

Innovation Marketing Literacy on Analysis of Corn Farming in Madura

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Abstract

Innovation in marketing management in the corn farming industry is the most important issue in making marketing analysis of corn farms. Therefore, this research will describe and then analyze the comparison of marketing innovations that include Marketing, Strategy, and marketing between districts in Madura. Thus this research is expected to make marketing decisions in a timely manner to prevent marketing difficulties, it is also useful for business analysis among agricultural areas in existing districts as research sample data. In addition to marketing innovation, the analysis of this study also uses the size of the business and the type of farming business. This research is based on descriptive and quantitative research methods. Descriptive methods are used to explain the character of Marketing, Strategy, and marketing. Meanwhile, quantitative methods test the comparison of innovation analysis in different districts. The results will give an idea of the state of marketing and comparison of business areas. Thus, conclusions can be drawn that are useful for developing or improving the marketing management system.

Keywords: Marketing, Corn, Strategy, Innovation, Madura

1. Introduction

Various types of plantation crops and food crops are cultivated by farmers both for household purposes and for sale to increase the income of the farmers themselves (Sestiana and Stefen, 2013)

One of the mainstay commodities in the agribusiness food/agriculture sector is corn. Corn is the main commodity in terms of business and use of its products, namely as raw materials for food and animal feed (Sujarwo, et al., 2011). This is quite derived because corn is a commodity that can be considered versatile and useful as a national food because it is a staple food after rice, besides that Corn is also an important commodity for the animal feed and seed industry. The fulfillment of food in quantity and quality is very important as a foundation for the development of the whole Indonesian people in the long term (Cannas et al., 2020; Halldórsson and Wehner, 2020).

Corn (*Zea Mays*) is a commodity that has economic value and has a great opportunity to be developed because of its composition as the main source of carbohydrates and proteins after rice, Almost all parts of the corn plant can be used for various purposes, ranging from fruits, stems, to leaves (Adhikari and Putnam, 2020; Chang et al., 2018; Thaore et al., 2020). Corn (*Zea Mays*) is an annual plant that has a round, intersected stem and is between 60-300

cm high. This plant can grow in lowlands to highlands (altitude 0-1,300m above sea level). Optimal rainfall between 85-100 mm/month and falls evenly throughout the year (Danandeh Mehr et al., 2022; Souza et al., 2020).

Corn production in Madura over the past 5 years has fluctuated, in 2013 the area of harvest and production of corn crops was with a harvest area of 34,174 and production of 139,265 and in 2014 it increased with a harvest area of 41,647 and production

170,203 tons, then again decreased in 2015, namely with a harvest area of 41,570 and production of 163,710 tons and again decreased in 2016 with a harvest area of 32,502 with a production of 131,123 tons. But then it increased again in 2017 with a Harvest Area of 78,993 and a production of 374,322 tons. There are changes that occur in corn production in some of these periods due to climate influences, decrease and increase in crop area, land function change to other commodities, serta due to the influence of pests and diseases (Lee et al., 2020; Resende et al., 2022). The results of Corn Production in Madura District

From this description, which still fluctuates frequently and it can be seen that corn supply until now has not been able to keep up with domestic corn demand where consumption tendencies Sweet corn in Indonesia is getting higher and higher causing an increasing number of imports (Subhana, 2010). If you look at the corn planting in Indonesia is quite wide, which means that the intention of farmers to cultivate corn crops is quite large, and there is still an opportunity to increase national maize production through acreage expansion (extensification) and intensification, especially in areas that are suitable and profitable for farmers (Sarasutha, 2002).

Some other inhibiting factors include the length of the market chain on corn products which results in the longer the market chain the less profit farmers get. It is also related to the role of middlemen/retailers in this process due to the lack of institutional role at the level of farmers where marketing institutions cannot be denied play an important role in organizing marketing, distributing services and production from producers to the final consumer and having a relationship with a business entity or individual or company that has ownership rights to the goods it markets and assists in the delivery of ownership rights of such goods or services from producers to consumers (Sudiyono, 2004).

Researchers consider it necessary to conduct research in order to analyze corn marketing in Madura Marawola District, Madura Regency so that an overview of the marketing process can be obtained, the profits obtained by farmers, marketing margins, marketing channels and marketing efficiency where efficiency is intended for a business or activity aimed at reducing the cost of "input" assuming that the "output" at this time remains unchanged (Wijaya, 2005).

2. Research Methods

This research was conducted in Madura with the consideration that, Madura District is a Maize-producing District in Madura Regency with 18 existing Villages/Kelurahan producing agriculture especially sweet corn. The research time is approximately 3 months from February to April 2022.

This study used primary and secondary data. The primary data in question includes interviews, polls from individuals or groups or the results of observation of an object, events and test results (objects). While secondary data is data obtained through intermediary media or indirectly in the form of books, records, existing evidence, or archives whether published or not publicly published in relation to product marketing agriculture in this case corn so that from the results of the analysis farmers will see the estimated amount of costs that must be incurred, how much profit is obtained, and can choose a farming business which is more profitable (Meilisia and Aida, 2017).

The data analysis tool used in this marketing analysis research is marketing margin analysis to find out marketing margin with the formula:

$$M = Hp - Hb$$

Description :

M = Marketing Margin (Rp/kg) Hp = Purchase Price (Rp/kg) Hb = Sales Price (Rp/Kg)

Analysis to find out the part of the price received by farmers to find out the share of prices received by farmers using the formula:

$$SF = \text{Price Farm} \times 100\% \text{ Price Retailer}$$

Description :

SF = Share of Price Received by Farmers

Pr= Price at the End Consumer level (Rp/Kg) Pf = Price at the Farmer level (Rp/Kg)

And analyze marketing efficiency to find out marketing efficiency, the formula is used:

$$EPS = (TB/TNP) \times 100 \%$$

Description :

Eps = TB Marketing Efficiency = Total TNP Marketing Cost = Total Sales Value

3. Results And Discussion

Overview of Research Locations.

In terms of demographics and geography, Madura has a competitive advantage, which in reality is one of the advantages for Madura Regency to improve the quality of tourism distribution with available resources and a very diverse scope of island clusters. With such geographical conditions, making Madura have many tourist destinations, from various destinations. Madura, namely cultural tourism, religious tourism, shopping tourism, and others, is dominated by nautical tourism. Some tourist destinations that are often visited by tourists, both local and foreign tourists, include; Gili Iyang (is the island with the second highest oxygen content in the world, after Jordan), Gili Labak, Gili Genting Beach 9, Lombang Beach, Kasur Pasir and Madura palace (Alfiyah, 2022)

Karachistic Respondents. A person's age can affect work performance and ability both physically and mentally, or in making decisions about corn marketing efforts carried out. The age of respondents with a percentage is in the age range of 26-51 years. This shows that most of the respondent farmers are in the productive age category, where the productive age is when a person is 15–64 with an average 40 years so it is very potential in developing a business using modern physical and technology .

Education Level. The level of education is the number of years of formal education taken by respondents in school. Education will affect the behavior and adoption rate of an educational innovation. Respondents are classified as high categories because the highest percentage, namely 43.59% is at the high school level. This shows that most of the respondent farmers and traders have sufficient knowledge to be able to understand the problems faced to be able to achieve the goals that were expected. According to Saridewi (2010), a person's level of education can change their mindset, better reasoning power so that the longer a person receiving an education will be more rational.

Number of Family Dependents. The number of family members affects the family economy , the more the number of family members, the more the needs of the family will increase , this will make the cost of living increase . The number of family members of 4-5 people at the study site is ideal according to the government's recommendations, namely two to three children plus both parents.

Experience trying. Experience in farming and trading can also increase the production that will be produced by farmers with the knowledge and skills possessed by farmers and Traders through the process of experience in corn marketing efforts are able to answer from existing problems, experience as a respondent farmer with the highest percentage is found in The range of business experience is 3-18 years. This shows that farmers are very experienced in farming. Experience is knowledge that a person experiences indefinitely. A pleasant and fulfilling experience will have a positive impact on continuing and adopting an innovation.

Cost, Profit and Marketing Price of Sweet Corn. The results of the research showed that there are 2 marketing channels in Madura district where channel I consists of: Farmers - Collecting Merchants - Retailers - Consumers, while for Channel II namely: Farmers - Retailers - Consumers while for Costs, Profits and Prices of sweet corn marketing from farmer to merchant collector of Rp. 5,100 /Kg. In the first channel, the collecting merchant makes a sale to the retailer at a price of Rp . 12,000/Kg, Total costs incurred of Rp. 167/Kg, and earned a profit of Rp. 6,733/Kg., next retailers sell to consumers at a price of Rp . 15,000 / Kg, the total costs incurred are Rp. 133 /Kg, and earned a profit of Rp. 2,867/Kg. As for the costs and profits received by each Sweet Corn Marketing Institute on the second channel , it can be seen that the price sold by farmers to retailers is Rp. 6,000/kg. In the second channel, retailers sell to consumers at a price of Rp. 15,000 / Kg. Total costs incurred are Rp. 183/kg. And earned a profit of Rp. 8,817/kg.

Channel 1 in the margin obtained from the collecting merchant to the retailer is Rp.

6,900 /Kg, with a sales price to retailers of Rp. 12,000, then the retailer resells it to consumers at a price of Rp. 15,000 / Kg and earns a profit of Rp. 3,000/kg. So that the total marketing margin obtained from channel I is Rp. 9,900 / Kg. marketing margin in channel II the margin value obtained by the retailer merchant is Rp. 9,000/Kg, with a purchase price from farmers of Rp. 6,000/ Kg, then the retailer resells to the end consumer at a price of Rp . 15,000/Kg and earns a profit of Rp. 9,000/kg. So that the total marketing margin obtained from channel II is Rp. 9,000 / Kg.

Table 1. Cost, Profit and Marketing Price of Sweet Corn on the First Marketing Channel in 2022.

No	Description	Volume/ Value per harvest
1	2	3
A	Farmer Sales Volume (Kg)	750
	Selling Price (Rp/kg)	5.100
B	Collecting Traders	
	Purchase Volume	750
	1. Purchase Price (Rp/Kg)	5.100
	2. Selling Price (Rp/Kg)	12.000
	3. Marketing Costs:	
	a. Manpower (Rp/Kg)	67
	b. Transportation (IDR)	100
	c. Total Cost	167
	4. Profit (Rp)	6.733
C	Reseller Merchants	
	Purchase Volume	750
	1. Purchase Price (Rp/Kg)	12.000
	2. Selling Price (Rp/Kg)	15.000
	3. Marketing Costs:	
	a. Labor (Rp/Kg)	33
	b. Transportation (Rp/Kg)	100
	c. Total Cost	133
	5. Profit (Rp)	2.867

Source : Primary Data After Processing, 2022

Shows that the selling price of farmers to collecting traders is Rp. 5,100/kg. In the first channel, collecting merchants make sales to retailers at a price of Rp. 12,000 / Kg, the total costs incurred are Rp. 167/Kg, and earned a profit of Rp. 6,733/Kg., then the retailer merchant sells to consumers at a price of Rp. 15,000/Kg, the total cost incurred is Rp. 133 /Kg, and earned a profit of Rp. 2,867/kg. In this first channel, collecting merchants spend a lot of marketing costs compared to retailers. As for the costs and profits that each Sweet Corn Marketing Institute receives on the second channel can be seen in Table 2.

Table 2 shows that the selling price of farmers to retailers is Rp. 6,000/kg. In the second channel, retailers sell to consumers at a price of Rp. 15,000 / Kg. Total costs incurred are Rp. 183/kg. And earned a profit of Rp. 8,817/kg.

Corn Farmer Marketing Margins. Marketing margin is the difference between the price paid by the end consumer and the price received by the producer or the cost of repaying marketing services, it can also be said that the difference between sales price and purchase price. The calculation of marketing margin is used to determine the cost flow at each institution involved in the marketing process, he explained, as shown in Table 3.

Table 2. Cost, Profit and Marketing Price of Sweet Corn on the Second Marketing Channel of 2022.

No	Description	Volume/Value per harvest
1	2	3
A	Farmer Sales Volume	600
	Selling Price (Rp/kg)	6.000
B	Reseller Merchants	
	Purchase Volume	600
	1. Purchase Price (Rp/Kg)	6.000
	2. Selling Price (Rp/Kg)	15.000
	3. Ordering Fee:	
	a. Manpower (Rp/Kg)	100
	b. Transportation (Rp/Kg)	83
	c. Total Cost	183
	4. Profit (Rp)	8.817

Source : Primary Data After Processing, 2022

Table 3. Marketing Margin of Sweet Corn on Channel I, Madura District in 2022.

No	Description	Purchase Price (Rp/kg)	Selling Price (Rp/kg)	Margin (Rp/kg)	Total Margin (Rp/kg)
1	2	3	4	5	6
1	Farmer		5.100		
2	Collecting Traders	5.100	12.000	6.900	
3	Reseller Merchants	12.000	15.000	3.000	
4	User	15.000			9.900

Primary :D ata Sources After Processing, 2022

Table 4. Marketing Margin of Sweet Corn on Channel II, in Madura, 2022.

No	Description	Purchase Price (Rp/kg)	Selling Price (Rp/kg)	Margin (Rp/kg)	Total Margin (Rp/kg)
1	2	3	4	5	6
1	Farmer		6.000		
3	Reseller Merchants	6.000	15.000	9.000	
4	User	15.000			9.000

Source : Primary Data After Processing, 2022

Channel I the margin value obtained from the collecting trader is Rp. 6,900/Kg, with a sales price to retailers of Rp. 12,000, then the retailer/merchant resells it to consumers with a price of Rp 15,000/Kg and earns a profit of Rp. 3,000/kg. So that the total marketing margin obtained from channel I is Rp. 9,900 / Kg.

Table 4 shows that the marketing margin on channel II of the margin value earned by the retailer merchant is Rp. 9,000/Kg, with a purchase price from farmers of Rp. 6,000/ Kg, then the retailer resells to the end

consumer at a price of Rp . 15,000/Kg and earns a profit of Rp. 9,000/kg. So that the marketing obtained from channel II is Rp. 9,000 / Kg.

Part of the Price received by Sweet Corn Farmers. Based on the results of research on channel I, the price of sweet corn at the producer (Farmer) level is Rp. 5,100/Kg and the price of sweet corn to the end consumer is Rp. 15,000/Kg. It can be systematically formulated as follows :

$$Sf = \frac{Rp. 5.100}{15.000} \times 100 \%$$

$$IDR 15,000$$

$$= 34 \%$$

In channel II, the prevailing price of sweet corn at the producer level is Rp.6,000/Kg and the price of sweet corn is at the level of consumer Rp. 15,000/kg. It can be systematically formulated as follows:

$$Sf = \frac{Rp. 6.000}{15.000} \times 100 \%$$

$$IDR 15,000$$

$$= 40 \%$$

According to the calculations made, the share of prices received by producers / farmers in channel I is 34% and the share of prices received by sweet corn producers on the channel II by 40% it can be seen that the efficiency value on channel I is 5.9% and on channel II is 3.0

%, the marketing efficiency of sweet corn in Madura District between channel I and channel II, the most efficient is the channel

II. This is due to the shortness of the marketing chain in channel II so that the costs incurred are smaller while the total sales value of channel II is greater than channel I.

Marketing Efficiency of Sweet Corn on Channel I :

$$Eps = (TB/TNP) \times 100\%$$

$$= (3,583,500 / 60,919,500) \times 100 \%$$

$$= 5.9 \%$$

Marketing Efficiency of Sweet Corn on Channel II:

$$Eps = (TB/TNP) \times 100\%$$

$$= (1,255,380 / 41,160,000) \times 100 \%$$

$$= 3.0 \%$$

4. Conclusions

Based on the results and discussion, the following conclusions were obtained:

Marketing channels for sweet corn in Madura, namely:

Channel I

Farmer Merchant Collectors Consumer Retailers → → →

Channel II

Merchant Farmers Consumer → → →

Resellers

1. The marketing margin of sweet corn in channel I, which is Rp. 9,900/Kg and the marketing margin of sweet corn on channel II, which is Rp. 9,000/Kg.
2. The share of prices received by farmers in channel I, which is 34% and the share of prices received by farmers in channel II, which is 40%.
3. Marketing efficiency of sweet corn on channel I, which is 5.9% and efficiency marketing on channel II, which is 3.0 % . The more efficient marketing efficiency of sweet corn in channel I and channel II is channel II ini due to the shortness of the marketing chain in channel II so that the costs incurred are smaller while the total sales value on channel II is greater than channel I.

4. Suggestion

Based on the conclusions of the research results in Madura District, the author suggests that farmers (producers) should channel their agricultural products through channel II, because on channel II is more efficient than channel

I. This is due to the shortness of the marketing chain in channel II so that the costs incurred are smaller.

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