

## EFFICIENCY OF MARKETING CHANNELS FOR MELON (Cucumis melo L.) IN THE GREEN HOUSE OF BALITAR ISLAMIC UNIVERSITY, BLITAR CITY

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### **Abstrak**

*Di era perdagangan menuju pasar bebas, persaingan semakin ketat. Maka perlu dicarikan pasar khusus untuk dapat mendongkrak harga jual buah melon. Buah yang berkualitas tinggi yang ditawarkan akan layak mendapatkan harga jual yang tinggi. Informasi harga pasar dicari seluas mungkin sebelum pemanenan. Tujuan analisis margin pemasaran adalah untuk melihat efisiensi pemasaran yang diindikasikan oleh besarnya keuntungan yang diterima oleh masing masing pelaku pemasaran. Berdasarkan perhitungan margin pemasaran dan farmershare terhadap dua saluran pemasaran tersebut, saluran I memiliki jumlah margin untuk yang grade A, B, dan C memiliki margin pemasaran yang sama yaitu Rp 6000/kg. Nilai farmer share pola saluran I untuk grade A 70%, grade B 62,5%, dan grade C 57,1%. Pola saluran II memiliki jumlah margin untuk yang grade A Rp 26.000/kg, grade B Rp 20.000, dan grade C Rp 17.000/kg. Nilai farmer share pola saluran II untuk grade A 35%, grade B 33,3%, dan grade C 32%. Dapat disimpulkan pola saluran yang paling efisien pada penjualan buah melon di Green House Universitas Islam Balitar Kota Blitar adalah pola saluran I, karena memiliki rantai pemasaran terpendek yaitu produsen langsung kepada konsumen.*

**Kata kunci— Usaha Melon, Efisiensi, Margin pemasaran**

### **Abstract**

*In the era of free market trade, competition is getting tougher. It is necessary to find a special market to boost the selling price of melons. High quality fruit offered will deserve a high selling price. The purpose of marketing margin analysis is to see the marketing efficiency indicated by the amount of profit received by each marketing actor. Based on the calculation of marketing margins and farmersshare of the two marketing channels, channel I has the same amount of margin for grades A, B, and C have the same marketing margin of Rp 6000/kg. The farmer share value of channel I pattern for grade A is 70%, grade B is 62.5%, and grade C is 57.1%. Channel pattern II has a total margin for grade A of Rp 26,000/kg, grade B of Rp 20,000, and grade C of Rp 17,000/kg. The farmer share value of channel pattern II for grade A is 35%, grade B is 33.3%, and grade C is 32%. It can be concluded that the most efficient channel pattern in melon fruit sales at the Green House of Balitar Islamic University in Blitar City is channel pattern I, because it has the shortest marketing chain, namely producers directly to consumers.*

**Keywords— Melon business, efficiency, marketing margin**

## 1. INTRODUCTION

The agricultural sector is a very strategic sector to grow the country's economy, because agriculture is the main thing or staple for the survival of people in the world. Indonesia is a developing country that has a large population, so this agricultural sector is the key to the country's economy. King Bhumibol Adulyadej likened "Agriculture is the human life" which can be interpreted that people's lives are very dependent on the agricultural sector. The agricultural sector is the main pillar of Indonesia's economic

development because almost all of Indonesia's economic activities are centered on this sector.

In the era of free market trade, competition is getting tougher. It is necessary to find a special market to be able to boost the selling price of melon fruit. High-quality fruit offered will deserve a high selling price. Market price information should be sought as widely as possible before harvesting. The trade chain must be studied carefully and thoroughly. The shortest chain is sought to obtain the highest selling price.

Melon agribusiness must be carried out carefully and always remain vigilant. Although based on the analysis of melon agribusiness cultivation shows promising prospects, but one day when spraying is delayed or other trivial matters are not considered, the profits that have been imagined will become *sima* instantly.

Business management is a very important factor in a company, many people fail due to lack of experience in the field of business management (Manullang, 2005). Management is the process of planning, organizing and using other organizational resources so that organizational goals can be achieved as set (Stoner & et al, 1996). Agricultural management is needed to plan a farming business to be carried out, organize the required workforce, provide direction to the workforce, in this case aiming to get profit or profit for the producer.

Capital is a means or provision to carry out business (Gilarso, 2009). Capital sources are not only about money, but such as human resources are also capital that is no less important in agricultural businesses. Capital is needed in agricultural businesses to facilitate the business to be built, the better the business, the more capital is needed. Managing capital in business is also necessary, because when entrepreneurs cannot manage the capital they have, then their business cannot get up. Limitations in terms of capital make it difficult for businesses to access the market, this difficulty occurs due to lack of expertise in marketing.

Marketing can be defined as an activity that seeks to make the products it markets acceptable and favored by the market (Gitosudarmo, 2008). Marketing is an interaction that seeks to create an exchange relationship, but marketing is not a simple way just to generate sales (Swastha 2002). So it can be concluded that marketing is a social and managerial process that seeks to create exchange relationships so that individuals and groups get what they need and want.

Marketing in agriculture is also very important, but marketing in agriculture becomes the weakest point as well as the strongest point if it can be managed properly, considering that marketing is the spearhead of every business that can return capital and get profit or profit. Therefore, effective and competitive marketing is needed to encourage farmers and agro-industry producers as well as related marketing institutions. Marketing is considered efficient if it meets two conditions, namely being able to deliver the results of producers to consumers as cheaply as possible and being able to make a fair distribution of the overall price paid by the last consumer to all parties participating in the production and trading activities of the goods (Mubyarto, 2002). The level of productivity of the marketing system can be seen from the efficiency and effectiveness of all marketing functional activities that also determine the performance of system operations and processes. Agricultural marketing activities are not only from farmers to consumers but start from the collection of farmers, and distribution including the selection of marketing channels. Marketing efficiency can be assessed from the

accumulated costs of all these processes. The marketing system will be more efficient if all these activities are carried out at minimum cost.

A chain that tends to be long will result in high marketing costs, because each intermediary wants to make a profit. The amount of marketing profits and marketing costs at the intermediary level is a component in the formation of the final price (retail price) at the consumer level. This will affect prices at the producer level, and can even suppress prices at the producer level because the purchasing power of some consumers is still limited. The purpose of marketing margin analysis is to see the marketing efficiency indicated by the amount of profit received by each marketing actor. The higher the proportion of the price received by producers, the higher the efficiency of the marketing system.

#### **Problem Formulation**

1. What is the marketing channel of melon fruit in the Green House of Balitar Blitar Islamic University?
2. Is the melon marketing channel at the Green House of Balitar Blitar Islamic University efficient?

#### **Objective**

To find out the pattern of hydroponic melon marketing channels, at the Green House of Balitar Blitar Islamic University in 2022 and to find out the most efficient channel in hydroponic melon marketing at the Green House of Balitar Blitar Islamic University in 2022.

## **2. RESEARCH METHODS**

### **2.1 Time and Place**

The implementation of this research activity was carried out at the Green House of Balitar Blitar Islamic University. This research activity was carried out on:

Time: October 2021 - February 2022

Place: Greenhouse of Balitar Islamic University

(Jl. Majapahit No.2-4, Sananwetan, Sananwetan District, Blitar City, East Java 66137).

### **2.2 Data Retrieval Method**

The method used in research activities uses quantitative analysis methods in the form of calculations and descriptive to describe the pattern of melon fruit marketing channels. To determine the pattern of melon fruit marketing channels and marketing margins used marketing channel analysis, while to determine the share of prices received by producers used farmer share analysis. The types and sources of data in this study are qualitative data and quantitative data. Data collection methods used in this research are interviews and documentation. Interviews were conducted with employees of PT Agro Wates to find out how the pattern of marketing channels carried out by employees of PT Agro Wates aimed at customers. Documentation is used as a complement, documentation in the form of recording of documents related to the research.

### **2.3 Data Analysis Methods**

#### **2.3.1 Marketing Margin**

$$M = H_k - H_p$$

Description:

M : Marketing Margin

H<sub>k</sub> : Consumer Price

H<sub>p</sub> : Producer price

$$\%M = M/HE \times 100$$

Description:

%M : Margin percentage

HE : Retail price

M : Margin

The marketing margin is the difference between the price at the farmer or producer level and the price at the final consumer level. The difference is due to the marketing costs and profits of each marketing institution involved in the channel. The marketing margin component consists of the costs required by marketing institutions to perform marketing functions called marketing costs or functional costs and profits of marketing institutions (Sudiyono, 2001: 96).

### 2.3.2 Farmer Share's

$$Fs = Pf/Pr \times 100$$

Keterangan:

Fs : Farmer Share

Pf : Price of melon at farm level

Pr : Price of melon at retailer level

Farmer's share is an analytical tool that can be used to determine trade efficiency in terms of farmers' income. Kohls and Uhl 1990 define farmer's share as the percentage of the price received by farmers in return for their farming activities in producing a commodity.

### 2.3.3 Marketing Efficiency

$$Eps = Bp/HE \times 100$$

Description:

Eps: Marketing efficiency

Bp : Marketing cost

HE: Retail price

Marketing efficiency is one aspect of marketing in an effort to improve the movement of goods from producers to consumers. In marketing efficiency, it will be seen that there are differences in prices received by producers to those paid by end consumers.

### 2.3.4 Analysis BEP (Break Event Point)

BEP can be calculated in two ways, namely: Sales Break Even Point (BEP) in Production Volume Units and Rupiah. Breakeven point production volume describes the minimum production that must be produced in a farming business in order not to experience losses. According to Soekartawi, 2016 the formula for calculating BEP units is as follows:

$$\text{BEP unit} = \frac{FC}{P - VC}$$

Keterangan:

BEP : Break Even Point

Q : Quantities (Produksi)

FC : Fixed Cost

VC : Variable Cost

P : Price

Break Even Point rupiah describes the total product revenue with the product quantity at the time of BEP, the formula is as follows:

$$\text{BEP Rupiah} = \frac{FC}{1 - \frac{VC}{TR}}$$

Description:

*BEP* = Break Even Point

*TR* = Total Revenue

*FC* = Fixed Cost

*VC* = Variable Cost

### 3. RESULTS AND DISCUSSION

#### 3.1 Post-harvest

Melon post-harvest activities carried out in the Greenhouse include: Melon collection process, Grading, Washing or cleaning, Labeling and Marketing.

##### 1. *Melon collection*

Harvested melons are collected into one place to make it easy when grading the melons.

##### 2. *Grading of melons*

Grading or grading aims to group the size of the melon in its grade. Each melon that matches its grade is collected or put into a different container box. This grading will also determine the price of the melon. In general, it is divided into three quality groups, among others:

**Grade A:** Good fruit shape or skin, weight > 800g and sweetness level for grade A > 13 - 14.

**Grade B:** Good fruit or rind shape, weight 600-800g and sweetness level for grade B > 13 - 14.

**Grade C:** Imperfect fruit shape or rind, weight 500 - 600g and sweetness level for grade C 10 - 12.

##### 3. *Cleaning*

Cleaning or washing of melon fruit is done when the melon has been graded according to its class. Melon cleaning is done by cleaning the fine hairs around the melon fruit so that it is easy to do labeling, and if there is dust or soil on the melon fruit, it is done by washing the melon fruit under running water.

##### 4. *Labeling*

After the melon is cleaned, labeling is done by attaching a sticker or twisted logo to the melon.

##### 5. *Marketing*

There are 2 marketing methods used to market the melon harvest at the Greenhouse of Balitar Islamic University, namely:

##### a) *Marketing directly to customers*

Students market the harvested melons directly to customers. The target customers are lecturers, besides that students also market melons to houses around the campus. This aims to provide students with knowledge in marketing. Students sell grade A melons for 20,000, grade B for 16,000, and grade C for 14,000.

##### b) *Marketing to collectors (PT. Agro Wates)*

The Green House of Balitar Islamic University is partnered with PT Agro Wates, so PT Agro Wates buys melons that have been grown in the Green House at a price of IDR 22,000/kg for grade A, IDR 17,000/kg for grade B.

##### c) *Supermarkets / supermarkets*

Melons that are sold in supermarkets or supermarkets are melons that have grade A. grade A melons have a price of around Rp 40,000 / kg of honey orange type melons have a target of middle to upper class customers so that the price of these melons tends to be more expensive than melons in general. The marketing itself is directly carried out by PT Agro Wates employees.

### 3.2 Discussion

#### 3.2.1 Fixed Costs

This fixed cost contains the cost of making the greenhouse and also the tools needed by the greenhouse that can be used for more than one year. This cost can be seen in table 2 below:

No	Material Name	Total	Price	Amount
1.	Steel battens	85 batang	3.400.000	3.400.000
2.	Steel C channel	112 batang	10.080.000	13.480.000
3.	Steel bolts	3200 buah	960.000	14.440.000
4.	UV Plastic	125 meter	6.250.000	20.690.000
5.	Screen net	150 meter	4.000.000	24.690.000
6.	Paving	1000 buah	2.100.000	26.790.000
7.	Sand	6 bak	900.000	27.690.000
8.	Land rent 1 years	500 $m^3$	500.000	28.190.000
9.	Hoe	2	140.000	28.330.000
10.	Doran	2	20.000	28.350.000
11.	Seddling Tray	6	90.000	28.440.000
12.	Tub	4	30.000	28.470.000
13.	Sprayer swan	1	50.000	28.520.000
14.	Gembor	1	65.000	28.585.000
15.	Sprayer	1	25.000	28.610.000
16.	pH meter	1	42.000	28.652.000
17.	Stop kran	1	15.000	28.667.000
<b>TOTAL</b>				<b>28.667.000</b>

*Tabel 3.1 Cost of Manufacture*

So the cost of making one greenhouse with a capacity of 500 plants is Rp 28,670,000.00. Balitar Islamic University has 2 greenhouses with the same capacity, so the grand total for two greenhouses with a total of 1000 melon plants is IDR 57,334,000.

#### 3.2.2 Variable Costs

This variable material cost contains the cost of materials such as fertilizers, fungicides, insecticides and equipment needed that can only be used only once a planting. The cost of melon cultivation at this stage can be seen in table 3 below:

No	Material Name	Total	Price	Amount
1.	Tetes gula	4 l	60.000	60.000
2.	EM 4	1	18.000	78.000
3.	Urea	5 kg	15.000	93.000
4.	KNO3	6 kg	120.000	213.000
5.	Qiuvita N	5	200.000	413.000
6.	CNG	5	75.000	488.000
7.	Javagreen	2	74.000	562.000
8.	Dithane 45	1 kg	30.000	592.000
9.	Dolomit	50 kg	110.000	702.000
10.	Fertiphos	50 kg	143.000	845.000
11.	Duit-18	2 botol	80.000	925.000

12.	Bendas	1	75.000	1.000.000
13.	Besvidor 100 ml	2 botol	56.000	1.056.000
14.	Convidor 50 ml	2 botol	84.000	1.140.000
15.	Odissa	1 kg	158.000	1.298.000
16.	NPK16-16	10 kg	320.000	1.618.000
17.	Magnesium sulfat	1	18.000	1.636.000
18.	Plastik klip	7 pcs	17.500	1.653.500
19.	Raffia rope	4 bal	40.000	1.693.500
20.	Melon Sedling	1	1.000.000	2.693.500
<b>TOTAL</b>				<b>2.693.500</b>

**Tabel 3.2 Variabel Cost**

It can be seen from the table above, for the variable costs required in one stage of cultivation of melon plants in the greenhouse costs Rp 2,693,500.00 The total of these costs includes two greenhouses for plants as many as 1000 melon plants.

### 3.2.3 Labor Costs

The labor costs of melon cultivation at this stage can be seen in table 4 below:

No	Activites	Wages	Total
1.	Servis sanyo	150.000	150.000
2.	Servis Klep	50.000	200.000
3.	Transportasi	10.000	210.000
<b>TOTAL</b>			<b>210.000</b>

**Tabel 3.3 Labor Cost**

In table 3.3 above, it states that the cost of labor at the Green House of Balitar Islamic University in Blitar City is IDR 210,000.

### 3.2.4 Recapitulation of cost

Description	Total
Fixed Cost	57.334.000
Variabel Cost	2.693.500
Labor Cost	210.000
<b>TOTAL</b>	<b>60.237.500</b>

**Tabel 3.4 Recapitulation of cost**

So the total cost required in one stage is Rp 60,237,500 This total includes fixed costs, variable costs and labor costs required in the Balitar Islamic University greenhouse.

Grade melon	Total produksi	Price	Total
Grade A	278,8 kg	14.000	3.903.200
Grade B	423,95 kg	10.000	4.239.500
Grade C	287,07 kg	8.000	2.296.560
<b>TOTAL Total Revenue</b>			<b>10.439.260</b>

**Tabel 3.5 Total Revenue**

The table above is the total amount of cultivation income at the Green House of Balitar Islamic University, Blitar City.

### 3.3 BEP (Break Event Point)

The table below is the BEP unit and rupiah for melon grade A, B and C:

Grade	BEP Unit	BEP Rupiah
A	5.071	71.667.500
B	7.847	81.905.714
C	10.805	95.556.666

**Tabel 3.6 BEP (Break Event Point)**

In the calculation of BEP analysis is divided into 2, namely BEP units or products with BEP rupiah. The calculation in BEP is equally important in seeing the efficiency of melon cultivation in this greenhouse. If the sales of melons in the greenhouse exceed the BEP unit above, it will get a profit, and if the results of melon sales are more or fit in the calculation of BEP rupiah above, the capital spent by the greenhouse will return and will even get a profit.

Marketing Chanel	Grade	Marekting Margin (Rp/Kg)	Persentase Margin
I	A	Rp 6000/kg	33,3%
	B	Rp 6000/kg	26,6%
	C	Rp 6000/kg	23,3%
II	A	Rp 26.000/kg	65%
	B	Rp 20.000/kg	66,6%
	C	Rp 17.000/kg	68%

**Tabel 3.7 Prosentase BEP**

This marketing margin is one way to see whether the marketing channel is efficient or not. The longer the marketing channel (the more institutions involved), the greater the marketing margin (Daniel, 2002). If the greater the marketing margin, the smaller the price received by the producer and the more indicative that the marketing system is inefficient. It can be seen from the calculation of marketing margins and the percentage of marketing margins that of the two marketing channels in the green house of Balitar Islamic University, Blitar City, which has the lowest marketing margin and percentage of marketing margin, namely the first marketing channel pattern, namely from producers directly to consumers.

Marketing Chanel	Grade	Farmer Share	Marketing Efficiencie
I	A	70%	30%
	B	62,5%	37,5%
	C	57,1%	42,8%
II	A	35%	65%
	B	33,3%	66,6%
	C	32%	68%

**Tabel 3.8 Marketing Channel Efficiency**

Farmer share is the percentage of the selling price of farmers (producers) to the price at the retailer level or the price paid by the last consumer. Marketing is said to be efficient if it has a large farmer share value. From the calculation of farmer share above, the biggest value is the first channel pattern.

Marketing channel efficiency can be said to be efficient if the value is smaller than other marketing channel patterns. It can be seen in the table above that the first marketing channel pattern has a lower marketing efficiency value than the second channel pattern.



#### 4. CONCLUSION

1. Based on the results of the research and discussion that has been made, it can be concluded as follows. There are two patterns of hydroponic melon marketing channels in Green House Unisba Blitar City. The first channel pattern is from farmers (producers) to consumers, the second pattern is from farmers to collectors and then to supermarkets outside the area.
2. Based on the calculation of marketing margins and farmers share of the two marketing channels, channel I has the same amount of margin for grades A, B, and C, which is Rp. 6000/kg. The farmer share value of channel I pattern for grade A is 70%, grade B is 62.5%, and grade C is 57.1%. Channel pattern II has a total margin for grade A of Rp 26,000/kg, grade B of Rp 20,000, and grade C of Rp 17,000/kg. The farmer share value of channel pattern II for grade A is 35%, grade B is 33.3%, and grade C is 32%. It can be concluded that the most efficient channel pattern in melon fruit sales at the Green House of Balitar Islamic University in Blitar City is channel pattern I, because it has the shortest marketing chain, namely producers directly to consumers, has the lowest marketing margin, has the largest farmer share value, and also has the smallest efficiency value.

#### 5. SUGGESTION

Based on the conclusions of the research results and discussion, suggestions can be made in this study, namely in the development of hydroponic melons in the Green House Unisba Blitar City, it is hoped that an efficient marketing system can be built so as not to harm either party.

#### ACKNOWLEDGMENTS

The authors would like to thank the Rector of Balitar Islamic University, PT Agro Wates and the Faculty of Agriculture for providing financial and institutional support for this research.

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