



Market Opportunities and Marketing Strategies in Layer Chicken Farming Business (Case Study: Egg Business in Bengkol Subdistrict, Manado City, North Sulawesi)

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ARTICLE INFO

Keywords: Laying Hen, Development Strategy, SWOT Analysis

Received : 12, December

Revised : 15, January

Accepted: 20, February

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ABSTRACT

Livestock farming is one of the crucial aspects of agricultural development. The role of the livestock subsector in agricultural development is significant, with one of the important products being the production of eggs and broiler chickens. Egg consumption in Indonesia has been increasing over the years, leading to an increase in egg production. This research aims to formulate development strategies using a descriptive analysis method. Data collection is done through questionnaires, interviews, and a review of literature related to the research. Data analysis utilizes the SWOT analysis method (Strengths, Weaknesses, Opportunities, Threats) to identify internal factors (strengths and weaknesses) and external environmental factors (opportunities and threats). The results of this analysis are then depicted in the SWOT quadrant and interpreted in the SWOT matrix. The research findings indicate an identification value of 3.3 for internal factors and 3.23 for external factors, suggesting that the development strategy for Ellen Farm's laying hen in Bengkol Village, Mapanget District, falls into quadrant I. This implies an intensive market strategy, including market penetration, market development, and product development.

INTRODUCTION

Indonesia is an agrarian country that produces various agricultural commodities. The contribution of the agricultural sector to Indonesia's Gross Domestic Product (GDP) is significant. In 2014, the contribution of the agricultural sector, including crops and livestock, was 5.44%, horticulture crops 4.19%, food crops 0.24%, and plantation crops 5.83% (BPS, 2014). In the overall economic sector's contribution to GDP, the livestock subsector ranks second, with the plantation crops subsector being the first.

Given Indonesia's abundant resources, the livestock subsector still has the potential for further growth and a more significant contribution to the country's economic development. The livestock subsector is a highly promising part of agriculture that can be developed. The contribution of the livestock subsector to Indonesia's agriculture depends on the ability of the actors in this subsector to develop their livestock businesses. In connection with this, the livestock subsector expected to be developed in the future is anticipated to produce competitive products in the market.

In North Sulawesi, egg production has increased due to the growing market demand for eggs, leading to an increased interest in starting layer chicken farming businesses. The following table shows the increasing egg production in North Sulawesi each year.

Table 1. Egg Production in North Sulawesi 2014 - 2017

Year	Egg production (Kg)
2014	9.948.573
2015	10.453.301
2016	10.968.526
2017	10.597.825

Source: BPS North Sulawesi Province (2018)

The demand for eggs is increasing, leading to many individuals opening layer chicken farming businesses. Despite the increasing potential in layer chicken farming, there are challenges hindering the business, such as limited capital and the inability to meet customer demand. Therefore, an analysis of the strengths, weaknesses, opportunities, and threats in layer chicken farming businesses, particularly in Manado, is necessary.

Ellen Farm is one of the layer chicken farming businesses located in Bengkol Subdistrict. Ellen Farm produces 6,930 eggs per day or 231 trays. The eggs from Ellen Farm are marketed in various places in Manado, such as Karombasan market, Tomohon market, Bersehati market, Cella Bakery, and Pondok Hijau Restaurant. They are also marketed outside the region, such as in Ternate City, with 700 trays every two weeks. This business has been running for a considerable time and has a relatively high profitability. The condition of Ellen Farm indicates potential for further development, as evidenced by the demand for eggs from consumers. This is seen as an opportunity in the layer chicken farming business. This is what motivates the owner to persist in the

business and intend to expand it. The aim of this research is to determine the business strategy for layer chicken farming at Ellen Farm in Manado.

TEORETICAL FRAMEWORK

In 2014, the contribution of the agricultural sector, including crops and livestock, was 5.44%, horticulture crops 4.19%, food crops 0.24%, and plantation crops 5.83% (BPS, 2014). In the overall economic sector's contribution to GDP, the livestock subsector ranks second, with the plantation crops subsector being the first.

Given Indonesia's abundant resources, the livestock subsector still has the potential for further growth and a more significant contribution to the country's economic development. The livestock subsector is a highly promising part of agriculture that can be developed. The contribution of the livestock subsector to Indonesia's agriculture depends on the ability of the actors in this subsector to develop their livestock businesses. In connection with this, the livestock subsector expected to be developed in the future is anticipated to produce competitive products in the market.

METHODOLOGY

This research was conducted at Ellen Farm in Bengkol Subdistrict, Manado City, for 3 months (July - September 2018) research, utilizing both primary and secondary data. Primary data were obtained through observation and interviews with the business owner, while secondary data were gathered from relevant books and literature related to the research. The observed variables in this study are:

2.1 Internal Factors

- a) Strengths (Strength)
- b) Weaknesses (Weakness)

2.2 External Factors

- a) Opportunities (Opportunity)
- b) Threats (Threats)

The data analysis method employed in this research is SWOT analysis, where data and information will be qualitatively analyzed. Qualitative analysis in this study is used to identify internal factors, including strengths and weaknesses, as well as external factors, including threats and opportunities.

2.3 Internal and External Environment Analysis

2.3.1 Internal and External Environment Analysis

The internal and external environmental analysis of the company utilizes two different matrices, namely the Internal Factor Analysis Strategy (IFAS) matrix and the External Analysis Strategy (EFAS) matrix.

1. Internal Strategic Factor Analysis Summary (IFAS) Matrix

The Internal Strategic Factor Analysis Summary (IFAS) is a strategy formulation tool used to summarize and evaluate the main strengths and weaknesses in functional business areas. It also

provides a basis for identifying and evaluating relationships between these areas (David, 2006).

The steps in identifying internal environmental factors in the IFAS matrix are as follows:

- 1) Major internal factors are identified in the internal audit process.
- 2) Assign weights ranging from 0.0 (not important) to 1.0 (very important) to each factor. The weights given to each factor indicate the relative importance level of the factor to the company's success in the industry. The total weight assigned must add up to 1.0.
- 3) Assign rankings from 1 to 4 for each factor to indicate whether the factor represents a major weakness (rank = 1), a minor weakness (rank = 2), a minor strength (rank = 3), or a major strength (rank = 4). Note that strengths should receive a rank of 3 or 4, and weaknesses should receive a rank of 1 or 2. Therefore, rankings are based on the company, while weights are based on the industry.
- 4) Multiply each factor's weight by its rank to determine the weighted average for each variable.

Then sum the weighted averages for each variable to determine the total weighted average, which is 2.5. A total weighted average below 2.5 depicts an organization as weak internally, while a total value above 2.5 indicates a strong internal position

2. External Factor Analysis Strategy (EFAS) Matrix

The External Factor Analysis Strategy (EFAS) is used to identify external factors related to opportunities and threats considered significant for a business. External data is collected to analyze issues related to economic, social, cultural, demographic, environmental, political, governmental, legal, technological, and competitive aspects (David, 2006). The steps in identifying external environmental factors in the EFAS matrix are as follows:

- 1) List external factors identified in the external audit process.
- 2) Assign weights ranging from 0.0 (not important) to 1.0 (very important) to each factor. The weights indicate the relative importance level of the factor to the company's success in the industry. The total weight assigned must add up to 1.0.
- 3) Provide rankings from 1 to 4 for each key external factor regarding how effective the company's current strategy is in responding to these factors, where 4 = superior company response, 3 = above-average company response, 2 = average company response, 1 = poor company response. Rankings are based on the effectiveness of the company's strategy, while weights are based on the industry.
- 4) Multiply each factor's weight by its ranking to increase the weighted value.

- 5) Sum the weighted values for each variable to determine the total weighted value for the organization. The highest weighted value is 4.0, and the lowest weighted value is 1.0. The total average weighted value is 2.5. A total weighted value of 4.0 indicates that the organization responds very effectively to the opportunities and threats in its industry. In other words, the company's strategy effectively capitalizes on current opportunities and minimizes the potential effects of external threats. A total value of 1.0 indicates that the company's strategy does not capitalize on opportunities or avoid external threats.

RESULT AND DISCUSSION

Product Identification at Ellen Farm

The main products produced by the layer chicken farm Ellen Farm are eggs, along with some by-products such as cull chickens and chicken manure. Cull chickens are sold in the market at a lower price, while chicken manure is sold to flower farmers to be used as compost fertilizer. The eggs produced are usually separated between intact eggs and cracked eggs. This separation ensures that the eggs sold to consumers are of good quality. Additionally, cracked eggs can also be sold, but at a lower price. Intact eggs are those that are not broken or cracked during the transfer process, while cracked eggs are categorized into wet cracked eggs and dry cracked eggs. Wet cracked eggs are those with cracks where the egg white moistens the shell, while dry cracked eggs are those where the egg white remains intact and does not moisten the shell. Intact eggs and cracked eggs, whether wet or dry, are stored in separate locations.

Identification of Internal and External Factors at Ellen Farm

Based on observations and research at Ellen Farm, the identification of internal environmental analysis (strengths, weaknesses) and external environmental analysis (opportunities, threats) is as follows:

Table 2. Identification of SWOT Ellen Farm Business

No	Strengths (S)	Weakness (W)
	<ul style="list-style-type: none"> • Utilizes its own feed milling. • Has a large land area. Competitive market pricing. Produces high quality eggs. 	<ul style="list-style-type: none"> • New entrants in the industry. • Layer chickens are susceptible to stress. • Suboptimal promotional efforts. • Unprofessional employees.

	Opportunity (O)	Treats (T)
	<ul style="list-style-type: none"> • High market demand for layered chicken eggs. • Easy market access. • Has a stable distribution network. • Increasing public awareness of nutritional needs. 	<ul style="list-style-type: none"> • Increase in fuel prices. • Ease of customers switching to other farmers. • Numerous similar businesses as competitors. • Susceptibility to diseases.

Internal Business Factors

1. Strengths

- a) Utilizes its own feed milling, allowing cost savings by avoiding the need to rent feed milling services for livestock feed such as corn.
- b) Has a large land area, enabling the addition of more cages to increase egg production to meet customer demand.
- c) Offers market-appropriate pricing. The egg prices are affordable and aligned with market rates, though they may fluctuate based on market developments and fuel price increases.
- d) Produces high-quality eggs. The eggs produced by Ellen Farm exhibit excellent quality and cleanliness, allowing the farm to compete effectively with other producers.

2. Weaknesses

- a) Suboptimal promotion. While the company has engaged in word-of-mouth promotion through existing customers, it has not utilized social media for broader promotion, posing challenges in expanding the reach of its product.
- b) Unprofessional employees in performing tasks, rules, and responsibilities set by the company owner. When the owner is not present, deviations from company guidelines, such as improper feeding of chickens, can negatively impact reproductive performance.
- c) New entrants in the industry. Limited knowledge and experience in managing layer chicken farming may pose challenges for the business in competing with more established players.
- d) Susceptibility of layer chickens to stress, leading to potential negative effects on productivity and even mortality.

External Factors Opportunity

- a. High market demand for layer chicken eggs. According to data from the Central Statistics Agency (2021), the average per capita egg consumption has been increasing annually, leading to a high demand

for eggs. This trend has encouraged many new entrepreneurs to enter the layer chicken farming business due to the unmet demand for eggs from the public.

Table 3. Average per capita egg consumption over the last 6 years

Eggs	Year	2015	2016	2017	2018	2019	2020
	Unit (Kg)	1,940	1,983	2,119	2,152	2,154	2,156

Source: BPS (2021)

- b. Increased awareness of the community regarding nutritional needs, a factor that has risen due to heightened awareness of the need for protein. Eggs are considered one of the protein sources required by the human body. Consequently, many people consume eggs. According to data from the Central Statistics Agency, the average daily per capita protein consumption has been increasing every year.
- c. Having a reliable distributor, with the distribution point being in Ternate.
- d. Easy market access, entrepreneurs need to understand market access to comprehend the importance of product quality and enhance the demand for their production. This understanding is crucial for entrepreneurs to follow procedures and sell products in the market.

2. Threats

- a. Increase in fuel prices may impact the rise in the prices of feed, medicines, vitamins, and eggs themselves, thereby affecting income and reducing egg production.
- b. Ease of customers switching to other farmers, as there are numerous layer chicken farming businesses. Thus, maintaining egg quality and service is crucial to prevent customers from easily switching to other farmers.
- c. Susceptibility to diseases is a threat, such as reduced appetite, grayish spots on the chicken's comb, and discharge from the eyes.
- d. Numerous similar businesses as competitors, as layer chicken farming businesses have been increasing yearly. Therefore, there is a need for new innovations to compete with similar businesses from competitors and remain sustainable.

3. Business Development Strategy Formulation

After identifying the internal factors, strengths, weaknesses, and external factors, opportunities, threats at Ellen Farm, the IFAS and EFAS matrices are formulated as follows:

IFAS Matrix Analysis**Table 3. IFAS Analysis**

No	Internal strategy factors	weight	Rating	Score
A	Strenghts			
1	Using feed milling	0.20	4	0,8
2	Having a large land area	0.20	4	0,8
3	Having competitive market pricing	0.14	3	0,42
4	Producing good-quality eggs	0.10	3	0,3
B	Weaknesses			
1	Unprofessional employees	0.14	1	0,14
2	Business actor is a new player	0.15	2	0,3
3	Layer chickens prone to stress	0.14	2	0,28
4	Promotion is not optimal	0,10	2	0,2
	TOTAL	1		3,3

In Table 3, it is explained that the indicators in the strength variable, such as using its own feed milling, have higher values compared to other indicators. This is because Ellen Farm minimizes expenses to avoid additional costs for renting or milling livestock feed. The IFAS matrix analysis is conducted on internal factors at Ellen Farm, divided into strengths and weaknesses. From the IFAS analysis results, the cumulative value is 3.3. This illustrates that Ellen Farm is internally strong.

EFAS Matrix Analysis**Tabel 4. EFAS analysis**

NO	External strategy factors	weight	Rating	Score
A	Opportunities			
1	Market demand for layer chicken eggs is quite high.	0,15	4	0,6
2	Has a steady supplier.	0,19	3	0,57
3	Increased awareness of the community regarding nutritional needs.	0,10	2	0,2
4	Easy market access.	0,11	4	0,44
B	Threats			
1	Numerous similar businesses as competitors.	0,12	4	0,48

2	Susceptibility to pests and diseases.	0,10	2	0,2
3	Increase in fuel prices.	0,09	2	0,18
4	Ease of customers switching to other farmers.	0,14	4	0,56
	TOTAL	1		3,23

In Table 4, it is explained that the indicators in the opportunity variable, such as the high market demand for layer chicken eggs, have higher values compared to other indicators. This is because of the high demand for eggs from the public, although it is not fully satisfied. The EFAS matrix analysis is conducted on external factors at Ellen Farm, divided into opportunities and threats. From the EFAS analysis results, the cumulative value is 3.23. This indicates that Ellen Farm responds well to existing opportunities and threats. The company's strategy effectively takes advantage of current opportunities and mitigates potential threats in the future.

IE Matrix

The IE Matrix is obtained from the average total values of the IFAS matrix, which is 3.12, and the EFAS matrix, which is 3.23.

Table 5. IE Matrix

Quadrant I 3,3 (IFAS) 3,23 (EFAS)	Quadrant II	Quadrant III
Quadrant IV	Quadrant V	Quadrant VI
Quadrant VII	Quadrant VIII	Quadrant IX

Ellen Farm Poultry business is in Quadrant I where the appropriate strategy to implement is an intensive strategy (market penetration, market development, and product development). Market development strategy is a good strategy where Ellen Farm should expand its overall market share.

3.4.2 SWOT Strategies

Various alternative strategies can be formulated using SWOT analysis. The advantage of using this model is to formulate strategies based on internal and external factors. The main strategies that can be recommended are four types: S-O, S-T, W-O, and W-T.

Table 6. SWOT Matrix

Strategy	(Strength) 1. Having a large land area. 2. Producing good-quality eggs. 3. Competitive market pricing. 4. Using its own feed milling.	(Weakness) 1. Suboptimal promotion. 2. Unprofessional employees. 3. Business actor is a new player. 4. Layer chickens prone to stress.
(Opportunities)	Strategy S-O	Strategy W-O

<ol style="list-style-type: none"> 1. Market demand for layer chicken eggs is quite high. 2. Increased awareness of the community regarding nutritional needs. 3. Having a steady distributor. 4. Easy market access. 	<ol style="list-style-type: none"> 1.1 Utilizing the existing large land by increasing the number of cages. 1.2 Maintaining egg quality to retain distributor demand and prevent them from switching to other farmers. 1.3 Maintaining competitive market pricing 	<ol style="list-style-type: none"> 1.1 Meeting high market demand and easy market access by utilizing social media. 1.2 Collaborating with relevant government entities to provide training for employees. 1.3 Building good relationships with customers.
<p>(Threats)</p> <ol style="list-style-type: none"> 1. The abundance of similar businesses as competitors. 2. Increase in fuel prices. 3. Vulnerability to diseases. 4. Ease of customers switching to other farmers. 	<p>Strategy S-T</p> <ol style="list-style-type: none"> 1.1 Increasing egg production to compete with similar products in terms of egg quality and market areas. 1.2 Maintaining the quality of products and services to prevent customers from easily switching to other farmers. 1.3 Collaborating with relevant government authorities for disease prevention and control. 	<p>Strategy W-T</p> <ol style="list-style-type: none"> 1.1 Utilizing social media for more effective promotional activities. 1.2 Obtaining a loan for improving facilities and infrastructure to compete with competitors. 1.3 Providing friendly, prompt, and professional customer service.

The strategies derived from the SWOT analysis for the Ellen Farm layer chicken farming business in Bengkol Village, Mapanget Subdistrict, include:

- 1) Utilizing the available vast land by increasing the number of cages.
- 2) Maintaining the quality of eggs to retain distributor demand and prevent them from switching to other farmers.
- 3) Maintaining prices that are in line with the market.
- 4) Responding to high market demand and ensuring easy market access through social media.
- 5) Collaborating with relevant government entities to provide training for employees.
- 6) Building good relationships with customers.

- 7) Increasing egg production to compete in terms of both egg quality and market coverage.
- 8) Maintaining product quality and services to prevent customers from easily switching to other farmers.
- 9) Collaborating with the government to control pests and diseases.
- 10) Utilizing social media for more effective promotion.
- 11) Seeking financial loans to improve facilities and infrastructure to compete with competitors.
- 12) Providing friendly, prompt, and professional customer service

CONCLUSION AND RECOMMENDATION

From the above research, it can be concluded that the appropriate business development strategy for Ellen Farm layer chicken farming is intensive strategies such as market penetration (capturing a large existing market through marketing), market development (introducing existing products to new regions), product development (increasing sales), as well as improving human resources, facilities, infrastructure, and leveraging information technology and social media.

FURTHER STUDY

Conducting a case study on layer chicken farming, specifically focusing on the egg business in Bengkol Subdistrict, Manado City, North Sulawesi, presents an opportunity to analyse the local market and develop effective marketing strategies. Here's an outline of potential market opportunities and marketing strategies for further study:

- 1) Competitive Landscape: Analyse the existing competitors in the local egg market and evaluate their strengths, weaknesses, opportunities, and threats (SWOT analysis).
- 2) Economic Factors: Consider economic factors that may affect the egg business, such as income levels, employment rates, and inflation in the region.

Marketing Strategies:

5. Product Differentiation: Explore ways to differentiate your eggs, such as organic, free-range, or specialty eggs. Highlight the nutritional benefits of your eggs compared to competitors.
6. Brand Building: Develop a strong brand identity for your layer chicken farm. Use storytelling and local elements to connect with consumers on a personal level.

ACKNOWLEDGEMENT

I would like to express my gratitude to the university and my faculty for providing extensive access for permanent faculty members to conduct research with flexible working hours. I extend my thanks to the owner of Ellen Farm for generously granting access to conduct research on their premises, and to the employees who have provided valuable information that has made this

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research meaningful. May this research contribute to the economic development of the region.

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