

CAYENNE PEPPER MARKETING ANALYSIS IN KEDIRI SUB-DISTRICT, WEST LOMBOK DISTRICT

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Abstract: Cayenne pepper is a strategic commodity that has a high economic value. The need for cayenne pepper tends to increase every year. This is inseparable from the increasing population and the development of industries that require cayenne pepper raw materials. Per capita chili consumption per year is relatively stable with an average growth rate of 0.44% per year. The consumption of cayenne pepper by the household sector in 2021 is 528.14 thousand tons, an increase of 10.25% from 2020. The consumption of cayenne pepper from the household sector is 75.72% of the total consumption of cayenne pepper. West Nusa Tenggara Province is one of the cayenne pepper producing centers that contribute to national cayenne pepper production.

The production of cayenne pepper from West Nusa Tenggara is not only marketed in markets within West Nusa Tenggara, but also to markets outside the area. West Lombok Regency is the district with the second highest production of cayenne pepper in West Nusa Tenggara Province, which is 44,800 kw. In addition, the average price fluctuation of cayenne pepper in the Mandalika Main Market from January 2022 to December 2022 recorded the highest price of IDR 85,600 / kg in June. while the lowest price was IDR 24,850 / kg which occurred in November. The length of the marketing channel formed from the interaction of marketing institutions will affect the price received by consumers and the price received by farmers as producers.

The purpose of this study was to analyze marketing channels, analyze marketing functions and analyze the marketing efficiency of cayenne pepper in Kediri sub-district, West Lombok district, West Nusa Tenggara. By using descriptive analysis method analyze farmer's share marketing margin and marketing profit distribution.

The results showed that there are 5 (five) cayenne pepper marketing channels in Kediri sub-district which involve several marketing institutions, namely: intermediary traders, wholesalers, and retailers. The marketing function performed by most of the marketing institutions involved is to carry out the three main functions of marketing, namely the exchange function, physical function, and facility function. However, the storage function included in the physical function is only carried out by retailers. Other research results show that the level of efficiency of cayenne pepper marketing in Kediri sub-district, West Lombok district is efficient. With the results of research findings in the form of price share results received by farmers are above 60%. Marketing channel IV is a relatively more efficient channel compared to marketing channels I, II, III, and V, due to relatively lower marketing margins. The value of farmer's share is relatively higher, and the value of profit distribution is close to 1.

Keywords: Cayenne pepper, marketing, farmer's share, profit distribution, market efficiency and farmers.

I. INTRODUCTION

The price of agricultural production will fluctuate. The price instability factor is caused by supply fluctuations and demand instability (Sukirno, 2019). Agricultural production is influenced by technology, climatic conditions, and pest attacks. While the sub-sectors of agricultural products that have high demand in the market are horticultural crops and food crops such as cayenne pepper, shallots, potatoes and peanuts (Sumantri, *et.al* in Lilis Puspita, 2021). Chili is a horticultural commodity

in the vegetable crop group that is cultivated, developed and consumed by the wider community. As a food crop, it often experiences fluctuations in marketing prices. So that the government issued a price policy by issuing Regulation of the National Food Agency of the Republic of Indonesia Number 11 of 2022 to ensure the availability of supply and price stability of soybeans, shallots, cayenne pepper, curly red chili, beef / buffalo, and sugar consumption by setting a reference price for purchases at the producer level and a reference price for sales at the consumer level.

Table (1). Reference Price of Chili Purchases at Producers and Reference Price of Chili Sales at Consumers According to the Regulation of the National Food Agency of the Republic of Indonesia Number 11 of 2022.

Commodities	Reference purchase price at producer (IDR/Kg)	Sales reference price at consumer (Rp/Kg)
pepper	25.000-31.500	40.000-57.000
Curly red chili	22.000-29.000	37.000-55.000

Source: National Food Agency, 2023.

Chili plants are grouped into two types: (1) large *chili* (*C. annum*) which consists of red chili and curly chili, (2) small chili known as cayenne pepper (*Capsicum frutescens*, *C. pendulum*, *C. baccatum*, and *C. chinense*). Cayenne pepper is popular for seasoning dishes because it has a very spicy taste compared to other types of chili (Setiadi, 1999). The development of cayenne pepper farming is currently directed at agribusiness activities, meaning that the increase in cayenne pepper cultivation will be successful if the cayenne pepper agribusiness system can be implemented optimally, one of which is the implementation of the marketing subsystem (Dermoredjo S.K., 2014; Gunawan *et al*, 2013 and Winarso B., 2012).

The main factor for price fluctuations in Mandalika Main Market is the *perishable* biological character of chili peppers. The second factor is caused by the ecological character of Indonesia which recognizes 2 seasons, namely the rainy and dry seasons. The rainy season is a major production constraint for vegetable crops, easily affected by disease so that production decreases. These factors affect *demand* and *supply* in the market. The strength of *supply* is determined by the amount of chili peppers produced and harvested seasonally. Meanwhile, the strength of *demand* is determined by the amount of household demand which tends to increase. Fluctuations in the average price of cayenne pepper in the Mandalika Main Market from January 2022 - December 2022 recorded the highest price of IDR 85,600 / kg, namely in June. while the lowest price was IDR 24,850 / kg which occurred in November (data from the Strategic Food Price Information Center, 2022).

Marketing is an activity in flowing products from farmers as primary producers to final consumers (Asmarantaka, 2014). Agricultural marketing is a system consisting of subsystems of marketing functions (exchange functions, physical functions and facility functions) where these functions are carried out by marketing institutions (Dahl and Hammond, 1977)

Based on data obtained from the West Lombok Regency Statistics Agency, it can be seen that there was an increase in production from 29,770 quintals in 2020 to 44,800 quintals in 2021. The average productivity also experienced a significant increase in 2021, namely 140.44 kw/ha compared to the average productivity in the previous year of 74.42kw/ha (BPS West Lombok Regency, 2022). Where Kediri District is one of the sub-districts in West Lombok Regency which is the highest producer of cayenne pepper compared to other sub-districts. In 2021, the production increased significantly from the previous year of 5,992 quintals to 26,590 quintals. With suitable geographical conditions, available land area, government support and large cayenne pepper production, Kediri District is an important cayenne pepper center in West Lombok Regency. Based on the description above, it is deemed necessary to know how the marketing system and marketing efficiency of cayenne pepper in Kediri District, West Lombok Regency. Therefore, a study was conducted entitled "Analysis of Cayenne Pepper Marketing in Kediri District, West Lombok Regency".

There are three problem formulations in this study, namely: (1) How is the cayenne pepper marketing channel in Kediri District, West Lombok Regency; (2) How is the marketing function of the cayenne pepper marketing institution in Kediri District, West Lombok Regency; (3) How is the efficiency of cayenne pepper marketing in Kediri District, West Lombok Regency?

II. METHODOLOGY

The method used in this research is descriptive analysis method, which is a method of examining the status of a group of people, an object, a condition, a system of thought or a class of events in the present. The purpose of this method is to make

a description, description or painting systematically, factually and accurately about the properties, facts and relationships between the phenomena investigated (Nazir, 2014). The unit of analysis in this research is farmers and cayenne pepper marketing institutions in Kediri District West Lombok Regency.

Determination of Sample Area: This research was conducted in Kediri Sub-district, West Lombok Regency. Kediri Sub-district consists of 10 (ten) villages, namely Banyumulek Village, Dasan Baru Village, Gelogor Village, Jagaraga Indah Village, Kediri Village, Kediri Selatan Village, Lelede Village, Montong Are Village, Ombe Baru Village, and Rumak Village. Of the 10 (ten) villages, two villages were determined by *purposive sampling* method, namely Montong Are Village and Ombe Baru Village on the basis of the consideration that these villages have a higher harvest area and total production of cayenne pepper than other villages. **Determination of Respondents:** Respondents in this study were cayenne pepper farmers and marketing institutions involved in cayenne pepper marketing. Determination of respondent farmers is done by *quota sampling* while determination of respondent traders village collectors, wholesalers and retailers is done by *snowball sampling* method. Respondent farmers used 30 farmers, while respondent traders were obtained by following the cayenne pepper marketing flow according to previous respondent information

Type of Data: The types of data used in this study are quantitative data and qualitative data. Quantitative data is data that can be measured by numbers such as marketing margin, *farmer's share*, and profit distribution. Meanwhile, qualitative data is data that cannot be measured using numbers such as marketing channels and marketing functions. **Data Sources:** **Primary data** were obtained by conducting observations, surveys and interviews with target respondents at the research locations at the farming and marketing levels. Respondents in this study were business actors in the cayenne pepper marketing chain (farmers, intermediary traders, wholesalers, and retailers)

Secondary data was obtained from various sources relevant to the research study. Secondary data was obtained from statistical information owned by the National Statistics Agency, West Nusa Tenggara Statistics Agency, West Lombok Statistics Agency, and the Agricultural Extension Center. Daily data on cayenne pepper prices from the Ministry of Agriculture, the Strategic Food Price Information Center (PIHPS) and Bank Indonesia. In addition, the secondary data was also obtained through literature from various agencies and previous studies related to this research

Variables and Measurement Methods: The variables measured in this study are as follows: (1) Purchase volume is the amount of cayenne pepper purchased by marketing institutions which is expressed in kilograms (Kg); (2) Sales volume is the amount of cayenne pepper production sold by farmers and marketing institutions which is expressed in the form of (Kg) or in percentage form (%); (3) Price is the result of transactions between farmers and marketing institutions with the addition of costs expressed in units of rupiah (Rp / Kg); (4) Marketing costs are costs incurred in the cayenne pepper marketing process from farmers to end consumers which include transportation costs, labor, storage and others, which are expressed in units of rupiah (Rp); (5) Production volume is the amount of cayenne pepper production sold by farmers which is expressed in kilograms (Kg); (6) Sales volume is the amount of cayenne pepper sold by farmers or marketing institutions in kilograms (kg); (7) Purchase volume is the amount of cayenne pepper purchased by marketing institutions or end consumers measured in kilograms (kg); (8) Marketing institutions are people or marketing institutions and intermediary traders involved in distributing cayenne pepper from producers to end consumers; (9) Payment system is a method used in the corn payment process, either directly or indirectly. **Data Collection Technique:** Data collection was conducted using the survey method. In this method, interview and observation techniques were used. The interview technique is carried out by asking direct questions (direct communication) with respondents who are guided by a questionnaire, while the observation technique is data collection carried out by direct observation in the field and recording the various data needed. **Data Analysis: Marketing Channels:** Marketing channel analysis is carried out by observing the cayenne pepper marketing chain that occurs from producers to end consumers. This marketing path illustrates the pattern of marketing channels that occur. **Marketing Institutions and Functions:** Analysis of marketing institutions and functions is carried out by observing, recording and analyzing each marketing institution involved and paying attention to each marketing activity carried out by each marketing institution. **Marketing Margins:** Marketing margin analysis will be conducted quantitatively. This analysis is based on primary data collected from each marketing institution from producers to consumers. Tomek and Robinson (1990) state that marketing margin is the difference between the price paid by consumers and the price received by producers. The amount of marketing margin is influenced by the length of the marketing channel. In addition, as a measure of marketing efficiency, several indicators can be used and the calculation method of the total marketing margin (MT), the margin of each particular institution is M_i so that mathematically the following calculation will be obtained (Asmarantaka, 2014).

$$MT = Pr - Pf \tag{3.1}$$

$$MT = C_i + \pi_i \tag{3.2}$$

Thus obtained:

$$Pr - Pf = C_i + \pi_i \tag{3.3}$$

Then the amount of marketing margin by (3.1) and (3.2) are as follows:

$$MT = \sum M_i \tag{3.4}$$

Thus the margin of the i-th marketing institution level is

$$M_i = P_{ji} - P_{bi} \tag{3.5}$$

Description:

- MT = Total marketing margin
- Pr = Price at consumer level (IDR/kg)
- Pf = Farm gate price (IDR/kg)
- C_i = Trade costs at the i-th marketing institution
- π_i = Institutional benefits due to the marketing system
- M_i = Marketing margin at the i-th marketing level, i= 1,2,...,n
- P_{ji} = Sales price for the i-th marketing institution
- P_{bi} = Purchase price for the i-th marketing institution

$$MT = \frac{(Pr-Pf) \times 100\%}{Pr} \tag{3.6}$$

The criteria used to determine marketing efficiency, namely (1) said to be efficient percentage of the total margin of 0-33%; (2) said to be less efficient if the percentage is 34-67%; and said to be inefficient if the percentage is 68-100% (Amin. *Et.al.*,2016). **Farmer's Share:** Soekartawi (2002) suggested that to measure marketing efficiency, the farmer's selling price was used as the base price (Pf) and compared with the selling price of traders at the final consumer level (Pr) multiplied by 100 percent. The mathematical calculation of *farmer's share* is as follows:

$$FS = \frac{Pf}{Pr} \times 100$$

Description:

- FS = Share of price received by farmers (IDR/kg)
- Pf = Farm gate price (IDR/kg)
- Pr = Price at consumer level (IDR/kg)

Profit Distribution: To determine the distribution of profits, it is calculated using the following formula (Azzaino, 1981).

$$DK = \frac{(\pi/c) \text{ smallest}}{(\pi/c) \text{ largest}}$$

Description:

DK = distribution

π = Marketing profit

c = cost

Decision criteria: if DK is close to one, then marketing can be said to be fair. If, DK between one marketing institution and another is almost the same, it means that the profits between marketing institutions are effectively the same (fair).

III. RESULTS AND DISCUSSION

Research Findings and Discussion

The research findings and discussion will be presented as follows:

General Discussion of the Research Location

Kediri sub-district as the research location is one of the 10 sub-districts in West Lombok Regency. Administratively, the boundaries of Kediri Sub-district are (Badan Pusat Statistik Kabupaten Lombok Barat, Year 2023):

North side: Labuapi Subdistrict South side: Kuripan Subdistrict West side: Gerung Subdistrict

East side: Kuripan Sub-district and Central Lombok Regency

Kediri Sub-district covers an area of 21.64 km² or 2.35% of the total area of West Lombok District. Kediri sub-district consists of 10 villages, namely Jagaraga Indah village, Montong Are village, Kediri village, Gelogor village, Rumak village, Banyumulek village, Ombe Baru village, Dasan Baru village, and Lelede village (Badan Pusat Statistik Kabupaten Lombok Barat, 2023). The largest area in Kediri Sub-district is Rumak Village with an area of 3.23 km² or 14.93% of the total area, while the smallest area is Lelede Village with an area of 1.10 km² or 5.08% of the total area in Kediri Sub-district (Badan Pusat Statistik Kecamatan Kediri, 2023).

Table (2). Area in Kediri Sub-district, West Lombok Regency, broken down by village in 2022.

No.	Village	Area (Km ²)	Percentag (%)
1.	Jagaraga Indah	3,20	14,79
2.	Montong Are*	2,81	12,99
3.	Kediri	2,92	13,49
4.	Gelogor	1,68	7,76
5.	Rumak	3,23	14,93
6.	Banyumulek	1,33	6,15
7.	New Ombe*	1,79	8,27
8.	Dasan Baru	1,78	8,23
9.	Kediri South	1,80	8,32
10.	Lelede	1,10	5,08
Total		21,64	100,00

Description: * = Sample Village

Source: Kediri District Statistics Bureau, 2023

Characteristics of Respondents: The characteristics of respondent farmers in this study include age, education level, number of family dependents and business experience and land size. Meanwhile, the characteristics of respondent traders include age, education level, number of family dependents and trading experience. The description is presented as follows.

Age of Respondents: The age criteria for farmers and traders used in this study are, if the respondent has an age of around 15 - 64 years then the respondent is said to be physically capable of working and is included in the productive workforce. Meanwhile, respondents who have an age below 15 years and above 64 years are said not to be productive labor. In detail the characteristics of respondents based on age can be seen in **Table (3)**.

Table (3). Age Range of Respondent Farmers and Cayenne Pepper Traders in Kediri District Year 2023

No	Age Range of Respondents (Thn)	Farmers		Merchant	
		Number (people)	Percentage (%)	Number (people)	Percentage (%)
1	<15	0	0,00	0	0,00
2	15-64	27	90	23	100
3	> 64	3	10	0	0,00
	Total	30	100	23	100

Source: Primary Data

Based on Table (3). it can be seen that the age of respondent farmers and intermediary traders is mostly in the range of 15-64 years, namely 27 people or 90% of the total respondent farmers and 23 people or 100% of the total respondent traders. Thus, all respondents, both farmers and traders, are mostly of productive age (15-64 years). **Education Level of Respondents:** The results showed that the education level of respondent farmers and intermediary traders was low, with the lowest level of education being never attended school until elementary school graduation, medium education being junior high school graduation, and high education being senior high school graduation until college. The distribution of respondent farmers and intermediary traders based on education level in Kediri District can be seen in **Table (4)**.

Table (4). Education Level of Respondent Farmers and Cayenne Pepper Traders in Kediri District in 2023.

No.	Education Level	Farmers		Merchant	
		Number (org)	Percentage (%)	Number (people)	Percentage (%)
1.	Not in School	0	0,00	0	0,00
2.	SD	26	86,67	10	43,48
3.	SMP	3	3,3	2	8,69
4.	HIGH SCHOOL	1	3,33	11	47,83
5.	PT	0	0,00	0	0,00
	Total	30	100	23	100

Source: Primary Data

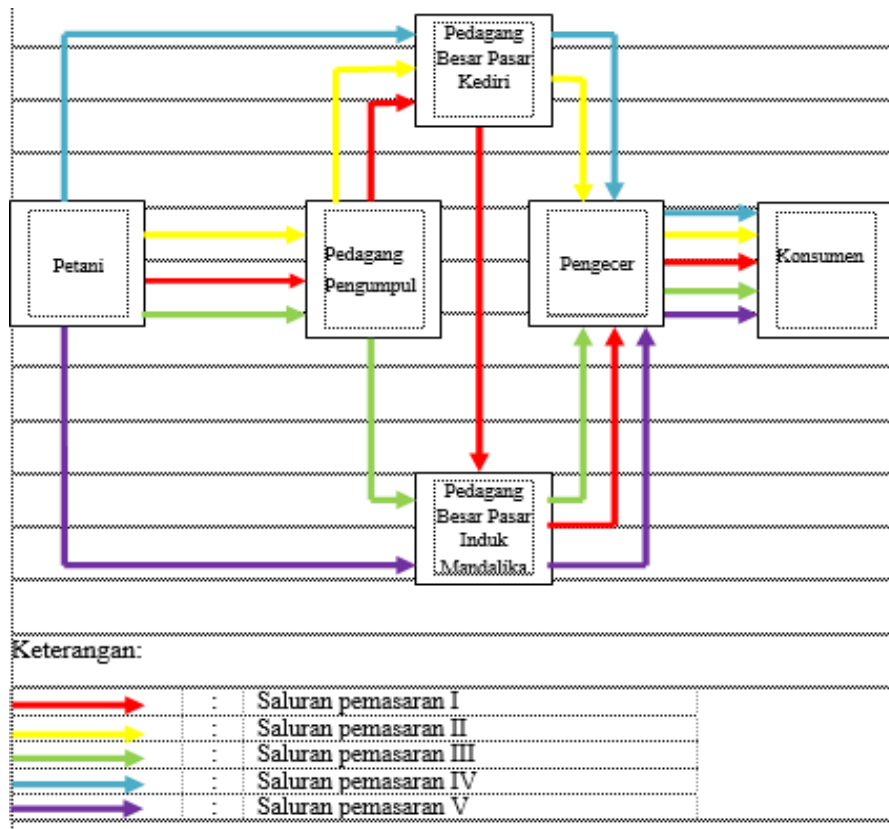
Based on Table (4). it can be seen that the average education level of the most respondent farmers is elementary school graduates with a total of 26 people or (86.67%) and the least level of education, namely graduating high school as many as 1 person (3.33%) of the overall respondent farmers. The highest level of education of traders is graduating from high school with a total of 11 people or (47.83%) and the least level of education, namely graduating from junior high school as many as 2 people (8.69%) of the overall respondent traders. It can be concluded that the average education level of respondent farmers is low because many of the farmers have graduated from elementary school (SD), while for respondent traders the average is high because many of the traders have graduated from senior high school (SMA). **Farm Business Land Area:** Land is a factor that can affect the production and income of farmers. The more extensive the farmer's cultivated land, the greater the level of production and income and vice versa, the narrower the farmer's cultivated land, the lower the production and income received by farmers. The characteristics of respondent farmers based on the area of cultivated land in Kediri District can be seen in **Table (5)**.

Table (5). distribution of respondent farmers of cayenne pepper based on the area of cultivated land in Kediri District in 2023.

No.	Area of Cultivated Land (Ha)	Number of Farmers (Org)	Percentage(%)
1	< 0,50	20	66,67
2	0,50 - 1, 00	10	33,33
3	> 1,00	0	0,00
	Total	30	100

Source: Primary Data Processed

Based on Table (5). shows that respondent farmers who have an area of cultivated land in the range of 0.50-1.00 Ha, namely as many as 10 people (33.33%). While farmers who have an area of cultivated land <0.50 Ha as many as 20 people (66.67%) of the total number of respondent farmers. **Marketing Channels:** Based on the results of the study, there are five marketing channels for cayenne pepper in Kediri District, namely: (1) Marketing channel I (Farmers - Collecting Traders - Kediri Market Wholesalers - Mandalika Main Market Wholesalers - Retailers - Consumers); (2) Marketing channel II (Farmers - Collecting Traders - Kediri Market Wholesalers - Retailers - Consumers); (3) Marketing channel III (Farmers - Gatherers - Mandalika Main Market Wholesalers - Retailers - Consumers); (4) Marketing channel IV (Farmers - Kediri Market Wholesalers - Retailers - Consumers); (5) Marketing channel V (Farmers - Mandalika Main Market Wholesalers - Retailers - Consumers). Presented in Figure (1). cayenne pepper marketing channel in Kediri District, West Lombok Regency as follows.



The five marketing channels above can be explained as follows:

Marketing channel I (Farmers - Collecting Traders - Kediri Market Wholesalers - Mandalika Main Market Wholesalers - Retailers - Consumers) The cayenne pepper marketing process in marketing channel I, farmers sell their cayenne pepper to collecting traders. Collecting traders usually sort the cayenne pepper they have bought and pack it using sacks with a volume of around 60 kg before selling it to the wholesalers in the Kediri Market. The price received by farmers is determined unilaterally by the collecting traders. The cayenne pepper collected by the intermediary traders is sent to the Kediri market using a *pick-up truck* at a cost of Rp15,000 per sack or 250/kg, where 1 sack has a volume of about 60 kg of cayenne pepper. The Kediri market is a place for several large traders to buy agricultural products so that the volume is sufficient to be forwarded to the Mandalika Bertais Main Market. From the big traders in Kediri, the cayenne pepper will be forwarded to the Mandalika Main Market. The transportation of cayenne pepper along with other agricultural commodities uses *pick-ups* at a cost of IDR 10,000/sack or IDR 166.67/kg. The wholesalers at the Mandalika Main Market do the sorting, and then pass it on to retailers to be sold to final consumers. Mandalika Main Market wholesalers only serve retailers who buy with a minimum purchase of 5-10 kg. Cayenne pepper to be sold is packed into plastic bags. The cost of packaging borne by large traders is Rp100/kg. Buyers of cayenne pepper from large traders are on average retailers in the Mataram traditional market and traveling vegetable traders. **Marketing Channel II** (Farmers - Collecting Traders - Kediri Market Large Traders - Retailers - Consumers) In marketing channel II, there is also the involvement of collecting traders in distributing farmers' crops to large traders. This occurs because farmers do not have access to sell directly to the market and farmers' yields are relatively small. Collecting traders usually come to farmers to buy cayenne pepper. Collecting traders will pay for the

farmer's cayenne pepper after one day of sales. Purchased cayenne pepper is brought to the Kediri Market using a *pick-up* truck. The total delivery cost borne by the collecting traders is IDR 10,000/sack or IDR 166.67/kg. Cayenne pepper purchased from wholesalers is packaged using plastic bags of 5 to 10 kg with a packaging cost of Rp 100/kg. **Marketing Channel III** (Farmers - Collecting Traders - Mandalika Main Market Wholesalers - Retailers - Consumers) in marketing channel pattern III, has similarities with marketing channel patterns I and II in Kediri District. Farmers sell their crops to collecting traders. The collected cayenne pepper is then transported to Mandalika Main Market by the collecting traders using a *pick-up* truck (*pickup* truck) along with vegetables harvested by other farmers. The delivery costs borne by intermediary traders in marketing channel III are greater than those in marketing channels I and II because the distance from Kediri Sub-district to Mandalika Bertais Main Market is relatively farther than that of Kediri Market. Shipping costs are greater, namely IDR 416.67/kg. Chili peppers purchased by wholesalers are then sold with a minimum sale of between 5 and 10 kg. Buyers from wholesalers are mostly retailers in traditional markets in Mataram City, and some from other districts. **Marketing Channel IV** (Farmers - Kediri Market Wholesalers - Retailers - Consumers) Marketing channel IV can only be used by farmers who have the capital to carry out delivery activities to the Kediri Market. The harvested cayenne pepper is weighed and then loaded into a *pick up* with a delivery fee of Rp 166.67/kg. After arriving at the Kediri Market, the cayenne pepper is transported to the kiosk of a large trader and weighed. After that the cayenne pepper is sorted by the wholesaler to remove damaged cayenne pepper. The farmer's harvest will be paid by the wholesaler on the same day after the unloading and weighing activities are completed. Large traders only serve traders who buy with a minimum purchase of 5 to 10 kg. Red chilies to be sold are packed into plastic bags. The cost of packaging borne by large traders is Rp100/kg. **Marketing Channel V** (Farmers - Mandalika Main Market Wholesalers - Retailers - Consumers) There are 2 (two) respondent farmers who sell their crops directly to Mandalika Main Market wholesalers. The transportation of cayenne pepper to the Mandalika Main Market wholesaler starts at 04.00 WITA with a shipping cost of IDR 416.67/kg. Large traders in channel V conduct purchasing activities not focused on cayenne pepper commodities alone, but also purchase other vegetable commodities such as shallots, garlic, green cayenne pepper, large red chili long beans, and several other commodities. Of the five marketing channels, it can be seen that the third marketing channel is the channel most widely used by respondent farmers (40%) in marketing their cayenne pepper. The channel is that farmers sell their cayenne pepper to collecting traders. Furthermore, the collecting traders sell everything to the big traders of Mandalika wholesale market. Then followed by marketing channel II, marketing channel I, marketing channel IV and marketing channel V

Marketing Efficiency: To find out the most efficient cayenne pepper marketing channel in Kediri District can be seen from several points of analysis of the cayenne pepper marketing pattern including marketing margins, *farmer's share*, and profit distribution. In addition, it can be seen from the pattern of marketing channels formed and marketing functions.

Table (6). Calculation of Marketing Efficiency in Each Marketing Channel of Cayenne Pepper in Kediri District, West Lombok Regency in 2023

Description	Marketing Channel				
	I	II	III	IV	V
Farmers					
a. Selling Price	50.00	50.00	50.00	52.00	55.00
	0	0	0	0	0
b. Marketing Costs					
PP					
a. Purchase Price	50.00	50.00	50.00		
	0	0	0		
b. Costs	400	400	566,6		
			7		
c. Advantage	1.600	1.600	4.433,		
			33		
d. Selling Price	52.00	52.00	55.00		
	0	0	0		
e. Margin	2.000	2.000	2.000		
f. π/c	4	4	7,82		
PB Kediri					
a. Purchase Price	52.00	52.00		52.00	
	0	0		0	

b. Marketing Costs	270	203,3	203,3
		3	3
c. Advantages	2.730	3.796,	3.796,
		67	67
d. Selling Price	55.00	56.00	56.00
	0	0	0
e. Margin	3.000	4.000	4.000
f. . π/c	10,11	18,67	18,67

PB

a. Purchase Price	55.00	55.00	55.00
	0	0	0
b. Marketing Costs	223,3	223,3	223,3
	3	3	3
c. Advantages	4.776,	4.776	4.776
	67	,67	,67
d. Selling Price	60.00	60.00	60.00
	0	0	0
e. Margin	5.000	5.000	5.000
f. . π/c	21,39	21,39	21,39

Retailer

a. Purchase Price	60.00	56.00	60.00	56.00	60.00
	0	0	0	0	0
b. Marketing Costs	440	320	440	320	440
c. Advantages	6.560	6.580	6.560	6.580	6.560
d. Selling Price	67.00	62.00	67.00	62.00	67.00
	0	0	0	0	0
e. Margin	7.000	6.000	7.000	6.000	7.000
f. . π/c	14,91	20,56	14,91	20,56	14,91
Total Margin	17.00	12.00	14.00	10.00	12.00
	0	0	0	0	0
Farmer's Share (%)	74,63	80,64	74,63	83,87	82,09
Profit Distribution	0,18	0,19	0,37	0,91	0,69

Source: Primary data processed

Marketing Margin: Marketing margin analysis is one of the indicators to assess marketing efficiency. The use of marketing margins as an indicator of marketing efficiency must be carried out on an *equivalent* agribusiness product marketing system (Asmarantaka 2014), so that in this study the analysis of marketing margins is differentiated based on the distance of the production location to the marketing destination. For more details of the marketing margin in each cayenne pepper marketing channel can be seen in Table (12). Marketing channel IV (Farmer→Market Big Dealer Kediri→Consumer retailer →) is the marketing channel that has the lowest marketing margin. In Table (12). it can be seen that the largest marketing costs incurred by marketing institutions in marketing channel IV (Farmer→Greater Kediri Market Trader→Retailer → Consumers) are at the retailer trader level which is Rp320/kg and at the large market trader level kediri amounting to Rp 203.33/kg. The high cost incurred by retailers is due to the high cost of labor to transport cayenne pepper from the wholesaler's stall to the retailer's stall reaching Rp 300/kg. In addition, retailers also get a relatively larger profit compared to other marketing institutions, which is Rp 6,580/kg. Similarly to what happens in marketing channel IV, in marketing channel I (Farmers → Collecting Traders→Great Traders Pasar kediri→Great Traders Mandalika Main Market→ Retailers → Consumers) it can be seen that the largest marketing costs are incurred by retailers. However, the margin owned by marketing channel I is greater than marketing channel IV. In marketing channel I, the biggest profit is taken by retailers which is Rp 6,560/kg. Based on the results of the analysis of cayenne pepper marketing margins in Kediri District, it can be concluded that the number of marketing institutions involved will affect the marketing margins obtained. **Farmer's Share:** The amount of *farmer's share* is influenced by the level of processing, transportation costs, product durability and the number of products (Kohl and Uhl 2002). A high *farmer's share* value indicates a high share received by farmers, but it does not necessarily indicate that the marketing system is efficient. The value of *farmer's share* is inversely

proportional to the marketing margin, meaning that the higher the marketing margin, the smaller the share received by farmers. The results of the *Farmer's share* analysis received by farmers in the cayenne pepper marketing channel in Kediri District can be seen in Table (6)

Profit Distribution: Profit distribution is the difference in the portion of profit of each marketing institution involved in each marketing channel. The distribution of profits in cayenne pepper marketing in Kediri District in 2023 can be seen in Table (6). shows that in marketing channel I there is a profit distribution of 0.18. In marketing channel II there is a profit distribution of 0.19, and in channel III the profit distribution value is 0.32. In marketing channel IV the profit distribution value is 0.91, and in marketing channel V the profit distribution value is 0.69. It can be concluded that the distribution of profits between each marketing institution involved in channels I, II, III, IV and V can be said to be unfair (not efficient).

Marketing Efficiency Analysis: The marketing efficiency of cayenne pepper in Kediri District can be measured using several quantitative indicators, namely by comparing the value of marketing margin, farmer's share, profit distribution, and sales volume of farmers. Efficiency analysis is done by comparing *equivalent* marketing channels, so the comparison is done by looking at marketing channels based on the distance of the production location to the market in Kediri District, West Lombok Regency.

Table (7). cayenne pepper marketing efficiency in Kediri District, West Lombok Regency.

Channe	Farmer's Share	Marketing	Profit
	(%)	Margin	distribution
I	74,63	17.000	0,18
II	80,64	12.000	0,19
III	74,63	14.000	0,37
IV	83,87	10.000	0,91
V	82,09	12.000	0,69

Source: Primary Data Processed

Based on the results of quantitative analysis of marketing channels in Kediri District, marketing channel IV is a more efficient channel compared to other channels. This is concluded based on the relatively lower marketing margin, the relatively higher value of *farmer's share*, and the value of profit distribution which is close to 1. In channel IV, it is proven that a relatively shorter marketing channel provides a higher *share* compared to a longer channel with marketing functions performed relatively the same as other marketing channels (*equivalent*). Channel IV can be an alternative for cayenne pepper farmers in selling crops because it provides a relatively higher price *share* and market assurance.

IV. CONCLUSIONS AND SUGGESTIONS

Conclusion: Based on the research objectives and the results of the discussion of marketing analysis and vertical market integration of cayenne pepper in Kediri District, West Lombok Regency, the following conclusions can be drawn: (1) There are five cayenne pepper marketing channels in Kediri that involve several marketing institutions, namely collecting traders, wholesalers, and retailers. Channel I: farmer- collecting trader-major trader of Kediri market-retailer-consumer; channel II: farmer- collecting trader-major trader of Kediri market-retailer-consumer; channel III: farmer- collecting trader-major trader of Mandalika main market-retailer-consumer; channel IV: farmer-major trader of Kediri market-consumer; and channel V: farmer-major trader of Mandalika main market-retailer-consumer. (2) The marketing function performed by most of the marketing institutions involved is to carry out the three main functions, namely the exchange function, physical function, and facility function, but the storage function included in the physical function is only carried out by retailer traders. Most sales practices use the cash payment system. At the wholesaler and retailer level, the cash payment system is used. Meanwhile, at the collector trader level, a later payment system is used. Later payments are made one to three days ahead. (3) The marketing efficiency of cayenne pepper in Kediri District is efficient because the price *share* received by farmers above 60%. This is in accordance with what is stated by Kohl and Uhl (2002), that in the marketing activities of agricultural commodities the price *share* received by farmers should be able to reach 40% or more of the price paid by consumers. Based on the results of the analysis of the marketing efficiency of cayenne pepper in Kediri District, West Lombok Regency, marketing channel IV is a relatively more efficient channel compared to marketing channels I, II, III, and V, due to relatively lower marketing margins, relatively higher *farmer's share* values, and profit distribution values that are close to 1.

Suggestions: Based on the conclusions and all discussions in this study, the following research suggestions can be given:

(1) A transparent price monitoring system is needed to help farmers and traders determine the best time to sell cayenne pepper; (2) Encourage cooperation between farmers, traders, and local governments to create policies that support price stability and market access

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