative importance of variable costs ranked sixth (7.24%).

8-fuel and oil costs:. Oils and fuels are used in the operation of pumps, machines and equipment that are used in production processes and their value has reached (35,000) thousand dinars/dunum, while it reached (7143) dinars/ton. It ranked eighth in terms of relative importance, amounting to (4%) of the total variable costs.

9-water and electricity costs:. The costs collected from farmers for the use of water and electricity are official wages and these costs are considered very important as they contribute to increasing the productive output and amounted to (29508) thousand dinars/dunum and also (6022) thousand dinars/ton, and the relative importance reached (3.33%) of the total variable costs and was ranked ninth.

10-maintenance and repair costs: These costs may vary depending on the farms and also according to the machines and equipment used, and their costs amounted to (39280) thousand dinars/dunum, while they amounted to (8016) thousand dinars/ ton. It ranked seventh in terms of relative importance, amounting to (4.43%) of the total variable costs.

#### **B-fixed costs:.**

These are the costs that do not change with the change in the volume of production and within the appropriate range, while the share of one unit is variable, such as rent and the disappearance of buildings, but in the long term, all costs become variable. Among the fixed costs of the tomato crop were land rents, family work and interest on capital, which are as follows as in Table (1):.

1-family business costs: It is the work that is on the farm permanently, whether there is production or not, as its value per acre has reached (235,000) thousand dinars/dunum, while its value per ton has reached about(47,959) tons/Dinar, while it constitutes (89.02%) of the total fixed costs, which is the highest ratio among the cost items.

**2-the costs of extinction**: The costs of extinction per acre amounted to about (17300) dinars / dunum, while its value per ton amounted to (3531) dinars / ton, while the percentage of extinction (6.6%) of the total fixed costs, the second percentage among the cost items.

**3-land rental costs**:. The land can be obtained through purchase, lease or contract from the state, and the land is considered one of the most important productive elements of

agricultural production.the rental value of the land reached (5500) thousand dinars/dunum, and the average land rent per ton was about (1122) thousand dinars /ton, while its percentage of total fixed costs was about (2.08%) and was in the fourth rank among the cost items.

**4-capital benefit**:. The interest rate is defined as that return on the investor's capital through the price that a person receives as a result of his waiver to dispose of his money that he lends for a specific period of time, and that price varies according to the period, whether monthly or annual, and according to the amount borrowed. The alternative costs of invested capital have been calculated as interest rates in the market, and accordingly, the interest rate is determined by the agreement of the lender and the borrower based on supply and demand, and the value of interest on the capital amounted to about (6200) thousand dinars/dunum, and its relative importance relative to fixed costs(2.3%) ranked third among the cost items. The total fixed costs amounted to about (264,000) thousand dinars.

Table (1) variable, fixed and total costs of the production cycle for the tomato crop for the spring crop for 2021

Average quantity Producti on per acre	Genre Costs	N	Production costs For the tomato crop	The cost of an acre The one In dinars	The cost of a ton The one produced In dinars	Importan ce Relativit y (%)
		1	Costs for the purchase of seedsand seedlings	88550	18071	9.99
	variable	2	Automation work costs	66360	13543	7.49
		3	Rental labor costs	188250	38418	21.25
		4	Transportation costs	24560	5012	2.77
		5	Nylon purchase costs	265000	54082	29.9
	The costs of	6	Fertilizer costs	00085	17347	9.6
	osts	7	Pesticide costs	64169	13096	7.24
_	သိ	8	Fuel and oil costs	35000	7143	4
4.9	The	9	Water and electricity costs	29508	6022	3.33
•	-	1 0	Maintenance and repair costs	39280	8016	4.43
	Fixed costs cause		Total	885677	180750	%100
		1	Family business costs	235000	47959	89.02
		2	Extinction costs	17300	3531	6.6
		3	Land rental costs	5500	1122	2.08
	Fix	4	Capital benefit	6200	1265	2.3
			Total	264000	53877	%100
			Total production costs	1149677	234627	

Source: - prepared bythe researcher based on the questionnaire form.

#### **C-marketing costs:.**

And the marketing costs are all the costs borne by the enterprise from the time of completion of manufacturing the product and sending it to the warehouses of full production to the time when the products sold are converted into cash , Kari and Mats defined marketing costs as those expenses that begin at the end ofmanufacturing costs, that when is, manufacture of products is completed and they become in a saleable condition and include expenses related to the sale and disposal of products. Table(2) shows the marketing costs of the tomato crop borne by farmers.

#### 1-loading costs:.

We note from Table (2) that the amount of marketing costs per acre amounted to (31,140)dinars/dunum, while the marketing costs of loading per ton and kilogram,

respectively, amounted to (6,355) tons/Dinar, (6,355) kg/dinar and ranked third in terms of relative importance of the total marketing costs, reaching (14.92%).

#### 2. discharge cost:.

According to table (23), we note that the amount of marketing costs for the cost of unloading per acre amounted to (27000) dinars /dunum, while(5510) dinars/ton, while the cost of unloading per kilogram amounted to (5. 510) JD / kg, and the marketing costs of unloading took the fourth place in terms of the relative importance of marketing cost items by (12.93%).

#### 3-cleaning, sorting and staging costs:.

It can be seen from Table (2) that the marketing costs of cleaning, sorting and staging amounted to about (37568)

dinars/dunum, (7667) dinars/ton and(7.667) dinars/kg, and the marketing costs of cleaning, sorting and staging took the second place in terms of the relative importance of the items of marketing costs by (17.99%).

#### 4. packing costs:.

We note from table (24) that the amount of marketing costs for packing wages has reached (16,851) dinars/dunum, while the marketing costs per ton amounted to(3,439) dinars/ton, while the marketing costs for packing amounted to(3,439) dinars/kg, and came in fifth place in terms of the relative importance of marketing cost items by (8.07%).

#### **5.** transportation to the market:.

The crop is transported by different transport vehicles, the load may consist of one, two or more loads, and the transportation costs vary according to the distance and proximity of the distance between the market and the production area, as the marketing costs of transportation for one acre, ton and kilogram respectively amounted to (70923) dinars/dunum, (14474) dinars/ton,

(14.474)dinars/ kg, and took the first place in terms of the relative importance of marketing cost items and amounted to about (33.98%).

#### 6-packaging costs:.

We note from table (24) that the costs of packaging used in the packaging of the crop per acre amounted to about (14014) dinars/dunum, while the marketing costs per ton and kilogram, respectively, amounted to (2860) dunums/ ton, (2,860) dunums/kg, and took the sixth place in terms of relative importance among the items of marketing costs, reaching (6.71%).

#### 7-car entry fees to the market:.

The costs of entry fees for Lamb cars to wholesale markets vary from one market to another, where the marketing costs of car entry fees to the markets per acre (11,216) dinars/dunum, while it amounted to (2,289) dinars/ton and(2,289) dinars/kg, while it ranked seventh in terms of the relative importance of marketing costs, reaching about(5.4%).

Table (2) marketing costs of the production cycle for the tomato crop for the spring crop for 2021

		Ci	top 101 2021			
average quantity Production	N N	costs Marketing For the production loop For the tomato crop	costs Marketing Per acre In dinars	costs Marketing Per ton In dinars	costs Marketing Per kg per In dinars	Importance Relativity %
	1	Download costs	31140	6355	6.355	14.92
4.9	2	Discharge cost	27000	5510	5.510	12.93
	3	Cleaning, sorting and staging costs	37568	7667	7.667	17.99
	4	Packing costs	16851	3439	3.439	8.07
	5	Transfer to the market	70923	14474	14.474	33.98
	6	Packaging costs	14014	2860	2.860	6.71
	7	Car entry fees to the market	11216	2289	2.289	5.4
	To	tal	208712	42594	42.594	%100

Source: - prepared by the researcher based on the questionnaire form.

D-Total Total and marketing costs:- We find through the questionnaire form collected from a sample of farmers in Salah al-Din governorate(Al-ishaqi), and through personal

interviews of farmers and some employees of the Directorate of Agriculture of Salah al-Din governorate, we have obtained the required data and both production and marketing costs were calculated individually, where the relative importance of those costs was determined, in order to indicate the type of costs borne by the agricultural product during the production process, as the variable production costs per acre were calculated and amounted to about (885677) dinars/dunum, while the variable costs per ton (180750 as for its cost per kilogram, it amounted to (180,750) dinars/kg We note that the relative importance of Total Total and marketing costs was calculated. variable production costs ranked first in terms of relative importance, reaching about (65.2%), while fixed production costs per acre, ton, and

also per kilogram reached the following ratios, respectively (264,000, 53,877, 53,877), while the relative importance of fixed costs took the second place among the items of production costs and amounted to about (19.4%). The total marketing costs amounted to about (208,712) dinars / dunum, (42,594) dinars / ton and (42,594) dinars/kg, and the marketing costs ranked third in terms of relative importance of the total total costs by (15.4%). The total total costs amounted to about (1,358,389) dinars / dunum, (277,221) dinars/ton and (277,221) dinars/kg, as shown in Table (3).

Table (3) the relative importance of production costs (variable and fixed) and marketing costs in relation to the total costs of the production cycle of the tomato crop for the spring crop for 2021

	<u> </u>	-	<u> </u>	1 6 1	
7	costs Production episode For the	costs Per acre	costs Per ton produced	costs Per kg produced	Importance
	tomato crop	In dinars	In dinars	In dinars	Relativity (%)
1	Variable production costs	885677	180750	180.750	65.2
2	Fixed production costs	264000	53877	53.877	19.4
3	Marketing costs	208712	42594	42.594	15.4
Tota	l costs	1358389	277221	277.221	% 100

Source: - prepared by the researcher based on the questionnaire form. Profits and revenues for the production cycle of the tomato crop :

Profit is achieved when the revenue achieved exceeds the cost of the commodity produced, as the profit for the average one-acre tomato crop for the spring crop of the 2021 estimated season was at (356611)dinars/dunum, while the average profit per ton was (72779) dinars/ton, and we find that the average profit per kilogram of tomato crop by (72). 779) dinars/kg, as for the revenues, it is what farmers receive as a result of selling the crop, as sometimes the sale is made to several parties, not one party, as the revenues have achieved a greater percentage of the total total

costs achieved for producers, and thus the profit varies from farm to farm, according to the cultivated areas, as well as according to the price sold, and also according to the management of the farm and its efficiency, and we find that the income of the average acre has reached (1,715,000) dinars/acre with marketing costs (208,712) the average revenue per ton was about (350,000) dinars/ton, with marketing costs of (42,594) dinars/ton, while the average revenue per kilogram was about (350) dinars/kg, and with marketing costs About (42.594) JD/kg and as shown in Table (4).

Table (4) production items, revenues, costs, realized profits and their averages for the tomato crop for the spring crop for the year 2021.

Z	production loop items For	average Per acre	average Per ton In	Average Per kg
~	the tomato crop	In dinars	dinars	per In dinars
1	Variable production costs	885677	180750	180.750
2	Fixed production costs	264000	53877	53.877
3	Marketing costs	208712	42594	42.594
4	Total costs	1358389	277221	277.221
5	Revenues	1715000	350000	350
6	Profits	356611	72779	72.779

Source: - prepared by the researcher based on the questionnaire form.

### 3-the gross and net added value and the average gross production cycle of the tomato crop for the year 2021.

The added value is the increase in agricultural income, as we note from Table (5) that the average value added per ton has reached (126,656) dinars/ton, while the average value added per kilogram has reached (126,656) dinars/kg. As for the net added value, its average per ton was (123,125) dinars/ton, while its average per kilogram was (123,125) dinars/kg, as for the average gross value added per ton was (159,156) dinars/ton, as for the average gross value added per

kilogram was (159,156) dinars/kg, and we find that the ratio of added value to the value of production, which shows the importance of the added value of the value of production, since the average per ton was (0.362) dinars/ton while the average per kilogram was about (0.362) dinars/kg. We note that the ratio of profits to value added has reached an average of about 0.575 per ton and per kilogram, and we note that this criterion is one of the most important elements of the value added of the total value added of the farm, as we find that when profits increase, this is a good indicator of

Table (5) shows the gross and net added value and the average gross production cycle of the tomato crop for the year 2021

N	Economic criteria	Average Per ton (per ton)	Average Per (per kg)
1	Gross added value in dinars	126656	126.656
2	Net added value in dinars	123125	123.125
3	Average gross value added	159156	159.156
4	The ratio of value added to production value	0.362	0.362
5	The ratio of profit to value added	0.575	0.575

Source: - prepared by the researcher based on the questionnaire form.

#### conclusions and recommendations

#### **Results:**

- 1 —the focus of this study was aimed at analyzing the value cycle of tomatoes in the ishaqi-Saladin regions .value-added activities were carried out between the regions, some of which include cleaning, transportation on time, the use of modern storage, sorting and harvesting at the time of ripening. these value-added activities can increase the value of tomatoes.
- 2-the total variable costs of the production loop amounted to about (885677) thousand dinars, while the total fixed costs amounted to (264000) thousand dinars, as for the total production costs amounted to (1149677) thousand dinars.
- 3-the average profit per acre of tomato crop for the spring crop of the 2021 season was estimated at (356611) dinars/dunum, while the average profit per ton was (72779) dinars/ton,

- and we find that the average profit per kilogram of tomato crop is (72.779) dinars / kg.
- 4-the revenue of the average dunum has reached (1715000) dinars/dunum with marketing costs (208712) dinars/dunum, as for the revenue for the average one ton has reached about (350000) dinars/ton, with marketing costs of (42594) dinars/ton, while the average revenue per kilogram has reached about (350) dinars/kg, with marketing costs about (42.594) JD/kg
- 5-the total marketing costs amounted to about (208,712) dinars / dunum, (42,594) dinars / ton and (42,594) dinars/kg, and the marketing costs ranked third in terms of relative importance of the total total costs by (15.4%).
- 6-most of the losses suffered by farmers in the tomato sector are primarily due to the spread of diseases and pests that affect the tomato crop.

7-the Ministry of Agriculture is the most capable entity to manage the value chain of the tomato crop in order to overlap its activities and responsibility on many actors, supportive and influential in the value chain of the tomato crop

#### **Recommendations:**

- 1-activating the role of agricultural extension in raising farmers ' awareness of the importance of observing quality conditions.
- 2-paying attention to the marketing process from picking the fruits until the goods reach the consumer so that the goods are suitable for direct consumption and manufacturing operations.
- 3-attention to marketing operations such as sorting, staging, transportation and storage.
- 4-interest in the formation of companies interested in buying tomato production from farmers in their production areas and marketing it to different markets.
- 5-intervention in adjusting and stabilizing prices, especially in the case of severe fluctuations to balance the supply and demand of tomatoes in different markets.
- 6-multiple marketing outlets to reduce the control and greed of traders in prices and then increase the return received by the farmer.
- 7-raising productivity rates, as the phenomenon of low productivity and its causes are caused by many overlapping factors, so the treatment must be comprehensive, starting with the framework required for the stability of producers in the production circle, which is provided by the integration of macro policies and general measures, and the stability of producers in the production circle is the basic and important stage that paves the way for

development and increasing productivity in all sectors.

#### References

- [1]Jassim, Hussein Abbas and Thamer, Ghassan Hashem. 2016. Efficiency of marketing some fruit crops in Baghdad governorate for the agricultural season 2014/2015, Journal of Iraqi Agricultural Sciences, vol.47, No. 2. Pp. 583-599.
- [2]Abdel Fattah, Hala Abdel Nabi, (2016), evaluation of the efficiency of intellectual capital in Egyptian commercial banks using the value-added model of intellectual capital, Egyptian Journal of Business Studies, Vol.36,, No. 3, Faculty of Commerce, Cairo University.
- [3]Harrison,Jeffrey S.&John,Caron H."Foundation in Strategic Management" By South-Western College Publishing .Printed in The United States of America, 1998.
- [4] Läthinen, K. & Toppinen, A. (2008). Financial performance in Finnish large- and medium sized sawmills: the effects of value-added creation and costefficiency seeking. Journal of Forest Economics 14 (4): 289-305.
- [5] Mandal, Niranjan & Goswami, suvarun, (2008), Value Added Statement (VAS) A Critical Analysis A case Study of Bharat Heavy.
- [6] Moore, Samuel, (2014), "Cost and Management Accounting", Published by Venus Books, New Delhi.
- [7] Teck, Foo Check,(2003), Enabling symbolism for communicating performance: strategic analyses of corporate value-added productivity, Corporate Communications: An International Journal, Vol. 8 Issue: 4, pp.241-254.
- [8]Coltrain, D., Barton, D. & Boland, M. 2000. Value Added: Opportu-nities and Strategies, Arthur Capper Cooperative Center, Department of Agricultural Economics, Cooperative Extension Service, Kansas State University, Pp 4-5.
  - [9] De Chernatony, Leslie & Harris, Fiona & Riley, Francesca Dall'Olmo, (2014). Added value: its nature, roles and sustainability, European Journal of Marketing, Vol\_34/1, pp.18.



## تحليل سلاسل القيمة والقيمة المضافة لإنتاج وتسويق محصول الطماطم في محافظة صلاح الدين للعام 2021 (الاسحاقى - نموذجاً)

وراس ابراهیم ارحیم firas.ibrahim@tu.edu.iq

فيصل حسين سعود الجوعاني faisal.h.soud@st.tu.edu.iq

2.1 قسم الاقتصاد والارشاد الزراعي، كلية الزراعة، جامعة تكريت، تكريت، العراق.

- تاريخ استلام البحث 2023/08/20 وتاريخ قبوله 2023/09/03.
  - البحث مستل من رسالة ماجستير للباحث الاول

#### الملخص

تهدف دراسة تتبع تدفقات المنتجات، وإظهار مراحل القيمة المضافة، وتحديد العلاقات مع الجهات الفاعلة الأخرى في السلسلة، إلى تحديد مشاكل ومعوقات ربط سلسلة القيمة لمحصولي الطماطم، وحساب تكاليف وإيرادات الإنتاج والتسويق. وحساب القيمة المضافة والمؤشرات ذات الصلة. اجريت الدراسة محافظ صلاح الدين (الاسحاقي الموذجا) وتم جمع البيانات الاولية للدراسة وفق عينة عشوائية تحتوي على عينات من الجهات الفاعلة ضمن حلقة القيمة لمحصولي الطماطم واستخدمت نموذج استبيان تم إنشاؤه خصيصًا لهذا الرابط. ومن خلال استخدام المؤشرات الكمية لاستخلاص النتائج، وهي مؤشرات لتحليل وحساب التكاليف والايرادات، توصلت الدراسة إلى أهم النتائج، فقد حققت الدورة الإنتاجية متوسط إجمالي القيمة المضافة (159.156) دينار /كغم، بحسب الاستنتاج. واستناداً إلى أهم المسائل والقيود المتعلقة بالدورة الإنتاجية لمحصول الطماطم فقد بلغت التكلفة الإجمالية للإنتاج للإجمالية حوالي (14,502) دينار /كغم، واحتلت تكاليف التسويق المرتبة الثالثة من حيث الأهمية النسبية لإجمالي التكاليف بمقدار (42,594) دينار /كغم، واحتلت تكاليف التسويق المرتبة الثالثة من حيث الأهمية النسبية لإجمالي التكاليف بمقدار (15.4) %). وتوصي الدراسة بضرورة تفعيل دور الإرشاد الزراعي في مراعاة شروط الجودة وزيادة وعي المزارعين بأهمية زيادة العرض على الطلب.

الكلمات المفتاحية: سلسلة القيمة المضافة، التسويق، محصول الطماطم، الاسحاقي.