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## MARKETING AND VALUE CHAIN ANALYSIS FOR THE MARKETING LOOP OF THE WHEAT CROP IN SALAH AL-DIN GOVERNORATE OF IRAQ FOR THE AGRICULTURAL SEASON 2018

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**ABSTRACT**

The value chain analysis study is one of the important and effective studies in tracking product flows, showing the stages of value addition, and identifying the main actors within the chain. This study came to find out the most important problems and obstacles that accompany the marketing cycle of wheat crops**.** Where the study aimed to calculate the production and marketing costs, revenues, and profits achieved by the actors in the marketing ring and calculate the added value for it. Acceptance of the crop in the first place at a price of**,** the revenues were 560000 dinars/ton, but in the case of sale at the farm gate, the revenues were 366500 dinars/ ton, As the highest added value for the farmers' ring in the case of first-class sales was 40829, and the lowest value - added in the event of selling at the farm gate was 80987,dinars /ton the marketing efficiency of the wheat crop according to the first formula was 69.899%. The results show that the increase in the prices of production and marketing inputs led to the increase in the production and marketing costs of the wheat crop, and consequently the decrease in profits. Weak marketing operations carried out by the farmer on the crop The study recommends the need to pay attention to the analyzes of value chains and the activities that they contain, as they represent a tool that helps organizations' departments to overcome all obstacles and problems that prevent the achievement of Objective of the study.

*Keywords*: marketing, value chain analysis, marketing loop, wheat crop.

## Introduction

The interest in agricultural marketing in general and the marketing of the wheat crop in particular, as it occupies a nutritional and economic importance in all countries of the world, as many countries, including Iraq. The as agricultural marketing is generally closely related to the production process, so much so that some economists believe that marketing precedes production, justifying this by the need to know how to dispose of the product before making a production decision (Shlaby *et al.*, 2010), Agricultural marketing has been defined as that flexible system aimed at facilitating (Salam *et al.*, 2011). The flow of agricultural commodities and related services from the places of their production to the places of their consumption, at the appropriate conditions, prices and types acceptable to all parties to the agricultural process (Al-Aref, 2009). This may be generalized to include the entire marketing behavior, and in this case the marketing margin represents the difference between the selling price (farm price) and the purchase price (retail price). Marketing margins mean marketing costs ± profits and losses.(Camillus *et al.*, 2014) Marketing margin or price spread is defined as the difference between the price paid by the final consumer and the price charged by the producer (Zaidan and Khater, 2013). The term value chain means a group of interconnected activities that each add value to a previous activity. Management thought has focused its efforts on dividing the activities of the organization into several groups of activities, each of whom

provides additional value to the previous group. (Zouubi, 2006) The value chain is known as the structure that the organization uses to understand the location of its costs and identify multiple tools. They are used to facilitate the implementation of the strategy at the business level (Hitt Michael, ireland; dnane,2001). The value chain shows how the product has moved from the initial material stage to becoming a final product. Therefore (Nabi and Luthria, 2002) the organization divides its business into groups of activities and each part of the value activities contributes to achieving the total value provided to a customer and also contributes to a part of the total profits because the basic concept of the value chain is adding the largest possible value at the lowest possible cost and measuring the amount of the contribution to the value provided and the profit for each part in Series(Macmillan hugh, tampoe, maher, 2000). Value is added through the processes by which raw materials are changed to semi-finished materials and then to final materials, and then through assembly into a marketable product that is packed and shipped to the customer or distribution center (Nguyen & Kira, 2001). the concept of added value, is the market value of goods and services produced by the institution minus the value of goods and services that have been acquired through transfer from other institutions, as it represents those new values that the human forces have added to the cost of production resources, as a result of the exploitation of available resources are best utilized (Al-Mahayawi, 2006).

## Problem statement

The study took the most important problems and obstacles facing the wheat value-added chain represented by the marketing cycle, production, and marketing costs until the stage of reaching the delivery centers, all of these have a great impact on the increase in production costs, and the decrease in profits and the added value achieved for wheat farmers.

## Objectives of the study

- Track the marketing commodity path of the wheat crop ,and calculate the production and marketing costs, margins and marketing efficiency.
- Study the reality of the analysis of the value chain of the wheat crop for the most important marketing channels, and explain the details of the participants and the owners of the shares in it and its impact on profits and the total and net added value.
- Knowing the revenues and profits of the marketing rings (farmers 'ring, merchants' ring) for first and second-degree sales, sales to merchants, and sales at the farm door for wheat crops.

## Material and Methods

To achieve the objectives of the research, the data and information were collected from primary sources by designing a questionnaire.The study relied on a set of analysis methods, including the descriptive and quantitative method based on appropriate mathematical models after their description and identification to choose what suits the reality of data that could be provided or adapted for this purpose, using the (SPSS), (Excel) program. To identify the most important problems and obstacles that accompany the work of the value chain for the marketing pathways of the wheat crop in Salah al-Din Governorate, the study area, necessary to analyze the value chain of the wheat crop. For this purpose, information was collected by using a questionnaire for a sample of the actors in each episode of the marketing paths to determine the most important quantitative indicators that must be considered in to extract quantitative results. The marketing ring includes each of the (farmers 'circle and the wholesale merchants' circle), which is sub-links of the value chain. Where a sample was taken from the community of farmers (166) farmers, and (33) wholesalers**.** the analysis

method included descriptive steps and quantitative analytical steps, the mathematical model used in this methodology is based on the following mathematical formula: (Value added = Revenue -Variable cost) as well as using some economic criteria, ratios and means, also value chain methodology is based on several related concepts, including: (value chain analysis approach) it is a system that converts production inputs into outputs that pass through several stages before they reach the final consumer including the stages of, production, marketing, processing and, each stage or activity of these activities adds valueto the product) (Hempel, E. 2010).

## Results and Discussion

Economic analysis of the value chain of the marketing channels rings (the marketing loop) for the wheat crop in Salah al-Din Governorate for the agricultural season 2018 .

First The farmers 'circle**:** The first of the marketing circles is the farmers' circle because all the marketing operations carried out by the farmer contribute to the calculation of economic criteria, profit , and added value, and agricultural activity is one of the main economic activities that contribute to the success of marketing.

### Total production and marketing costs of the wheat crop:

Each of the production costs (variable and fixed) and the marketing were calculated separately, and the relative importance of each was determined to indicate the type of costs that the agricultural product bears during the production process. Table (1), also shows the total variable and fixed costs and the marketing costs in the event of selling the and the relative importance of each of them concerning the total costs, as the variable production costs amounted to about (285513) dinars/ton and came first in terms of the relative importance of the total costs, at rate of (79.618%). Fixed production costs amounted to about (29838) dinars/ton and came in third place in terms of the relative importance of total costs, at a rate of (8.320%), as for the marketing costs in the case of selling the, it amounted to about (43.250) dinars/ton and came in second place in terms of the relative importance of the total costs, at a rate of (12.060%), as the table (1) shows the total costs, which amounted to about (358.601) dinars/ton.

**Table 1 :** the total costs of the wheat-growers circle in case of selling to the grain company

| Costs for the wheat growers' circle in the event of a sale to the grain company | Costs are per ton dinars | Relative importance % |
|---|---|---|
| Variable production costs | 285513 | 79**.**618 |
| Fixed production costs | 29838 | 8.320 |
| Marketing costs | 43250 | 12.060 |
| Total costs | 358601 | 100% |

Source: Calculated by the researcher based on the questionnaire

### Revenue (sales price) for the farmers' ring:

Farmers get revenues by selling the wheat crop, and farmers may sell the crop to a number of agencies as shown in Table (2) entities, prices and costs for each party, where the first paragraph shows the revenues and sales for marketing the farmer himself to the grain company, which shows in the event that the crop is accepted first place at a price of (560000) dinars /ton. the costs of (43250) dinars/ton, either in the case of accepting the wheat crop for the second

rank and at the price of (480000) dinars ton and marketing costs (43250) dinars/ton, and in the case of selling to the wholesaler, the revenues were (410129) dinars/ton and costs (21720) dinars /ton as for the case of sale at the farm door, the revenues were (366500) dinars/ton and since the sale is on the farm, the marketing costs do not exist because the farmer does not bear any costs when selling after harvest at the farm gate.

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**Table 2 :** Revenues and profits for the farmers' circle, sales for the first and second degree, sales to wholesalers, and sales at the farm gate for wheat crops.

| Paragraphs for a farmers' ring | Sales of the first class per ton dinars | Sales for the second degree per ton dinars | For sale to a wholesaler of dinars | For sale at the farm gate dinars |
|---|---|---|---|---|
| Variable production costs | 285513 | 285513 | 285513 | 285513 |
| Fixed production costs | 29838 | 29838 | 29838 | 29838 |
| Marketing costs | 43250 | 43250 | 21720 | - |
| Total costs | 358601 | 358601 | 337071 | 315351 |
| Revenues | 560000 | 480000 | 410120 | 366500 |
| Earnings | 201399 | 121399 | 73049 | 51149 |

Source: Calculated by the researcher based on the questionnaire.

The added value and the share of the farmer's circle: that the added value achieved represents the increase in agricultural income, and from Table (3) it appears that the added value of the sample of the farmers' ring varies according to the entity to which the wheat crop is marketed and includes the following:

1. The value added when marketing the grain company and accepting the first class: where the total added value amounted to about (231237) dinars/ton, while the net added value was (230294). The added value to the total costs was calculated at (0.644) dinars/ton, and a percentage was extracted the value added to the production value is about (0.413) dinars/ton. The percentage of profits on the added value was calculated, reaching about (0.870).

2. The added value when marketing the silo and accepting the second class: where the total added value was about (151237) dinars/ton, while the net added value was (150294). The added value was also calculated to the total costs of (0.421) dinars/ton, and the added value was extracted The value of production amounted to about (0.315) dinars/ton, and the percentage of profits on the added value was calculated, reaching about (0.802).

3. Value added when marketing to wholesalers: The total added value amounted to about (102887) dinars/ton, while the net added value was (101944). The ratio of the added value to the total costs of (0.302) dinars/ton was extracted. To the value of production, about (0.250) dinars/ton, and the percentage of profits on the added value was calculated, reaching about (0.709).

4. The added value when selling at the farm gate: where the total added value amounted to about (80987) dinars/ton, while the net added value is (80044). To the value of production, about (0.229) dinars/ton, and the percentage of profits on the added value was calculated, reaching about (0.631).

**Table 3 :** The total added value and its percentage of costs, production and profits for the wheat crop in Salah al-Din Governorate for the agricultural season 2018

| Economic standards | (first place) Average per ton dinars | (Second place) Average per ton dinars | For an average wholesaler per tonne dinars | Sell at farm door price Average tonl dinars |
|---|---|---|---|---|
| Total added value in dinars | 231237 | 151237 | 102887 | 80987 |
| Net value added in dinars | 230294 | 150294 | 101944 | 80044 |
| Percentage of value added to total costs | 0.644 | 0.421 | 0.302 | 0.256 |
| The ratio of the value added to the production value | 0.413 | 0.315 | 0.250 | 0.229 |
| Profit to value added ratio | 0.870 | 0.802 | 0.709 | 0.631 |

Source: Calculated by the researcher based on the questionnaire.

**The Wholesalers Circle:**

Revenues and profits for the wholesalers circle: Revenues are defined as those financial flows that enter (as a base amount for the price of the commodity with its profit) and these flows correspond to the cost of the commodity or service, so if these flows exceed the cost, the excess is called a profit, while the profits are the part in excess of the cost price And from Table (4), it appears that the total revenues that have been achieved from selling a quantity of wheat crop are about (560000), dinars/ton in the case of acceptance for the first degree, but in the case of acceptance for the second degree, the revenues are about (480000), dinars/ton, As shown in the table, the revenues are greater than the total costs, so he will achieve profits and this profit varies from one unit to another according to the price at which the crop is sold, the costs that he spent and his efficiency in marketing, and there is also a first order at a price specified by the government, which represents about (560000), dinars/ ton and in second order at a price of (480000) dinars/ ton and a third order at a price of (460000), dinars/ton, the table also shows that wholesalers make profits whose amount for the sample was approximately (108.541), dinars/ton in the event of acceptance for the first class, and profits of (28541) dinars/ton. The total costs of the wholesaler ring, both variable and fixed costs, amounted to about (451459), as it reached the variable costs are about (450.919) dinars/ton, and the variable costs ranked first in terms of the relative importance of the total costs, while the fixed costs amounted to about (540) dinars /ton.

**Table 4 :** The revenues, costs and profits realized for the sample of the wholesalers' circle.

| Paragraphs for the wholesalers ring | Average per ton in dinars |
|---|---|
| Revenue in the case of accepting the first degree | 560000 |
| Revenue if the second degree is accepted | 480000 |
| Variable costs | 450919 |
| Fixed costs | 540 |
| Total costs | 451459 |
| Profits if the first degree is accepted | 108541 |
| Profits if the second degree is accepted | 28541 |

**Source**: Calculated by the researcher based on the questionnaire.

The total, net, and total average added value: It is evident from Table (5) that the total added value of the sample of the wholesalers' circle in the event that the crop is accepted by the grain company (silo) for the first class amounted to about (109081) dinars/ton, as for the acceptance of the crop in the second class The amount of the total added value was about (29081). As for the net added value for the first and second class, it was about (108971) dinars/ton and (28971) dinars/ton, respectively, and the ratio of the added value to the total costs was calculated for each of the first and second degrees. It amounted to about (0.241) and (0.064) dinars/ton, respectively, and the ratio of value added to the value of production for the first and second degree, and its amount (0.195) and (0.060) dinars/ton, respectively, for the level of the sample. This criterion shows the importance that the added value occupies from the value of production (sales, revenues) of the wheat crop, as the higher the percentage indicates a good level of sales (revenues) in the activity of wholesalers, while the ratio of profits to the added value of the first and second degree was (0.995) and (0.981) dinars/ton, respectively, for the level of the sample, as this criterion indicates the importance of profits as one of the value-added elements of the total added value achieved by wholesalers in the case of marketing to receiving centers, the government grain company (silo).

**Table 5 :** The total and net added value and percentages of the first and second class wholesalers circle for the agricultural season 2018.

| Economic standards | Average per ton for first class in dinars | Average per ton for second class in dinars |
|---|---|---|
| Total added value in dinars | 109081 | 29081 |
| Net value added in dinars | 108971 | 28971 |
| Percentage of value added to total costs | 0.241 | 0.064 |
| The ratio of the value added to the production value | 0.195 | 0.060 |
| Profit to value added ratio | 0.995 | 0.981 |

Source: Calculated by the researcher based on the questionnaire.

**Table 6 :** Productive Costs, Total Marketing Costs of the Farmer and Wholesaler, Absolute Marketing Margin, and Marketing Efficiency.

| | Type of costs | Per ton in dinars |
|---|---|---|
| 1 | Production costs | 315351 |
| 2 | Marketing costs of farms | 43250 |
| 3 | Marketing costs for a wholesaler | 4133 |
| 4 | Total marketing costs | 8458 |
| 5 | Total production and marketing costs | 399931 |
| 6 | Absolute marketing margin | 149871 |
| 7 | Marketing Efficiency by Formula (1) | 69899 |
| 8 | Marketing Efficiency by Formula (2) | 67785 |
| 9 | Type of costs | 315351 |

Source: Calculated by the researcher based on Table (1)

It is clear from table (6) that the total production costs amounted to (315351) dinars/ton, as for the total marketing costs (84.58) dinars/ton, and the total production and marketing costs (399931) dinars /ton. The absolute marketing margin amounted to (149871), and the marketing efficiency reached according to Formula (1,2) towards (69899) and (67785) respectively, and according to the two formulas, it becomes clear that the marketing efficiency was moderate, and the reason for this is the high marketing margins of the different marketing stages, resulting from the high marketing costs and profits of intermediaries**.**

Many of conclusions and recommendations were obtained from results.The existing marketing rings in the agricultural marketing process are of many types, forms ,and tasks. Market mediators and sales agents with high wages and profits. The increase in the prices of productive and marketing inputs, which led to an increase in the costs of producing and marketing one ton of the studied wheat crop and thus the lack of profits**,** and Weakness or absence of the concept of agricultural marketing extension, which is considered an essential entry point for developing the matrix of the marketing system for agricultural products. Based on the above, we conclude that the wheat farmers in the studied sample were bearing an insignificant part of (Tvc) as costs

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the production process of wheat farms has paid off with lucrative profits that encourage agricultural producers to continue in the production process. The higher the added value, the higher the selling prices, and thus the higher profits. Whether by selling on the farm or to wholesalers, the added value is lower because the price is lower and thus the profits made are less. That most of the added value generated by farmers goes to the middle circle (local traders), which requires reducing the gap.

The research also recommends adopting several agricultural policies that support wheat farmers instead of one policy. Provides seeds of good varieties, and farmers rely on the state rather than purchasing bad seeds from the local market. The agricultural extension agencies play their role by conducting field extension seminars to familiarize farmers with the disadvantages of fragmentation of tenure and the importance of creating large agricultural groupings. Focusing on the necessity silo of establishing moderns, and with an advanced level of technology, production, especially in or near wheat production areas, in order to absorb the output from farmers and not delay in Receive it.The study recommends the need to pay attention to value chain analyses and the activities that they contain.

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