

Tilapia Agribusiness Development Strategy at Rahmat Fish Farm to Increase Income and Business Sustainability

Strategi Pengembangan Agribisnis Ikan Nila di Rahmat Fish Farm untuk Peningkatan Pendapatan dan Keberlanjutan Usaha

Muh Faturokhman*

Agribusiness Management Study Program, Vocational School, IPB University
E-mail: m.faturokhman@apps.ipb.ac.id

Warchito

Agribusiness Management Study Program, Vocational School, IPB University
E-mail: lec_warcito@apps.ipb.ac.id

Ayutyas Sayekti

Agribusiness Management Study Program, Vocational School, IPB University
E-mail: ayutyassa@apps.ipb.ac.id

Faisal Ali

Postgraduate Student of Management Science Study Program, Faculty of Economics and Management, IPB University
E-mail: dpisfaisal@apps.ipb.ac.id

Fauzia Noorchaliza

Postgraduate Student of Animal Bioscience Study Program, IPB University
E-mail: noorchalizafauzia@apps.ipb.ac.id

ABSTRACT

The increasing demand for fisheries commodities following the implementation of the Free Nutritious Meal (MBG) program presented both opportunities and challenges for tilapia agribusiness actors. Rahmat Fish Farm, a medium-scale enterprise in Bandung, faced managerial and technical constraints that led to supply-demand imbalance and suboptimal operational efficiency. This study aimed to formulate adaptive and sustainable development strategies for tilapia agribusiness. A descriptive approach was employed using Internal Factor Evaluation (IFE), SWOT Matrix, and Quantitative Strategic Planning Matrix (QSPM). Data were collected through field observations, in-depth interviews, and literature review. The results of the IFE analysis indicated that the company was positioned in the "Hold and Maintain" strategic quadrant. SWOT analysis generated alternative strategies focusing on strengthening internal management and partnership development. Based on the QSPM results, five priority strategies were identified: (1) improving inventory management, (2) opening a new branch in Pangalengan, (3) evaluating partner satisfaction, (4) enhancing partner capacity through training and mentoring, and (5) strengthening internal human resources. These findings provided strategic recommendations to support the sustainability of tilapia agribusiness operations.

Keywords: IFE/EFE, development strategy, SWOT analysis, Tilapia agribusiness, QSPM.

ABSTRAK

Peningkatan permintaan komoditas perikanan akibat implementasi program Makan Bergizi Gratis (MBG) mendorong peluang sekaligus tantangan bagi pelaku agribisnis ikan nila. Unit Usaha Menengah (UKM) Rahmat Fish Farm sebagai salah satu produsen utama di wilayah Bandung menghadapi kendala manajerial dan teknis yang berdampak pada ketidakseimbangan supply-demand serta efisiensi operasional yang belum optimal. Penelitian ini bertujuan merumuskan strategi pengembangan agribisnis ikan nila yang adaptif dan berkelanjutan. Metode penelitian menggunakan pendekatan deskriptif dengan alat analisis Internal Factor Evaluation (IFE), External Factor Evaluation (EFE), Matriks SWOT, dan Quantitative Strategic Planning Matrix (QSPM). Data dikumpulkan melalui observasi, wawancara mendalam, dan studi literatur. Hasil analisis IFE dan EFE menunjukkan posisi perusahaan berada pada kuadran strategi "Hold and Maintain". Analisis SWOT menghasilkan beberapa alternatif strategi berbasis penguatan manajemen internal dan pengembangan kemitraan. Berdasarkan QSPM diperoleh lima strategi prioritas, yaitu: (1)

perbaikan inventory management, (2) pembukaan cabang baru di wilayah Pangalengan, (3) evaluasi kepuasan mitra, (4) peningkatan kapasitas mitra melalui pendampingan dan pelatihan, serta (5) penguatan kualitas sumber daya manusia internal. Hasil penelitian ini diharapkan dapat menjadi dasar pengambilan keputusan strategis dalam mendukung keberlanjutan agribisnis ikan nila.

Kata kunci: Agribisnis ikan nila, Analisis SWOT, IFE/EFE, Strategi Pengembangan, QSPM.

***Corresponding author**

INTRODUCTION

As a country with vast marine potential, Indonesia is a major contributor to global fisheries production and the second-largest fish producer, both from capture fisheries and aquaculture (Agung., 2017). The Ministry of Maritime Affairs and Fisheries (KKP) recorded that Indonesian fisheries production will reach 24.5 million tons by 2024, including freshwater, brackishwater, and marine fish (BP, 2025). Meanwhile, aquaculture production figures show that four fish species with the highest production volumes in Indonesia are tilapia (1.3 million tons), catfish (1.1 million tons), milkfish (772,000 tons), and carp (483 million tons) (KKP, 2025).

Tilapia is the commodity with the highest production rate. This is in line with the increase in public consumption of fisheries in Indonesia, which increased from 57.91 kg/cap/year in 2023 to 58.91 kg/cap/year in 2024 (BPS, 2025). This data does not yet indicate an increase in fish consumption following the implementation of the Free Nutritious Meals (MBG) program. Considering the nutritional benefits of tilapia, it boasts a very high protein content, reaching 20.08 percent per 100 grams (Haditya *et al.*, 2022). This protein content meets the recommended dietary allowance (RDA) of 57 grams (Minister of Health Regulation No. 75/2013 concerning the RDA). Fish has high potential as an alternative source of protein for the community. This potential must be supported by an adequate supply.

Tilapia itself stands out as a leading commodity due to its rapid growth, adaptability to various environmental conditions, and disease resistance (Hadijah *et al.*, 2022). Tilapia cultivation is heavily influenced by strategic location and water quality, which are key success factors (Mimbar *et al.*, 2023). Significant fisheries production is inextricably linked to the support and role of local fish farmers and cultivators. Therefore, the development of aquaculture production is crucial to support the local fisheries supply chain and ensure sustainable consumption within the community. West Java is the second-largest tilapia cultivation producing province in Indonesia, producing 275,808 tons per year, after North Sulawesi Province, which reaches 418,186 tons per year (BPS, 2024). Along with this, West Bandung Regency is also a contributor to tilapia production with a production volume reaching 23,180 tons per year, while the largest production is Indramayu Regency, with 44,475 tons per year (BPS West Bandung Regency, 2024).

The MBG program, which demands increased public fish consumption, presents a significant opportunity for fish farmers, including tilapia farmers. The current level of fish consumption is not yet accurately recorded under the MBG program. However, according to information from the West Bandung Communication and Information Agency (2024), the average consumption rate in West Bandung Regency is between 36-

37 kg/capita/year. This presents a significant opportunity to increase tilapia production capacity in West Bandung Regency.

The MBG program and the resulting increase in consumption are positive signals for local farmers to increase their production levels. According to Sugriwa (2023), the number of Fishery Households (RTP) in Bandung Regency currently stands at 7,623. Rahmat Fish Farm is one of the largest biofloc tilapia farmers in Bandung Regency. Initially established to supply the local community's consumption needs, Rahmat Fish Farm has now expanded its business through 17 biofloc tilapia farming partners. Rahmat Fish Farm has the potential to become a major supplier of tilapia in West Bandung Regency, with fluctuating production averaging 2,500-3,500 quintals per month. This production fluctuation remains a challenge, resulting in excess supply and excess demand, disrupting the company's continuity and market stability. Therefore, a more structured production and management model is needed. Adanya program MBG menjadi peluang tersendiri bagi perusahaan, sehingga fluktuasi produksi tidak lagi menjadi hambatan dalam meningkatkan pemasaran dan pendapatan.

Based on the above conditions, the approach to developing tilapia aquaculture must be an integrated agribusiness system. Tilapia development using an agribusiness system approach provides comprehensive benefits because it integrates activities from upstream to downstream, thereby increasing production efficiency, added value, and the welfare of business actors. The tilapia agribusiness system has various positive impacts, such as strengthening food security, creating employment opportunities, and encouraging regional economic growth. Furthermore, this sector supports sustainable development, improves community welfare, and makes a significant contribution to the national economy (Syamsuri & Alang, 2023). The agribusiness system is beneficial for increasing income while maintaining business sustainability because businesses focus not only on production but also on the ability to identify opportunities, organize resources, strengthen market access, and build business resilience. Mukti *et al.* (2022) explain that entrepreneurial-oriented agriculture can create new economic activities, create jobs, and maintain the sustainability of the agricultural sector by exploiting business opportunities in rural areas. In the context of production, increases must also be made in line with the increasing demand resulting from the MBG program. Farmers can collaborate with partners to increase production. According to Oktami *et al.* (2024), increasing the role of partners in tilapia cultivation will also significantly contribute to farmer welfare and the community economy.

Efforts to increase production scale and capacity require business preparation, including capital, resources, and management. Good managerial support will create a sustainable business unit and foster a strong partnership system that can meet market needs. Therefore, a business development study at Rahmat Fish Farm is crucial for creating alternative sustainable corporate development strategies. This study aims to identify problems and potential for Rahmat Fish Farm business development and to develop alternative business development strategies.

RESEARCH METHODS

The types of data used are primary and secondary. Primary data is a data source that provides data directly to the data collector (Sugiyono, 2016). Some techniques that can be used to collect primary data include observation, interviews, active participation, and documentation. Secondary data is data obtained or collected by researchers from various

existing sources (the researcher acts as a secondhand source). Secondary data is obtained from various sources such as books, company reports, scientific journals, and so on.

This research uses a qualitative and quantitative descriptive approach with a case study at Rahmat Fish Farm, located in Cimaung District, Bandung Regency, West Java. The sampling technique was purposive sampling, considering parties directly related to business management and strategic decision-making. Respondents in this study consisted of the business owner and all 10 internal employees of Rahmat Fish Farm. In addition, supporting informants came from cultivation partners and other related parties to strengthen the research information.

Descriptive Analysis

Descriptive analysis is a method used to describe or analyze the results of a study, but not to draw broader conclusions (Sugiyono, 2017). Descriptive analysis involves collecting data based on actual conditions to provide a comprehensive picture of Rahmat Fish Farm's performance, including the company's history and development, various aspects of the company, business units, and a review of the business environment.

IFE (*Internal Factor Evaluation*) and EFE (*External Factor Evaluation*) Analysis

The Internal Factor Evaluation (IFE) Matrix is a strategy formulation tool used to summarize and evaluate key strengths and weaknesses across various functional areas of a business. Furthermore, the IFE also provides a basis for identifying and assessing the relationships between these functional areas (Ningsih & Hamamah, 2014). The External Factor Evaluation (EFE) Matrix is used to assess external factors related to opportunities and threats deemed significant to a company. The EFE matrix is calculated based on the ratings and weights assigned to each factor (Astuti & Ratnawati, 2020).

The weighting scores were determined through a questionnaire administered by all employees and company owners. This assessment was based on the level of importance on a scale of 1-4 (1 = very unimportant, 2 = influential, 3 = very influential, 4 = very influential). These scores were then processed by comparing the scores for each factor with the overall cumulative scores for both the IFE and EFE. The weighting scores ranged from 0.0 (not important) to 1.0 (very important) for each factor. All weights totaled 1.00. Therefore, the weights indicated the relative importance of the factor to the company's success.

The rating score is a comparison of each factor's score with the number of respondents. Rating scores range from 1-4, indicating how effective the company's strategy is in responding to that factor: 4 = very strong response, 3 = above average response, 2 = adequate response, and 1 = weak response. The assessment categories in the IFE and EFE matrices refer to a total weighted score, namely: a score of 1.0–1.99 indicates a low/weak condition, a score of 2.0–2.99 indicates a moderate condition, and a score of 3.0–4.0 indicates a high/strong condition. In the IFE matrix, these categories describe a company's ability to leverage its strengths and overcome its internal weaknesses. Meanwhile, in the EFE matrix, these categories are used to assess a company's ability to respond to external opportunities and threats.

SWOT Analysis

A SWOT analysis is a systematic, organized tool for identifying factors used to design a company's strategy. It is a tool used to evaluate an organization's internal and external environments, thus aiding in formulating appropriate strategies to achieve competitive advantage. According to Suriono (2021), a SWOT analysis is a process for finding a strategic fit between the opportunities in the company's external environment

and its internal environment, while simultaneously taking into account various external threats and internal weaknesses. A SWOT analysis is conducted by identifying the company's internal (strengths and weaknesses) and external (opportunities and threats) factors, ultimately identifying the appropriate priority strategies through the following three stages.

a) SWOT Matrix

The SWOT matrix identifies four strategic alternatives based on an analysis of internal and external environmental factors. This analytical approach is based on the logic of maximizing strengths and opportunities while minimizing weaknesses and threats.

b) QSPM Analysis

The Quantitative Strategic Planning Matrix (QSPM) is a tool for the priority decision-making stage. Several alternative priority strategies are developed by considering previously identified external and internal success factors. The QSPM weights internal and external business factors, including strengths, weaknesses, opportunities, and threats, and then determines the appropriate strategic priorities for implementation (Rahmantari *et al.*, 2023). These alternative priority strategies can be seen through the calculation of the Total Attractiveness Score (TAS) from the assessment results by the managerial decision-maker, namely the company owner. The TAS is the result of multiplying the weights of each SWOT factor by the interviewee's assessment. The assessment questionnaire is determined based on the opportunities/relationships between each alternative strategy and each SWOT factor. The assessment is determined on a scale of 0-4 (0 = No related/opportunity, 1 = Very low related/opportunity, 2 = Low related/opportunity, 3 = High related/opportunity, 4 = Very high related/opportunity).

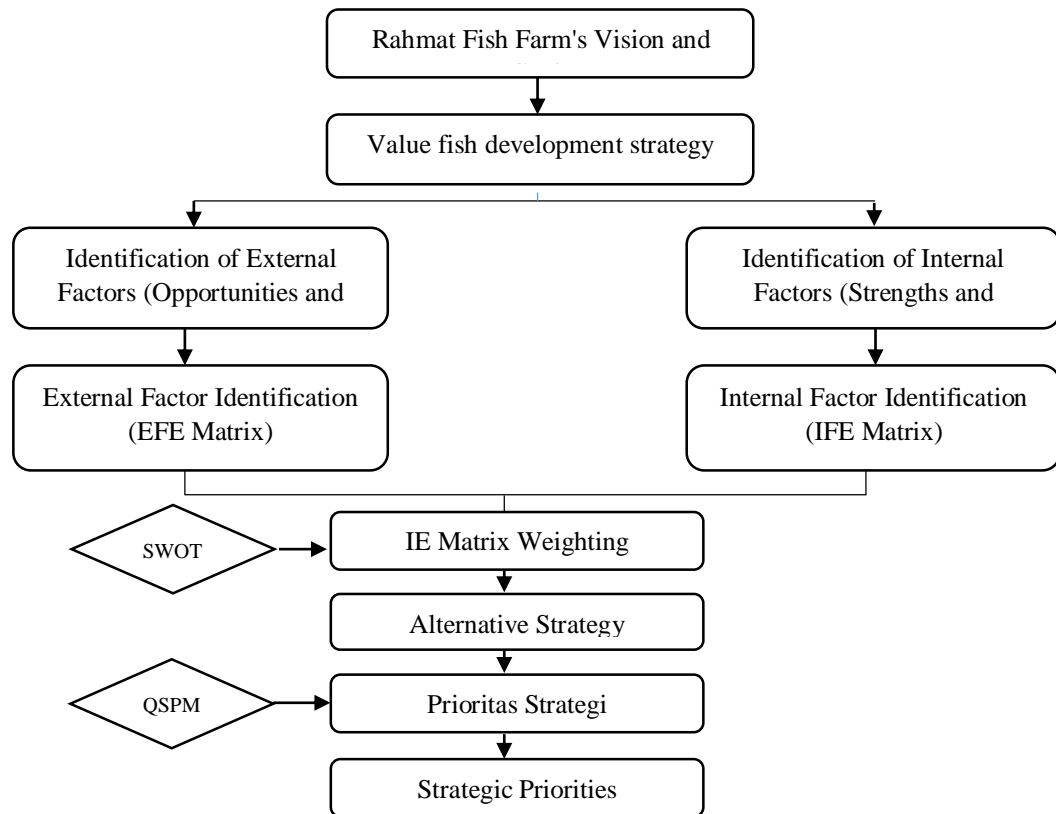


Figure 1. Research's Mind Map

RESULT AND DISCUSSION

Rahmat Fish Farm is a medium-scale tilapia fish farming business located in Cimaung District, West Bandung Regency, West Java. This business focuses on tilapia cultivation using a biofloc system and has developed a partnership-based business model involving 17 farming partners. Rahmat Fish Farm was founded to meet the fish consumption needs of the local community, but over time, the business has evolved into an agribusiness network encompassing production, distribution, and partnership development. Currently, Rahmat Fish Farm continues to increase its production in line with the growing demand for tilapia for MBG (Indonesian Fish Farming Group).

The company has gained public recognition through publications on national television and has implemented various innovations in its cultivation practices, such as environmentally friendly pond management and the use of quality production inputs. Rahmat Fish Farm also holds CBIB (Good Fish Cultivation Practices) certification, strengthening its credibility in the fisheries sector. Despite its significant growth potential, the company still faces several managerial and operational challenges, such as production fluctuations, limited inventory management, overlapping employee duties, and suboptimal partnership management. Therefore, strategic development is needed to improve operational efficiency, strengthen competitiveness, and support long-term business sustainability.

The approaches used in this study are Internal Factor Evaluation (IFE) and External Factor Evaluation (EFE), which allow for a systematic assessment of the strengths, weaknesses, opportunities, and threats faced by Rahmat Fish Farm. The IFE matrix serves to identify the extent to which the company is able to utilize internal strengths and minimize weaknesses, while the EFE matrix is used to assess the company's ability to respond to external environmental dynamics (David, 2011; Wheelen & Hunger, 2012).

Table 1. Analysis Results IFE (*Internal Factor Evaluation*)

Internal Strategic Factors				
Strength		Quality	Rating	Score
1	Collaborate with production input suppliers, e-fishery agriculture start-ups, and farming partners for business development.	0,06	2,6	0,15
2	Many potential partners will collaborate with Rahmat Fish Farm as a result of branding through National TV	0,06	2,6	0,15
3	Have regular customers from B2B sales system.	0,06	2,8	0,17
4	Already have social media on YouTube and Instagram with quite good engagement	0,06	2,8	0,17
5	CBIB certified cultivation and windmill innovator achievements.	0,06	2,6	0,15
6	Use of quality production inputs ranging from seeds to fish vitamins.	0,04	1,8	0,07
7	Pond waste from cultivation that does not pollute water and the environment.	0,07	3,2	0,22
8	A family-like work culture that supports the ongoing business aspects.	0,05	2,4	0,13
9	Productive workforce and mastery of cultivation techniques.	0,07	3,2	0,22
Weakness				
1	Products have not been optimally absorbed in the market.	0,06	2,8	0,17
2	Social media management is suboptimal.	0,06	2,6	0,15

Internal Strategic Factors			
Strength	Quality	Rating	Score
3 Inadequate stock management, hampering stock forecasting.	0,06	2,6	0,15
4 Business administration recording and bookkeeping (upstream and downstream) are not yet computerized.	0,07	3,2	0,22
5 Overlapping tasks between workers with unclearly defined responsibilities.	0,07	3,4	0,25
6 Limited capital resources due to constrained cash flow in sales.	0,04	2	0,09
7 Declining fish prices due to the lack of management of fish mortality in ponds.	0,07	3	0,20
8 Undefined partnership management clearly results in a decline in partnership ties.	0,05	2,2	0,11
TOTAL	1,0		2,76

Based on the calculations in Table 1, the total weighted score for the IFE matrix was 2.76, indicating that Rahmat Fish Farm's internal conditions are in the moderate category. This score indicates that the company has adequately utilized its internal strengths to support business operations, but several weaknesses remain that limit optimal performance improvement. A score slightly above the average of 2.5 indicates that the company's internal position is quite strong, particularly in operational and technical aspects such as a productive workforce, environmentally friendly cultivation systems, and an established network of business partnerships. However, managerial weaknesses, such as unstructured inventory management, overlapping division of tasks, and a non-digitized administration system, remain key challenges that require immediate improvement to support sustainable business growth.

The largest contribution from the strengths factor is seen in operational and sustainability aspects, particularly related to environmentally friendly aquaculture waste management and the presence of a productive and technically competent workforce. This indicates that Rahmat Fish Farm excels in technical production, the fundamental foundation of the aquaculture business. Furthermore, the presence of loyal customers in the B2B system and national media exposure also strengthen the company's market position and branding. This finding aligns with previous research stating that operational excellence and market relations are key factors in increasing the competitiveness of agribusinesses (Porter, 2008). The analysis revealed significant weaknesses, particularly in managerial and organizational aspects. Issues such as overlapping tasks among workers, a non-computerized recording system, and suboptimal stock management and digital marketing indicate that the business management system remains conventional. This situation has the potential to create inefficiencies and hinder data-driven decision-making. According to Laudon and Laudon (2020), digitalization of management information systems is a crucial factor in improving operational efficiency and business planning accuracy. Furthermore, technical issues such as fish mortality, which impacts selling prices, also highlight the need to strengthen risk management in the production process.

Based on the analysis results in Table 2, a total weighted score of 2.64 was obtained, indicating that Rahmat Fish Farm's ability to respond to external factors is in the moderate category. This score reflects that the company has been quite capable of capitalizing on existing opportunities, but still faces challenges in optimally anticipating external threats. According to Wheelen and Hunger (2012), an EFE score around the average indicates

that the company's strategy is not yet fully adaptive to the dynamics of the external environment.

The main opportunities that Rahmat Fish Farm can capitalize on come from the high public interest in fish farming and the strong fishing culture in Bandung Regency. Furthermore, the relatively high productivity of tilapia in West Java and advances in aquaculture technology are supporting factors that can increase production efficiency and scale. The development of social media also opens up significant opportunities for product marketing and market education. This aligns with the findings of Kotler and Keller (2016), which state that digital transformation in marketing can expand market reach and improve interaction with consumers. Furthermore, the Free Nutritious Meal Program (MBG) launched by the government presents a new strategic opportunity for fisheries businesses, including Rahmat Fish Farm, as it drives increased demand for animal protein sources such as fish. Thus, Rahmat Fish Farm has the potential to expand its market through partnerships with food suppliers for the MBG program, while simultaneously strengthening its role in supporting food security and improving public nutrition.

The company faces various complex threats, particularly those related to environmental factors and competition. The dependence of the biofloc cultivation system on weather conditions and the potential for decline in seed quality due to natural factors are key risks in the production process. Furthermore, the presence of competitors with larger business scales and better service quality increases competitive pressures within the industry. Other threats, such as delays in feed supplies and power outages, indicate risks to the supply chain and infrastructure that can impact operational continuity. Porter (2008) emphasizes that the intensity of competition and the strength of external factors significantly determine a company's competitive position within the industry. However, if the opportunities from the MBG Program are optimally utilized, competitive pressures can be offset by a more stable and guaranteed increase in market demand through the support of government programs.

Table 2. Analysis EFE Results (*External Factor Evaluation*)

	External Strategic Factors	Quality	Rating	Score
Opportunity				
1	Government support, particularly from the Bandung Regency Ministry of Fisheries, for local fisheries businesses.	0,04	1,8	0,08
2	Local community's passion for fishing.	0,07	3	0,22
3	Cimaung's favorable geographic environment, located in a temperate climate that is not too cold or hot.	0,06	2,4	0,14
4	Development of tilapia cultivation technology.	0,06	2,6	0,16
5	Social media platforms serve as marketing channels for products and as a platform for exchanging information about cultivation.	0,07	2,8	0,19
6	The large number of competitors allows for the promotion of cultivated commodities.	0,06	2,4	0,14
7	The high productivity of tilapia cultivation compared to other fish species in West Java (Open Data Jabar, 2011-2020).	0,07	2,8	0,19
8	High interest among the Bandung Regency community in the world of fish cultivation.	0,08	3,2	0,25
Threats				

1	Fish farming using the biofloc system is quite affected by weather factors.	0,07	2,8	0,19
2	Larger scale of competitors' businesses.	0,06	2,6	0,16
3	Better quality of service from competitors.	0,06	2,6	0,16
4	Competitors offering the same product.	0,06	2,4	0,14
5	Natural factors can cause seed quality to decline.	0,07	2,8	0,19
6	Delays in the arrival of feed supplies.	0,06	2,4	0,14
7	Lack of education and awareness among local communities about the importance of fish consumption as a source of protein.	0,06	2,6	0,16
8	Periodic power outages or problems with electricity from PLN.	0,06	2,4	0,14
TOTAL			1,00	2,64

Referring to the results of the IFE and EFE matrices, Rahmat Fish Farm is in an internal and external condition that is both in the medium category, with scores of 2.76 and 2.64, respectively. This position indicates that the company does not yet have a dominant competitive advantage, but is also not in a weak condition. From the perspective of the Internal-External (IE) matrix, this condition is generally in the hold and maintain position, where the recommended strategy is to maintain existing performance while making gradual improvements (David, 2011).

The weighted score in the IFE matrix (Figure 2) can be used to assess Rahmat Fish Farm's internal conditions. The total weighted score for key internal factors is 2.76. This indicates the company's strong internal potential, as the weighting is above the average score of 2.5. The IFE matrix results indicate that Rahmat Fish Farm's primary strength is "Pond waste from cultivation that does not pollute water and the environment," with the highest score of 0.22. Meanwhile, "Limited capital resources due to constrained cash flow in sales" is a major weakness for the company, requiring consideration for development. This is because this point has the lowest score of 0.09.

		Total Weight Average IFE		
		High (3.04-4.0)	Moderate (2.0-2.99)	Low (1.0-1.99)
Total Weight Average EFE	High (3.04-4.0)	I Grow and Built	II Grow and Built	III Hold and Maintenain
	Moderate (2.0-2.99)	IV Grow and Built	V Hold and Maintenain	VI Harvest of divest
	Low (1.0-1.99)	VII Hold and Maintenain	VIII Harvest of divest	IX Harvest of divest

Figure 2. Matrix IE Analysis

The weighted score in the EFE matrix (Figure 2) can be used to assess Rahmat Fish Farm's external conditions. The total weighted score for key internal factors is 2.64. This

indicates the company's very strong external potential, as the weighting is above the average score of 2.5. RFF is able to capitalize on opportunities and avoid threats very effectively. The results of the EFE matrix processing show that "The high interest of the people of Bandung Regency who are interested in the world of fish farming" is an opportunity with the largest score of 0.25 which can be taken by Rahmat Fish Farm. There are two threats with the largest scores that need to be avoided, namely the threat of "Fish farming using the biofloc system is quite influenced by weather factors" and "Natural factors can cause the quality of seeds to decline" with the same score of 0.19.

Based on the IFE and EFE matrix values, Rahmat Fish Farm's potential for development is in cell V. This cell indicates the appropriate strategy to implement is "Hold and Maintain". Based on this strategy, Rahmat Fish Farm's potential strategies include market penetration and product development, focusing on maintaining or increasing market share or sales of existing products. Market penetration strategies can be implemented by setting competitive and affordable prices, advertising or promoting products through all channels and media, collaborating with suppliers and marketing partners, and developing customer loyalty.

Matrix SWOT Analysis

Table 3. SWOT Rahmat Fish Farm Strategy

STRONG	WEAKNESS
<ol style="list-style-type: none"> 1. Collaborating with production input suppliers, e-fishery agriculture startups, and fish farming partners for business development. 2. A large number of potential partners are willing to collaborate with Rahmat Fish Farm as a result of branding through national television. 3. Having a loyal customer base through a B2B sales system. 4. Having established social media accounts on YouTube and Instagram with good engagement. 5. CBIB-certified fish farming and achievements as a windmill innovator. 6. Using high-quality production inputs, from seeds to fish vitamins. 7. Pond waste from fish farming that does not pollute the water and the environment. 	<ol style="list-style-type: none"> 1. Products have not been optimally absorbed in the market. 2. Social media management is not yet optimal. 3. Inadequate inventory management, hindering stock forecasting. 4. Business administration recording and bookkeeping (upstream and downstream) have not been computerized. 5. Overlapping tasks between workers with unclear responsibilities. 6. Limited capital resources due to cash flow in sales. 7. Declining fish prices due to the lack of specific management of fish mortality in ponds. 8. Unstructured partnership management results in fluctuating production stocks.

	8. A family-like work culture that supports business operations.	
	9. A productive workforce with expertise in fish farming techniques.	
OPPORTUNITY	SO STRATEGY	WO STRATEGY
1. Government support, particularly from the Bandung Regency Ministry of Fisheries, for local fisheries businesses.	1. Expanding partnerships through the dissemination of education on tilapia fish farming entrepreneurship, highlighting the advantages of the biofloc system through electronic media branding and training activities. (S2, S4, S6, S7, O1, O4, O5, O6, O8)	1. Effectively utilize social media to expand Rahmat Fish Farm's market reach. (W1, W2, O5, O8)
2. Local communities' passion for fishing.	2. Establishing a biofloc tilapia fish farming community to support commodity existence and business sustainability. (S2, S4, O7, O8)	2. Evaluate partner satisfaction with collaborative relationships to maintain stock continuity. (W1, W3, W8, O6, O7, O8)
3. Cimaung's favorable geographic environment, located in a region that is not too cold or hot.	3. Improving and maintaining customer relationship management through membership programs/special discounts (S3, O2)	3. Create ready-to-eat processed products from freshly killed fish to diversify products and expand distribution. (W1, W7, O1, O5)
4. Development of tilapia cultivation technology.		4. Improve human resources through structuring, clarifying job descriptions, and dividing responsibilities to optimize the workforce. (W5, O6, O8)
5. The existence of social media platforms as a marketing tool for products and as a medium for exchanging information about cultivation.		
6. The large number of competitors allows for the demonstration of the existence of cultivated commodities.		
7. The high productivity of tilapia cultivation compared to other fish species in West Java (Open Data Jabar, 2011-2020).		
8. The high interest of the Bandung Regency community in the world of fish cultivation.		
THREATS	ST STRATEGY	WT STRATEGY
1. Fish farming using the biofloc system is quite affected by weather factors.	1. Improved collaboration management with production input suppliers (S1, S6, T5, T6)	1. Opening branches to expand the market and distribute fish from partners (W1, T2, T3, T4).
2. Larger scale of competitors' businesses.	2. Fry handling management with a quarantine system and the provision of medicines	2. Improving inventory management to predict the certainty and schedule of production flows, goods
3. Better quality of service from competitors.		

4. Competitors offering the same product.	and vitamins (S5, S6, S9, T5)	flow, and cash flow. (W3, W4, W6, T6)
5. Natural factors can cause seed quality to decline.	3. Service quality evaluation (S8, T2, T3, T4)	
6. Delays in the arrival of feed supplies.	4. Creating educational content on the benefits of fish consumption to increase awareness and company profits (S4, T7)	
7. Lack of education and awareness among local communities about the importance of fish consumption as a source of protein.	5. Improving oversight of cultivation management, including pH, flock levels, vitamin administration, and generator requirements (S5, S6, S9, T1, T8)	
8. Periodic power outages or problems with electricity from PLN.		

Based on the results of the SWOT matrix analysis, several alternative strategies were obtained that can be implemented by Rahmat Fish Farm by considering a combination of internal and external factors of the company. The resulting strategies include SO (Strength-Opportunity), ST (Strength-Threat), WO (Weakness-Opportunity), and WT (Weakness-Threat) strategies, each of which has different implications for business development. Based on the SWOT matrix table, the description of each alternative strategy is obtained as follows:

a) S - O Strategy

The SO strategy is an approach that leverages a company's internal strengths to seize available external opportunities. The analysis shows that Rahmat Fish Farm has significant potential for business growth through network expansion and branding. One key strategy is expanding partners through the dissemination of entrepreneurial education on biofloc-based tilapia cultivation through electronic media and training activities. This strategy not only increases the number of partners but also strengthens the company's position as an innovative and educational business actor.

Establishing a biofloc-based tilapia cultivation community is a strategic step to strengthen the business ecosystem and maintain business sustainability. This community can serve as a forum for information exchange, capacity building, and strengthening market networks. Furthermore, improving Customer Relationship Management (CRM) through memberships or special discounts can increase customer loyalty, particularly in the company's existing B2B segment. The government's Free Nutritious Meal Program (MBG) presents a strategic opportunity highly relevant to the SO strategy, as it encourages increased consumption of animal protein, including fish. This opens up opportunities for Rahmat Fish Farm to expand the market through partnerships with food suppliers in the MBG program, thus not only increasing sales volume but also strengthening the company's social role in supporting national food security. This finding is in line with research by Kurnia *et al.* (2024) which recommends strengthening the SO strategy by improving seed sales expertise, maintaining quality certification, and maintaining consumer loyalty as the key to the success of the fisheries business.

b) S – T Strategy

The ST strategy aims to leverage internal strengths to address external threats. In this regard, Rahmat Fish Farm needs to improve its collaboration with suppliers to ensure a secure supply of inputs. Furthermore, seed handling through a quarantine system and vitamin supplementation are crucial to maintain quality and reduce the risk of fish mortality. The company also needs to improve service quality to address competition and create educational content to raise public awareness of fish consumption. Monitoring of the cultivation process, such as pH control, water quality, and electricity availability, must also be improved to mitigate operational risks. This is consistent with research by Oktami et al. (2024), which emphasizes the importance of good cultivation system management for business success.

c) W - O Strategy

The WO strategy is implemented by capitalizing on opportunities to overcome weaknesses. One step that can be taken is optimizing social media to expand the market and improve branding. Evaluating partner satisfaction is also crucial for maintaining collaborative relationships and ensuring stock availability.

Product diversification by processing fish into ready-to-eat products can increase added value and reduce losses. Furthermore, improving human resource management through clear division of tasks can increase work efficiency. The MBG program can also be utilized to address marketing weaknesses by tapping into the program's supply chain, thereby stabilizing demand. Research by Harmain and Purwansyah (2025) shows that social media plays a crucial role in improving business performance. Meanwhile, Taufik (2022) states that production efficiency, particularly in feed costs, is crucial for the profitability of aquaculture businesses.

d) W - T Strategy

A WT strategy is a defensive tactic to mitigate a company's internal weaknesses and avoid threats. Here are some alternative WT strategies that Rahmat Fish Farm can implement. One step is opening branches to expand markets and distribution. Furthermore, improving inventory management is crucial for better managing production and financial flows.

Weaknesses in fish farming generally lie in suboptimal management, input quality, and poor record-keeping systems (Husnan *et al.*, 2025). Therefore, strengthening management is key to business success. This is supported by Oktami *et al.* (2024), who state that business management must encompass comprehensive planning, implementation, and evaluation. The strategies recommended in the SWOT analysis are based on Rahmat Fish Farm's current operational and managerial conditions. Strategies related to improving inventory management and human resource restructuring are prioritized because the company still experiences challenges in stock forecasting, production scheduling, and task allocation among workers. These conditions cause production fluctuations and make it difficult for the company to consistently meet market demand. This also relates to the current situation, which requires continuous fish production to supply the SPPG needs under the MBG program.

Partnership evaluation and partner training strategies are also recommended because Rahmat Fish Farm relies heavily on partner farmers to maintain production capacity. Strengthening partnerships and improving partner technical capabilities are crucial to maintaining production continuity and maintaining product quality standards. Furthermore, the recommendation to open a new branch is based on increasing market opportunities due to high demand for fish consumption and the

implementation of the MBG program. This strategy is expected to improve market access, distribution efficiency, and the company's competitiveness in the regional fisheries sector. The recommended strategy focuses more on strengthening the company's internal systems before undertaking more aggressive business expansion. This approach is considered most appropriate given the company's position in the "hold and maintain" quadrant of the IE matrix. Various recommended strategies are not part of the challenges faced by the company. In particular, the company currently faces the challenge of being able to supply the tilapia fish needed for the MBG program.

QSPM Matrix Analysis

The Quantitative Strategic Planning Matrix (QSPM) is the final stage of strategy formulation analysis, which involves selecting the best alternative and serving as a decision-making tool for selecting the best strategic priorities. The data collection involved the owner of Rahmat Fish Farm, an executive with a stake in decision-making and a thorough understanding of the company's internal and external factors. The QSPM calculation begins by collecting data for a weighted Attractiveness Score (AS), which is then multiplied by the weights obtained from the internal and external analysis. The final results of the QSPM analysis are shown in Table 17. The complete QSPM calculation results for Rahmat Fish Farm's strategic alternatives can be found in Appendix 2.

The SWOT analysis resulted in the formulation of 14 strategic alternatives, each with nine strengths, eight weaknesses, eight opportunities, and eight threats. Each strategy was then weighted by an Attractiveness Score (AS) to obtain a Total Attractiveness Score (TAS). This calculation yielded three primary strategic alternatives appropriate for Rahmat Fish Farm.

The Quantitative Strategic Planning Matrix (QSPM) is the final stage of the strategy formulation analysis, selecting the best alternative and serving as the basis for decision-making regarding the best strategic priorities. The data collection involved the owner of Rahmat Fish Farm, an executive with a stake in decision-making and a thorough understanding of the company's internal and external factors. The QSPM calculation begins by collecting data for a weighted Attractiveness Score (AS), which is then multiplied by the weights obtained from the internal and external analysis.

The SWOT strategy analysis resulted in the formulation of 14 strategic alternatives, each with nine strengths, eight weaknesses, eight opportunities, and eight threats. Each strategy was then weighted by an Attractiveness Score (AS) to obtain a Total Attractiveness Score (TAS). This calculation yielded five primary strategic alternatives appropriate for Rahmat Fish Farm.

Based on the QSPM matrix calculation results, the final stage of strategy formulation revealed three priority strategic alternatives most relevant for Rahmat Fish Farm to implement: improving inventory management and opening branches, with the highest TAS score of 7.06, and evaluating partner satisfaction with a TAS score of 6.70. These findings indicate that strategies focused on strengthening internal systems and operational efficiency have a higher level of urgency than other strategies. Conceptually, these results indicate that the company's primary challenges lie not only in the market but also in managerial capacity to effectively manage resources and the supply chain (David 2011).

Table 4. Analysis QSPM Matrix Results

TAS Value	Alternative Strategies
7,06	Inventory Management Improvement
7,06	Branch Opening
6,70	Partner Satisfaction Evaluation
6,48	Partner Expansion (Training)
6,43	Human Resources Improvement (Job Description)
6,36	Tilapia Cultivation Community
6,14	Educational Content (Social Media)
6,08	Cooperation Improvement (Supplier)
5,94	Frying Handling Management
5,92	Membership
5,73	Cultivation Management Supervision
5,59	Social Media Optimization
5,55	Service Quality Evaluation
4,62	Processed Products

Improving inventory management is a critical strategy because it serves as the foundation for maintaining operational stability, particularly in managing production and demand uncertainty. Weaknesses in inventory management have the potential to lead to cost inefficiencies, supply imbalances, and cash flow disruptions. In the context of the fisheries agribusiness, which is characterized by perishable goods, effective inventory management becomes even more crucial. This finding aligns with supply chain management literature, which emphasizes that well-integrated inventory systems can improve business responsiveness and competitiveness (Christopher, 2016).

The branch opening strategy reflects a market expansion orientation aimed at increasing distribution reach and strengthening competitive position. However, this strategy carries significant risks if not balanced with adequate internal preparedness, particularly regarding production capacity, human resource quality, and management systems. Internal strengthening strategies have a higher priority than diversification strategies, such as developing processed products. Rahmat Fish Farm is still in the core business strengthening stage, so the primary focus needs to be on improving efficiency, operational stability, and managerial quality before undertaking more complex expansion.

These findings are further supported by research by (Oktami *et al.* 2024), which states that the success of tilapia cultivation is determined not only by technical aspects of production but also by the quality of management of the overall agribusiness system, including supporting subsystems that play a role in providing resources, services, and operational support. Thus, the strategic approach resulting from the QSPM demonstrates the need for integration between internal efficiency, institutional strengthening, and business network development.

CONCLUSION

Based on the results of the SWOT and EFE/IFE analyses, various problems and potential development opportunities were identified. The results identified at least 24

issues at Rahmat Fish Farm. Based on these issues, various alternative strategies were developed to support the company's development. Furthermore, priority strategies were developed based on the company's current situation.

The analysis results show that the IFE (2.76) and EFE (2.64) matrix values place Rahmat Fish Farm in cell V (hold and maintain). This position indicates that the company needs to maintain its existing performance by focusing on increasing efficiency and competitiveness, without aggressive expansion. Within the framework of the tilapia agribusiness, potential derivative strategies include market penetration through increased promotional activities and expanding customer networks in existing markets, product development aimed at adding added value, such as processing into fillets or frozen products, and optimizing production costs through effective management of feed utilization and water quality to maintain operational expenses within acceptable limits. Implementing a customer retention strategy is crucial, which involves upholding fish quality and size consistency and fostering long-term partnerships. By adopting this methodology, the company can maintain good performance, gradually increase revenue streams, and ensure business sustainability by avoiding the risks associated with overly aggressive expansion.

Based on the SWOT and QSPM analyses, five priority strategies were identified: improving inventory management, opening branches in potential areas, evaluating partner satisfaction, increasing partner capacity through training, and improving human resource management. These findings confirm that strengthening internal systems and operational efficiency are key to supporting business sustainability, followed by market development and partnership strategies. Implementing a structured strategy is expected to support the welfare of local farmers and increase fish consumption in Bandung Regency.

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