Prospect for the development of salted egg agro industry: an analysis on marketing distribution aspect

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Abstract. Marketing distribution is an important of the strategy in business development in agroindustries. The aim of the research was to introduce marketing (distribution pattern, margin and marketing efficiency) at the salted egg agro industries in Brebes Regency. Survey method had been conducted on 52 salted egg agro industries which had active PIRT certificate. The data collection was conducted by means of interview and observation. Descriptive analysis was used to determine the marketing distribution of salted eggs. Marketing efficiency was obtained by calculating marketing margin and farmer share. The results show that the salted egg agro industries implemented two marketing distribution patterns; direct marketing pattern (consumer→producers) and indirect marketing pattern (producer→retailer→consumer). The number of the salted egg agro industries which apply indirect marketing pattern is 57.69%. The implementation of direct and indirect marketing patterns was classified as efficient according to the farmer's share values of 87.13% and 78.21%. It can be recommended the direct marketing.

Keywords: efficiency, marketing margin, marketing, pattern, salted egg

1. Introduction

Competitiveness and market orientation are the factors that continue to receive attention in sustainable agricultural development. In the early 1990s, a strategy of agricultural industrialization was launched to reduce the imbalance between the growth of agricultural and industrial sector. Industrialization of agriculture is an effort to increase the added value of agricultural goods or services so as to increase the income of farmers, to be able to absorb labor, and to create new jobs [1]. One of the three principles of agricultural industrialization is rural development stimulated by agro-industry. In this principle, the importance of forward and backward linkages of industrialization process is emphasized that will accumulate generating substantial added value. The problem is that agricultural commodities are perishable, so it needs immediate handling, such as storage and processing. Producers' decision to get closer to consumers is common in primary agricultural commodities. One of livestock agro industry commodities is salted egg.

In Indonesia, Brebes Regency is known as the center of salted egg small industries because in 2004 it became the champion of sustainable development competition in the category of awareness in the

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management of small industry environment center. The object of the industrial center is Brebes salted egg. The driving factor is the potential availability of duck eggs in Brebes Regency which is the highest compared to other districts in duck egg production reaching 5,341,711 kg $\lceil 7 \rceil$. The availability of duck eggs in Brebes District varies throughout the year due to seasonal influences. In the dry season (August to October) the production of duck eggs is indicated by the price of eggs which is more expensive than that in the rainy season (November to February). The existence of local institutions has not shown optimal role so that many small entrepreneurs of salted eggs (family) get loss and/ or bankrupt. It was indicated by business uncertainty (risk) faced by craftsmen as result of long selling time (product circulation), fluctuating raw material price, and standardization of salted egg products. Long selling time allows the growth of Staphylococcus aureus and Clostridium perfringens, [11] that endanger consumers. Similarly, the marketing constraints are related to the perception of the public on the danger from excessive salt consumption. The salt content of various salted egg products may be avoided by consumers who want to reduce their salt intake (SNI-SNI Quality Standard, SNI-01-4277-1996). The tendency of reduced extensive maintenance systems in rice fields is opposed to consumer demand on salted eggs from the eggs with grazed ducks. Consumers' perception is that the price of salted egg products from the eggs with ducked ducks and grazing patterns is higher because it is preferred by consumers [8].

Salted egg agro industry in Brebes Regency is in small scale. The application of price per item varies from IDR 2,500 to IDR 3,500. 40% of the producers markets salted egg products in stores around their homes and 25% of them have no place to market[9]. The components of the curing material used depend on the scale of the business in salted egg agro industry[10]. Based on the problems, it is necessary to conduct a research with the aim of analyzing the prospects for the development of salted egg agro industry by reviewing the aspects of distribution and marketing efficiency. The benefit of this research are as a recommendation to the agroindustry of salted egg and the holder of the livestock product policy in determining the efficient marketing pattern

2. Research methods

The survey for the research on salted egg agro industry with PIRT certificate had been conducted in Brebes Regency known as a small industry center of salted eggs. The respondents consisted of producers, intermediary traders, and consumers. The number of respondents as the salted egg producers was 52 people with active PIRT certificates from 69 salted egg agro industries with PIRT certificates $\lceil 3 \rceil$. Interview method with questionnaires and observation was used for data collection, and then they were a nalyzed. Descriptive analysis was used to determine the marketing distribution of salted eggs. The analysis of marketing efficiency was conducted by calculating marketing margin and farmer's share. If farmer's share > 50%, it can be concluded as an efficient marketing; and if farmer's share < 50%, the marketing is not efficient $\lceil 4 \rceil$.

3. Results and discussion

3.1. Characteristics of salted egg agroindustry

The existence of salted egg agro industry in Brebes Regency has contributed to the regional economy with a value of IDR 12,044,700,00 from 6,882,383 eggs $\lceil 3 \rceil$. The business management is still implemented traditionally and only 23.08% of producers used business bookkeeping. It is in line with the research results of Sumekar *et al* $\lceil 9 \rceil$ that 65% of agro-industries had relatively small capital related to the purchasing ability of duck eggs of 5,000 eggs per week on average. 69.23% of salted egg agro industries had conducted their business activity based on product orientation, that is, typical salted egg product with bright yellow color in yolk.

The salted egg products were classified as having low durability. 57.70% of the manufacturers stated that the duration of preservation is < 2 weeks. Salted eggs were produced with a saltiness diversity associated with 65.38% of manufacturers who did not have information about the salinity



limit for health. Arthur $et\ al[2]$ states that consumers buy salted eggs by considering brand name, quality, preference, health and traditionality. The thing that did not become consumer consideration when buying salted egg products is the salt content.

3.2. Marketing pattern of salted eggs

The marketing pattern of salted egg agro industry in Brebes district shows 57.69% of the respondents relied on intermediaries with retail status (Table 1) It is possible because of the short duration of durability. The constraints faced by the producers in the marketing of salted eggs through intermediaries (retailers) were the indirect payment systems (waiting after salted eggs are sold) and the risk insurance was charged to the producers.

Retailer as an intermediary in marketing of salted eggs has a status as a regular customer. 36.37% of them were from out of Brebes District, 60.61% of them had low educational level (less than 9 years) which was contradictive with 100% of consumers with the educational level over 9 years. In accordance with Arthur et al $\lceil 2 \rceil$, the typical and traditional products are consumer consideration in the purchase of food

Table 1. Number of Respondents By Marketing Pattern in Salted Egg Agro Industry.

	Marketing Pattern	Number of Respondents	
No.		N	%
1.	Producer → Consumer	22	42.31
2.	Producer → Retailer → Retailer	30	57.69

3.3. Marketing efficiency in salted egg agro industry

The marketing of salted eggs in direct marketing pattern shows higher margin value (IDR 409.90 / egg) than the indirect marketing pattern (IDR 706.67 / egg) (Table 2). In accordance with Soekartawi's opinion $\lceil 6 \rceil$, the amount of marketing margin is determined by the costs incurred by the marketing agency (intermediaries) and the expected profit.

Table 2. Marketing Margin in Salted Egg Agro Industry.

		Marketing Margin	
No.	Aspects in Marketing Pattern	Price	Margin
		IDR/egg	
1.	Producer → Consumer (direct marketing pattern)	2775 00	
	Average Price in Producer Level Average Price in Consumer Level	2775.00 3184.00	409.90
2.	Producer → Retailer → Retailer (indirect marketing pattern)		
	Average Price in Producer Level	2536.67	
	Average Price in Retailer Level	2893.33	356.67
	Average Price in Consumer Level	3243.33	706.67

The value of efficiency in direct marketing pattern (producer \Rightarrow consumer) is higher than that in indirect marketing pattern (producer \Rightarrow retailer \Rightarrow consumer) as indicated from the shares received by the producers (farmer's share); 87.13% and 78.21% (Table 3). Along with the opinion of Santoso $\begin{bmatrix} 5 \end{bmatrix}$, the low farmer's share in the marketing pattern does not indicate the weak bargaining power of producers especially for the fragile food commodities.



Salt eggs agro industry in Brebes Regency has implemented an efficient marketing pattern, which is the share received by producers > 50%. Therefore, salted egg agro industry can be further developed. According Soekartawi $\lceil 6 \rceil$, marketing efficiency indicates the factors of buying and selling transactions, market competition, and competition among market participants running well

Table 3. Marketing Efficiency in Salted Egg Agro Industry.

_	Efficiency in Marketing Pattern (%)		
Efficiency Aspect	Producer → Consumer	Producer → Retailer → Consumer	
Marketing			
Margin	12.87	21.79	
Farmer's share	87.13	78.21	

4. Conclusion

It is concluded that 57.69% of salted egg agro industries in Brebes district implemented indirect marketing pattern (producer \rightarrow retailer \rightarrow consumer). The implementation of direct and indirect marketing pattern was classified as efficient that can be seen from the farmer's shares of 87.13% and 78.21% respectively.

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