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Rice Marketing Efficiency Analysis in Baruga Village, Baruga Subdistrict, Kendari City

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Abstract

This study aims to find out 1) how much margin and profit rice traders in Amohalo Village, Baruga District, Kendari City and 2) whether rice marketing in Amohalo Village, Baruga District, Kendari City runs efficiently. This research has been carried out from January to March 2024. The population in this study is rice farmers in Baruga Village, Baruga District, Kendari City. Sampling was carried out using the Simple Random Sampling method. The research sample was 30 paddy rice farmers, while the determination of the trader sample used the Snowball method. The snowball sampling technique is a technique for taking data sources that at first the number is small and then becomes larger. This study uses marketing efficiency analysis (Farmer's Share). The results of the study are: 1) The margin at the mill is Rp2,000/Kg with a profit of Rp1,336/Kg, the wholesaler in channel I with a margin of Rp2,000/Kg and the profit is Rp1,693/Kg, the wholesaler in channel II with a margin of Rp2,000/Kg and the profit is Rp1,673/Kg and the small trader in channel II with a margin of Rp1,333/Kg and the profit is Rp625/Kg and 2) The marketing channel I has a marketing efficiency of 71.42% and the marketing channel II has a marketing efficiency of 65.21% so it can be concluded that both channels have been efficient.

Keywords: Rice, Marketing Efficiency, Margin

INTRODUCTION

Indonesia is an agricultural country as one of the strategic rice producers in terms of economic, social and political aspects. Rice is a very important food ingredient that is required to continue to exist and develop in meeting the needs of the Indonesian people, which is a staple food. The position of rice in Indonesia as the main food for the community will never be

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replaced. In this case, the rice stock in Indonesia is still lacking, so the government imports rice from other countries which is still running until now. Given the importance of rice for the people of Indonesia, it is necessary to market rice so that the stock of domestically produced rice is adequate, to reduce rice import activities carried out by the government (Mubyarto, 1986).

Yusalina *et al. (*2022) Agricultural marketing is a system consisting of sub-systems of marketing functions, where marketing functions consist of exchange functions, physical functions, and facility functions. According to Asmarantaka (2014), agribusiness marketing can be said to be efficient if there is a creation or increase in high *added* value, generating profits for each marketing institution involved in accordance with the costs incurred, marketing margins that occur relatively in accordance with the functions that increase the final consumer and provide a share received by farmers that will relatively stimulate farmers to produce at the farm level. Efficient marketing has implications for cultivators, marketing institutions and end consumers satisfied with the contribution made. According to Anindita (2017), appropriate market information will facilitate marketing decisions, regulate the process of market competition, and facilitate marketing.

Amohalo Rice Field is one of the rice field farming areas in Baruga Village, Baruga Sub-district, Kendari City, Southeast Sulawesi Province, which is inhabited by 110 households with 250 rice field farmers. The area of Amohalo rice fields is 400 hectares with a potential of 1000 hectares and consists of 17 farmer groups who are members of one Gapoktan. Amohalo rice field area in Baruga Sub-district is ± 30 km from the center of Kendari City government. The people of the Amohalo rice field area are mostly from South Sulawesi (Bugis) and the rest are local people (Tolaki).

Based on data from the Kendari City Agriculture Office, the area of rice fields in Amohalo, Baruga Village, Baruga Subdistrict, Kendari City, Southeast Sulawesi, reaches 450 hectares. In 2019, rice production in Amohalo reached 2,000 tons, with an average productivity of 4.4 tons per hectare. This figure increased from 2018 which only reached 1,500 tons, with an average productivity of 3.3 tons per hectare. The increase in rice production is due to several factors, including assistance from the government in the form of seeds, fertilizers, and alsintan, as well as assistance from agricultural extension workers.

Table 1 Rice production data in Amohalo from 2019 to 2022

Year	Land Area (Ha)	Production (Kg)	Productivity (Kg/Ha)
2019	450	2.000	2.860
2020	450	1.800	2.600

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2021	450	1.800	2.600
2022	450	2.700	2.600

Source: Central Bureau of Statistics 2023

The increase in rice production in Amohalo shows the positive results of the government's efforts, which targets rice production to reach 3,000 tons by 2023 through measures such as the expansion of planting land, the application of modern agricultural technology, and good rice processing. This is expected to improve farmers' welfare and food security in Kendari City. Rice marketing is done in traditional markets, such as Amohalo Morning Market on Jalan Sulawesi and Amohalo Central Market on Jalan Jenderal Sudirman, which are open every day, as well as in rice shops scattered in Amohalo. Rice prices vary depending on the type and quality, with local rice being more affordable than imported rice. Amohalo rice is marketed directly to Kendari City, Konawe Regency, South Konawe Regency, and Kolaka Regency, as well as indirectly to various regions through collectors and distributors who sell it to wholesalers and retailers.

Kelurahan Baruga is the location of rice fields that will remain productive until 2023, while Kelurahan Labibia is experiencing a decline in productivity due to land conversion, with only about 20 hectares of rice fields remaining and a smaller number of farmers compared to Baruga. The research was conducted in Baruga due to the agricultural characteristics of the region, including the dominance of rice production, the potential for local and regional rice markets, and infrastructure support such as roads and storage facilities that affect the efficiency of rice distribution. The existence of farmer groups also facilitates data collection and analysiswhile external factors such as government policies and market conditions provide a more comprehensive picture of marketing efficiency. The marketing of rice from Baruga Village is expected to improve the economy of the local and surrounding communities, while expanding the competitiveness of Amohalo rice in a wider market to support farmers' welfare.

Based on the description above, the marketing of rice in Baruga Subdistrict has been running efficiently or not so that the description led the author to explore it through research entitled Analysis of rice marketing efficiency in Amohalo Subdistrict, Baruga District, Kendari City.

METHOD

The location of this research was in Baruga Village, Baruga Sub-district, Kendari City. This research was conducted from February to July 2024. The population in this study were wet-rice

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farmers located in Baruga Village, Baruga Subdistrict, Kendari City. The sample in this study were wet-rice farmers in Baruga Village, Baruga Subdistrict, Kendari City with the number of samples taken from the number of wet-rice farmers as many as 150 people taken 20% of the number of wet-rice farmers, so that the research sample was obtained as many as 30 wet-rice farmers. The determination of the sample of traders using the *Snowball sampling* method so as to obtain large traders as many as 7 respondents and small traders as many as 3 respondents.

Data collection techniques were carried out by observation, interview, and documentation. To analyze the data, researchers used the following formula;

1. Marketing efficiency formula

   $FS = (1-\frac{M}{He})\times 100\%$

   Description:

   Fs = Farmer's Share or the percentage share received by producers (IDR/kg)

   M = Rice marketing margin (IDR/kg)

   He = Selling price at the trader level (Rp/kg)

   Efficiency indicators:

   Fs ≤ 50% = Inefficient marketing channel

   Fs ≥ 50% = The marketing channel is efficient, as the share of the price received by producers is relatively large.

   The marketing margin analysis in this study used the following formula (Surni 2022):

   M = He - Hp

   M = B + π

   Description:

   M = Marketing margin (Rp/Kg)

   He = Price at consumer level (Rp/Kg)

   Hp = Price at producer level (Rp/Kg)

   B = Cost (Rp/Kg)

   π = Profit (Rp/Kg)

RESULTS AND DISCUSSION

Analysis of Cost of Goods Determination at Farmer Producer Level

The cost of goods is an indicator of the success of a business because the cost of goods determines the profit obtained by farmers. The determination of the cost price at the producer farm level can be seen in Table 2.

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Table 2 Determination of Cost of Goods

	Description	Unit (Rp/Kg)
Farmer Level	Fixed Cost	2.342.883
	Variable Cost	90.271.800
	Cost of goods	9.167,44
Producer Level	Cost of goods	9.167,44
	Farmer Profit Margin	848,56
	Price at Producer level	10.016

Source: Primary Data Processing, 2024

Based on Table 2, it can be seen that fixed costs consisting of equipment and transportation costs amounted to Rp2,342,883/Kg, while variable costs consisting of production costs, transportation and milling costs amounted to Rp90,271,800/Kg. The cost of grain can be calculated in the following way: fixed costs divided by production plus variable costs divided by production to get Rp14,103.75/Kg. So, the cost of rice per Kg is Rp9,167.44/Kg. Farmers as *price takers* cannot determine the selling price, so knowing the cost of can help farmers in making decisions to immediately sell or hold their products (Suliasnita and Wildayana, 2021).

Based on Table 2, it can be seen that the price at the producer level can be found by summing up the cost price with the farmer's profit margin so that the price at the producer level is IDR 10,016/Kg.

Efficiency Analysis of Rice Marketing in Baruga Village, Baruga Subdistrict

Marketing channels are a series of interdependent organizations involved in the process of making products or services ready for use or consumption (Hanafie, 2010).

Marketing Channel

As is well known, the sale of a product is strongly influenced by the marketing environment consisting of market players and the forces that come from marketing management decisions implemented by producers. One of the important decisions that must be made by the management of producers related to marketing mix factors is the decision regarding the distribution channels to be used by producers (Ramadini *et al*., 2022). Based on the results of research conducted on rice marketing in Baruga Village, Baruga Subdistrict, there are two marketing channels.

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(I) Farmers → Milling → Wholesaler → Consumer

(II) Farme → Milling → Wholesaler → Small → Consumer

Marketing channel I is a marketing channel often referred to as a two-level channel because there are two intermediaries (Kotler and Keller, 2009). Farmers as producers sell milled dry grain to millers then millers process milled dry grain into rice, after processing grain into rice, the millers sell to large traders then large traders sell to consumers. There are 4 large traders in this channel.

Marketing channel II is often referred to as a three-level channel because there are three intermediaries (Kotler and Keller, 2009). Marketing Channel II is the longest channel and involves all marketing institutions from producers, namely farmers, to final consumers, namely households. Farmers as producers sell milled dry grain to millers then millers process milled dry grain into rice, after processing grain into rice, the millers sell to large traders then large traders sell to small traders then small traders sell to consumers. There are 3 big traders in this channel and 3 small traders.

Marketing Costs and Margins

Marketing costs include all costs incurred from the time the product is completed and stored in the warehouse until the product is converted back into cash (Mulyadi, 2000). Fatima *et al* (2022) also suggested that marketing margins are calculated based on the reduction in sales prices with purchase prices at each marketing institution.

Marketing costs include all costs incurred from the time the product is completed and stored in the warehouse until the product is converted back into cash. The size of the rice marketing margin is influenced by marketing costs and profit taking, which differ for each marketing institution involved. Rice marketing activities in Baruga Sub-district go through a marketing channel involving millers, wholesalers and retailers. However, in the first part of the channel that involves milling and large traders as marketing institutions. The marketing costs and margins incurred by marketing channels I and II can be seen in Tables 3 and 4.

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Table 3 Marketing Cost and Margin Marketing channel I

No.	Description	Unit (Rp/Kg)	FS (%)
1	Farmers		
	a. Cost of Goods	9.167,44	
	b. Profit Margin	848,56	
	c. Price at producer level	10.016	
2	Milling		83,46
	a. Purchase Price	10.016	
	b. Marketing Costs		
	1. Packaging Cost	312	
	2. Loading and Unloading	8	
	3. Milling Cost	344	
	c. Total Marketing Cost	664	
	d. Selling Price	12.000	
	e. Marketing Margin	1.984	
	f. Advantages	1.320	
3	Wholesaler		85,71
	a. Purchase Price	12.000	
	b. Marketing Costs		
	1. Transportation Cost	112	
	2. Packaging Cost	96	
	3. Labor Cost	99	
	c. Total Marketing Cost	307	
	d. Selling Price	14.000	
	e. Marketing Margin	2.000	
	f. Advantages	1.693	
FS (%)			71,42

Based on Table 3, rice marketing institutions in Kelurahan Baruga involve millers and wholesalers. The producer-level price of IDR 10,016/Kg is calculated from the sum of the cost of production of IDR 14,103.75/Kg, which includes fixed and variable costs, as well as the conversion of grain to rice of IDR 9,167.44/Kg, plus the farmer's profit margin of IDR 848.56/Kg according to the cost pricing and average pricing methods (Surni et al., 2022). Millers pack the rice in 50-kg sacks before selling it to wholesalers, who then sell it to final consumers.

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Wholesalers can either buy directly from the mill or use a transportation service and bear the transportation costs. In marketing channel I, farmers sell their milled dry grain to the mill, with the mill's marketing cost of Rp648/Kg covering packaging, loading and unloading, and milling, while large traders incur marketing costs of Rp307/Kg for transportation, packaging, and labor. The marketing margin at the mill reached Rp1,984/Kg with a profit of Rp2,000/Kg, while the margin of large traders was Rp2,000/Kg with an average profit of Rp1,693/Kg. The length of the marketing chain has an effect on increasing marketing costs, which in turn affects the price level at the final consumer.

Table 4 Marketing Costs and Margins Marketing channel II

No.	Description	Unit (Rp/Kg)	FS (%)
1	Farmers		
	a. Cost of Goods	9.167,44	
	b. Profit Margin	848,56	
	c. Price at producer level	10.016	
2	Milling		83,46
	a. Purchase Price	10.016	
	b. Marketing Costs		
	1. Packaging Cost	312	
	2. Loading and Unloading	8	
	3. Milling Cost	344	
	c. Total Marketing Cost	664	
	d. Selling Price	12.000	
	e. Marketing Margin	1.984	
	f. Advantages	1.320	
3	Wholesaler		85,71
	a. Purchase Price	12.000	
	b. Marketing Costs		
	1. Transportation Cost	123	
	2. Packaging Cost	94	
	3. Labor Cost	110	
	c. Total Marketing Cost	327	
	d. Selling Price	14.000	
	e. Marketing Margin	2.000	

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	f. Advantages	1.673	
4	Small Merchants		13,04
	a. Purchase Price	14.000	
	b. Marketing Costs		
	1. Transportation Cost	213	
	2. Packaging Cost	283	
	3. Labor Cost	213	
	c. Total Marketing Cost	708	
	d. Selling Price	15.333	
	e. Marketing Margin	1.333	
	f. Advantages	625	
FS (%)			65,21

Based on Table 4, rice marketing institutions in Kelurahan Baruga involve millers, large traders, and small traders. The producer-level price of IDR 10,016/Kg is calculated from the sum of the cost of production of IDR 14,103.75/Kg, which includes fixed and variable costs, as well as the conversion of grain to rice of IDR 9,167.44/Kg, plus the farmer's profit margin of IDR 848.56/Kg according to the cost pricing and average pricing methods (Surni et al., 2022). Millers pack the rice in 50-kg sacks before selling it to large traders, who then sell the rice to small traders. Small traders buy directly from large traders and then sell the rice to end consumers. In marketing channel II, farmers sell unhusked dry rice to millers with milling marketing costs of Rp648/Kg including packaging, loading and unloading, and milling. Large traders incur marketing costs of Rp327/Kg for transportation, packaging, and labor, while small traders incur marketing costs of Rp708/Kg. Marketing margins at the mill amounted to Rp1,984/Kg, large traders Rp2,000/Kg, and small traders Rp1,333/Kg, with profits at the mill Rp1,336/Kg, large traders Rp1,673/Kg, and small traders Rp625/Kg. Price and marketing cost factors have a significant effect on marketing margins, which in turn affect the price structure to the final consumer.

Marketing Efficiency

The percentage of the price received by rice producers from the total price paid by consumers can be used as a measure of marketing efficiency. If the share of the price received by producers is ≤ 50%, it means that the marketing channel is not efficient and vice versa, if the share of the price received by producers is ≥ 50%, the rice marketing channel is efficient, therefore the share received by producers is relatively large. More details about the percentage

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of the price share received by producers from the two rice marketing channels can be seen in Table 5.

Table 5 Percentage of Farmer's Share of Price Received by Producers

No.	Marketing Channel	Marketing Efficiency	
		Percentage (%)	Criteria
1	Marketing Channel I	71,42	Efficient
2	Marketing Channel II	65,21	Efficient

Based on Table 5. shows that in rice marketing in Baruga Village, Baruga District of the 2 marketing channels it can be seen that, marketing channel I has a percentage (71.42%) while marketing channel II has a percentage (65.21%). Based on the percentage value obtained, it can be said that marketing channels I and II efficient, because they are greater than 50%, marketing channel I is more efficient than marketing channel II, this is because the longer the marketing chain indicates that more marketing institutions are involved in the channel, thus causing the share received by producers to be smaller. This is in line with research conducted by Maharani *et al* (2015) who obtained research results related to rice marketing channels totaling two channels and both channels were efficient, in line with Arifudding *et al* (2020) which showed that marketing channel I (Farmers- Milling- Wholesalers- consumers) was more efficient than other marketing channels.

This amount is strongly influenced by price and marketing costs, price is one of the factors that determine the selection of marketing channels. However, the calculation of the costs to be incurred in marketing also determines how and when traders choose to market their merchandise, because in principle traders will try in such a way as to obtain profits from the results of production and marketing. A small number of marketing actors can provide a higher *farmer share*. In addition, the margin received by each marketing institution is also greater than other channels (Lasitya *et al*., 2022).

CONCLUSION

Based on the results of the research that has been done, it can be concluded that large traders in channel I with a margin of Rp.2,000/Kg and a profit of Rp1,693/Kg, large traders in channel II with a margin of Rp.2,000/Kg and a profit of Rp1,673/Kg and small traders in channel II with a margin of Rp1,333/Kg and a profit of Rp625/Kg.

Marketing channel I has a marketing efficiency of 71.42% and marketing channel II has a marketing efficiency of 65.21% so it can be concluded that both channels are efficient.

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Suggestions that can be given include several aspects, namely: (1) for farmers, it is expected to increase rice productivity so that the benefits obtained can be maximized; (2) for marketing institutions, it is expected to be able to maintain and optimally utilize existing marketing channels; (3) for the government, this research is expected to be a reference material in making decisions related to rice marketing, especially in Baruga Village, Baruga District, Kendari City; and (4) for further researchers, it is hoped that this research can be a specific reference regarding rice marketing channels and be able to encourage the development of further research related to rice commodities.

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