Marketing Efficiency of Beef Cattle from Sumbawa District to Lombok Island

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Abstract

The aim of this study is to analyse the efficiency of beef cattle marketing which is delivered from Sumbawa Province to Lombok Island, and to describe the marketing system. Number of sample was 46 respondence consisting of 30 farmers, 10 middleman in livestock, 1 collecting trader, and 5 slaughterers in Lombok Island. Observed variable consisted are marketing margin, farmer's share, and marketing efficiency. Data was analysed statistically. Result showed that there were 2 channels of marketing, firstly, farmer-middleman in livestock-collecting trader-slaughterer in Lombok Island-consumer; second channel was farmer-collecting trader-slaughterer in Lombok Island-consumer. The highest marketing margin found in the first channel was as much as Rp 1.517.500/cattle, and the lowest margin found in the second channel was as low as Rp 1.185.000/cattle. The highest farmer's share occurred in the first channel was as much 96.08% and the lowest was in the second channel as low as 95.09%. the second channel was the most efficient based on the efficiency index count, which was 5.78%, however the first channel was 7.62%.

I. Introduction

One of government affair in the West Nusa Tenggara was to fulfil the need in meat consumption for the society, especially in marketing channel between producer to consumer. Population of beef cattle in Sumbawa Province was 16223 cattle, so that there's suffiecient amount of cattle to be shipped from Sumbawa Province to Lombok Islands. According to records, 1299 cattle in January, 1101 cattle in February, and 998 cattle in March 2018 were shipped to Lombok Island (Anonymous, 2018). Marketing channels used could be direct or indirect from the farmer to the consumer, these channels may affect the marketing efficiency.

There was no information reported yet, the aim of this research was to find out the marketing channel of beef cattle from Sumbawa Province to Lombok Island.

II.   Material and Method

Research was done in May to June 2018, and the location was in Sumbawa Province and Lombok Island that was chosen by purposive method.

The number of farmers chosen was 30, marketing foundation consisted of 10 middleman of livestock, one collecting trader, 5 businessman in Lombok Island. Variable of observation was the price of cattle from farmer, maintenance cost, marketing cost, the profit, price of cattle from the middleman, collecting trader, and price of cattle in Lombok consumer, marketing margin, and marketing efficiency.

The primary data consisted of volume and value of sale and purchase from each marketing foundation, marketing channel, the condition, structure, market diversity which originated from marketing foundation (farmer, middleman, collecting trader, and consumer in Lombok Island). Secondary data was originated from Animal Husbandry Department in Sumbawa Island.

Marketing indicator of beef cattle from Sumbawa to Lombok Island was analysed using formula from (Soekartawi, 2002).

$$Mi = Pki - Ppi = Bti + Ki$$

Mi = Marketing margin, Pki = Consumer purchase price, Ppi = Farmer's purchase price, Bti = Marketing cost, Ki = Profit of marketing agencies

To get information of farmer income in Sumbawa was analysed by farmer's share counting

$$Fs = (Pf/Pr) \times 100\%$$

Fs = Farmers Share, Pf = Farmer's selling price (Rp/kg)
Pr = Consumer's purchase price (Rp/kg).

To analyse the efficiency of marketing channel, the formula used was:

$$EP = \frac{TB}{TNP} \times 100\%$$

EP = Marketing efficiency, TB = Total of marketing cost, TNP = Total of product value. With decision rule: (a) 0 – 33% = efficient, (b) 34 – 67% = less efficient dan (c) 68- 100% = not efficient.

III.   Result and Discussion

Marketing channel

Based on the results from observations and tracing of cattle transactions from Sumbawa Province to Lombok Island, results showed there were two marketing channels involving several marketing institutions, as in Figure 1.
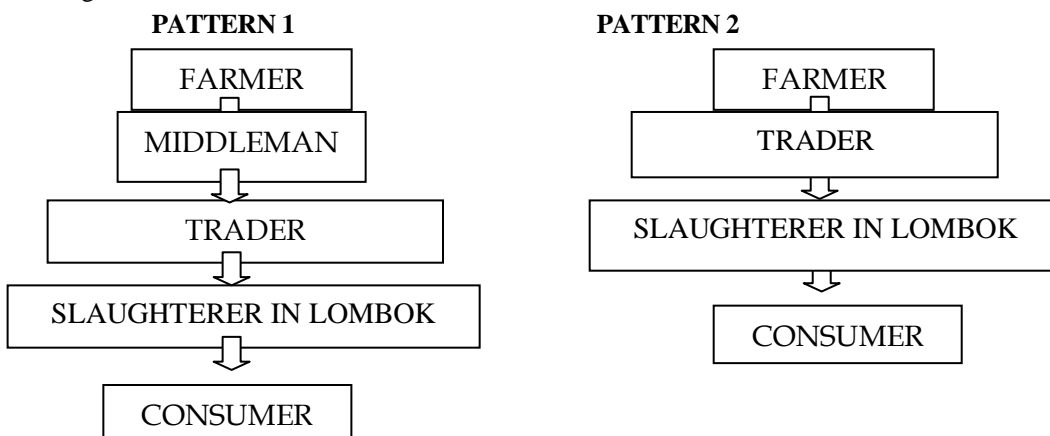

Figure 1. Marketing channel of beef cattle

Figure 1 shows that the marketing process of cattle from Masbagik District in Sumbawa Province to Lombok Island, begins with the sale of cattle by breeders to the direct market and selling directly to traders. The marketing channels for cattle in Sumbawa Province are quite varied, this can not be separated from the extensive marketing area.

The marketing factors involved in distributing cattle from respondent farmers were middleman, collecting traders and slaughterers on the island of Lombok. The marketing agents (middleman and collecting trader traders) who bought the cattle in Sumbawa District did not weigh the cattle but only by looking at their posture and skin color to know how much the meat weighs.

IV. Marketing Margin and Cost

Marketing Margin

Marketing margins were the difference between the selling price and the purchase price of cattle. The marketing margin of cattle from Sumbawa Province to Lombok Island is presented in Table 1.

The highest total marketing margins were in first channel because there were more middleman involved. Daniel (2002) reported that the longer the distance and the more intermediaries involved in marketing, the higher the marketing costs and the greater the marketing margins. The lowest margin was the second channel of marketing because it had fewer marketing agencies involved.

Marketing costs

Marketing costs were produced by the marketing agencies involved in the form of traders who gave money to Pepehani (for livestock permit management and transportation of livestock from Sumbawa Province to Lombok Island to which the location provided by collecting traders), transportation costs, information costs, feed costs and slaughtering costs for livestock. The highest marketing costs were found in the first channel marketing because there were three marketing agencies involved.

Farmer's Share

Farmers share was the percentage of prices received by farmers compared to the selling price of middleman, collective trader and slaughterer on the island of Lombok. Farmer's share in marketing activities could be used as a basis or benchmark for marketing efficiency. In other words, the small size of farmer's share would be determined by the size of the marketing margin. The greater the farmer's share, the more efficient the marketing system is (Sudiyono, 2001). Farmers share marketing of cattle in Sumbawa Province is presented in Table 3.

Marketing Efficiency

The beef cattle marketing system in Sumbawa Province was still simple, the route from producer to consumer is still long. The role of large traders and collecting traders in livestock buying and selling could cause the cattle price received by farmers to be small. It happened because farmer did not have bargaining power compared to other marketing agencies and did not have complete information about selling prices on the market. In addition, the relative distance of the marketing location from the production center allows the risk of the breeders to be known if farmers sell their livestock products directly to end consumers on the Lombok island. Whereas if you sell livestock at a farmer's residence, the farmer only faces the risk of low sales prices.

The distribution of marketing activities of cattle are carried out through two marketing channel models, namely first marketing channel involving farmers, brokers, traders, slaughterers on Lombok Island and consumers and second channel marketing that did not use the middleman. The second marketing channel was more efficient than the first marketing channel. It was because farmers sell cattle to collecting traders directly without the presence of other traders who dare to buy livestock at a higher price than the middleman (Table 4).

First marketing channel marketing efficiency I was 7.62% and second channel was II 5.78%. The most efficient marketing channel was the second channel which had a smaller efficient value of 5.78%, because less marketing agencies were involved. Every marketing agency spent marketing costs which cause marketing costs to be even greater. This result was supported by the research of (Mariyono et al. (2013); Emhar et al. (2014);

Rais et al. (2013)). They reported that the shorter the marketing channel, the more efficient the marketing is.

V. Conclusion

1. There were two channel of marketing system. The first channel consisted of farmer-middleman-collector-slaughterer-consumer, whereas the second channel consisted of farmer-collector-slaughterer-consumer.
2. The second channel of marketing system was the most efficient due to its lower marketing cost compared to the first channel.
3. Farmer's share of the first channel showed that the middleman got 92.74%, collector was 87.78%, slaughterer was 96.08%. the farmer's share of the second channel was 90.26% for the collector, and the slaughterer got 95.09%

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Table 1. marketing margin of cattle from Sumbawa Province to Lombok Island

Marketing agencies	Average of Purchase price (Rp/cattle)		Average of selling price (Rp/cattle)		Margin (Rp/cattle)	
	I	II	I	II	I	II
Farmer	-	-	10.115.000	10.985.000	-	-
Middleman	10.115.000	-	10.900.000	-	785.000	-
Collective trader	10.900.000	10.985.000	12.417.500	12.170.000	1.517.500	1.185.000
Slaughterer in Lombok Island	12.417.500	12.170.000	12.924.250	12.725.000	506.750	555.000
Total I						2.884.250
Total II						1.740.000

Table 2. Marketing cost of beef cattle from Sumbawa District to Lombok Province

Marketing Institution	Marketing Cost (Rp/cattle)	
	Channel I	Channel II
Farmer	-	-
Middleman		
1. Pepehani	-	500.000
2. Transportation cost	150.000	-
3. Sale information cost	100.000	-
4. Feed cost	-	20.000
5. Slaughtering cost	-	-
Collecting Trader		
1. Pepehani	500.000	500.000
2. Transportation cost	-	-
3. Sale information cost	-	-
4. Feed cost	20.000	20.000
5. Slaughtering cost	-	-
Slaughterer in Lombok Island		
1. Pepehani	-	-
2. Transportation cost	50.000	50.000
3. Sale information cost	-	-
4. Feed cost	15.000	15.000
5. Slaughtering cost	150.000	150.000
Total	985.000	750.000

Table 3. Farmers share marketing of cattle in Sumbawa Province.

	Farmer		Middleman		Collective trader		Slaughterer in Lombok Island	
	I	II	I	II	I	II	I	II
Buying cost (Rp)	-	-	10.115.000	-	10.900.000	10.985.000	12.417.500	12.170.000
Sale cost	10.115.000	10.985.000	10.900.000	-	12.417.500	12.170.000	12.924.250	12.725.000
Marketing margin	-	-	785.000	-	1.517.500	1.185.000	506.750	555.000
Marketing cost	-	-	250.000	-	520.000	520.000	215.000	215.000
Farmer's Share (%)	92,74	90,26	87,78	-	96,08	95,09	**-**	-

Table 4. Marketing efficiency of beef cattle between two marketing ways

Marketing way	Total of product (Rp)	Total marketing cost (Rp)	Marketing efficiency (%)
I	12.924.250	985.000	7,62
II	12.725.000	735.000	5,78