



Analysis of Rice and Paddy Commodity Distribution Chain in Banua Baru Village, Wonomulyo District

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ABSTRACT

This study aims to analyze the distribution pattern of rice commodities in Banua Baru Village. This study uses a qualitative approach with data collection techniques through observation, interviews using questionnaires, and documentation. Primary and secondary data were collected from a sample of 40 people and analyzed using descriptive percentage analysis and marketing margin analysis. The results show that there are three rice distribution patterns in Banua Baru Village, namely: (1) farmer to collector to rice mill to retailer to consumer, (2) farmer to rice mill to wholesaler to retailer to consumer, and (3) farmer to rice mill to wholesaler to consumer. This study also found that the highest marketing margin occurs in rice mills (60%), followed by collectors (12.5%), retailers (7.41%), and collectors (7.14%). Based on the value of profit margin, rice mills have the highest profit of Rp4,500/Kg, followed by collectors (Rp1,500/Kg), retailers (Rp1,000/Kg), and collectors (Rp500/Kg). This study also identifies several problems faced by farmers in marketing their rice products, such as limited information on rice prices and delayed payments by collectors.

Keywords: Chain Analysis, Rice Distribution, Banua Baru

INTRODUCTION

Indonesia is an agricultural country, where 40% of the majority of the population's livelihoods are farming. Indonesia is an agricultural country because most or the majority of its population works in the agricultural sector, besides that Indonesia is also crossed by fertile mountain ranges. The fertility of agricultural land in Indonesia is due to the location of Indonesia in a tropical climate area, making the process of rock weathering that occurs in Indonesia occur perfectly which makes the soil fertile. Indonesia is also the largest archipelagic country in the world with 17,508 islands, and with a land area of 1,922,570 km². This makes it very possible for Indonesia to be the largest agricultural country in the world. In an agricultural country like Indonesia, agriculture has an important contribution both to the economy and to meeting the basic needs of the community, especially with the increasing population which means that the need for food is also increasing. In addition, there is an additional role from the agricultural sector, namely increasing the welfare of the community, most of whom are now below the poverty line (Ayun et al, 2020).

One of the regencies in West Sulawesi Province that has quite large potential for agricultural land resources is Polewali Mandar Regency. The agricultural sector is the mainstay of the community's economy, especially paddy fields. In 2023, West Sulawesi Province's rice production reached 294.03 thousand tons. One of the sub-districts that produces the highest rice in Polman Regency is Wonomulyo District. Wonomulyo District is one of the centers for food crop development, where land use is dominated by rice fields. In 2019, rice production in Wonomulyo District reached 57,293.02 tons with a productivity of 7.53 tons/ha (Polewali Mandar Central Statistics Agency, 2020).

The rice distribution chain in Banua Baru Village, Wonomulyo District, Polewali Mandar Regency, is a complex system involving various actors, including farmers, rice mills, collectors, retailers, and end consumers. The distribution process begins with farmers planting rice in their fields, then collecting and milling the harvested grain into rice. The milled rice is then sold to collectors in the village or surrounding sub-district.

Despite its high production, Banua Baru Village faces inefficiencies due to a fragmented distribution chain. This leads to high marketing costs and unstable prices, affecting farmers' income and consumer prices. There is no research that measures the marketing margin in the rice sector of Polewali Mandar, where farmers' income remains stagnant despite high consumer prices. This study aims to analyze the distribution pattern of rice commodities in Banua Baru Village and identify factors affecting marketing margins.

Research on the rice distribution chain in Banua Baru Village is important for several reasons: 1). Distribution Accessibility: Banua Baru Village faces challenges in terms of distribution accessibility, both in terms of physical distribution infrastructure and adequate market access. 2). Supply Chain Efficiency: Inefficiencies in the rice supply chain, from farmers to end consumers, can hinder optimal distribution and sales. 3). Stakeholder Coordination: Lack of coordination among distribution stakeholders, such as farmers, collectors, transporters, and traders, can hinder smooth product distribution. 4). Quality and Price: Issues related to the quality and price of rice produced in Banua Baru Village also need attention, as they can affect the product's competitiveness in the market.

Paddy is the fruit of the rice plant in the form of seeds covered by husks. The weight of paddy at 0% water content ranges from 12 - 44 mg, while the average weight of the husk is 20% of the weight of the paddy, Gunawan et al (2020). Distribution is a process of delivering goods or services from producers to consumers and users, when and where the goods or services are needed. The distribution process basically creates utility of time and place. In today's mature competitive era which makes competition so tight between companies, companies work hard to organize their companies to be able to survive in the midst of today's competition. Indri & Marpaung (2022).

Paddy is rice seed covered by husk, with the weight of paddy at 0% moisture content ranging from 12 - 44 mg and husk contributes about 20% of the weight of paddy. On the other hand, the distribution of goods or services is the process of delivery from producers to consumers that creates time and place benefits, and in today's era of fierce competition, companies must effectively manage the distribution process to survive the competition. Overall, these two opinions highlight the importance of efficiency in the agricultural and distribution sectors as the key to success and competitiveness in a competitive market. Rice is a grain that comes from the rice plant (*Oryza sativa*) and is one of the most important staple foods in the world, especially in Asia. After being harvested, rice undergoes a milling process to separate the outer skin (husk) to produce rice that is ready to be cooked into rice. In its raw form, rice contains the main content in the form of complex carbohydrates which function as a source of energy for the body.

In addition to being a source of energy, rice also contains other nutrients such as protein, a little fat, fiber, and vitamins and minerals, depending on the type and processing. White rice, for example, is more widely consumed because of its soft texture and neutral taste, but red rice and black rice are superior in terms of nutritional content because they still have a bran layer that is rich in fiber and antioxidants. Therefore, the choice of rice type can be adjusted to the nutritional needs and lifestyle of each individual. In everyday life, rice plays an important role in the culinary culture of many countries. In Indonesia, rice made from rice is almost always present at every meal, either as a main meal or as part of various traditional dishes. In addition, rice is also used in other forms such as rice flour to make various cakes and market snacks. With its huge role, rice is not only a source of food, but also a symbol of prosperity and sustainability of life for many people.

Distribution is a term used in marketing to describe how a product or service is made physically available to consumers. Distribution includes warehousing, transportation, inventory and order handling activities. Distribution is the fourth element of traditional marketing which refers to how a product or service is designed so that it can be obtained by customers. Activities in distribution include monitoring recording, ordering processes and transportation. Kushariyadi and Bambang Sugito (2022). Distribution is a process of delivering goods or services from producers to consumers and users, when and where the goods or services are needed. The distribution process basically creates utility of time and place. In today's mature competitive era that makes competition so tight between companies, companies work hard to organize their companies to be able to survive in the midst of today's competition. Thessa Natasya Karundeng et al (2018).

Distribution includes activities such as warehousing, transportation, inventory, and order handling. It serves to ensure that goods or services reach consumers at the right time and place, creating time and place benefits. In a highly competitive context, distribution helps companies survive by bringing producers and consumers closer together, and ensuring that products are widely accessible, both locally and internationally. Descriptive analysis is an analysis method in the form of describing or depicting a state of a research object at the present time based on the facts that appear as they are. According to Sugiyono (2019) descriptive analysis is analyzing data by describing or depicting the data that has been collected as it is without intending to make conclusions that apply to the public or generalizations. This analysis is used to determine the number of respondents who will be divided

according to the characteristics that have been determined.

According to Yusniawati et al. in 2016, marketing margin is the difference between the price paid by consumers and the price paid by farmers. To calculate the marketing margin in each marketing channel, it is important to know the selling price and the purchase price associated with each marketing institution involved. Marketing margin is an indicator of the profit obtained by the marketing institution in the buying and selling process.

This research was conducted through several systematic stages to understand the rice distribution chain in Banua Baru Village. The stages included: 1). Literature study and information gathering to understand relevant theories and concepts. 2). Field observation to understand the geographical and socio-economic conditions of the village, as well as the rice distribution process. 3). Distribution chain exploration to understand the structure and weaknesses of the distribution chain. 4). Supply chain analysis to understand the relationships between actors, marketing margins, distribution costs, and distribution efficiency. 5). Drawing conclusions and providing recommendations for improving rice distribution in Banua Baru Village.

RESEARCH METHODS

Research Design

This research was conducted in Banua Baru Village, Wonomulyo District, Polewali Mandar Regency from April to June 2025. To obtain the necessary data, both qualitative and quantitative, that is relevant, directed, and purposeful in accordance with the problem at hand, this study uses primary and secondary data. Primary data is collected through the following methods:

According to Sugiyono (2020), a questionnaire is a data collection technique that involves providing a set of written questions or statements to respondents to answer. The questionnaire is designed to identify the variables that respondents consider important.

This technique can be conducted with various actors in the distribution chain, such as rice farmers, collectors, millers, wholesalers, and retailers. Questions can range from their role in the distribution chain, prices, product quality, challenges faced, as well as time and costs associated with distribution.

Researchers can participate directly in rice distribution activities in the field, observing how goods move from farmers to collectors, to millers, and finally to end consumers.

According to Sugiyono (2022), documentation is the process of collecting data and information for research purposes in the form of reports, photos, books, archives, documents, numerical records, and photographs.

By using a combination of these data collection techniques, the study can obtain a comprehensive picture of the rice distribution chain in Banua Baru Village, Wonomulyo District, including challenges, costs, prices, and factors that affect the distribution and trade of this commodity.

According to Sugiyono (2022) Population is a generalization area consisting of: objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then conclusions drawn. So the population of this study amounted to 50 farmers who own and cultivate rice fields in Banua Baru Village, Wonomulyo District.

According to Sugiyono (2022) Sample is a part of the number and characteristics possessed by the population. If the population is large, and researchers cannot study everything in the population, for example due to limited funds, manpower and time, then researchers can use samples taken from that population. What is learned from the sample, the conclusion will be applicable to the population. For this reason, samples taken from the population must be truly representative (representative): Sampling is based on certain traits and characteristics that are the main characteristics of the population, for farmers referred to in this study are farmers who in their business have their own land for planting rice, but they sell their harvest in the form of dry milled rice. The subjects taken in the sample are those who contain the most characteristics in the population. Determination of population characteristics is carried out carefully.

Determination of sampling using purposive sampling with the number of samples used in this study is 40 respondents with details of 20 farmers, 3 middlemen, 1 rice mill, 10 collectors and 6 retailers. Where farmers are the starting point (Starting Point) taken from one sub-district which is the center of rice production in Polewali Mandar Regency, precisely in Wonomulyo District.

According to Asrulla et al, (2021) Purposive sampling is a way to obtain samples by selecting samples from among the population according to what the researcher wants. In this technique, researchers choose purposive samples with subjective aims. The selection of "purposive samples" is carried out because researchers may have understood that the information needed can be obtained from a particular target group that is able to provide the desired information because they do have such information and they meet the criteria determined by the researcher.

In this study, rice farmers in Banua Baru Village can be selected as respondents based on the following criteria:

- a. Active rice farmer: Respondents must be active rice farmers who plant and harvest rice in Banua Baru Village.
- b. Farming experience: Respondents must have at least 1 year of experience in rice farming to ensure they have sufficient knowledge and experience about rice production and marketing.
- c. Land ownership: Respondents must be landowners or tenants who plant rice in Banua Baru Village.
- d. Willingness to be interviewed: Respondents must be willing to be interviewed and provide information about rice production, marketing, and distribution.
- e. Residence in Banua Baru Village: Respondents must reside in Banua Baru Village to ensure they have knowledge and experience about local conditions and the rice distribution chain.

Before conducting the interview, the researcher will explain the purpose and procedure of the study to the respondents and obtain their oral consent. Respondents will be guaranteed confidentiality and anonymity, and will be given the opportunity to ask questions and withdraw their participation if desired. By doing so, this study can be conducted in an ethical manner and respect the rights of the respondents.

By using clear and specific respondent criteria, this study can obtain accurate and relevant data about the rice and rice commodity distribution chain in Banua Baru Village.

1. Percentage Descriptive Analysis

The data collection instrument used is a questionnaire sheet, the questionnaire used is a questionnaire with a Likert scale. After the data is completely collected, the next stage is the data analysis stage, the data analysis technique uses descriptive percentage analysis, the results obtained from the questionnaire are analyzed using the following percentage formula: $P = \frac{f}{n} \times 100\%$

The analytical descriptive method is a research method that is carried out with the main objective of creating a picture or description of a situation objectively and how or why the phenomenon occurs. According to (Azwar, 2002, p. 43) the purpose of descriptive research is to provide a picture of the research subject based on data from variables obtained from the group of subjects studied.

2. Marketing Margin Analysis

According to Latumahina (2021), Data Analysis uses the marketing margin measurement method. The marketing margin measurement method is used to determine the difference between prices at the consumer level and prices at the producer level. Marketing margin measurement method With the formula:

$$MP = Pr - Pf$$

Description:

- MP = Marketing Margin (Rp/kg)
 Pr = Price at retailer level (Rp/kg)
 Pf = Price at producer level (Rp/kg)

To calculate Share margin, namely:

$$Sm = \frac{Pf}{Pr} \times 100\% \quad sSbi = \frac{Bi}{Pr - Pf} \times 100\% \quad Ski = \frac{Ki}{Pr - Pf} \times 100\%$$

Description:

- Ki = Institutional profit
 Pr = Price at the retailer level
 Pf = Price at the producer level
 Sm = Share margin (%)
 SBi = Share costs (%)
 Ski = Share profits (%)

RESULTS AND DISCUSSION

Respondent Characteristics

a. Characteristics of Rice Farmers in Banuabaru Village

The following is a general description of farmer respondents in Banua Baru Village. The farmers referred to in this study are farmers who in their business have their own rice fields and their harvest is sold in the form of dry milled rice. The income of farmers with their own land is sold to middlemen with a slashing and kiloan system. The farmer respondents in this study were farmers whose planting to harvesting activities took 4 months, with spreading seeds until ready to be planted taking 21 days and the tools for rice farmers were hoes, sickles, sickles, and tractors. The results obtained were summarized in the following table:

Table 1. Characteristics of Rice Farmers in Banua Baru Village

Description	Information
Average Land Ownership	0.5-1Ha/Farmer
Dominant rice varieties	MR219
Harvest intensity	3 Times
Cropping pattern	Rice-Rice-Rice
Production costs	Rp.1,102,-/kg GKG
Income	30 million/ha
Capital sources (%)	
Own	100%
Own & Non-Bank Loans	-
Form of selling paddy	Dry Milled Paddy (GKG)
Sales system	
1) Tebasan (88%)	Average price Rp. 7,000,-/Kg
2) Kiloan (12%)	Average price Rp. 7,200,-/Kg
Constraints in Sales	Limited market information, Information on rising and falling paddy prices, credit payments made by traders

Source: Processed primary data, 2025.

Based on table 1 above, the average land ownership of farmer respondents in Banua Baru Village is around 0.5 hectares to 1 hectare. If seen from the average harvest of farmers, namely in 1 hectare can obtain 45 to 60 sacks of rice, then the average income of rice farming in one harvest is quite high, producing around Rp. 30 million per hectare. However, the average land ownership of farmer respondents in the area is relatively narrow so that it is not economical for rice farming activities. Then the majority of respondents sell the harvest in the form of Dry Milled Rice (GKG) with a slashing system (Rp. 7,000, - / Kg) and a kiloan system (per Kg) which is priced higher at around Rp. 7,200, -.

b. Characteristics of Middlemen Traders

The following is a general description of the respondents of middlemen traders in Banua Baru Village, the results obtained are summarized in the following table:

Table 2. Characteristics of Middlemen Traders in Banua Baru Village

Description	Description
Main Capital Source (%)	100%
Own	
2) Rice Milling	42-56 tons/harvest season
Purchase Volume	Dry Milled Grain (GKG)
Purchase Form	Dry Milled Grain (GKG)
Sales Form	Rp.7,000(GKG/Kg)
Purchase Price Range	Rp.7,200-Rp.7,500,-(GKG/Kg)
Sales Price Range	Banua Baru Village in Wonomulyo District 100%
Purchase AreaActivities (Marketing Function)	Estimation, Price, Rice Cutting, Floating, Payment, Location Survey

Source: Processed primary data, 2025.

Based on table 2 above, the main source of capital for the middlemen respondents (100%) uses their own capital to carry out their business activities. Middlemen respondents who work individually are free to choose

where they will sell their purchases according to the expected profit. The form of grain purchased by the middlemen respondents is mostly Dry Milled Grain (GKG) with an average price of Rp. 7,000, then the middlemen resell it without changing the form of the grain with an average price of Rp. 7,200-7,500 per kilogram. In this case, the middlemen respondents only estimate the price of farmers' grain in the fields, then cut the rice and resell it in the same form without giving special treatment. On average, in one harvest season they are able to buy between 42 tons and 56 tons of grain from farmers.

The respondents of middlemen traders in this study were located in Banua Baru Village, This is because it is the closest to the mill. In addition, the village is also close to the rice warehouse where farmers sell their crops and is a meeting place for farmers and middlemen traders through the milling place, also in the rice fields in their respective areas so that many of the middlemen trader respondents work at the milling place. The purchasing area of the middlemen traders is a village in a sub-district, meaning that middlemen traders buy rice from farmers who are at the rice mill where the scope of this purchase is still within the scope of one sub-district. The activities carried out by middlemen traders, namely in relation to the marketing function, are price estimation, choosing the type of rice, bargaining and packaging rice in rice bags. Price estimation in this case is that middlemen traders are able to estimate various types of rice.

The activity of selecting the type of rice in this case is to sort the various types of rice that will be purchased at the time of purchase so that they can get the type of rice they expect. The packaging activity carried out by the middlemen traders with the aim of being distributed to the next buyer, this packaging activity also aims to maintain the quality of the rice so that it remains stable.

c. Characteristics of Rice Milling

The following is a general description of rice milling in Banua Village, the results of which are summarized in the following table:

Table 3. Characteristics of Rice Milling in Banua Baru Village

Description	Description
Capital Source	Self and Non-Bank loans
Purchase Area	Wonomulyo District
Purchase Volume	100-200 tons/Season
Purchase Form	Dry Milled Paddy (GKG)
Sales Form	Rice and Barley
Purchase Price Range	Rp.7,200-Rp.7,500,-(GKG/Kg)
Sales Price Range	Rp.12,000 (Rice/Kg)
Activities (Marketing Function)	Grouping of paddy types, Drying, Milling, and Packaging

Source: Processed primary data, 2025.

The marketing function carried out by rice millers is to change the form of grain into rice. Here there is a special treatment of grain to be processed into rice which begins with grouping the types of grain, and milling the grain. After the grain is processed into rice, then the rice millers pack it in the form of sack packaging or labeled packaging.

Table 3 above shows that the main source of capital for rice mills is their own capital. In the current era of economic globalization, to increase their business capital, rice mills are very likely to establish relationships with non-bank institutions, because they have assets in the form of their businesses to be used as collateral. To meet their milling capacity, rice mills in Pati District are able to buy 100 tons to 200 tons of dry milled grain (GKG) in one harvest season.

d. Characteristics of Collectors

The following is a general description of respondents of collectors in Banua Baru Village, the results obtained are summarized in the following table:

Table 4. Characteristics of Collectors in Banuabaru Village

Description	Collector Trader
Form of Purchase	Rice and Labeled
Form of Sale	Rice and Labeled
Capital Source (%)	
1) Own	100%
2) Own and Bank Loan	Rp.12,000-Rp.12,500,-/Kg
Purchase Price Range	Rp.13,000-Rp.13,500,-Kg
Sales Price Range	Wonomulyo District
Purchase Area	50-100 Tons/Month

Source: Processed primary data, 2025.

Rice collectors in Banua Baru Village are generally located in the center of the District. The respondents of the collectors in this study were representatives of rice collectors from Banua Baru Village. This is because the activities carried out by the collectors are distributing the rice they have purchased to retailers in Banua Baru Village. The marketing function of the collectors is to buy rice that has become rice at the rice mill or in rice storage warehouses owned by the collectors and then distribute the rice to retailers in markets in other Districts and Regency areas.

In this case, they buy paddy that has become rice and resell it in the same form without any changes. In one transaction, the collector trader is able to buy an average of 50 tons to 100 tons of rice. Source of Characteristics of Retail Traders The capital of collector traders in running their business is 100% of respondents use their own capital.

e. Characteristics of Retail Traders

The following is a general description of retail traders in Banua Baru Village, the results obtained are summarized in the following table:

Table 5. Characteristics of Retail Traders in Banua Baru Village

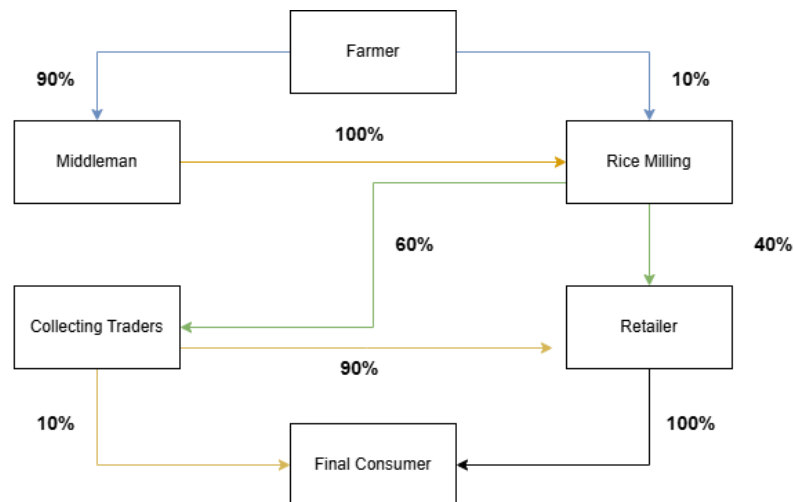
Description	Retailer Trader
Form of Purchase	Rice and Barbecue
Form of Sale	Rice and Barbecue
Source of Capital (%)	
1) Own	100%
2) Own and Bank Loan	MR219
Varieties of rice in demand by consumers	Rp.13,000-Rp.13,500,-/Kg
Purchasing Price Range	Rp.14,500-Rp.15,000,-/Kg
Sales Price Range	1-5 Tons/Month
Purchase Volume Marketing Function	Reduce production costs, increase expenditure costs

Source: Processed primary data, 2025.

Retailers in Banua Baru Village are generally located in Banua Baru Village and Wonomulyo Central Market. In this case, they buy rice and 1-5 tons/month Reduce production costs, increase the cost of expenses to resell it in the same form without any treatment, only there is a packaging process carried out so that the rice that has become rice will not lose its quality, retailers are only able to purchase rice around 1 ton to 5 tons. The marketing function of retailers is to distribute rice to consumers. The variety of rice that has become rice is more in demand by consumers is MR219 because the price of MR219 on the market is relatively affordable for consumers. The source of capital for retail traders is 100% using their own capital.

Percentage Descriptive Analysis

This analysis procedure is used to present research data in an informative form so that it is easy to understand. In this study, the analysis technique used is quite simple, namely by finding the proportion (percentage) using the frequency distribution obtained based on research data. Based on research conducted with each rice and paddy distribution actor, the results of the calculation of the percentage descriptive analysis regarding the selection of rice and paddy distribution channels in Banua Baru Village can be displayed in Figure 1 below:



Percentage of distribution channel selection for paddy rice commodities in Banua Baru Village

- = Distribution of rice farmers' harvest results
- = Distribution of harvest results purchased by middlemen
- = Distribution of results from purchasing rice milling
- = Distribution of purchasing results from collector traders
- = Distribution of retailer purchasing results

a. Distribution of Farmers' Harvest Results

The results of the descriptive analysis of the percentage of the selection of distribution channels for the harvest results of farmer respondents in Banua Baru Village can be displayed in the table below:

Table 6. Distribution of Rice Farmers' Harvest Results in Banua Baru Village

Description	Frequency	Percentage
Millers	18	90%
Rice Mills	2	10%
Collectors	-	-
Retailers	-	-
Total	20	100%

Source: Processed primary data, 2025.

Based on the calculation results of table 6 above, it informs that in the selection of distribution channels for harvest results, there are no farmer respondents who sell grain to collectors and retailers. The majority of farmer respondents (90%) sell their harvest results to middlemen, and the rest (10%) of farmer respondents sell grain to rice mills. A total of 18 respondents chose to sell their harvest results to middlemen and 2 respondents sold them to rice mills. The sales process referred to in this case is that the results of the harvest are directly given rice bags so that the quality is good. Schematically, the distribution pattern of farmer respondents' harvest results can be concluded as follows: (a) From farmers to middlemen, (b) From farmers to rice mills.

b. Distribution of Purchase Results of Middlemen Traders

The results of the descriptive analysis of the percentage of the selection of distribution channels for the results of purchasing grain/rice from middlemen traders in Banua Baru Village can be shown in the table below:

Table 7. Distribution of Purchase Results of Middlemen Traders in Banua Baru Village

Description	Frequency	Percentage
Rice Milling	3	100%
Collectors	-	-
Retailers	-	-
Total	3	100%

Source: Processed primary data, 2025.

Based on the calculation results of table 7 above, it informs that in the selection of distribution channels

for the results of purchases, there are no middlemen respondents who sell to collectors and retailers. All (100%) of middlemen respondents sell their rice purchases to rice mills. Schematically, the distribution pattern of the results of purchases by middlemen respondents can be concluded as follows; From middlemen to rice mills.

c. Distribution of Rice Mill Purchase Results

Table 8. Distribution of rice mill purchase results

Description	Frequency	Percentage
Bulog		-
KUD		-
Trader Collector	0,6	60%
Trader Retailer	0,4	40%
Total	1	100%

Source: Processed primary data, 2025.

Based on the calculation results of table 8 above, it informs that in the selection of distribution channels, the results of rice milling purchases are 60% sold in the form of rice to collectors and the rest (40%) of rice mills sell to retailers. In terms of rice marketing, all rice mills actually also serve purchases from consumers who are close to the milling location, but in very small quantities. While their milling capacity is capable of producing up to 100 tons to 200 tons of grain in four months. So, the selection of these distribution channels is the main market share owned by each rice miller. Schematically, the distribution pattern of rice milling purchases can be concluded as follows; (a) From rice mills to collectors, (b) From rice mills to retailers.

d. Distribution of Purchase Results of Collecting Traders

The results of the descriptive analysis of the percentage of the selection of distribution channels for the results of purchasing grain/rice from collecting traders in Banua Baru Village are shown in the table below:

Table 9 Distribution of Purchase Results of Collecting Traders in Banua Baru Village

Description	Frequency	Percentage
Retailer	9	90%
Consumer	1	10%
Total	10	100%

Source: Processed primary data, 2025.

Based on the calculation results of table 9 above, it informs that in the selection of distribution channels for the results of purchases, all respondents of collector traders (100%) sell them to retailers and consumers, in this case the respondents act as suppliers for retailers in the market and in shops in Banua Baru Village. Collectors sell to retailers by (90%), the rest (10%) sell the results of purchasing rice to consumers. Collector trader respondents in Banua Baru Village are intermediary traders, they have a rice storage warehouse and several transport vehicles (trucks) as supplier needs for retailers. Schematically, the distribution pattern of the results of purchases of collector trader respondents can be concluded as follows; From collector traders to retailers.

e. Distribution of Purchase Results of Retail Traders

The results of the descriptive analysis of the percentage of the selection of distribution channels for the results of purchasing rice and paddy from retail traders in Banua Baru Village can be displayed in the table below:

Table 10 Distribution of Purchase Results of Retail Traders in Banua Baru Village

Description	Frequency	Percentage
Consumer	6	100%
Total	6	100%

Source: Processed primary data, 2025.

Based on the calculation results of table 10 above, it informs that in the selection of distribution channels for purchasing results, all retailer respondents (100%) sell to consumers. In this case, retailers are rice trading actors who deal directly with consumers. Schematically, the distribution pattern of purchasing results for retailer respondents can be described as follows; From retailers to end consumers.

4. Marketing Margin Analysis

Table 11. Marketing Margin Analysis

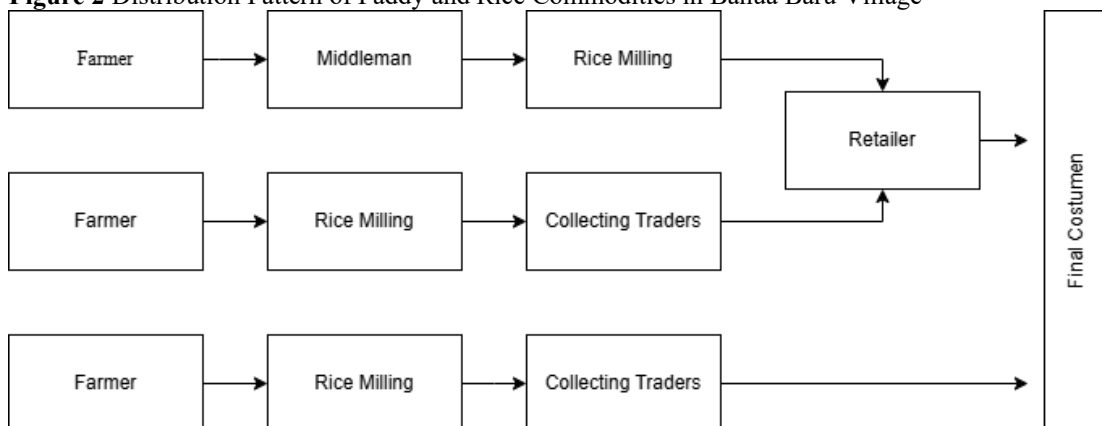
Description	Unit (Rp/Kg)
a. Farmers	
1) Selling Price (GKP)1	7.000
b. Middlemen	
1) Purchase Price	7.000
2) Marketing Margin	500
3) Marketing Cost2	100
4) Profit Margin	400
5) Selling Price	7.500
c. Rice Milling	
1) Purchase Price	7.500
2) Marketing Margin	4.500
3) Marketing Cost2	3.500
4) Profit Margin	1.000
5) Selling Price	12.000
d. Collector Trader	
1) Purchase Price	12.000
2) Marketing Margin	1.500
3) Marketing Cost2	500
4) Profit Margin	1.000
5) Selling Price	13.500
e. Retail Traders	
1) Purchase Price	13.500
2) Marketing Margin	1.000
3) Marketing Cost2	500
4) Profit Margin	500
5) Selling Price	14.500

Source: Processed primary data, 2025.

1. Distribution Pattern of Paddy Commodities in Banuabaru Village

The distribution pattern of paddy and rice in Banua Baru Village found three trading channels, namely: the first marketing channel, From farmers to middlemen to rice mills to retailers to consumers; second, From farmers to rice mills to collectors to retailers to consumers; third, From farmers to rice mills to collectors to consumers. For more details, the structure of the rice and rice trading flow can be described as follows:

Figure 2 Distribution Pattern of Paddy and Rice Commodities in Banua Baru Village



In the first marketing channel, farmers sell dry milled rice (GKG) to middlemen who are the rice traders' henchmen. From the middlemen it is distributed to the rice mill. In the rice mill, the rice is grouped and undergoes special treatment including the drying, milling, and packaging processes. The packaged rice is then distributed to retailers in markets and shops and then to end consumers. Second, from farmers to rice mills to collectors to retailers and then to consumers. Third, from farmers to rice mills to collectors to consumers.

The first rice and rice commodity trading channel is rice mills (40%) directly distributing their rice to retailers in markets and shops. The small number of rice mills that sell directly to collectors is because their milling capacity is relatively small, which is between 100 tons to 200 tons of rice in one harvest season. Activities carried out by rice mills include; milling, packaging and grouping. The grouping itself is done by grouping the types of The third rice commodity distribution pattern, farmers (10%) sell rice or grain directly to rice mills in the form of Milled Dry Grain (GKG). In the rice mill, the grain is processed into rice which is then distributed to collectors. From the collectors, the rice is then distributed to retailers. The collectors themselves are able to buy an average of 50 tons to 100 tons of rice. The form of purchasing and selling rice is Rice and belabeled. Belabeled means rice that is already in the form of labeled packaging. The source of capital is 100% from their own capital, because the collectors already have the funds to buy rice. Meanwhile, retailers buy an average of 1-5 tons of rice, because retailers sell rice that consumers are interested in, namely rice that has been processed in the form of rice with the MR219 variety.

The majority (90%) of farmers sell their crops to middlemen using the tebasan system. The tebasan sales system is a non-transparent purchasing method, where farmers sell their crops in the fields without knowing the amount of rice production from the harvest. In this case, farmers do not harvest, the harvest is carried out by middlemen after an agreement on the purchase price. If the average selling price of rice received by farmers using the tebasan system is relatively low, namely IDR 7,000 per kilogram of Dry Milled Grain (GKG). Then the remaining (10%) farmers sell their crops directly to rice mills using the kilo system (Per Kg). Generally, they make these sales because the location of their fields is close to the mill. The price received by farmers in selling rice or grain to rice mills is higher when compared to the kilo system, which is an average of IDR 7,200 per kilogram of Dry Milled Grain (GKG). In general, farmers sell their crops directly in the form of Dry Milled Grain (GKG) both to middlemen and rice mills. There are no farmers who sell their rice or grain in the form of Harvested Dry Grain (GKP) or Stored Dry Grain (GKS). Actually, farmers can receive a higher price if they sell their rice in the form of rice.

Rice Commodity Distribution Chain Value

In general, the rice and rice commodity trading chain in Banua Baru Village is from farmers to middlemen to rice mills to collectors to retailers to consumers. Schematically, the marketing margin value of rice and rice commodities can be seen in the following figure:

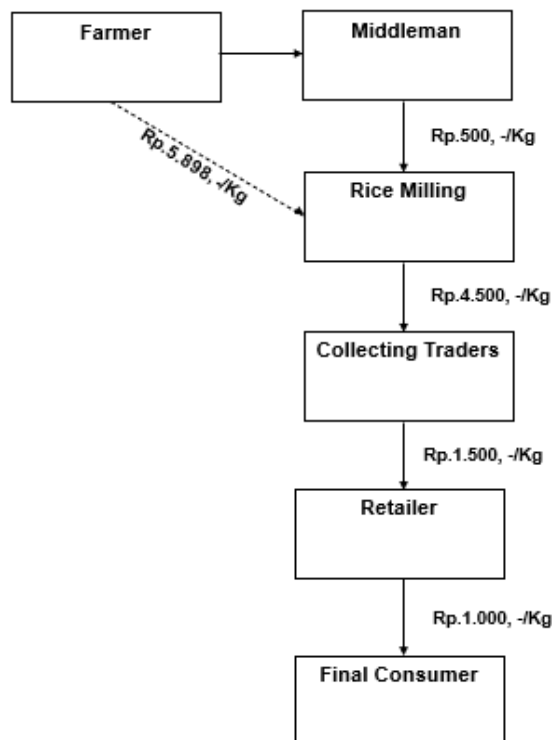


Figure 3 Marketing Margin for each Rice and Rice Trader in Banua Baru Village

Based on the marketing margin scheme above, it can be seen that the length of the distribution channel in Banua Baru Village triggers a fairly high disparity in the price of grain or rice at the farmer and consumer levels. This is evidenced by the large difference in the price of grain or rice at the farmer and consumer levels, which is IDR 7,500/Kg. The large number of actors in the trade system will cause high distribution costs (marketing margins) so that there is a portion that must be issued as profit for traders. Intermediaries control 90% of sales, so farmers become price recipients. Thus, farmers only receive a small portion of the price offered by consumers, while intermediaries make large profits from the sale of grain or rice. Figure 3 shows that the marketing margin of middlemen who buy rice or grain from farmers at IDR 7,000 per kilogram and sell it to rice mills at IDR 7,500 per kilogram, resulting in a margin value of IDR 500 per kilogram. The net benefit margin obtained by middlemen in distributing rice or grain from farmers to rice mills is IDR 400 per kilogram after deducting marketing costs for rice cutting, loading and unloading, and transportation of IDR 100 per kilogram.

The rice mill, which processes grain into rice, sells it to wholesalers at IDR 12,000 per kilogram of rice. The rice mill obtains a marketing margin of IDR 4,500 per kilogram. The large marketing margin at the mill is due to the drying process of grain into dry grain for milling (GKG), which results in a shrinkage of around 60% of the original grain weight. The marketing cost incurred by the rice mill to distribute rice to wholesalers is IDR 3,500 per kilogram, with a net profit of IDR 1,000 per kilogram. The wholesaler then sells the rice to retailers at IDR 13,500 per kilogram, resulting in a marketing margin of IDR 1,500 per kilogram. The wholesaler's marketing cost to distribute rice to retailers is IDR 1,000 per kilogram, including transportation, loading and unloading, and packaging costs.

Finally, the retailer, who is the actor directly facing consumers, sells the rice at IDR 14,500 per kilogram. The marketing margin at the retailer is IDR 1,000 per kilogram. The retailer obtains a net profit of IDR 500 per kilogram with marketing costs of IDR 500 per kilogram for transportation and loading and unloading. Compared to the previous research conducted by Ariwibowo (2013), the marketing margin between the research in Banua Baru Village and Pati District shows significant differences. In Banua Baru Village, the highest marketing margin occurs in rice milling (60%), collectors (12.5%), retailers (7.41%), and wholesalers (7.14%), with profit margins of Rp4,500/kg, Rp1,500/kg, Rp1,000/kg, and Rp500/kg, respectively. Meanwhile, in Pati District, the highest marketing margin occurs in rice milling (44.4%), wholesalers (7.5%), collectors (3.6%), and retailers (3.4%). This indicates regional disparities.

This fact shows that the processing process greatly determines the added value of each post-harvest activity and marketing of agricultural commodities. Farmers who sell their harvest directly in the fields cannot enjoy the added value generated from the trade of grain or rice. Farmers' dependence on tebasan reflects limited access to capital, which forces direct sales even though the profit is lower. This situation shows the separation of farmers from the trade of grain or rice commodities. Thus, retailers will not be enjoyed by farmers. there is a disparity between the price of rice or paddy and consumers. The very high results received by middlemen, collectors, and retailers will not be enjoyed by farmers.

CONCLUSION

Based on the research findings and discussion, several conclusions can be drawn: (1) The distribution pattern of rice commodities in Banua Baru Village involves three distribution channels: (a) from farmers to middlemen to rice mills to retailers to consumers; (b) from farmers to rice mills to wholesalers to retailers to consumers; and (c) from farmers to rice mills to wholesalers to consumers. With these distribution patterns, rice traders can obtain profits. (2.) Farmers face several problems in marketing their rice products, including limited information on rice prices and delayed payments by middlemen. And (3) The highest marketing margins are found in rice mills (60%), followed by wholesalers (12.5%), retailers (7.41%), and middlemen (7.14%). In terms of profit margins, rice mills have the highest margin (IDR 4,500/kg), followed by wholesalers (IDR 1,500/kg), retailers (IDR 1,000/kg), and middlemen (IDR 500/kg).

Based on the research findings, several recommendations can be made: (1) Improving Price Transparency: The village government can improve price transparency by regularly and accurately publishing market prices, enabling farmers to make informed decisions when marketing their crops; (2) Limiting Middlemen Margin: The village government can establish regulations to limit the margin of middlemen to 5% of the selling price, allowing farmers to receive a fairer price and increase their income; (3) Developing Efficient Marketing Systems: The village government can collaborate with the private sector to develop more efficient marketing systems, reducing marketing costs and increasing farmers' profits; (4) Empowering Farmers through Farmer Groups: The village government can empower farmers through farmer groups by providing training and mentoring in marketing and financial management, enabling farmers to improve their bargaining position in the supply chain; and (5) Monitoring and Evaluation: The village government needs to monitor and evaluate the implementation of these

recommendations to ensure that the objectives of increasing farmers' income and reducing price disparities are achieved. It should be noted that these recommendations may not be applicable to other villages with different conditions, such as villages with cooperatively managed factories. Therefore, further research is needed to understand the specific conditions of other villages and develop appropriate recommendations.

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