MARKET DEVELOPMENT STRATEGY MODEL AND EFFICIENCY OF COST OF BROILER CHICKEN EGG FARMER BUSINESS IN JAMBI CITY

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Abstract

Animal Husbandry is a sub-sector that is a very important role in maintaining food security, because food from animal origin is a source of animal protein, as a basic need in meeting community nutrition. Broiler eggs are one of the commodities that have been favored by many people, but the selling price of eggs is currently increasing. The increase in egg prices is due to the smaller amount of egg supply and production in Jambi City. In general, the final goal of this study was to formulate a development strategy model and cost efficiency of broiler breeder business in Jambi City. Specifically, the objective is to formulate a market development strategy and cost efficiency of broiler breeders in Jambi City.

Keywords: Market Development Strategy, Cost Efficiency.

Introduction

Animal Husbandry is a sub-sector that has a very important role on maintaining food endurance, because of food from animals is a source of animal protein, as a basic necessity in fulfilling people's nutrition (Warsito, 2010). Meat, milk, and eggs are livestock food products that are very important in fulfilling nutrition the community, besides, that it is also a strategic economic commodity. Meat from Animal Husbandry is obtained from various sources, namely poultry, large ruminants, small ruminants, and another animal husbandry. Meanwhile, milk is obtained from large ruminants and small ruminants, and eggs are obtained from poultry.

Protein requirements for humans vary depending on age, type of activity and other factors. Proteins of animal origin are very important for humans because the composition of the amino acid is more balanced than vegetable protein. Besides, animal protein is an important source of minerals, a source of vitamin B 12 which is not found in vegetable products and more importantly, have a better taste. Sources of protein received by the community are found in chicken meat and eggs. Indonesia is a country that consumes low protein sources, which indicates that Indonesian people still lack protein intake, even though chicken meat and eggs are the easiest sources of protein (Suharno, 2000).

Eggs are a type of nutritious food that is very popular among the people and is one source of animal protein (Suharno, 2000). Oil is produced by poultry such as chickens, ducks, geese, etc. Most eggs supplied by laying hens are the source of animal protein from the lowest livestock at prices that can be reached by the wider community. Chicken can be raised with relatively small capital. According to Metasari (2013), the level of consumption of egg protein in Indonesia lags far behind other countries such as Japan and the United Kingdom. A large population with egg consumption of only 50 grains per capita per year is very small when compared to Japan which is 269 grains and England which reach 290 grains per capita per year. Community consumption of eggs is low due to the low amount of egg supply and production in Indonesia. One area that has a low supply of eggs is Jambi City.

Jambi City is one of the areas on the island of Sumatra, which is one of the few cities to get the number of eggs in Sumatra. The low amount of egg supply has caused the price of the melt in Jambi City to increase by around 20 percent. The low amount of egg production in Jambi causes the government to increase the supply of eggs from various regions such as Padang, Riau, and Palembang. The supply of eggs in Jambi comes from Kerinci where there is a delay in supply due to landslides in the area. The high selling price of eggs causes a low willingness of people to consume eggs, resulting in a decrease in sales at the merchant level by 50 percent.

Broiler Chicken Egg Breeders are one of the farmers who have many advantages. Broiler chicken eggs are one of the commodities that are popular with many people, but the selling price of eggs is currently increasing. The increase in egg prices is due to the smaller amount of egg supply and production in Jambi City. The small amount of egg supply and production causes traders to buy supplies from various regions to meet the needs of the people of Jambi. This is what causes traders to increase the selling price of community eggs. The selling price of eggs currently ranges from Rp. 26,000 per kilogram or Rp. 2,000 to Rp. 2,500 per item.

The high selling price and the lesser amount of egg production have caused public interest to decline for the purchase of eggs. So that some development strategies are needed which will help farmers to increase their business production. After being implemented, a few development strategy models will show the cost efficiency of selling eggs in Jambi City. So that it takes several strategies and cost effective models that support the welfare of broiler breeders. The business development strategy model is carried out by recognizing the environmental

factors of egg breeders, namely internal environmental and the external environmental factors. The results of the analysis of internal environmental factors are useful for identifying strengths and weaknesses, while the results of the analysis of external environmental factors are useful to provide an overview of opportunities and threats. After determining these factors, the best strategies will be obtained by egg farmers.

Methods

This study uses a mixed method, which is a combination of qualitative and quantitative research methods. The type of combination research used is Sequential Exploratory Design, which is in the early stages of the study using qualitative methods and the next stage using quantitative methods.

This study uses primary data and secondary data collected from several sources. Primary data were obtained from direct observations in the field and direct interviews with broiler breeders, UMKM services, buyers and employees. Data needed to be the area of location, level of productivity, sales data, employee income, production data and number of buyers. While secondary data is obtained from various government agencies or institutions that have data for this study including the Ministry of Commerce, MSMEs, and the Central Bureau of Statistics (BPS). The selection of research locations was done purposively with the consideration that the location of the study was the center of chicken eggs in Jambi. Field data collection is carried out for six months.

Descriptive statistical analysis is used to provide a descriptive or empirical description of the data collected in the study (Ferdinand, 2008). This study uses descriptive statistical analysis in the form of average statistics.
The data obtained was translated descriptively according to internal environmental analysis to determine the strengths and weaknesses faced by the company in order to compile the matrix of Internal Factor Evaluation (IFE). Whereas External Factor Evaluation (EFE) environmental analysis is used to identify opportunities and threats. The combination of the IFE and EFE matrices produces an IE matrix containing nine types of cells that show a total combination of weighted values from the IE matrix.

- **External Factor Evaluation (EFE) Matrix**

According to David (2008), the matrix External Evaluation Factor (EFE) enables strategy makers to summarize and evaluate economic, social, cultural, demographic, environmental, political, government, legal, technological and competitive information.

Table 1. Matriks Eksternal Faktor Evaluation

External Factor	Strategic	Weight	Rate	Weighted Score
Opportunity 1..... 2..... 3.....				
Threats 1..... 2..... 3.....				
Total				

Source: David 2008

- **Internal Evaluation Factor Matrix (IFE)**

The Internal Evaluation Factor Matrix (IFE) is a strategy formulation tool to summarize and evaluate key strengths and weaknesses in the functional area of the business. After gathering all the information that affects the continuity of the company, the next stage is the matching stage by utilizing all of the information. The model that can be used as an analysis tool is the SWOT matrix (Strength, Weakness, Opportunities, Threats) (David, 2008). The SWOT matrix is an important analytical tool that can assist managers in developing four types of strategies, namely strength - opportunity strategies (SO Strategies), weakness - opportunity strategies (WO Strategies), weakness strategies - threats (WT Strategies) and strength - threat strategies (ST Strategies).

Intensive strategies (market penetration, market development, and product development) or integrative (backward integration, forward integration, and horizontal integration) can be most suitable for these divisions. Second, divisions included in cells III, V, or VII can be managed in the best way with a guard and maintain strategy, market penetration and product development are two strategies commonly used for this type of division.

Third, recommendations that are commonly given for divisions included in cells VI, VIII, and IX are harvested or divested.

		TOTAL SCORE INTERNAL FACTOR EVALUATION		
		STRONG	AVERAGE	WEAK
		3,0 - 4,0 3,0	2,0 - 2,99 2,0	1,0 - 1,99 1,0
	HIGH 3,0 - 4,0	I	II	III
TOTAL SCORE EXTERNAL FACTOR EVALUATION	MEDIUM 2,0 - 2,99 2,0	IV	V	VI
	LOW 1,0-1,99 1,0	VII	VIII	IX

Source : David, 2008

Figure 1. IE Matrix

A SWOT analysis is a systematic way to identify factors and strategies that describe the best fit between various alternative strategies that exist based on strengths, weaknesses, opportunities, and threats. Through this analysis, it allows users of the SWOT Matrix to determine alternative strategies based on a combination of internal and external factors.

PERFORMANCE FACTORS	Enhancers	Inhibitors
Internal	**STRENGTHS** List of all the valuable resources that an organization can use to exploit the external environment	**WEAKNESSES** List of all the resources that an organization requires to perform in the external environment
External	**OPPORTUNITIES** List of all the possibilities that an organization can pursue or exploit to gain benefit	**THREATS** List of all the factors that have the potential to reduce an organization's performance

Source: David (2008)

Figure 2. SWOT Matrix

Result and Discussions

In the stage of market development strategy, there is a strategic management process consisting of several stages, namely the strategy formulation stage consisting of the mission development stage, external and internal environmental audits, determination of long-term goals to the making and selection of strategies. The strategy implementation phase consists of the stages of policy setting and annual goals and resource allocation. The strategy evaluation phase includes the stages of measuring and evaluating performance, (David, 2006). The marketing mix can be used to examine the internal and external environment in business. Based on the results of the study, it was found that the marketing mix of broiler breeders consisted of products (products), price (price), place (place) and promotion (promotion).

The product, breeders of chicken eggs have produced good quality of chicken eggs. Egg breeders have selected eggs to be sold on the market. The eggs were cracked apart for specific buyers with a lower selling price, so the eggs sold on the market consist of quality and consumable eggs.

Price, determination of selling prices for broiler eggs always follows the prevailing market prices. The population of Jambi City as one of the most consumers of broiler eggs compared to the surrounding districts has an impact on the selling price of chicken eggs themselves so that when demand is high, the price of broiler eggs will have a significant effect.

Place, the marketing carried out by the race chicken breeder is located in Jambi City. The location of Jambi City itself has a strategic marketing location because it has many traditional markets and modern markets.

Promotion, the broiler breeders do not carry out promotions and sales of broiler eggs due to information obtained from mouth to mouth through regular customers or permanent manufacturers.

- **Internal Environmental Analysis**

Management, management has an important role to assist in an effort to deal with competitors and develop to become a larger scale business.

Finance, the capital needed by breeders in Jambi City ranges from an average of Rp. 40,000,000 - Rp.70,000,000. Capital comes from own capital and some come from KUR loans and cooperatives.

Production and Operations, the production amount of chicken eggs based on the latest data from the Jambi City Statistics Agency reached 2,818,750 kg in 2016, the amount of production is still below the demand of consumers which reached nearly 3,452,200 in 2016 so that to meet consumer demand still had to be supplied from outside Jambi City as from West Tanjung Jabung and East District.

Marketing, marketing carried out by breeders Race chicken eggs are sales to Egg supplier agents, egg traders in traditional markets, and to modern markets and local supermarkets located in Jambi City.

- **External Environmental Analysis**

Economic factors directly influence the production and demand of eggs from consumers and suppliers of eggs. Household expenditure is one of the factors that influence chicken eggs. The high consumption of the community for eggs and eggs is an alternative choice of consumers to consume the cheapest protein compared to other commodities so that the business of broiler egg farming has a role in economic change.

Social, cultural, demographic and environmental factors shape the way people live, work, produce and consume. These factors create a need for different products, services, and strategies. Population growth is one of the things that can affect a business.

Political, governance and legal factors represent major opportunities or threats for small organizations and large organizations. As for changes in the law, it provides an illustration of patent rights, laws, tax rates, and lobbying activities that can influence the company. The government has collaborated with broiler breeders in promoting the business in product promotion activities in Jambi Province's agriculture and livestock services.

Technological advances will affect products, services, markets, suppliers, distributors, and competitors. Broiler breeders do not use special technology in the production process or in sorting egg quality due to the empowering of HR personnel.

Based on the results of interviews with business owners, there were many competitors of broiler breeders, both those who directly and differently product commodities, so that consumers preferred not only to consume chicken eggs, such as domesticated chicken breeders, ducks, quails, and others.

- **Market Development Strategy**

Strength (Strength) :
1. Quality of Chicken Egg Products
2. Pricing
3. Collaboration between Broiler Breeders and Home Industries and Large Agents

Weaknesses (Weaknesses) :
1. Promotional activities have not been maximized
2. Low Production Level
3. Marketing of eggs in certain segments

Opportunities :
1. High demand for Ras Chicken Eggs
2. Support from the government

Threat (Threats**) :**
1. The existence of similar business competitors
2. Human resource capabilities are still low.

- **Internal Factor Evaluation (IFE) matrix**

The weighting and rating of internal factors, namely the strengths and weaknesses of the broiler eggs farmer, are formulated in the IFE matrix.

Table 2. Results of IFE Matrix Analysis

No	Internal Strategy Factor	Weight	Rate (B)	Score(AxB)
	Strength			
1.	Product quality of broiler chicken egg	0,268	4,00	0,826
2.	Pricing	0,125	3,00	0,472
3.	Collaboration between farmers and several business partners	0,196	3,50	0,627
	Weakness			
1.	Promotional activities have not been maximum	0,114	1,00	0,109
2.	Production level	0,150	1,00	0,257
3.	Marketing product in specific segments	0,145	1,50	0,219
	Total	1,000	14,00	2,510

In Table 1, the total score of the IFE matrix is 2.510. The main strength of the breeders is the chicken eggs with a score (0.826). The main disadvantage is that there are no maximal promotion activities (0.109).

- **External Factor Evaluation (EFE) Matrix**

Giving weight and rating to external factors in the form of opportunities and threats. Determining opportunities and threats is formulated in the EFE matrix.

Table 3. Results of EFE Matrix Analysis

No	External Factor Strategy	Weight (A)	Rate (B)	Scor (AxB)
	Opportunity			
1.	Demand for Eggs Broiler Chicken	0,427	4,00	0,951
2.	Support from the government	0,167	3,50	0,648
	Threat			
1.	The Existence of similar business competitors	0,261	3,00	0,662
2.	Human resource capabilities are still weak	0,145	1,50	0,245
	Total	1,000	12,00	2,506

In Table 2, the total score of the EFE matrix is 2.506. This value shows that broiler breeders can be said to be able to benefit from external opportunities and avoid the threats that confront them.

- **Internal-External (IE) Matrix**

The IE matrix map can be seen in Figure 1 below.

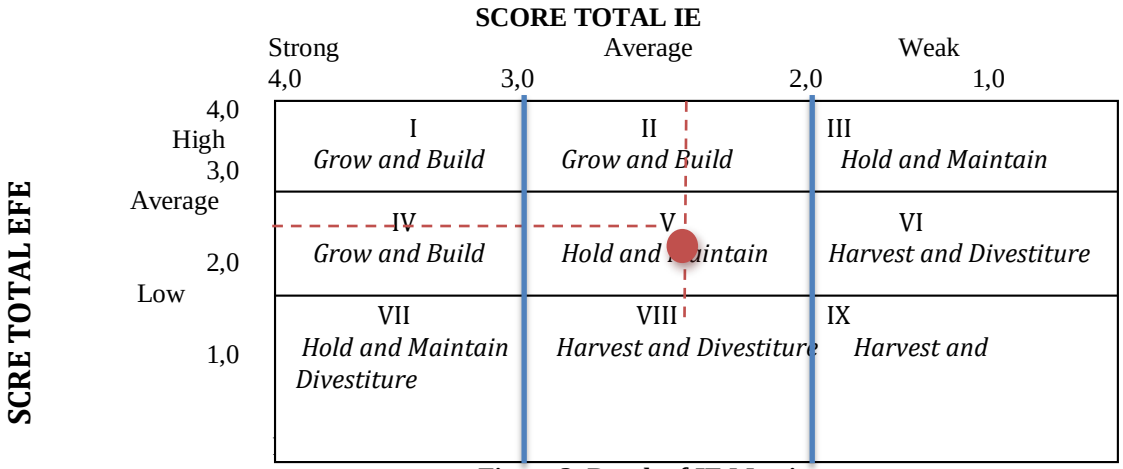

Figure 3. Result of IE Matrix

Based on the picture above, it can be seen that the race chicken breeders are in the Hold and Maintain position (maintain and maintain). Internal and external factors obtained, breeders must maintain the quality of chicken eggs, this method can be done to maintain the demand for race chicken eggs and the trust of business partners and consumers, while what must be maintained by breeders is the demand for chicken eggs race.

• SWOT Matrix

The alternative strategy that will be carried out by the race chicken breeders obtained from the IE matrix is then developed into the SWOT matrix. The alternative strategy can be seen in Figure 3.

Internal Analysis / External Analysis	Strong (S)	Weakness (W)
	1. Eggs Product Quality 2. Transparency Pricing 3. Collaboration between farmers and several business partners	1. Promotional activities have not been maximum Tingkat Produksi 2. Marketing product in specific segments
Opportunities (O) 1. Demand for Eggs Broiler Chicken 2. Support from the government	Strategy S-O 1. Maintaining the quality of chicken eggs 2. Maintaining the demand for chicken eggs (S1, S2, S3, O1, O2)	Strategy W-O 1. 1. Increase the level of egg production (W2, O1, O2) 2. Increasing promotional activities for sales (W1, W3, O1, O2)
Threat (T) 1. The Existence of similar business competitors 2. Human resource capabilities are still weak	Strategy S-T Expanding Egg marketing network (S1, S3, S4, T1, T2)	Strategy W-T Increase promotion and production activities (W1, W2, T1, T2)

Figure 4. A result of SWOT Matrix Analysis

Based on the SWOT analysis of strengths, weaknesses, opportunities, and threats from broiler breeders, five alternative strategies were obtained, namely (1) Maintaining the quality of race chicken eggs (S-O Strategy), the quality of chicken eggs is one of the important things from the egg business. The quality of chicken eggs can be improved by always maintaining hygiene after harvesting eggs. In addition, eggs can also be sorted or dated each post-harvest egg to find out the proper period of consumption; (2) Increasing promotional activities for sales (W-O Strategy), factors due to considering eggs as commodities included in the basic ingredients that are often consumed by the community make a promotion felt not. Increased promotion will have a positive impact on broiler breeders in expanding market share; (3) Increase egg production (W-O Strategy), One alternative that can be done to increase production can be by getting additional sources of capital for farmers through KUR and Micro Credit; (4) Expanding the marketing network of chicken eggs (S-T Strategy), expanding network marketing can be done by race chicken breeders by collaborating with several partners both in the city and outside the city of Jambi; (5) Increase promotion and production activities (W-T Strategy), opening a business unit is an alternative

for Broiler Egg Breeders. Opening a business unit is intended to have branches and resellers specifically for egg sales to increase sales so that the race chicken egg business can develop.

- **Cost Efficiency**

Table 4. Average Total Production Costs of Broiler Chicken Eggs in Jambi City Period January - April 2018

No	Description	Total	Total Unit Price (Rp)	Total Investment value	Total Cost Production/4 weeks (Rp)
Fixed Cost					
1	Broiler Chicken(Pallet)	9721 / pcs	45.000	437.445.000	21.872.250
Total Fixed Cost					**21.872.250**
Variable Cost					
1	Chicken Food	5000 kg	5.200		26.000.000
2	Other Cost	-			16.800.000
Total Variable Cost					**42.800.000**
Total Variable Cost					**64.672.250**

Based on the results in table 1, the average production costs needed to produce chicken eggs are 64,672,250 for 4 weeks. Calculation of production costs must pay attention to the number of fixed costs and variable costs.

Table 5. Average Total Revenue for Sales of Race Chicken Eggs in Jambi City Period January - April 2018

No	Description	Total	Unit Price	Total/4 weeks (Rp)
1	Broiler Chicken Eggs	95.764/ pcs	2.150	205.892.600
Total Revenue				205.892.600

Based on the results of table 5, it is known that the average total income generated by breeders is Rp. 205.892.600, if calculated the value of cost efficiency, the output produced is still greater than the total costs incurred (input), which is equal to Rp. 64,672,250. To calculate how much efficiency in the race chicken breeding business, the following calculation

Table 6. Calculation of Cost Efficiency

No	Description	Total (Rp)
1	Input (Total Production Cost)	64.672.250
2	Output (Revenue)	205.892.600
Cost efficiency = Input/Output		3.18

From the results of table 4, it is known that cost efficiency can still be done by broiler breeders in Jambi City at 0.69, this is because the value of put out or total income is still greater than the input value or the total cost of production.

Conclusions

The results of the analysis of the internal environment with the IFE matrix showed that the race chicken farmer business had a strong internal position with a score of 2.510. The results of the analysis of the external environment with the EFE matrix of the position of the Broiler Eggs are above average with a value of 2.506. Analysis of the IE chicken breeder egg matrix is in the Hold and Maintain V quadrant position (maintain and maintain). The results of the calculation of cost efficiency through the calculation phase of total production costs and total income can still be done by broiler breeders in Jambi City of 0.69, this is because the value of put out or total income is still greater than the input value or total production cost.

Recommendations

Broiler chicken breeders must be able to maintain the quality of race chicken egg products in order to maintain high demand levels, breeders must increase promotional activities for sales and expand the marketing network of broiler eggs by collaborating with business partners.

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