

## **Analysis of Broiler Feed Distribution Channel (Case Study at PT. Sinar Terang Madani Makassar)**

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### **Abstract**

In the context of supporting the establishment of a profitable livestock business, a livestock feed industry that can supply livestock feed at a feasible price needs to be developed. Feed mill is constantly developing into large scale at the same time the increased population of broiler. This research was carried out to determine distribution pattern, marketing margin, marketing profit, thus the efficiency of broiler feed marketing at PT. Sinar Terang Madani as producer can be determined. The first distribution channel was the direct marketing from producer to consumers. The second distribution channel was from producer to retailers and then consumers. The third distribution channel was from producer to agents and then to retailers and eventually to consumers. The highest margin was the third distribution channel with a total margin of IDR 53.750/sachet, while the lowest was the second distribution channel of IDR 35.000/sachet. The distribution channel that had the largest marketing cost was the third distribution channel with an average total cost of IDR 3.816/sachet, while the smallest is the second distribution channel with an average total cost of IDR 1.240/sachet. The distribution channel that had the largest marketing profit was the third distribution channel with a total profit of IDR 46.118/sachet, while the smallest was the second distribution channel of IDR 33.760/sachet. In general, the distribution channel is efficient because it has an efficiency value between 0.2%-0.9%.

**Keywords** : Distribution channel, margin, cost, profit, and marketing efficiency

### **INTRODUCTION**

The broiler business in the context of the livestock sector development in Indonesia is very strategic in meeting the animal protein intake needs and creating job opportunities (Ramadhan *et al.*, 2021). In this case, the poultry industry is the one that mainly triggers the livestock sub-sector business development (Mottet and Tempio, 2017). The reason is the increased demand for animal food made from poultry as the population, income, consumption, and education level grow and improve. This becomes a potential development for the broiler industry in Indonesia (Riwukore *et al.*, 2020).

One of the areas that have the potential to develop poultry industry including broilers is South Sulawesi Province. The population of broilers in South Sulawesi Province is presented in the following Table 1.

Table 1. Broiler population in South Sulawesi Province in 2018-2020

<b>Year</b>	<b>Broiler Population (Broiler)</b>	<b>Percentage of Population Decrease (%)</b>
2018	101.990.626	-
2019	76.337.385	25.15
2020	71.537.432	6.29

Source: Indonesia statistics (2020).

Based on Table 1, the population of broilers from 2018 to 2020 has decreased, by 25.15% from 2018 to 2019 and then decreased by 6.29% in 2019 to 2020. According to Prasetyo and Kartika (2017), one of the factors that affect the decrease in broiler production is the low production due to the lack of capital or profits from the broiler business, thus many breeders switch their professions in order to meet their life needs.

The feed industry requires a marketing strategy in delivering its products to farmers. Such marketing strategy gives direction regarding the market segmentation, identification of target markets, and positioning (Atmoko, 2018). According to Haslinda (2016), the demand for broilers is increasing as people are currently starting to be aware of their nutritional needs. The development of the broiler industry controls livestock production facilities including feed. The poultry farmers cannot prepare their own livestock feed with quality standards for livestock needs, so they need poultry feed producers. The feed industry must be able to distribute its products to farmers in accordance with the amount, time, place, and affordable price.

In the efforts to increase the population of broilers, it causes the development of other sectors that support the broiler farming business, including the broiler feed industry (Hafez dan Attia, 2020). Since the demand for livestock feed increases in Indonesia, it directly and positively affects the products offered by PT. Sinar Terang Madani. PT. Sinar Terang Madani must have a strategy in dealing with business competition so that they can survive and grow to become the leader of the livestock feed market.

One of the aspects that plays a significant role in selling the company's products is distribution (Mulky, 2013). Distribution is the process of distributing products from producers to consumers, either directly or indirectly. Distribution aims to facilitate the delivery of goods from producers to consumers at the right time, in which the product is maintained in terms of its quality and in quantities according to consumer needs. In this case, companies must choose the right distribution channels and manage them as well as possible so that the company is able to increase their sales value and achieve maximum profit well (Aprilianti, 2016).

PT. Sinar Terang Madani is one of the branch company of PT. PERKASA GROUP company which engages in the poultry industry, by producing livestock feed that has been developing rapidly. Its large mill is located at Barru and distributes its product to the surrounding and various areas. However, its company office which is located in Makassar also has a warehouse to store its feed product that can be sold to the breeders in surrounding areas when their livestock population is big. Yet, if the breeders' livestock population is small, then they can buy the feed from the marketing agencies involved. The company initially only distributes its livestock feed in the Sulawesi region, but currently has distributed its product to various regions,

including North Kalimantan, West Nusa Tenggara, East Nusa Tenggara, Papua, and West Java. The long distance to travel, requires a lot of money, and takes a long time. In order to know the marketing chain and the marketing agencies involved, then this current research will focus only on the South Sulawesi area to make the data collection easier.

The company emphasizes the importance of distribution channels, considering that this method can be used as a benchmark for marketing capabilities in various marketing units. PT. Sinar Terang Madani is expected to be able to choose the right distribution channel, so that the products distributed can be accepted by consumers. If the marketing mechanism goes well, then all parties involved will obtain profit. Therefore, the role of marketing agencies becomes very important. The marketing process must go well, to measure the efficiency of the work performance of the marketing process, marketing efficiency is used. The factors that can be used to measure marketing efficiency are marketing profit, prices received by consumers, the availability of adequate marketing facilities to expedite buying and selling transactions, storage, transportation, and market competition.

In general, a distribution channel that is too long will result in higher costs, thus resulting in higher selling prices and can further disrupt the sale of the products. This is understandable because every intermediary needs a feasible profit for the reward of their activities. Therefore, large companies tend to use short distribution channels in order to suppress high selling prices. On the other hand, small companies tend to use long distribution channels, unless the company's marketing is only locally and limited (Syahyunan, 2004).

PT. Sinar Terang Madani, which distributes livestock feed, needs to know the right and most profitable distribution channel. Thus, its distribution channels can be analyzed and improved to increase the sales volume and to achieve maximum profit. This explanation becomes the background for performing this research on the Analysis of Broiler Feed Distribution Channels (Case Study at PT. Sinar Terang Madani).

## **MATERIALS AND METHODS**

This research was conducted in August-September 2021 at PT. Sinar Terang Madani, Biringkanaya District, Makassar City, South Sulawesi, in addition to all marketing agency locations involved in the broiler feed marketing from PT. Sinar Terang Madani to its consumers.

Furthermore, this research was conducted descriptively, since it describes the marketing channels of broiler feed, the margins of each marketing agency, the channel margin, the profit obtained from each marketing agency, the marketing profit of each marketing channel, and the marketing efficiency of each marketing agency, as well as the efficiency of broiler feed marketing channel.

Data employed in this research were collected by interview directly from the company to the consumer. In addition, interviews were also done directly with company marketing managers and marketing agencies involved in the marketing broiler feed. During the interview, a questionnaire was used as a research instrument to facilitate the interview. The agencies involved and the distribution channels formed were obtained by tracing the flow of feed distribution from the company to the consumer. Furthermore, the data collected in this study included data on feed prices, marketing costs for each agency, buying prices, selling prices for each agency, transportation costs, and administrative costs at PT. Sinar Terang Madani. In this case, the data were analyzed descriptively and statistically in the form of averages and percentages.

Furthermore, the following formula was also employed to calculate the margins of each marketing agency and marketing channel as proposed by Hanafiah and Saefuddin (2006):

- a. Margin of each broiler feed marketing

$$MMA = SP - BP$$

MMA = margin of the marketing agency (IDR/sachet)

SP = Selling price of broiler feed at each level marketing agency (IDR/sachet)

BP = Buying price (IDR/price)

- b. Margin of each marketing channel

$$MMC = MPM.1 + MPM.2 + \dots + MPM.n$$

MMC = Margin of marketing channel (IDR/sachet)

MPM.1 = Margin of the marketing agency for the first marketing

MPM.2 = Margin of the marketing agency for the second marketing

MPM.n = Margin of the marketing agency for the third marketing

- c. Profit for each marketing agency calculated using the following formula:

$$\Pi = MA - TC$$

$\pi$  = Profit of the Marketing Agency (IDR/sachet)

MA = Margin of Marketing Agency (IDR/sachet)

TC = Total marketing cost incurred by each marketing agency (IDR/sachet)

- d. Marketing profit for each marketing channel calculated using the following formula:

$$\pi_t = \pi_1 + \pi_2 + \dots + \pi_n$$

$\pi_t$  = Profit of marketing channel

$\pi_1$  = Profit of the first marketing agency

$\pi_2$  = Profit of the second marketing agency

$\pi_n$  = Profit of the n marketing agency

- e. Efficiency of marketing channel using the following formula:

$$EM = \frac{MC}{TPV} \times 100 \%$$

EM = Marketing efficiency (%)

MC = Total marketing cost (IDR/sachet)

TPV = Total Product Value marketed (IDR/sachet)

If: The smallest Ep value is the most efficient

## RESULTS AND DISCUSSION

### Broiler Feed Distribution Channel of PT. Sinar Terang Madani

The livestock feed produced by PT. Sinar Terang Madani include broiler feed, laying hens feed, fighting cock feed, ayam kampung feed, and pig feed. However, the dominant feed produced is broiler feed. Livestock feed products owned by PT. Sinar Terang Madani has been registered and has an SNI (Indonesian National Standard) certificate so that it meets the feed quality and safety standards. The selling price is determined by adjusting it according to the market price in order to be able to compete with other feed products. The broiler feed price for the pre-starter phase is IDR 450.000/sachet, for the starter phase is IDR 440.000/sachet each in the form of pellet fractions, while for the finisher phase is IDR 430.000/sachet in pellet form. In this case, the company will give a discount of IDR 100/kg if the pickup target is no less than 80 tons/month, while if it reaches 150 tons/month, the discount given is IDR 150/kg.

PT. Sinar Terang Madani has 2 storage warehouses, one of them is the warehouse in Barru Regency, South Sulawesi which is also its feed mill location with a capacity of 400 tons. Meanwhile, another warehouse is located in Makassar, South Sulawesi, adjacent to the head office of PT. Sinar Terang Madani with a capacity of only 50 tons.

There are three feed distribution channels as follow:

**1. Distribution channel I**

This distribution channel is where the company sells the product directly to consumers. In this distribution channel, there are no marketing agencies as intermediaries to consumers. See Figure 1 for more details.



Figure 1. Distribution channel I of PT. SinarTerangMadani

In this distribution channel, the feed sale is carried out directly to consumers or breeders with the requirement that the breeder has a minimum population standard of 10.000, the pickup target is no less than 10 tons/month or equivalent to 200 sachets/month, and the farm is located in an area far from the agent/distributor. PT. Sinar Terang Madani has a subsidiary company that is engaged in broiler. Therefore, the feed pickup does not need any requirement. This is different from other breeders who must meet the requirements in taking the feed.

PT. Sinar Terang Madani conducts promotions in an effort to market their feed products so that farmers know their products. Promotion has a significant role in affecting the consumers to buy feed products. In the context of the promotion, they use printed media such as brochures or magazines which are routinely issued once a month and distributed to farmers and shops selling livestock infrastructure.

Promotions that are performed by PT. Sinar Terang Madani emerges the consumers' interest in buying the feed products. Consumers buy broiler feed by purchasing different types and quantities with prices for the pre starter phase of IDR 450.000/sachet, the starter phase of IDR 440.000/sachet, and the finisher phase of IDR 430.000/sachet. On the average, the selling price of the three feed types is IDR 440.000/sachet. The consumer came to PT. Sinar Terang Madani to buy feed using its own truck, while the company only helps in loading the feed to the truck by its workers.

**2. Distribution channel-II**

In this distribution channel, there are retailers as marketing agency that sell the product to consumers. These retailers buy the feed product directly from the company (Figure 2).



Figure 2. Distribution channel II of PT. SinarTerangMadani.

Based on Figure 2, in this distribution channel, PT. SinarTerangMadani distributes its feed products through retailers with the requirement that the pickup target of the feed is no less than 100 sachets/month. Such method will make it easier for the consumers to buy the feed product in small quantities. In determining the selling price of feed products, PT.

SinarTerangMadani adjusts the prices according to market prices. In order to determine the right price, the company must look at the selling price that can be reached by consumers.

There are 2 retailers who buy livestock feed at PT. SinarTerangMadani. The amount and type of broiler feed purchased varies. In this case, the retailers come to PT. SinarTerangMadani to pick up the feed using its own truck, while the company only helps in loading the feed to the truck with its workers. Both retailers sell broiler feed at the same price. The feed price for the pre-starter phase is IDR 500.000/sachet, the starter phase is IDR 475.000/sachet, and the finisher phase is IDR 450.000/sachet. On the average, the selling price of the two retailers when selling the three types of broiler feed is IDR 475.000/sachet. Consumers come directly to retailers to buy the feed they want. The form of this distribution channel is the same as the pattern of broiler marketing channels were producers-retailers-consumers by Bustang (2020).

### 3. Distribution channel-III

In the Distribution Channel III at PT. SinarTerangMadani, the marketing agency involved is the agent, the retailer and the consumer. See Figure 3 for more details.



Figure3. Distribution channel III of PT. SinarTerangMadani

The requirement for the agent involved in this distribution channel is that the agent must purchase no less than 10 tons of feed/month or the equivalent of 200 sachets/month. If the pickup target is no less than 80 tons/month, PT. SinarTerangMadani will give a discount of IDR100/Kg. However, if the pickup target reaches 150 tons/month, the company will give a discount of IDR 150/Kg. In this case, there are 2 agents and the selling price to the retailer is the same. The price of feed for the pre starter phase is IDR 460.000/sachet, the starter phase is IDR 450.000/sachet, and the finisher phase is IDR 440.000/sachet. On the average, the selling price of the two agents when selling the three types of broiler feed is IDR 450.000/sachet. In this distribution channel, the agent will come to PT. SinarTerangMadani to pick up the feed using their own truck and the company will help in loading the goods to the agent truck by using its workers.

Retailers who buy feed from the agents, will have the product delivered to their place. The price given is the same and delivery costs are borne by the agents themselves. Retailer 1 buys feed from agent 1 and then sells it to consumers. The selling price of broiler feed for the pre starter phase is IDR 500.000/sachet, the starter phase is IDR 475.000/sachet, and the finisher phase is IDR 450.000/sachet. Therefore, on the average, the selling price of retailer 1 when selling the three types of broiler feed is IDR 475.000/sachet. Retailers 2, 3, and 4 buy feed from agent 2. All three retailers sell the products to consumers at the same price. The selling price of broiler feed for the pre starter phase is IDR 525.000/sachet, the starter phase is IDR 500.000/sachet, and the finisher phase is IDR 475.000/sachet. On the average, the selling price of the three retailers is the same when selling the three types of broiler feed for IDR 500.000/sachet. In this distribution channel, it is easier for consumers to obtain feed because there are several retailers who sell the feed. Consumers who will buy feed, will come to retailers to buy the feed themselves. The three forms of distribution channels are in line with Nikita (2021).

### Marketing Margin

The marketing margin for broiler feed agency is the difference between the buying price and the selling price. In order to find out the marketing margin of broiler feed in each distribution channel, it is necessary to first know the selling price and buying price of each marketing agency involved. The marketing margin on distribution channel-I broiler feed is presented in Table 2.

Table 2. Margin of distribution channel I of broiler feed according to its types in PT. SinarTerangMadani

Marketing Agency	Types of Feed	Selling Price (IDR/sachet)	Buying Price IDR/sachet	Margin IDR/sachet
I. PT. SinarTerangMadani	Pre starter	450.000	-	-
	Starter	440.000	-	-
	Finisher	430.000	-	-
II. Consumer	Pre starter	-	450.000	-
	Starter	-	440.000	-
	Finisher	-	430.000	-
Total Price		1.320.000	1.320.000	
Average		440.000	440.000	

Source: Primary data that has been processed 2021

In this distribution channel, buying price is the price given to consumers who directly buy at the company so that there is no marketing margin (Table 2). The marketing margin on distribution channel-II is the same between the two retailers. However, there is a margin difference between the types of feed marketed. The type of feed that obtained the largest margin was pre-starter, and then starter, and the smallest was finisher. Meanwhile, the margin for distribution channel II is IDR 35.000/sachet (Table 3). The marketing margin in distribution channel III of broiler feed is the same between the two agents and there is a difference in the margin between the types of feed marketed. Retailers sell the feed per kilogram. Retailer 1 gets a different marketing margin than retailer 2, 3, and 4, because they have different selling prices. The marketing agencies that get the largest margins in distribution channel III are retailers 2, 3, and 4, retailer 1, then the smallest are agents 1 and 2. The marketing agencies involved in distribution channel III are agents and retailers. In this channel, agents usually have a fairly large sales volume (Table 4).

The distribution channel that received the largest margin is the distribution channel III of IDR 185.000/sachet. Distribution channel III is also considered to be a long distribution channel because it involves 2 marketing agencies to get to consumers. According to Indriyo (2001), the longer and more marketing agencies involved in the marketing process, the greater the total margin. On the contrary, the shorter and fewer marketing agencies involved in the marketing process, the smaller the total margin. This is in accordance with the statement made by Hasyim (2012) that the amount of marketing margin will vary in each marketing channel because each marketing actor has a different selling price. This is in accordance with the statement Hastang and Asnawi (2015) the margins obtained by collecting traders are smaller than the margins

obtained by inter-regional traders. However, the profits obtained by collecting traders are greater than those of inter-regional traders. This is because the costs incurred by inter-regional traders are greater than those of collectors.

Table 3. Margin of distribution channel II of broiler feed according to its types in PT. Sinar Terang Madani

Marketing Agency	Types of Feed	Selling Price (IDR/sachet)	Buying Price (IDR/sachet)	Margin (IDR/sachet)	
I. PT, SinarTerangMadani	Pre starter	450.000	-	-	
	Starter	440.000	-	-	
	Finisher	430.000	-	-	
	Total Price	1.320.000	1.320.000		
	Average	440.000	440.000		
II. Retailer					
	- Retailer I	Pre starter	500.000	450.000	50.000
		Starter	475.000	440.000	35.000
		Finisher	450.000	430.000	20.000
	Total Price	1.425.000	1.320.000	105.000	
	Average	475.000	440.000	35.000	
- Retailer II	Pre starter	500.000	450.000	50.000	
	Starter	475.000	440.000	50.000	
	Finisher	450.000	430.000	20.000	
	Total Price	1.425.000	1.320.000	105.000	
	Average	475.000	440.000	35.000	
<b>Average of Retailer Margin</b>				<b>35.000</b>	
III. Consumer	Pre starter		500.000		
	Starter		475.000		
	Finisher		450.000		
	Total Price		1.425.000		
	Average		475.000		
<b>Margin of Distribution Channel</b>				<b>35.000</b>	

Source: Primary data that has been processed 2021.



Table 4. Margin of distribution channel III of broiler feed by type PT. Sinar Terang Madani

Marketing Agency	Types of Feed	Selling Price (IDR/sachet)	Buying Price (IDR/sachet)	Margin (IDR/sachet)	
I. PT. Sinar Terang Madani	Pre starter	450.000	-	-	
	Starter	440.000	-	-	
	Finisher	430.000	-	-	
	Total Price	1.320.000	1.320.000		
Average	440.000	440.000			
II. Agent	- Agent 1	Pre starter	460.000	450.000	10.000
		Starter	450.000	440.000	10.000
		Finisher	440.000	430.000	10.000
	Total Price	1.350.000	1.320.000	30.000	
	Average	450.000	440.000	10.000	
	- Agent 2	Pre starter	460.000	450.000	10.000
		Starter	450.000	440.000	10.000
		Finisher	440.000	430.000	10.000
	Total Price	1.350.000	1.320.000	30.000	
	Average	450.000	440.000	10.000	
<b>Average of Agent Margin</b>				<b>10.000</b>	
III. Retailer	- Retailer 1	Pre starter	500.000	460.000	40.000
		Starter	475.000	450.000	25.000
		Finisher	450.000	440.000	10.000
	Total Price	1.425.000	1.350.000	75.000	
	Average	475.000	450.000	25.000	
	- Retailer 2	Pre starter	525.000	460.000	65.000
		Starter	500.000	450.000	50.000
		Finisher	475.000	440.000	35.000
	Total Price	1.500.000	1.350.000	150.000	
	Average	500.000	450.000	50.000	
	- Retailer 3	Pre starter	525.000	460.000	65.000
		Starter	500.000	450.000	50.000
		Finisher	475.000	440.000	35.000
	Total Price	1.500.000	1.350.000	150.000	
	Average	500.000	450.000	50.000	
	- Retailer 4	Pre starter	525.000	460.000	65.000
Starter		500.000	450.000	50.000	
Finisher		475.000	440.000	35.000	
Total Price	1.500.000	1.350.000	150.000		
Average	500.000	450.000	50.000		
<b>Margin of distribution channel</b>				<b>185.000</b>	

Source: Primary data that has been processed 2021

## Marketing Costs

Marketing costs for broiler feed are costs incurred during the marketing process, starting from the sale of feed from producers to being received by consumers. In calculating the marketing costs charged to broiler feed, it is calculated from the amount of feed sold per month (sachets). Then, the amount of broiler feed sold per month is divided by the total sales of feed multiplied by the total monthly marketing costs. The amount of marketing costs for the distribution channel-I broiler feed at PT. Sinar Terang Madani can be seen in Table 5.

Table 5. Marketing cost of distribution channel I of broiler feed in PT. Sinar Terang Madani.

Distribution Channel	Types of Marketing Cost	Amount of Feed (IDR/sachet)	Marketing Cost (IDR/sachet)	Percentage (%)	Average Cost (IDR/sachet)
I	PT.Sinar Terang Madani	905			
	a. Warehouse Rent		2.712.329	69.8	
	b. Depreciation of Transportation Equipment		92.466	2.4	
	c. Communication		350.000	9	
	d. Printing Cost		450.000	11.5	
	e. Transportation		280.000	7.3	
Total			3.884.795	100	4.293
Marketing Cost of the Distribution Channel					4.293

Source: Primary data that has been processed, 2021.

In this distribution channel, there are several costs incurred for the marketing such as for renting a warehouse to store the feed to be marketed, the costs for printing the brochures/magazines in promoting feed products, transportation costs in the form of gasoline from warehouses in Barru to Makassar warehouses, depreciation of transportation equipment needed used in transportation, and communication costs in order to communicate with consumers/breeders or marketing agencies involved. The marketing cost in distribution channel I is IDR 4.293/sachet (Table 5). There are 2 retailers who sell feed with different marketing costs. The buying costs in the form of fuel costs and depreciation are different between the two retailers. The difference in fuel costs is caused by the differences in the location and transportation used, while the depreciation expense calculated is the depreciation of the warehouse depreciation. Retailers have the same number of workers of 3 people with the division of working time and the wages/salaries given are also different. Furthermore, the communication costs are in the form of monthly telephone fee packages for marketing purposes. In addition, the building taxes are also different between the two retailers. The marketing costs on distribution channel II are IDR 5.162/sachet (Table 6).

Table 6. Marketing cost of distribution channel II of broiler feed in PT. Sinar Terang Madani.

Distribution Channel	Types of Marketing Cost	Amount of Feed (Sachet/Month)	Marketing Cost (Sachet/Month)	Percentage (%)	Average Cost (Sachet/Month)	
II	Retailer 1	105				
	a. Buying Cost		80.000	26.9		
	b. Workers Wage		42.677	14.4		
	c. Communication		50.000	16.8		
	d. Depreciation of Warehouse		20.248	6.9		
	e. Depreciation of Transportation Equipment		102.740	34.5		
	f. Tax		1.361	0.5		
	Total		297.325	100	2.832	
	Retailer 2		110			
	a. Buying Cost		50.000	19.5		
	b. Workers Wage		38.817	15		
	c. Communication		50.000	19.5		
	d. Depreciation of Warehouse		308.222	12		
	e. Depreciation of Transportation Equipment		84.932	33.2		
	f. Tax		2.250	0.8		
	Total		256.320	100	2.330	
	Total Retailer Marketing Cost		553.645		5.162	
Average Retailer Marketing Cost				2.581		
Marketing Cost of the Distribution Channel				5.162		

Source: Primary data that has been processed 2021

There are 2 agents which sell the feed with different marketing costs. The different costs come from the cost of fuel, depreciation of warehouse and transportation equipment, as well as the cost of land and building taxes. The difference in fuel cost is caused by difference in the delivery location from the agent to the retailer. The number of workers at agent 2 is more than agent 1 and the wages/salaries given are also different. However, there is a similarity between the two agents' communication costs which is the monthly telephone costs. The transportation used by the two agents has the same capacity, but the acquisition of the buying price and the remaining price as well as the economic life of the transportation is different, thus the depreciation of the transportation for the two agents is different.

Table 7. Marketing cost of distribution channel III of broiler feed in PT. Sinar Terang Madani

Distribution Channel	Types of Marketing Cost	Amount of Feed (Sachet/Month)	Marketing Cost (IDR/Sachet)	Percentage (%)	Average (IDR/Cost)
III	Agent 1	200			
	a. Buying Cost		80.000	16.8	
	b. Transportation Cost		30.000	6.5	
	c. Workers Wage		196.373	41.5	
	d. Communication		50.000	10.5	
	e. Depreciation of Warehouse		27.397	5.7	
	f. Depreciation of Transportation Equipment		82.192	17.3	
	g. Tax		8.333	1.7	
	Total		474.296	100	2.371
	Agent 2	220			
	a. Buying Cost		100.000	9	
	b. Transportation Cost		80.000	7.4	
	c. Workers Wage		754.488	68.5	
	d. Communication		50.000	4.5	
	e. Depreciation of Warehouse		30.822	2.7	
	f. Depreciation of Transportation Equipment		11.000	0.9	
	g. Tax		77.626	7	
	Total		1.103.935	100	5.018
	Total Agents' Marketing Cost		1.578.231		7.386
	Average Agents' Marketing Cost				3.695
	Retailer 1	40			
	a. Depreciation of Warehouse		41.096	75.9	
b. Tax		1.042	1.9		
c. Communication		12.000	22.2		
Total		54.137	100	1.353	
Retailer 2	80				
a. Transportation		32.000	25		
b. Retribution		22.500	17.6		
c. Rent		50.000	39.2		
d. Depreciation of Transportation Equipment		23.116	18.2		
Total		127.616	100	15.952	
Retailer 3	30				
a. Retribution		22.500	17.2		
b. Rent		50.000	38		
c. Transportation		32.000	24.3		
d. Depreciation of Transportation Equipment		26.969	20.5		

*Broiler Feed Distribution Channel*

Total		131.469	100	4.382
Retailer 4	25			
a. Retribution		22.500	18.9	
b. Rent		50.000	42	
c. Transportation		32.000	26.9	
d. Depreciation of Transportation Equipment		14.384	12	
Total		118.884	100	4.755
Total Marketing Cost		432.106		26.443
Average Retailer Marketing Cost				5.289
Marketing Cost of Distribution Channel				33.832

Source: Primary data that has been processed 2021.

There are 4 retailers who sell the feed with different marketing costs. The retailer 1 has marketing cost which is slightly different from other retailers, while retailers 2, 4 and 4 have marketing costs that are relatively almost the same. The three retailers buy feed from the same agent with the same transportation costs in the form of gasoline. They then sell the feed in the market so that there are the same retribution and place rent fee. The transportation used to buy feed varies so that the depreciation costs for transportation equipment are different for the three retailers. The marketing cost on distribution channel III is IDR 33.832/sachet.

In this case, the distribution channel that has the highest marketing cost is distribution channel III, which is IDR 33.832/sachet. The reason is that there are 2 marketing agencies involved in distributing the broiler feed products. This is in accordance with Annisa *et. al.*, (2015) who stated that the longer of distance and the more intermediaries involved in marketing, the higher the marketing costs.

### **Marketing Profit**

Marketing profit is the difference between the price paid by consumers and the price received by producers after reducing the marketing costs or the difference between marketing margins and costs incurred during the marketing process. When the margins obtained are high and the marketing costs incurred are small, then the profit obtained is high. The profit of distribution channel II is IDR 64.838/sachet. This is in line with Daniel (2002) who claimed that to achieve large profits, marketing agencies can take steps such as determining the selling price according to the desired profit.

Marketing agencies involved in distribution channel III are agents and retailers. The high margin obtained from sales to consumers and less marketing costs incurred causes the profit to be high (Sudana, 2020). The profit of distribution channel III is IDR 161.169/sachet. The price difference is caused by an additional price which is the profit obtained from the costs incurred by each marketing agency. This is also explained in the results of research conducted by Ghigbi and Chiks-Okonta(2020) that buying price of the poultry feed, cost of transportation, market charges was negatively and significantly associated with profit.

Table 8. Profit of marketing agencies in each distribution channel of broiler feed at PT. SinarTerangMadani

Distribution Channel	Selling Volume	Selling Price (IDR/Sachet)	Buying Price (IDR/Sachet)	Margin (IDR/Sachet)	Cost (IDR/Sachet)	Profit (IDR/Sachet)
I						
PT, SinarTerangMadani	905	440.000	-	-	-	-
Profit of Distribution Channel						-
II						
PT, SinarTerangMadani	905	440.000	-	-	-	-
Retailer 1	105	475.000	440.000	35.000	2.832	32.168
Retailer 2	110	475.000	440.000	35.000	2.330	32.670
Profit of Distribution Channel						64.838
III						
PT, SinarTerangMadani	905	440.000	-	-	-	-
Agent 1	200	450.000	440.000	10.000	2.371	7.629
Retailer 1	40	475.000	450.000	25.000	1.353	23.647
Agent 2	220	450.000	440.000	10.000	5.018	4.982
Retailer 2	8	500.000	450.000	50.000	15.952	34.048
Retailer 3	30	500.000	450.000	50.000	4.382	45.618
Retailer 4	25	500.000	450.000	50.000	4.755	45.245
Profit of Distribution Channel						161.169

Source: Primary data that has been processed 2021.

### Marketing Efficiency

The marketing efficiency of broiler feed can be calculated from the total marketing cost and the total value of the product marketed. Marketing efficiency of each distribution channel and marketing agency involved in PT. Sinar Terang Madani is presented in Table 9. In distribution channel I, there is no marketing margin because the company directly sells the feed to consumers. However, in this distribution channel, there is a high rent fee for the warehouse so that this distribution channel is considered less efficient. Furthermore, the marketing efficiency of distribution channel I is 0.9%. In distribution channel II, the marketing agencies involved are two retailers. In performing the marketing, the roles of both retailers are considered efficient and effective. This is due to the low marketing costs incurred by each retailer. In this case, the marketing efficiency in distribution channel II is 0.9%. Furthermore, the marketing agencies involved in channel III are agents and retailers. The two marketing agencies obtain different efficiency values, but it is considered efficient. In this case, the marketing efficiency of distribution channel III is 6.6%. One way that needs to be done to improve the efficiency of feed marketing is the availability of easily accessible information on the price of feed at each marketing agency and the availability of other supports. This is in line with Amsalu (2019) which explains that complete market information is important to provide accurate information on current poultry supply.

Table 9. Marketing efficiency of broiler feed in each distribution channel and marketing agencies in PT. Sinar Terang Madani

Distribution Channel	Cost (IDR/Sachet)	Product Value (IDR/Sachet)	Efficiency Value (%)
<b>I</b>			
PT. Sinar Terang Madani	4.293	440.000	0.9
<b>Efficiency of Distribution Channel</b>			<b>0.9</b>
<b>II</b>			
Retailer 1	2.832	475.000	0.5
Retailer 2	2.330	475.000	0.4
<b>Efficiency of Distribution Channel</b>			<b>0.9</b>
Agent 1	2.371	450.000	0.5
Retailer 1	1.353	475.000	0.2
Agent 2	5.018	450.000	1.1
Retailer 2	15.952	500.000	3.1
Retailer 3	4.382	500.000	0.8
Retailer 4	4.755	500.000	0.9
<b>Efficiency of Distribution Channel</b>			<b>6.6</b>

Source: Primary data that has been processed 2021.

In general, marketing agencies involved in marketing activities for broiler feed at PT. Sinar Terang Madani obtains an efficiency value between 0.2%-3.1 %, thus it is considered efficient. This is in accordance with the previous research conducted by Mandak (2017), in which all marketing channels studied have an efficiency percentage because the level of marketing efficiency is less than 33%. This is further supported by Rosmawati (2011) who claimed that if the marketing efficiency value is 0 to 33%, then it is categorized as efficient. If the marketing efficiency value is 34 to 67%, it is categorized as less efficient. Meanwhile, if the marketing efficiency value is 68 to 100%, then it is categorized as inefficient.

The level of efficiency and effectiveness in marketing from the consumer's point of view is the distribution channel-I. This is because there are no marketing agencies involved in the distribution channel or direct marketing to consumers/breeders. The price of feed provided is directly from the company's price so that it is easily accessible by consumers. The level of efficiency in the marketing of the distribution channel III is considered effective, indicated by the company's side. This is because in distribution channel III, there are marketing agencies, including agents and retailers. Agents obtain feed from companies in large quantities to make sales on a large scale. The price given by the company by the agent is relatively cheap, but the intake of feed is quite a lot. This is in line with Kassali *et. al.*(2019) that one that determined the efficiency in poultry feeds marketing was the number of shop operated.

The marketing agency gets of smallest margin from the agent of IDR 10.000/sachet. Meanwhile, the marketing agencies received the largest margin retailers 2, 3, and 4 at IDR 50.000/sachet. Furthermore, the marketing agency that obtains the smallest marketing costs is retailer 1 in distribution channel III, which is IDR 1.353/sachet. Meanwhile, the marketing agency that has the largest marketing costs is retailer 2 on distribution channel III, which is IDR 15.952/sachet. The marketing agency that gets the smallest profit is agent 2 for IDR 4.982/sachet. Retailer 3 gets the biggest profit, which is IDR 45.618/sachet. In addition, the most

efficient marketing agency is retailer 1 in distribution channel III by 0.2% in line with Hermly (2019) that it's efficiency of distribution channels was efficient level because it's below the number 1.

## CONCLUSION

Based on the current study that has been conducted, it can be summed up that there are three forms of feed distribution channels. The first one is direct sales from companies to consumers. The second is sales through retailers to consumers. Meanwhile, the third is sales through agents, retailers and consumers. In this case, the marketing agencies that obtain the largest marketing margins and profits are retailers 2, 3, and 4 in distribution channel III, retailer 1 and 2 on distribution channel II, retailer 1 on the distribution channel III, as well as agents 1 and 2 on distribution channel III. Furthermore, the distribution channels that obtain the largest margins are distribution channel III, followed by distribution channel II, and distribution channel I. The most efficient marketing agency is retailer 1 in distribution channel III, retailer 2 on distribution channel II, retailer 1 on distribution channel II, as well as agent 1, retailer 3, retailer 4 on distribution channel III, then PT. SinarTerangMadani, agent 2, and retailer 2 on distribution channel III, respectively. The most efficient distribution channels are distribution channels I and II, and distribution channels III, respectively. This research contributes to providing information related to barriers in distributing feed so that corrective steps can be taken in the future in addition, providing additional knowledge about the study of feed distribution and marketing margins and profits of each marketing agency.

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