

Economic study for costs of maize production and marketing in Kirkuk Province for 2022

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Abstract

The yellow corn crop is considered one of the most important nutritional and health elements in view of its nutritional value because it occupies an important position in the national economy. It is necessary to study this crop from a marketing perspective and to study the most important marketing methods for the product. The aim of the research is to focus on the most important marketing and administrative results and their impact on insurance and value in addition to the gross, net, and subscriptions by studying the reality of the value chain analysis of the yellow corn crop for the most important marketing methods. Randomly selected samples were used in this study. It includes (64) farmers in Kirkuk district. Information was collected through a questionnaire form for farmers, information related to the wholesale market was collected through a questionnaire form, and a number of forms distributed to wholesalers (30) were designed specifically for them, in addition to information from retail stores (45). The research was primarily concerned with marketing the yellow corn crop in Kirkuk Governorate. He studied the distribution of information from the farm gate all the way to the consumer, and by identifying the most important problems and obstacles that obstruct the marketing of this crop, the results showed that the average total value added by the farmers' circle in the case of selling to the silo amounted to (243,020) dinars per ton, with the highest value added in the case of Selling to the silo, while the average value added in the case of selling to the wholesale amounted to (140,853) dinars/ton, which is the lowest value added. As for the average total value added by the wholesalers' circle in the case of selling to the silo, it amounted to about (83,397) dinars/ton. It is also considered the highest added value for the wholesalers circle in the case of selling to silos, while in selling to retail it was the lowest value added. The average value added amounted to about (63,058) dinars/ton. Most of the added value achieved by farmers goes to the middle circle (wholesalers and retailers). The researcher recommended adopting a number of agricultural policies that support yellow corn farmers instead of one policy to help farmers achieve a standard of living suitable for them and protect them from changes in production, prices and climatic conditions, which encourages farmers to expand agriculture. Yellow corn production

Introduction:

The yellow corn crop is considered one of the main crops of great importance from a nutritional and industrial standpoint. In terms

of cultivated area and production, it ranks third in the world and fourth in Iraq after wheat, barley and rice. Due to competition

from other summer crops such as cotton and potatoes, maize production is relatively small. It ranks second after rice in terms of productivity, and yellow corn is grown globally to meet the nutritional needs of the population. The importance of this crop increases with the increasing expansion of livestock projects in general, especially poultry. Yellow corn is of great importance in human nutrition, as its grains can be ground and its flour used alone. Or mixing it with wheat flour in making bread. Its seeds can also be eaten after boiling. Some of its varieties are used in making popcorn and others in extracting oil. It occupies first place at the governorate level, through studying the marketing channels for this crop and determining marketing methods and services for this crop. There are many problems in agricultural marketing, including the

seasonality of production, and most agricultural commodities are perishable, and a large portion of them are not suitable for human consumption and are not. Human Agricultural marketing provides a set of services for agricultural commodities as they move from the farms where they are produced until they reach the final consumer. It aims to facilitate the process of exchanging goods in terms of quality, quantity and price (it is necessary to study the nature of the marketing cycles and paths that the crop goes through during marketing to diagnose the most important problems and obstacles that have a negative impact on profits and added value. The importance of the research comes from the importance of agricultural marketing and the importance of the yellow corn crop from study area.

Research objectives

Identify the most important marketing and administrative determinants and their impact on profits, marketing margins, total and net value added, and the percentage of value added to production, and identify problems by studying the reality of value chain analysis of the yellow corn crop for the most important marketing routes

1.2 Research hypothesis

The increase in marketing margin items affects the spread of buying and selling prices in favor of brokers, and the marketing efficiency of yellow corn has decreased for reasons such as weak marketing operations and marketing functions. Crops add value to local products, but the cost per cycle is high, and the value chain affects the value added.

1.3 search problem

-1The yellow corn crop faced the risk of damage after marketing activities stopped due to the lack of experts to receive yellow corn from farmers, pointing out that the average amount of yellow corn received by the authority's marketing center, while agricultural production at that time did not exceed (60 thousand tons), while Kirkuk's annual production exceeds (500 thousand tons.)

-2Farmers confirmed that they incurred huge financial losses and huge debts due to the inclusion of yellow corn in agricultural plans, like wheat and barley, but not in marketing plans.

.3The high prices of crops in the local market and the lack of sales plans caused great harm to farmers

2.Theoretical

.2.1The concept of added value:

The concept of added value suggests that each component in the process should be examined in terms of the value that the components add to the final product. If an activity, process, or connection does not add value, removing it may improve productivity. Value is added through processes through which raw materials are changed into semi-finished materials, then into finished materials, then through assembly into a marketable product that is packaged and shipped to the customer or distribution center (Nguyen & Kira, 2001:8-9). The researcher (Hndriksn) confirmed that the concept of added value is the market value of the goods and services produced by the institution, minus the value of the goods and services that were acquired through transfer from other institutions. It represents those new values that human resources have added to the cost of production resources, as a result of exploitation. The available resources are best exploited (Al-Mahiawi, 2006: 376). For farmers, the term added value also means obtaining a greater share of money from the food consumer. Examples include direct marketing, farmer ownership of processing facilities, production of agricultural products with higher intrinsic value (such as preserved grains, organic produce, pasture-raised beef, chicken, etc.) and conventional crop production, where buyers are willing to pay higher prices for the goods. Traditional. Any use of agricultural resources in a way that leads to an increase in their economic value compared to their value in the case of traditional uses will create added value to them. Also, the value that marketing adds to any commodity is such that the price of this commodity becomes much higher than

framework:

its physical components. The marketing added value is measured by the difference between the prices received by the primary producer and the prices paid by the final consumer, or by the price margin that covers the operations accompanying marketing the product in its final form between the marketing parties. Different types. (Habib, 20184:). According to (Robbins), agricultural prices fell sharply, but retail prices rose for the same goods in industrialized countries. This indicates that value-added goods should be in the activities of sorting, packaging, and processing goods in general (Mather (2005:6.(

.2.2Definition of added value:

Added value is defined as a commercial term that refers to activities that add value by taking the expectations and interests of the public into consideration (Macoubrie & Harrison, 2013:5). The added value is also defined as the value of the output minus the value of the inputs ((Al-Lahibi, 2020: 93), as defined by (Jassem) as all the values that are added at any stage of production and circulation of goods or when performing services. It is also defined as the difference between the value of the materials used in its productionIn the case of the final product, it is the difference between the cost value and the selling price (Jassem 2019:57). Through definitions, the researcher knows that the added value in the marketing stage is everything that is added to the product in the marketing stage and what is added to it in terms of change in shape, appearance and quality according to the desires and interests of the consumer.

Improving value-added production -:

Most existing methods focus on improving value-added production, which takes different forms (Trienekens, 2011, :68):

First: Improving products:

Second: Improving processing and conversion processes:

Third: Improving distribution functions:

Fourth: Moving from the value chain to a new value chain.

There are also interconnected factors and options that lead to improving the value chain, including :

-1Addresses of markets (local, regional, global) that provide alternative opportunities to increase added value and represent markets and circles that are ready and willing to pay to add value.

-2Arrangement and organization between vertical and horizontal relationships, that is, between actors in the value chain network structure, which enables obtaining added value.

-3Producing added value through marketing activities and conversion processes of products.

Methods of distributing added value:

The distribution of added value to various workers or actors is linked to the strength and form of control and direction of the chain. It also depends on the strength and position of bargaining of workers in the value chain, and the asymmetry of information between the stages of the chain, as well as the production technology used. Differences in market power and the dependence of relationships have a clear impact on Choosing a system of commercial relations, and that there is a limited number of producers who in these cases depend on the final parties in the chain, for example (intermediaries, transport

contractors, exporters, etc.) to prepare the inputs. The methods of distributing the added value are:

First: Share of retail value added:

Often the share of the added value of the retailer (retailer) or the final retail price is used as a mandate to distribute the added value or economic surplus. However, this method looks at differentiation or differentiation in production costs. Moreover, this method is volatile and unstable (because some retailers' sellers It adds high margins that are not related to production costs) (Al-Falluji, 2016:65:) and that profit, added value, and prices are indicators of the share of income for actors across the value chain, and the added value can be calculated for the various links in the chain, and its distribution to all actors in the chain can be viewed and then divided to obtain a share. The value added by each worker in the value chain.

Second: The method of inputs and outputs :

Obtaining a fixed level for the method of analyzing inputs to outputs is an expensive analysis and requires time. However, some researchers recommend it. According to this method, we assume that the companies' product is in a vacuum, which changes by an amount of The added value is y . This method may be relevant if the establishment or companies are isolated or independent from global markets, but this is not appropriate for analyzing the global value chain, because everything is globally interconnected (Al-Falluji, 2016: 66.)

3.Materials and working methods

3.1.revenue (sales price) for farmers' ring:

Profit is achieved when the revenues generated exceed the cost of the commodity produced, as the profits for the average per ton

of the yellow corn crop for the season (2022) were estimated at approximately (165,623) dinars/ton. As for the revenues, they are what farmers obtain as a result of selling the crop, as the sale is sometimes made to multiple parties and not to one party, as The revenues

achieved a greater proportion of the total costs achieved by the producers, and thus the profit varies from one farm to another and according to the cultivated areas, as well as according to the sold price also according to the farm's

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Table (1) Items of production, revenues, profits, and costs incurred and their averages for the yellow corn crop for the 2022 season

sequence	Farmers episode section	Average per ton is one dinar (if selling to silo)	Average per ton per dinar (in case of wholesale sale)
1	Variable production costs	104013	104013
2	Fixed production costs	51014	51014
3	Marketing costs	29350	21600
4	Total costs	184377	176627
5	Revenues	350000	247833
6	Profits	165623	71206

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2The gross and net value added and the total average of the yellow maize production cycle for the 2022 season

The value, in addition to the achieved, represents an increase in agricultural income. Table (23) shows that the average values are in addition to the total per ton sold to the silo. Including about (245,987) dinars/ton, while the average value in addition to the gross value for the wholesale is about (143,820) dinars/ton, and in terms of net value up to an average of one thousand (243,020) dinars per ton of yellow corn crop/ tons when sold to the silo, while selling it to a wholesaler in Bulgaria is about (140,853) dinars/ton. The

management and efficiency. We find that the average revenue per ton in the case of selling to the silo has reached about (350,000) dinars/ton. With marketing costs amounting to approximately (29,350) dinars/ton, While in the case of wholesale sales, revenues amounted to about (247,833) dinars/ton, with marketing costs (21,600) dinars/ton, and profits in the case of wholesale sales amounted to about (71,206) dinars/ton, as shown in Table (1

average ratio of the added value to the total total costs was about (1.334) dinars/ton, and while the average price when sold to wholesalers was (0.819) dinars/ton, we find that the average ratio of the total value added to the production value reached about (0.703) dinars/ton. While the average total value added to the production value of the yellow corn crop was about (0.580) dinars/ton, we note that the average ratio of profits to the added value amounted to about (0.673) dinars/ton in the case of selling to silos, and the average ratio of profits to the added values was The total in the case of sale to wholesalers is approximately (0.502) dinars/ton

Table (2) The total value added and the percentage of costs, production and profits for the yellow corn crop in Kirkuk Governorate for the production season (2022)

sequence	Economic criteria	The average is one dinar per ton when selling to the silo	Average per ton when selling wholesale
1	Total value added in dinars	245987	143820
2	Net value added in dinars	243020	140853
3	The ratio of total value added to total costs	1.334	0.819
4	The ratio of total value added to production value	0.703	0.580
5	The ratio of profits to total value added	0.673	0.502

3.3.The gross and net added value of the wholesalers ring-:

It is clear from Table (3) that the total added value for the sample of wholesalers in the case of selling to the silo amounted to about dinars/ton, and the average net added value in the case of retail sale was about (63,058 (dinars/ton, and the ratio of the net added value to the total costs was calculated as (0.305) dinars/ton. While in the case of retail sale, it amounted to about (0.195) dinars/ton, and the ratio of the value added to the production value in the case of silo sales was about

(84,047) dinars/ton, while the average per ton in the case of selling to retail was about (63,708) dinars/ton, and the net value added in the case of selling to the silo About (83,397 (

(0.240) dinars/ton, and in the case of retail sales it amounted to about (1.168) dinars/ton. As for the profits ratio To the total added value in the case of selling to the silo, it amounted to about (0.891) dinars/ton, while in the case of retail sales, the ratio of profits to the total added value was about (0.857) dinars/ton.

Table (3) Total and net added value and percentages for the wholesalers' ring in the event of selling to silos and retail for the agricultural season 2022

sequence	Economic criteria	Average per ton if selling to silos	Average per ton if sold retail
1	Total value added	84047	63708
2	Net value added	83397	63058
3	The total value added to the total costs	0.305	0.195
4	Total value added to the value of production	0.240	1.168
5	The ratio of profits to total value added	0.891	0.857

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4Average production and marketing profits for the value chain links of the yellow maize crop for the 2022 season

After the results of the study and discussion of the value chain links for the yellow maize crop, a summary must be given of the most important results obtained from the study, which is the profit achieved, which is one of the most important parts of the components of added value and constitutes the largest value. It is shown through Table (4) that the total

wholesale sales, the profit amounted to approximately (71,206) dinars/ton, and ranked second in terms of relative importance for the farmers' circle, with a percentage of (30.066%). As for the amount of total profit achieved by the wholesaler (129,589) dinars/ton, the average profit reached In the case of selling to silos, it was (74,964) dinars/ton, as it ranked first in terms of relative importance for the wholesalers circle, at a rate of (57.848%). However, in the case of selling to retail, the average profit was about (54,625) dinars/ton, and it ranked second in terms of importance. Relatively, at a rate of (42.152%),

profit achieved For the farmers' marketing circle for the yellow corn crop, the total profit achieved amounted to (366,418) dinars/ton, while the total average profit for the farmers' group reached (236,829) dinars/ton, where the amount of profit in the event of selling to the silo amounted to about (165,623) dinars/ton, as It came in first place in terms of the relative importance of the farmers' circle, with a percentage of (69.934%).In the case of

as shown in Figure (4). The amount of profit achieved in each episode of the value chain was in terms of the relative importance of all episodes of the value chain, as the highest profit was achieved in the farmers' episode in the event of selling to the silo, at a rate of (45.201%).), (%), followed in second place by the wholesalers ring when selling to the silo with a rate of about (20.459%). The farmers ring also ranked third when selling to wholesale with a percentage of (19.433%). The wholesalers ring came in fourth place if selling to retail with a percentage of (14.907).(%

Table (4): Average profits per ton in dinars for the value chain links for the yellow corn crop for the 2022 season

Episode name	Average profits per ton dinar		The relative importance of the farmers' circle%	Relative importance of total episodes %
Farmers' ring	For silo	165623	69.934	45.201
	For the sentence	71206	30.066	19.433
the total	236829		100	-
Wholesalers ring	For silo	74964	57.848	20.459
	For the sentence	54625	42.152	14.907
the total			100	
The total number of episodes	366418			100

3.5. Estimating the different marketing margins for the yellow corn crop in Kirkuk Governorate for the 2022 agricultural season

-1 The marketing margin between the wholesale and producer circles in the event of selling to the silo:-

It is evident from Table (5) that the absolute marketing margin between the wholesaler and the farmer for the yellow corn crop in the case of selling to the silo reached an average of

(102,167) dinars/ton, and the relative marketing margin for it amounted to about (29.191%).

-2 The relative marketing margin between the wholesale and producer circles in the case of selling to the silo, where the absolute marketing margin was about (132,167) dinars/ton, and the relative margin was about (34.781%) as shown in Table (5).

Table (5) shows the marketing margins between the different marketing stages of the yellow corn crop for the 2022 season

	Marketing margins			
2022	Wholesale - product (if selling to silo)		Wholesale - product (in case of retail sale).	
Average	absolute	Relative	absolute	relative
	102167	29.191	132167	34.781

Conclusions:

-1The added value increases the higher the selling prices are, and thus higher profits are achieved. As for selling at the farm gate or to wholesalers, the added value is lower because the price is lower, and thus the profits achieved are lower.

-2The average total value added by the farmers' group in the case of selling to the silo amounted to (243,020) dinars/ton, where the highest value added was in the case of selling to the silo, while the average value added in the case of selling to the wholesale amounted to (140,853) dinars/ton, which is the lowest value. Added, as for the average total value added by the wholesalers ring in the case of selling to the silo, it amounted to about (83,397) dinars/ton, and it is also considered the highest value added by the wholesalers ring in the case of selling to the silo, while in selling to retail, it was the lowest value added, as it reached the average value added. About

(63,058) dinars / ton, most of the added value achieved by farmers goes to the middle circle (merchants and sieve owners), which requires reducing the gap.

-3The absolute marketing margin between a wholesaler and a producer for the yellow corn crop (in the case of selling to silos) averaged about (102,167) dinars/ton, and the relative marketing margin in this case was about (29.191%). As for the amount of the absolute marketing margin between a wholesaler and a producer (In the case of retail sale) (132,167) dinars/ton. As for the relative marketing margin, it amounted to about (34.781%) of the amount paid from the silo, which goes as profits to intermediaries and other marketing costs. The high percentage of marketing margin is due to the high amount of profits received by these distributors, despite the fact that The number and type of marketing services provided by them are often few and weak.

Recommendations:

1-Encouraging and supporting the cultivation of yellow corn in the governorate and following modern technical methods in

growing the crop, because Kirkuk Governorate contributes greatly to wheat production throughout Iraq.

-2Working to raise the educational level of the working class in growing yellow corn, by intensifying extension and educational courses through agricultural extension and communicating with research centers, as it is considered an important and necessary issue to educate farmers and raise the level of their

production and marketing efficiency and global competitiveness.

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