AgriMu
Journal of Socio-Economics and Agribusiness
Vol. 06 No. 02 June 2026, Pages: 64-75

AN ANALYSIS ON SUPPLY CHAIN CHANNEL OF SWEET CORN (*Zea mays*) IN THE SETYO PRATOLO 2 FARMER GROUP, LINGGASARI VILLAGE, KEMBARAN SUB-DISTRICT, BANYUMAS REGENCY

Trianita Safitri[1], Pujiati Utami[2]*, Dumasari[3], Watemin[4]

[1,2,3,4]Student in the Agribusiness Program, Muhammadiyah University of Purwokerto
Lecturer in the Agribusiness Program, Faculty of Agriculture and Fisheries, Muhammadiyah University of Purwokerto

***Corresponding email: pujiatiutami@ump.ac.id**

ABSTRACT
Sweet corn is a horticultural crop with considerable economic value and steadily increasing demand over time. However, its supply chain distribution process continues to face several challenges, particularly high marketing costs, lengthy distribution channels, and the relatively weak bargaining position of farmers. This study aims to analyze supply chain channels and measure the marketing efficiency of sweet corn within the Setyo Pratolo 2 Farmer Group located in Linggasari Village, Kembaran Sub-District, Banyumas Regency. This study employed a descriptive method with both quantitative and qualitative approaches. Data were collected through interviews, questionnaires, and documentation involving 20 farmers, 2 collectors, and 10 retailers selected using purposive sampling. Data analysis was conducted by calculating marketing margins, marketing efficiency, and farmers share to evaluate the performance of each distribution channel. The findings identified two supply chain channel patterns. Channel I (farmer-collector-consumer) and Channel II (farmer-collector-retailer-consumer). The marketing margin in Channel I was IDR 2,382/kg, which is lower than Channel II at IDR 5,334/kg. In terms of efficiency, Channel I demonstrated a marketing efficiency of 3.6%, indicating an efficient channel, whereas Channel II showed 18.5%, categorized as less efficient. Additionally, the farmers share in Channel I reached 56.7%, significantly higher than Channel II at 33.3%. Therefore, Channel I is considered the most efficient distribution channel due to its shorter distribution chain, lower marketing costs, and higher price share received by farmers.

Keywords: Supply Chain, Marketing Efficiency, Sweet Corn, Farmers Share, Marketing Margin.

INTRODUCTION

Sweet corn (*Zea mays Saccharata Sturt*) is one of the horticultural products with high economic value and steadily increasing demand. The rise in demand for sweet corn in Indonesia is driven by changing consumer habits, as people increasingly opt for nutritious foods, as well as growing demand from the food processing industry (Reza et al., 2025). In addition to being a food source, this commodity is also crucial for supporting the country's food security. According to information from the FAO cited in (Pertanian, 2024), Indonesia ranks among the top ten countries in the world for corn production, with total production estimated at approximately 21.48 million tons annually.

With this increase in demand and production, marketing has become a critical aspect of the agricultural sector. Marketing plays a vital role in managing how products are distributed from producers to consumers through available distribution channels (Amin Silfiah, 2022). A marketing channel is a system involving various organizations or individuals who interact with one another to distribute products to end consumers (Hakim, 2023). In this context, the role of marketing institutions is crucial in the supply chain, as explained: "Traders play a vital role in the marketing of agricultural products" (Dumasari, 2020).

Therefore, success in sweet corn farming depends not only on the cultivation methods used, but also on how effectively the distribution system connects producers with consumers. At the global level, the efficiency of the sweet corn supply chain is a key factor in maintaining price stability and product quality. Research by Morella *et al.*, (2021) shows that the application of technology in the agro-industrial supply chain can improve operational efficiency, enhance distribution methods, and strengthen the position of products in the international market. Therefore, an efficient supply chain enables agricultural products to reach consumers while maintaining quality and reducing distribution costs.

At the local level, corn is one of the main commodities that plays a key role in the agricultural sector in Banyumas Regency, Central Java. According to information from the Dinas Komunikasi dan Informatika Kabupaten Banyumas (2025), corn production in the area has fluctuated over the past five years. In 2020, the harvested area for corn was 5,158 ha, with a total production of 31,784.58 tons. In 2021, the harvested area decreased to 4,301.10 ha with a production of 27,741.50 tons. Then in 2022, the harvested area rose again to 5,155 ha with a production of 32,492.26 tons, marking the highest figure during the observation period. However, in 2023, the harvested area decreased again to 4,509 ha with a production of 29,392.72 tons, then increased again in 2024 to 4,830 ha with a production of 31,544.85 tons. Overall, the total harvested area for corn from 2020 to 2024 reached 23,953.1 ha with a total production of 152,955.91 tons.

Although corn production in Banyumas Regency is relatively high, farmers still face various challenges within the supply chain, such as dependence on middlemen or intermediaries. The corn distribution chain in Indonesia involves many parties, including farmers, collectors, wholesalers, and retailers, all of whom influence distribution margins at every level of the marketing process (Sriyundi et al., 2022). This situation results in farmers receiving lower prices compared to consumer prices, indicating the influence of intermediaries in price determination. However, most studies have focused primarily on dried shelled corn used as a raw material for the feed industry. Research on the sweet corn supply chain, particularly at the farmer group level, remains relatively scarce. Meanwhile, sweet corn is a perishable commodity that requires a faster and more efficient distribution system. Furthermore, the socio-economic interactions among actors in the distribution system such as farmers, wholesalers, retailers, and buyers have not yet been thoroughly examined.

In response to this situation, research is needed to analyze the sweet corn supply chain and evaluate the level of marketing efficiency at the farmer group level. Therefore, this study was conducted at the Setyo Pratolo 2 Farmer Group, located in Linggasari Village, Kembaran Sub-district, Banyumas Regency. The study aims to identify the profiles of actors in the supply chain, identify existing distribution channels for sweet corn, and analyze marketing efficiency based on margins and the farmer's share. It is hoped that the findings of this study will serve as a useful reference for farmers, the government, and marketing actors in their efforts to improve the efficiency of sweet corn distribution while promoting farmers welfare.

RESEARCH METHODOLOGY

The research was conducted in Linggasari Village, Kembaran Sub-district, Banyumas Regency. The location was selected using purposive sampling, based on the fact that the area is one of several sweet corn production centers and has a distribution network involving farmers, collectors, and retailers. The research will be conducted from October 2025 to March 2026. The method used was a descriptive approach employing both quantitative and qualitative methods. The descriptive approach was used to systematically describe the conditions of farmer groups, the characteristics of sweet corn farmers and traders, as well as the patterns of the supply chain. Meanwhile, a quantitative approach is used to measure the efficiency of the supply chain by calculating the marketing margin, marketing effectiveness, and the farmer's share, while a qualitative approach is used to describe the role of each stakeholder as well as the flow of goods, information, and finances within the distribution channel.

The data used in the study include data from direct observations and data from other sources. The data from direct observations was collected through interviews and the distribution of questionnaires to sweet corn farmers, collector, and retailers participating in the supply chain network in Linggasari Village. Secondary data was collected from relevant institutions, various literature reviews, official reports, and relevant supporting documents. Sampling was conducted using a non-probability sampling technique, specifically purposive sampling. The population for this study comprised all members of the Setyo Pratolo 2 Farmers Group located in Linggasari Village, Kembaran Sub-district, Banyumas Regency, totaling 112 people. Of this number, only farmers who met specific criteria were selected as the sample for the study. The criteria for farmers selected as the sample are as follows :

1. Is an active member of the Setyo Pratolo 2 Farmers' Group.
2. Developing sweet corn farming.
3. The sweet corn farm is located in Linggasari Village.

4. Selling the harvest through existing marketing channels in Linggasari Village, namely collectors and retailers.

Based on the established criteria, a total of 20 farmers were selected as the sample. In addition, this study also involved 2 collectors and 10 retailers as key informants. Data analysis was conducted in several stages. Descriptive analysis was used to describe the profiles of farmer groups and supply chain actors. Next, distribution margin analysis was used to determine the difference in selling prices between farmers and final consumers, as formulated below :

$$M = Pf - Pr$$

Description:
M : Marketing margin (Rp/Kg)
Pr : Prices at the producer level (Rp/Kg)
Pf : Prices at the consumer level (Rp/Kg)
Level of marketing efficiency is calculated to determine the extent of product distribution costs relative to the value of goods traded, using the formula :

$$EP = \frac{BP}{NP} X100\%$$

Description:
EP : Marketing efficiency (%)
BP : Marketing cost (Rp/Kg)
NP : Value of marketed products (Rp/Kg)

According to Hapsari (2013) as cited in Yapanto, Paramata dan Gumulu (2021), the criteria for assessing marketing efficiency can be explained as follows :
EP < 5% indicates that marketing activities are efficient, while an EP value of > 5% or ≥ 5% indicates that marketing is not yet efficient. In addition, the farmer's share is used to calculate the percentage of the price received by farmers relative to the final consumer price, using the formula :

$$fs = \frac{pf}{pr} x100\%$$

Description:
FS : Farmer's share (%)
Pf : Prices at the farm level (Rp/Kg)
Pr : Prices at the consumer level (Rp/Kg)

The higher the farmer's share, the higher the proportion of the price received by farmers, indicating that the marketing channel is becoming more efficient. The results of the calculations for marketing margins, marketing efficiency, and the farmer's share were then used as the basis for determining the most efficient sweet corn supply chain channel for the Setyo Pratolo 2 Farmers' Group in Linggasari Village.

RESULTS AND DISCUSSION

Farmer Group Profile

The Setyo Pratolo 2 Farmers Group is an agricultural group established in 2016 and located in RT 02 RW 05, Linggasari Village. The group has a total of 112 members and is led by Mr. Sumadi as its Chairperson. In carrying out its activities, the Setyo Pratolo 2 Farmers Group has a clearly structured organization so that the division of tasks and responsibilities among members can be carried out efficiently. Regular meetings are held every two months as a forum for coordination, evaluation, and information sharing. Based on current developments, this farmers' group holds the status of an intermediate-level farmers group. Its primary activities include extension services and training for members, such as training in organic fertilizer production to enhance knowledge and skills in agriculture. To date, the Setyo Pratolo

AgriMu
Journal of Socio-Economics and Agribusiness
Vol. 06 No. 02 June 2026, Pages: 64-75

2 Farmers Group has not established partnerships with traders or other marketing institutions to support the marketing of agricultural products.

Profile of a Sweet Corn Farmer

The profile of sweet corn farmers in the Setyo Pratolo 2 Farmers Group includes their age, educational background, experience in farming, and the size of the land they own.

1. Farmers' Age

   Based on a study conducted with 20 farmers as respondents, age was one of the key factors analyzed to understand the age composition of farmers. The age distribution of the respondents is presented in Table 1 below :

   Table 1. Number of Farmer Respondents by Age Group

No	Age	Total (people)	Percentage (%)
1.	20 – 40 years	3	15%
2.	41 – 60 years	9	45%
3.	61 – 80 years	8	40%
	Total	**20**	**100%**

   Source : Processed Data, 2026

   Referring to Table 1, it can be seen that the majority of farmer respondents in the Setyo Pratolo 2 Farmers Group are in the 41–60 age range, totaling 9 people or 45%. This indicates that the farmers are predominantly in the middle productive age group. The 61–80 age group ranks second with 8 people, or 40%, indicating that there are still many elderly farmers actively engaged in agriculture. On the other hand, the 20–40 age group has the smallest number, with 3 people, or 15%, signaling low participation of the younger generation in this group's agricultural activities.

2. Education Level

   The respondents educational levels were among the aspects examined in this study. Data on the distribution of the respondents educational levels can be seen in Table 2 below :

   Table 2. Number of Farmer Respondents by Education Level

No	Education Level	Total (people)	Percentage (%)
1.	Not attending school	1	5%
2.	Elementary school graduate	12	60%
3.	High school graduate	7	35%
	Total	**20**	**100%**

   Source : Processed Data, 2026

   According to the table above, the majority of farmer respondents in the Setyo Pratolo 2 Farmers Group have a final level of education equivalent to elementary school, totaling 12 people (60%). Meanwhile, 7 farmers (35%) have completed high school, while only 1 farmer (5%) has never received formal education. This indicates that the educational level of farmers in the Setyo Pratolo 2 Farmers Group is still predominantly at the elementary school level.

3. Farming Experience

   The respondents farming experience reflects the length of time farmers have been engaged in agricultural activities. The distribution of this farming experience is presented in Table 3 below :

   Table 3. Number of Farmer Respondents by Farming Experience

No	Farming Experience (years)	Total (people)	Percentage (%)
1.	1 – 15 years	11	55%
2.	16 – 30 years	4	20%
3.	31 – 45 years	4	20%
4.	46 – 60 years	1	5%
	Total	**20**	**100%**

   Source : Processed Data, 2026

Referring to the table above, the majority of farmer respondents in the Setyo Pratolo 2 Farmers Group have 1–15 years of farming experience, comprising 11 individuals (55%). This indicates that most farmers fall into the intermediate experience category. Meanwhile, four farmers each (20%) have 16–30 years and 31–45 years of experience. As for farmers with the longest experience, namely 46–60 years, there is only one (5%). In general, the data shows that the farmer population is predominantly made up of those with less than 15 years of experience.

4. Land Area

Variations in land size can indicate the agricultural potential of each respondent. The distribution of land sizes among the farmer respondents is shown in Table 4 below :

Table 4. Number of Farmer Respondents by Land Area

No	Land Area	Total (people)	Percentage (%)
1.	< 0,5	16	80%
2.	0,5 - 1	4	20%
Total		**20**	**100%**

Source : Processed Data, 2026

Based on the table, it can be seen that the majority of respondents own plots of land smaller than 0.5 hectares, namely 16 people, or 80% of all respondents. Meanwhile, 4 respondents (20%) own land ranging from 0.5 to 1 hectare. Of the total 20 respondents (100%), this indicates that the majority of farmers have relatively small landholdings, specifically under 0.5 hectares.

Sweet Corn Merchants Profile

The profile of sweet corn merchants includes age, education, and farming experience.

1. Age Of The Merchant

Age is one of the key factors analyzed to understand the age composition of merchants. Data on the ages of the merchants involved in this study are presented in Table 5 below :

Table 5. Number of Merchants by Age Group

No	Age	Total (people)	Percentage (%)
1.	30 – 40 years	4	33%
2.	41 – 50 years	6	50%
3.	51 – 60 years	2	17%
Total		**12**	**100%**

Source : Processed Data, 2026

The data tabulation shows that the composition of vendors by age group is dominated by the 41–50 age range, with 6 individuals, or 50% of the total 12 vendors. The 30–40 age category comes next, with 4 people, or 33%. Meanwhile, there are 2 merchants aged 51–60, or 17%, making this the smallest group. Overall, this data indicates that the majority of merchants fall within the productive age range.

2. Education Level

The educational levels of the vendors are among the aspects examined in this study. The distribution of the vendors' educational levels in this study is presented in Table 6 below :

Table 6. Number of Merchants by Educational Level

No	Educational Level	Total (people)	Percentage (%)
1.	Elementary School Graduate	6	50%
2.	Junior High School Graduate	4	33%
3.	High School Graduate	2	17%
Total		**12**	**100%**

Source : Processed Data, 2026

Referring to the table above, the educational background of the vendors consists mostly of elementary school graduates, with 6 people, or 50% of the total 12 respondents. Next, 4 vendors (33%) have completed Junior High School (SMP), while 2 vendors (17%) have completed Senior

High School (SMA). Of the total 12 vendors (100%), it can be concluded that the majority have a basic education background.

3. Business Experience In The Agricultural Sector

Information regarding the business experience of the merchants in the agricultural sector, as gathered in this study, is presented to provide insight into the duration of their involvement in business activities. Details regarding the distribution of this experience are shown in Table 7 below :

Table 7. Number of Farmers by Business Experience In The Agricultural Sector

No	Business Experience In The Agricultural Sector (years)	Total (people)	Percentage (%)
1.	1 – 15 tahun	8	67%
2.	16 – 30 tahun	4	33%
	Total	**12**	**100%**

Source : Processed Data, 2026

Based on the data tabulation above, the majority of merchants have 1–15 years of business experience, totaling 8 people or 67% of all respondents. Meanwhile, there are 4 merchants with 16–30 years of experience, or 33%. Of the total 12 people (100%), it can be said that the majority of merchants have relatively long business experience, although the group with less than 15 years of experience still dominates.

The Sweet Corn Supply Chain Mechanism

The mechanisms within the supply chain are crucial elements integrated into the sweet corn distribution system. The supply chain generally consists of three main flows that must be managed in a coordinated manner: the flow of goods, information, and finance. The flow of goods moves from the producer (the upstream party) to the consumer (the downstream party). Meanwhile, the flow of information is two-way, moving from producers to consumers and vice versa from consumers to producers. The flow of funds moves from the downstream to the upstream as payment for the distributed products (Moh dan Moh, 2023).

This distribution process then gives rise to various marketing channels that connect farmers with distribution entities, such as collectors and retailers. In practice, the distribution pattern for sweet corn in the Setyo Pratolo 2 Farmers Group is divided into two distinct marketing channels, based on the product's distribution route from the farmer to the final customer.

Based on the research findings, the sweet corn marketing system in the Setyo Pratolo 2 Farmers' Group is divided into two distribution channels. In marketing channel I, product distribution involves only one marketing institution: the collector. In this channel, the collector distributes the product directly after purchasing it from the farmers, without going through additional retailers.

Meanwhile, in marketing channel II, the product distribution process involves two intermediaries: collectors who purchase agricultural produce from farmers and then resell it to retailers before it finally reaches the final consumer.

a. Channel I : Farmer – Collector – Consumer

Channel I is a distribution system involving two stages of distribution, starting with farmers as producers, then moving on to collector traders, and finally directly to end consumers. The following diagram of Channel I illustrates the flow of products, information, and funds :

Figure 1. Channel I of the Sweet Corn Supply Chain in the Setyo 2 Farmers Group

Description :
= Product Flow
= Information Flow
= Financial Flow

Under this system, farmers sell their sweet corn harvest to collectors. The collectors then distribute the product directly to consumers without going through retailers. Thus, there is only one intermediary before the product reaches the consumer. This is consistent with the findings of (Suciati, Fitria dan Endah, 2024), Marketing Channel I is also known as a one level marketing channel. In this channel, there is only one distributor involved: the collector. Farmers generally choose this channel because the selling price they receive tends to be higher. This is one of the main factors farmers consider when deciding on a marketing channel for their harvest.

In Channel I, the marketing channel system consists of three main flows: the flow of goods, the flow of information, and the flow of funds. These three flows are interconnected and operate in an integrated manner among farmers, collectors, and final consumers, as shown in Figure 1.

1) Product Flow

In Channel I of the sweet corn supply chain at the Setyo Protolo 2 Farmers' Group, a Farmer–Collector–Consumer distribution system is used. This process begins with the farming activities carried out by farmers, from planting through to harvest. When the corn is ready for harvest, the farmers notify the collector traders located in Linggasri Village. Next, the collector traders come directly to the field to carry out the harvesting process.

After harvesting, the sweet corn is not distributed immediately but first undergoes a sorting process based on quality. During this stage, the collectors also peel off some of the outer husks to make the cobs look cleaner and neater. In a single harvest, the average purchase volume reaches about 5,000 kg, with the price following the market rate of Rp3,500 per kilogram. However, this amount is not always consistent because it depends heavily on the level of production and market demand at the time. After the transaction and weighing are complete, the sorted sweet corn is then packed into sacks and transported using vehicles such as pickup trucks or trucks to the collector's business premises.

Upon arrival at the collector's location, the corn is repackaged into 25 kg and 50 kg bags to facilitate distribution. After packaging, the sweet corn is then distributed to end consumers. End consumers in this supply chain include not only households but also MSMEs (Micro, Small, and Medium Enterprises) such as grilled corn vendors, other corn processing businesses, and MBG (Free Nutritious Meals) kitchens that require a specific quantity of corn for further processing. Thus, product distribution occurs directly, starting from the farmers, continuing to the collectors, and reaching the end consumers without passing through other intermediaries.

2) Information Flow

In addition to the flow of goods and money, there is also a two-way flow of information between farmers, collectors, and consumers. Farmers provide information on harvest times, estimated production volumes, and the quality of the sweet corn available. This information serves as a reference for collectors to determine the quantity to be purchased and their distribution plans to consumers. Conversely, collectors also convey information from consumers regarding volume requirements, quality standards, and market price trends. Communication is typically conducted in person at the cultivation sites or via telephone to ensure effective coordination. This effective flow of information helps maintain a balance between production and demand and reduces the risk of supply surpluses or shortages.

3) Financial Flow

The financial process in this supply chain flows from consumers to farmers through intermediary collectors. Consumers, whether from MSMEs (Micro, Small, and Medium Enterprises) or the MBG (Free Nutritious Meals) program, pay the collectors based on the amount of sweet corn they purchase. The middlemen then pass on this payment to the farmers at an average price of Rp3,100 per kilogram. Generally, payments between middlemen and farmers are made in cash after weighing and agreeing on quality. The amount received by farmers may vary from harvest to harvest due to fluctuations in production volume and market demand.

b. Channel II : Farmer – Collector – Retailer – Consumer

Channel II is a distribution system involving several stages of distribution, starting with farmers as producers, then moving to collector traders, followed by retailers, until the product

AgriMu
Journal of Socio-Economics and Agribusiness
Vol. 06 No. 02 June 2026, Pages: 64-75

finally reaches consumers. The following diagram of Channel II illustrates the flow of products, information, and funds :

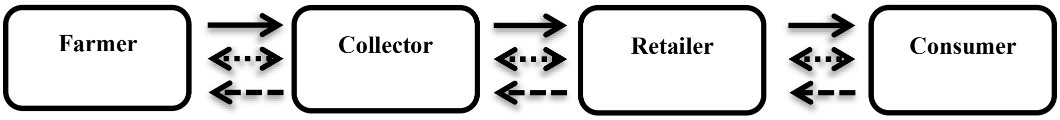
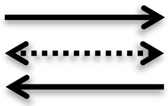


Figure 2. Channel II of the Sweet Corn Supply Chain in the Setyo 2 Farmers Group

Description : 
= Product Flow
= Information Flow
= Financial Flow

In this process, farmers first sell their sweet corn harvest to collectors. The collector then redistributes the product to retailers who sell it directly to end consumers. Under this mechanism, two intermediaries are involved before the product finally reaches the consumer. This aligns with the question (Suciati et al., 2024), marketing channel II is known as a two-level marketing channel. It involves several entities, such as collectors and retailers.

Farmers typically choose this channel because collector traders have large storage capacities, enabling them to purchase large quantities of crops at once. In addition, the speed of payment is also a key factor. Collector traders often pay in cash or shortly after the transaction takes place, allowing farmers to immediately access funds for their business operations and daily needs.

In marketing channel II, there are three main flows within the distribution channel system: product flow, information flow, and financial flow. These three flows are interrelated and operate in an integrated manner among farmers, collectors, and retailers, as illustrated in Figure 2.

1) Product Flow

The distribution process begins with farmers, who act as producers, cultivating the crops until harvest. After the harvest is complete, farmers do not sell their produce directly to end consumers, but rather through collector traders in Linggasari Village. Generally, these collector traders visit the fields directly to purchase the harvest from the farmers. On-site, the collectors perform simple weighing and sorting, such as cleaning the corn and trimming some of the outer husks so the cobs appear cleaner.

In a single harvest, the average amount of sweet corn purchased by collectors is around 500 kg, although this figure may vary depending on production yields and market demand. After sorting, the sweet corn is placed in sacks and then transported using private vehicles, such as pickup, to the collector's place of business. There, the collector repackages the sweet corn. It is packed in 1-kilogram plastic bags, which are then arranged into larger plastic bags containing about 10 bags, or the equivalent of 10 kilograms.

Once the entire packaging process is complete, collectors distribute the sweet corn to Wage Market for sale. From there, the corn is purchased by retailers. Additionally, some retailers choose to buy the product directly from the collectors homes. After that, these retailers resell the sweet corn to consumers, either by setting up stalls at the market, selling it at their own vegetable kiosks, or going door to door in residential neighborhoods. In this way, the product flow moves gradually from the producer to the end consumer.

2) Information Flow

In addition to the flow of goods and payments, there is also a two-way flow of information within this supply chain. Farmers provide information regarding harvest schedules, estimated production volumes, and the quality of sweet corn to the collectors. This information is crucial so that collectors can estimate transportation needs and plan distribution to Wage Market. On the other hand, collectors and retailers also provide feedback to farmers regarding market conditions, current demand, consumer preferences regarding size or sweetness levels, and price trends. Communication typically takes place in person during transactions or over the phone to ensure smooth coordination. This effective exchange of information contributes to supply stability and production adjustments based on market needs.

3) Finansial Flow

The flow of funds in this supply chain moves from upstream to downstream, starting with consumers and then returning to farmers. Consumers pay retailers for the sweet corn they purchase based on the quantity they take. After that, retailers make payments to the collectors based on the volume of supply received. Next, the collector pays the farmers for their harvest using a price in line with the market average, which is Rp2,700 per kilogram. Payments between farmers and collectors are typically made in cash after weighing and agreement on quality. However, purchase volumes and total payments may vary from harvest to harvest due to fluctuations in production and market demand conditions.

Marketing Margin

The marketing margin is the difference between the farm gate price and the price paid by the end buyer (Merita, 2020). The following is a calculation of the marketing margin for sweet corn in the Setyo Pratolo 2 Farmers Group in Linggasari Village :

Table 8. Marketing Margin Calculation Results

Channel	Consumer Buying Price	Podusen Selling Price	Marketing Margin (Rp/Kg)
Channel I	Rp5.500	Rp3.118	Rp2.382
Channel II	Rp8.000	Rp2.666	Rp5.334

Source : Processed Data, 2026

Based on the table above, there is a difference between the price and the marketing margin across the two channels. In Channel I (Farmer – Collector – Consumer), consumers pay Rp5,500 per kilogram, while producers receive only Rp3,118 per kilogram, resulting in a marketing margin of Rp2,382 per kilogram. On the other hand, Channel II (Farmer – Collector – Retailer – Consumer) shows a much higher consumer buying price, namely Rp8,000 per kilogram, yet the amount received by the producer is actually lower, at Rp2,666 per kilogram. Consequently, the marketing margin for this channel is higher, at Rp5,334 per kilogram. This indicates that the marketing margin for Channel I is lower than that of Channel II, suggesting that the marketing chain in this channel is more efficient or involves fewer intermediaries. As a result, producers receive a more favorable price, while consumers pay a relatively lower cost. These differences in marketing margins are influenced by the length of the distribution channel, the amount of marketing costs, and the profit margins expected by each marketing participant involved (Sudana, 2019). This finding is consistent with the research by Eldi et al., (2018) which shows that the marketing margin is influenced by the number of entities involved in the distribution process. This is due to the increasing number of marketing actors involved, which tends to result in higher costs.

Marketing Efficiency

According to Noviantari et al., (2015), marketing efficiency can be defined as the percentage ratio of marketing costs to the total value of the product. Marketing efficiency analysis is conducted to evaluate the extent to which the supply chain is functioning effectively, given the various marketing activities involved. In the case of the sweet corn supply chain at the Setyo Pratolo 2 Farmers' Group, there are several channels that act as marketing institutions. These channels include farmers, collectors, and retailers in the distribution process of this commodity. The existence of these marketing institutions will affect the total marketing costs incurred by each marketing actor, so the relevant information is presented as follows :

Table 9. Results of the Marketing Efficiency Analysis

Channel	Total Marketing Costs	Total Product Value	Marketing Efficiency (%)
Channel I	Rp200	Rp5.500	3,6%
Channel II	Rp1.480	Rp8.000	18,5%

Source : Processed Data, 2026

Based on the information in the table, it is evident that each marketing channel exhibits a different level of efficiency when comparing total marketing expenditures to the total value of products sold. In Channel I, total marketing expenditures amounted to Rp200, with the total value of products sold at Rp5,500. From this, a marketing efficiency rate of 3.6% was calculated. Referring to the marketing efficiency criteria, where EP < 5% is categorized as efficient, while EP > 5% indicates an inefficient condition, Channel I falls into the efficient category, as its efficiency percentage is below the specified threshold.

On the other hand, Channel II recorded marketing expenses of Rp1,480 and the value of products sold at Rp8,000. Based on these calculations, the marketing efficiency rate reached 18.5%. This figure is well above the 5% efficiency threshold, so Channel I can be categorized as an efficient channel. It is evident that marketing expenses in Channel I are relatively lower compared to those in Channel II. Based on these results, Channel I is more efficient than Channel II in marketing activities. This is consistent with the view of Downey and Erickson (1992) as cited in (Eldi et al., 2018), that the longer the distribution channel used by an organization, the lower its efficiency. The inefficiency of the supply chain is also reflected in producers' dependence on intermediaries, as "Craftsmen are also bound to sell products to intermediaries at lower prices due to unsuitable marketing systems" (Dumasari et al., 2020). This underscores the need to evaluate the structure of distribution channels in order to improve efficiency and fairness within the supply chain.

Farmer Share

The higher the farmer's share, the higher the proportion of the price received by farmers, indicating that the marketing channel is becoming more efficient. The results of the farmer's share calculations for each distribution channel are shown in Table 10 below :

Table 10. Farmer Share in the Sweet Corn Supply Chain of the Setyo Pratolo 2 Farmers Group

No	Prices At The Farm Level (Rp/Kg)	Prices At The Consumer Level (Rp/Kg)	Farmer's share
Channel I	Rp3.118	Rp5.500	56,7%
Channel II	Rp2.666	Rp8.000	33,3%

Source : Processed Data Diolah, 2026

Based on the information in the table above, the farmer's share for each sweet corn distribution channel in the Setyo Pratolo 2 Farmers Group is as follows. In Channel I, farmers receive Rp3,118/kg, while consumers pay Rp5,500/kg, resulting in a farmer's share of 56.7%. Meanwhile, in Channel II, farmers receive a price of Rp2,666/kg, while the price paid by consumers reaches Rp8,000/kg, resulting in a farmer's share of 33.3%.

A higher proportion of the farmer's share indicates that the proportion of the price received by farmers is also higher, suggesting greater efficiency in the marketing channel. Thus, Channel I has a significantly higher farmer's share compared to Channel II, leading to the conclusion that Channel I provides a more profitable share of the price for farmers. These findings are also consistent with a study (Feni, 2023) that explains that the longer the distribution chain, the smaller the share of the price received by farmers tends to be, whereas in shorter marketing chains, the share received by farmers is larger.

Furthermore, the results of these calculations regarding the farmers' share can be used in conjunction with marketing margin and marketing efficiency analyses to determine the most efficient distribution channel for sweet corn in the Setyo Pratolo 2 Farmers' Group, Linggasari Village.

CONCLUSION

Conclusion

Based on the results of the research conducted, the following conclusions can be drawn :

1. There are two sweet corn supply chains within the Setyo Pratolo 2 Farmers Group. Chain I consists of farmers, collectors, and consumers, while Chain II involves farmers, collectors, retailers, and consumers. The difference in the number of intermediaries in each chain affects the resulting level of marketing efficiency.
2. The marketing margin in Channel I is lower than in Channel II. In Channel I, the marketing margin was recorded at Rp2,382/kg, while in Channel II it reached Rp5,334/kg. The lower margin in

Channel I indicates that the distribution chain is simpler, resulting in a smaller price difference between the producer and consumer levels.
3. The results of the marketing efficiency calculation show that Channel I is more efficient than Channel II. In Channel I, the marketing efficiency value is 3.6%, which is still within the efficient category, whereas in Channel II it reaches 18.5%, indicating that the channel is inefficient because it exceeds the marketing efficiency threshold (<5%).
4. The farmer's share in Channel I is higher than in Channel II. Channel I recorded a farmer's share of 56.7%, while Channel II recorded 33.3%. The higher this figure is, the larger the portion of the price received by farmers; therefore, Channel I provides farmers with a higher profit margin than Channel II..

Suggestion

Based on the research findings and conclusions, the following recommendations can be made :
1. Sweet corn farmers in the Setyo Pratolo 2 Farmers Group are advised to make greater use of shorter distribution channels, such as Channel I. This is because this channel has proven to be more efficient and able to provide farmers with a larger share of the price. In addition, sweet corn is a perishable commodity, so it requires a fast and efficient distribution process to maintain its quality.
2. Local governments and relevant agencies are encouraged to provide guidance, marketing training, and support for market access to farmers so that sweet corn can be distributed more efficiently without relying too heavily on middlemen.
3. Future researchers are encouraged to conduct further studies on the development of a more integrated sweet corn supply chain model, including the use of information technology, cooperation among farmers, and analysis across a broader research scope, in order to gain a more comprehensive understanding of the efficiency of the sweet corn supply chain.

REFERENCES

Amin Silfiah. (2022). Efisiensi Pemasaran Jagung Bisi-18 (Zea Mays) Di Desa Keang Kecamatan Kalukku Kabupaten Mamuju. *Agrimu Jurnal Sosial Ekonomi Pertanian Dan Agribisnis*, *2*(2).

Dinas Komunikasi Dan Informatika Kabupaten Banyumas. (2025). *Data Dan Informasi Kabupaten Banyumas 2025 (Volume 9, 2025)*.

Dumasari. (2020). *Pembangunan Pertanian Mendahulukan Yang Tertinggal* (Jamhari & S. Imam (Eds.); 1st Ed.). Pustaka Pelajar.

Dumasari, Pujiati, U., Imam, S., & Dinda, D. A. (2020). Marketing Srategies For Creative Handicrafts Fabricated From Coconut Waste Based On Potential Market Trendin Indonesia. *Palarch's Journal Of Archaeology Of Egypt/ Egyptology*, *17*(7), 13778–13786.

Eldi, A., Isyaturriyadhah, & Fikriman. (2018). Analisis Pemasaran Kentang Di Desa Pulau Tengah Kecamatan Jangkat Kabupaten Merangin. *Jurnal Agri Sains*, *2*(01).

Feni, O. (2023). Analisis Efisiensi Pemasaran Pepaya Di Kabupaten Muaro Jambi. *(Doctoral Dissertation, Universitas Jambi).*

Hakim, H. M. (2023). Saluran Dan Margin Pemasaran Produk Ikan Asap Di Kabupaten Fakfak. *Agrimu Jurnal Sosial Ekonomi Pertanian Dan Agribisnis*, *3*(1).

Merita, I. A. (2020). *Margin Dan Strategi Pemasaran Komoditi Jagung Di Kabupaten Gorontalo*. *09*(01), 15–21.

Moh, I. J., & Moh, S. (2023). Analisis Rantai Pasok Dan Efisiensi Pemasaran Komoditas Jagung Di Kecamatan Guluk-Guluk Kabupaten Sumenep. *Jurnal Manajemen Kompeten*, *6*(2), 65–74.

Morella, P., Maria, P. L., Jesus, R., & Juan, C. S. (2021). Study And Analysis Of The Implementation Of 4 . 0 Technologies In The Agri-Food Supply Chain : A State Of The Art. *Mpdi Agronomy*, *11*(2526).

Noviantari, K., Hasyim, A. I., & Rosanti, N. (2015). Analisis Rantai Pasok Dan Nilai Tambah

Agroindustri Kopi Luwak Di Provinsi Lampung. *Jurnal Ilmu Agribisnis: Journal Of Agribusiness Science*, *3*(1), 10–17.

Pertanian, P. D. Dan S. I. (2024). *Outlook Komoditas Pertanian Tanaman Pangan: Jagung*.

Reza, Z., Desty, P. A., & Mustika, L. A. (2025). Produksi Jagung Manis (Zea Mays Saccharata Sturt) Pada Berbagai Jarak Tanam Dan Dosis Bokashi. *Mediagro Journal Of Agricultural Sciences*, *21*(3), 276–285.

Sriyundi, A. R., Asda, R., & Indriani, R. (2022). Rantai Pasok Jagung Di Kecamatan Boliyohuto Kabupaten Gorontalo. *Ejurnal Universitas Negeri Gorontalo*, *7*(1).

Suciati, L., Fitria, S. N., & Endah, P. (2024). Analisis Efisiensi Saluran Pemasaran Jahe Emprit (. *Jurnal Ekonomi Pertanian Dan Agribisnis (Jepa)*, *8*(2), 624–631.

Sudana, W. (2019). Analisis Efisiensi Pemasaran Ikan Teri Segar Hasil Tangkapan Nelayan Di Desa Sanggalangit Kabupaten Buleleng. *Jurnal Pendidikan Ekonomi Undiksha*, *11*(2), 637–648.

Yapanto, L. M., Paramata, A. R., & Gumulu, T. H. (2021). *Sistem Pemasaran Ikan Cakalang Di Tempat Pelelangan Ikan Tpi Desa Katialada Provinsi Gorontalo*. 233–239.