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BUSINESS DEVELOPMENT STRATEGY FOR CATFISH REARING AT CIRCULAR TANK IN GUNUNGKIDUL, YOGYAKARTA PROVINCE

STRATEGI PENGEMBANGAN BISNIS PEMBESARAN IKAN LELE KOLAM BUNDAR DI GUNUNGKIDUL, DAERAH ISTIMEWA YOGYAKARTA

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ABSTRACT

The fisheries sector plays an important and potential role in the Indonesian economy. The fisheries business in Indonesia is divided into three subsectors, i.e., capture fisheries, aquaculture, and processing. The Mina Mulya Maju Mandiri (4M) Cooperative is a fisheries cooperative engaged in production cooperatives (breeding, rearing, marketing, and procurement of fisheries facilities and infrastructure) and savings and loan cooperatives located in Kapanewon Semin, Gunungkidul Regency, Yogyakarta Special Region. The 4M Cooperative has a community of aquaculture members who run catfish farming businesses under the guidance and supervision of the cooperative. The purpose of this study is to formulate a strategy for developing catfish farming in circular ponds by identifying internal and external factors, business planning with a SWOT analysis, and analyzing business development strategies to be implemented. This study used a descriptive research method with qualitative and quantitative data. Data sources in this study consisted of primary and secondary data obtained from scientific journals, previous research reports, and the Central Statistics Agency (BPS) of Gunungkidul Regency and Yogyakarta Special Region. Data collection methods were carried out through observation, documentation, and interviews. The results of the study show that the business position is in quadrant I (aggressive) with SO (strengths and opportunities) strategic steps to formulate a strategy for developing a circular tank catfish farming business at the Mina Mulya Maju Mandiri Cooperative (4M).

Keywords: catfish farming, development strategies, SWOT analysis

ABSTRAK

Sektor perikanan mempunyai peran penting dan potensial bagi perekonomian Indonesia. Usaha perikanan di Indonesia terbagi dalam 3 subsektor usaha, yaitu perikanan tangkap, budidaya, dan pengolahan. Koperasi Mina Mulya Maju Mandiri (4M) merupakan koperasi perikanan yang bergerak dalam bidang koperasi produksi (pembibitan, pembesaran, pemasaran, pengadaan sarana dan prasarana perikanan) dan koperasi simpan pinjam yang berada di Kapanewon Semin, Kabupaten Gunungkidul, Daerah Istimewa Yogyakarta. Koperasi 4M mempunyai komunitas anggota budidaya yang menjalankan usaha budidaya ikan lele di bawah bimbingan dan pengawasan koperasi. Tujuan dari penelitian ini adalah merumuskan strategi pengembangan usaha budidaya ikan lele di kolam bundar dengan identifikasi faktor internal dan eksternal, perencanaan usaha dengan analisis SWOT, dan menganalisis strategi pengembangan usaha yang akan diterapkan. Penelitian ini menggunakan metode penelitian deskriptif dengan data kualitatif dan data kuantitatif. Sumber data dalam penelitian ini terdiri atas data primer dan data sekunder yang diperoleh dari jurnal ilmiah, laporan penelitian terdahulu, dan Badan Pusat Statistik (BPS) Kabupaten Gunungkidul dan Daerah Istimewa Yogyakarta. Metode pengumpulan data dilakukan dengan cara observasi, dokumentasi, dan wawancara. Hasil penelitian menunjukkan bahwa posisi usaha berada pada kuadran I (agresif) dengan langkah strategi SO (*strengths and opportunities*) untuk merumuskan strategi pengembangan usaha budidaya ikan lele kolam bundar di Koperasi Mina Mulya Maju Mandiri (4M).

Kata kunci: analisis SWOT, budidaya ikan lele, strategi pengembangan

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INTRODUCTION

Fisheries is a strategic economic sector with a significant existing and potential role in the Indonesian economy. This is supported by Indonesia's vast territorial waters, which hold abundant fishery resources, both for capture fisheries and aquaculture (Gaurahman and Arka 2020). The strategic role of the fisheries sector in national development includes increasing foreign exchange through exports, expanding employment opportunities, and strengthening the incomes of fishermen and fish farmers. Furthermore, this sector serves as a driver of the regional economy, improving the welfare of local communities involved in related industries and safeguarding marine resources and environmental sustainability (Sholikhah *et al.* 2025).

The aquaculture sector represents a step toward sustainable farming by incorporating modern aquaculture trends. One example is biofloc technology and circular tarpaulin ponds. As it develops, downstream processing in the fisheries industry involves processing raw products into semi-finished or finished products. This process increases their added value, extends their shelf life, and creates new jobs (Harefa *et al.* 2022).

Aquaculture is the cultivation of aquatic organisms in a controlled environment to generate economic value (Sudaryati *et al.* 2017). One freshwater commodity with a marketable value that fish farmers commercially cultivate is catfish (*Clarias* sp.) (Tuwitri *et al.* 2020). Catfish is a freshwater fish with a short harvest period and rapid growth of approximately three months. Catfish are adaptable and tolerant to various water conditions, enabling them to achieve land efficiency with high stocking densities through the biofloc system (Tjahjono *et al.* 2025).

A business or enterprise is the activity of managing various factors of production to produce goods and services to make a profit. The primary function of business is to create utility value in a product, whether goods or services, and to increase that value through processing to achieve a higher level of utility value (Rompas 2018).

Cooperatives are economic organizations or economic institutions whose principles are implemented according to Indonesian culture: mutual cooperation and kinship. The foundation for the organization of cooperatives in Indonesia is Article 33(1) of the 1945 Constitution (Putri and Rizaldi 2021). The legal basis for cooperatives is regulated in Law Number 25 of 1992 concerning Cooperatives. This law classifies cooperatives into five types: savings and loan cooperatives, consumer cooperatives, production cooperatives, service cooperatives, and marketing cooperatives (Priliandani *et al.* 2018). The Mina Mulya Maju Mandiri (4M) where the study carried on is a cooperative engaged in savings and loan cooperatives, producer cooperatives, and consumer cooperatives.

The 4M business core is catfish production using a circular tank system. In addition to farming management, the Mina Mulya Maju Mandiri Cooperative also took care the socio-economic impact provided to the local community. This is to create employment opportunities for the local community and beyond, through empowerment steps by joining the cooperative members and also members of the cooperative fish farmers with an aquaculture community that carries out independent fish farming under the Cooperative's supervision. This cooperative of fish farmer community operates with assistance steps in the form of facilities and infrastructure for the farming process, providers of raw materials for production (seeds, feed, medicine), and also bridges members in distributing their harvest through the Cooperative. With an agreement of 5–20% of the profits from members going into the Cooperative's treasury, with an initial agreement based on the number of ponds and cultivation results. In return, when members experience losses or crop failures, the cooperative assists to alleviate the burden, as agreed by both parties based on the principle of kinship. Another advantage is the ability to produce its own supplementary fish feed, derived from catfish bones and spines. The Mina Mulya Maju Mandiri Cooperative also receives assistance from the Capital Management Institute for Marine and Fisheries Business (LPMUKP), which is under the Ministry of Marine Affairs and Fisheries (KKP).

The 4M Cooperative operates in a marginal area. Despite weaknesses and constraints, such as Gunungkidul Regency's aridity and limited natural resources (water), this farming business has a proven track record and has been operating sustainably from 2011 to the present. Therefore, this study was conducted to identify the cultivation processes and strategies implemented by the 4M Cooperative.

Selecting an appropriate strategy can support the achievement of company goals. If the chosen strategy is followed by organized implementation, the organization or company will more easily achieve its desired goals (Ardiansyah and Alkemega 2024). A business

development strategy is a series of steps, plans, or approaches designed to help a business grow, expand its market reach, increase revenue, and strengthen its market position. This strategy involves a thorough analysis of the company's opportunities, threats, strengths, and weaknesses, as well as the utilization of existing resources to achieve predetermined goals (Wahid *et al.* 2021).

The analysis of the development strategy for circular tarpaulin tank catfish farming in cooperatives was conducted using a strategic analysis approach to formulate future business plans, considering the strengths, weaknesses, opportunities, and risks in fish farming operations (Oktamalia *et al.* 2023). This research was conducted to address the need for a planned business development strategy for catfish farming in the circular tank, particularly in dryland farming environments. A well-formulated strategy is expected to prevent the business from becoming stagnant and reduce business risks. Through a SWOT analysis approach, cooperatives can formulate effective strategies to increase productivity, competitiveness, and business sustainability. This study aims to formulate a strategy for developing a catfish farming business in a circular tank by identifying internal and external factors, business planning with SWOT analysis, and analyzing the business development strategy that will be implemented.

METHODS

Time and location

The research was conducted for three months (from March to May 2023), in the circular tarpaulin tank catfish farming business unit of the Mina Mulya Maju Mandiri Cooperative. The cooperative's office was located at Jl. Karangmojo–Ngawen, Tegalsari, Jatiayu, Karangmojo, Gunungkidul Regency, while the cooperative's fish farming house was located in Klampok Hamlet, 014/004, Kalitekuk, Semin, Gunungkidul Regency, Yogyakarta Special Region.

Types of research

The research method used was descriptive research, which is a method used to describe and interpret phenomena or social realities of an object based on existing facts in the field. Descriptive research is used to gain an in-depth understanding of the research object at a specific point in time (Zellatifanny and Mudjiyanto 2018).

Sources and data collection techniques

The data sources used were primary and secondary. Primary data were obtained through observation, documentation, and in-depth interviews with cooperative administrators, fish farmer members, and other relevant parties. Secondary data were obtained from scientific journals, previous research reports, and publications from agencies such as the Central Statistics Agency (BPS) and the Ministry of Maritime Affairs and Fisheries.

Sampling determination techniques

The sample size for this study was 10 respondents, consisting of 1 core cooperative administrator, 2 fish farming technical staff, and 7 active farmer members. The sample was determined using purposive sampling, based on the respondents' roles and active involvement in cultivation activities and decision-making within the cooperative (Sugiyono 2013).

Data analysis

The data analysis method in this study used a SWOT (strengths, weaknesses, opportunities, and threats) analysis, which is an identification tool for formulating business development strategies. A SWOT analysis is a method for evaluating business considerations regarding internal factors (strengths, weaknesses) and external factors (opportunities, threats) within a business (Victor 2020).

Preparation of strategic plans

The strategic planning process involves three analytical stages, as follows (Rangkuti 2008):

1) The information-gathering stage in strategic planning is as follows:
   a) Identifying internal (IFAS-internal factor analysis summary) and external (EFAS-external factor analysis summary) factors.
   b) Determining the weighting of each factor.
   c) Assigning a rating. The rating indicates the effectiveness of the company's strategy in responding to strategic factors. The assessment was based on (1) Score 4: very good, (2) Score 3: good, (3) Score 2: fair, and (4) Score 1: poor/less than ideal (Rangkuti 2008).
   d) Calculating the weighting and rating values. The weighting of each factor was multiplied by the rating value to obtain

the weighted value. The total weighted value was calculated by summing all the weighted values for each factor.

The next step is to score the IFAS and EFAS matrices to assess the relative influence and importance of each factor on the business strategy (Tables 1 and 2).

2) The data analysis stage in strategic planning involves two main methods:
   a) Internal-External (IE) Matrix. The IE Matrix was used to determine a company's position within a nine-cell matrix (Figure 1). This matrix has two main dimensions:
      - The total score of the Internal Factor Evaluation (IFE) matrix on the X-axis.
      - The total score of the External Factor Evaluation (EFE) matrix on the Y-axis.

      Based on position, the recommended strategies are:
      - Grow and build: Positions in cells I, II, or IV with intensive strategies (market penetration, market development, product development) or integration (backward, forward, horizontal).
      - Hold and maintain: Positions in cells III, V, or VII with a focus on market penetration, product development, or market development.
      - Harvest and divest: Positions in cells VI, VIII, or IX with diversification, divestment, or liquidation strategies.

   b) SWOT Matrix. The SWOT matrix was used to design strategies by considering strengths, weaknesses, opportunities, and threats (Zahra *et al.* 2021). The development stages included identifying external opportunities and threats, as well as the company's internal strengths and weaknesses, which are further explained in Figure 2.
      - SO (Strength-Opportunity) strategy: leveraging a company's strengths to maximize opportunities.
      - WO (Weakness-Opportunity) strategy: overcoming internal weaknesses by capitalizing on existing opportunities.
      - ST (Strength-Threat) strategy: using a company's strengths to reduce or avoid threats.
      - WT (Weakness-Threat) strategy: a defensive strategy to minimize weaknesses and avoid threats.

Table 1. Internal factor analysis summary (IFAS) matrix scoring (Strengths and Weaknesses).

Internal Strategy Factors	Weights	Ratings	Scores
Strength (S)	S1 (0.0–1.0)	S2 (1–4)	S1×S2 = S3
Weakness (W)	W1 (0.0–1.0)	W2 (1–4)	W1×W2 = W3
Total	**1.0**		

Table 2. External factor analysis summary (EFAS) matrix scoring (Opportunities and Threats).

External Strategy Factors	Weights	Ratings	Scores
Strength (S)	O1 (0.0–1.0)	O2 (1–4)	O1×O2 = O3
Weakness (W)	T1 (0.0–1.0)	T2 (1–4)	T1×T2 = T3
Total	**1.0**		

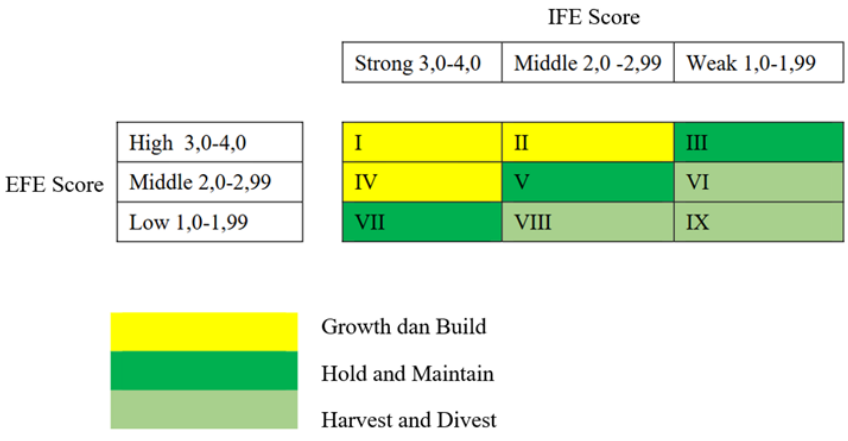


Figure 1. Internal External Matrix (Suhendah *et al.* 2022).

IFAS / EFAS	STRENGHTS (S) Identify 5-10 internal strengths • etc.	WEAKNESS (W) Identify 5-10 internal weaknesses • etc.
OPPORTUNITIES (O) Identify 5-10 external opportunities • etc.	STRATEGY SO Creating strategies that leverage strengths to maximize opportunities	STRATEGY WO Creating strategies that minimize weaknesses to maximize opportunities
TREATHS (T) Identify 5-10 external threats • etc.	STRATEGY ST Creating strategies that leverage strengths to overcome threats	STRATEGY WT Developing strategies that minimize weaknesses and avoid threats

Figure 2. SWOT matrix of catfish farming business (Rangkuti 2008).

3) The decision-making stage in strategic planning. At this stage, internal and external factor data were analyzed using the SWOT Matrix, and the IE Matrix serves as the basis for decision-making (Figure 3). The results of this analysis were used to determine the strategic steps that best suit the company's current conditions and existing opportunities.

Quadrant I: This is a highly favorable situation for the company. With its strengths and opportunities, the company can optimally capitalize on existing opportunities. A suitable strategy for this situation is an aggressive growth strategy (growth-oriented strategy), which supports expansion and development policies.

Quadrant II: Although the company faces various external threats, its internal strengths are its primary advantage. The strategy implemented in this situation is to leverage internal strengths to pursue long-term opportunities through diversification, both in products and markets.

Quadrant III: This situation describes a company facing significant market opportunities but experiencing internal limitations or weaknesses. The strategies implemented aim to address internal problems so the company can maximize market opportunities.

Quadrant IV: This is a highly unfavorable situation for the company, faced with external threats and internal weaknesses. In this situation, the company needs to immediately implement a defensive strategy to remain in the market and minimize losses.

RESULTS AND DISCUSSION

Analysis of internal and external factors

Internal factors are factors that exist within a business and can influence its management. Internal factors include strengths and weaknesses. Internal factors in a circular catfish tank farming business are shown in Table 3.

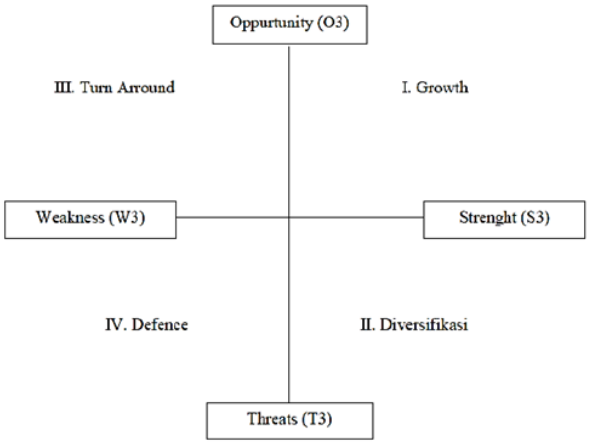


Figure 3. SWOT analysis diagram of catfish farming business (Rangkuti 2008).

Table 3. Internal factors of catfish farming business in round tarpaulin ponds, Mina Mulya Maju Mandiri Cooperative, Yogyakarta.

External Strategy Factors	Weight	Rating	Weight×Rating
Strength			
1. The only fisheries cooperative in Gunungkidul Regency, Yogyakarta.	0.12	4	0.48
2. Can produce its own supplementary food.	0.12	4	0.48
3. Has members who carry out independent fish farming under the supervision of the cooperative.	0.12	4	0.48
4. Has standard operating procedures (SOPs) for fish farming, an administration system, business capital, and a sound capital development system under the cooperative's management.	0.12	4	0.48
5. Uses a circular tarpaulin pond model.	0.11	4	0.44
Total			**2.36**
Weaknesses			
1. Lack of active product promotion on social media.	0.08	4	0.32
2. The fish farming tanks still have dirt floors, not concrete pool rebates.	0.08	2	0.16
3. Some fish farming staff fail to adhere to cultivation standard operating procedures (SOPs).	0.09	4	0.36
4. Lack of biosecurity during the fish farming process.	0.08	3	0.24
5. Zero-security cultivation areas.	0.08	2	0.16
Total	**1.00**		**1.24**

External factors are factors originating from outside a business and can influence its management. External factors include opportunities and threats. External factors in a business are shown in Table 4.

Table 4. External factors of catfish farming business in round tarpaulin ponds, Mina Mulya Maju Mandiri Cooperative, Yogyakarta.

External Strategy Factors	Weight	Rating	Weight×Rating
Opportunity			
1. High market demand.	0.12	4	0.48
2. Support and capital resources from the Ministry of Maritime Affairs and Fisheries through the BLU LPMUKP (Public Service Agency for Maritime and Fisheries Business Capital Management) program.	0.12	4	0.48
3. Increasing public interest in catfish farming.	0.12	4	0.48
4. Private investors/banks.	0.11	4	0.44
5. Availability of vacant land in the Semin Subdistrict.	0.11	3	0.33
Total			**2.21**
Threat			
1. Rising feed prices.	0.08	3	0.24
2. Fluctuating catfish prices.	0.09	3	0.27
3. Price competition with other producers.	0.09	2	0.18
4. Other fishery products.	0.08	3	0.24
5. Natural factors in Gunungkidul Regency, including areas with dry land conditions.	0.08	1	0.08
Total	**1.00**		**1.01**

Internal external matrix

Calculations based on the internal external (IE) matrix conducted on the catfish farming business at the Mina Mulya Maju Mandiri Cooperative resulted in an EFE value of 3.22 and an IFE value of 3.60 (Figure 4). The result is that the company is in quadrant I, which is a growth strategy through vertical integration and concentration (grow and build).

SWOT Matrix

Identification of internal factors (strengths and weaknesses) and external factors (opportunities and threats), in the catfish farming business at the Mina Mulya Maju Mandiri Cooperative, resulted in four development strategies. These strategies include the SO strategy, WO strategy, ST strategy, and WT strategy, as seen in Table 5.

SWOT analysis diagram

Based on the results of the SWOT analysis, values were obtained from the x- and y-axis coordinates (Table 6). The values in Table 6 were used to determine the coordinate points in the circular pond catfish farming development strategy at the Mina Mulya Maju Mandiri Cooperative, resulting in a SWOT analysis diagram as shown in Figure 5.

The SWOT analysis graph shows that the intersection of the x- and y-axis points (1.12 and 1.2) is in quadrant I (Growth) and has a positive value. This condition indicates that the round pond catfish farming business at the Mina Mulya Maju Mandiri Cooperative is in a very profitable position. Catfish has a significant opportunity for development due to high market demand, government support through capital programs such as the BLU LPMUKP, and the increasing public interest in farming this commodity. In addition, the availability of vacant land and institutional support from cooperatives that have aquaculture SOPs, round pond systems, and independent feed production capabilities strengthens the potential for expansion and sustainability of the catfish farming business economically and technically. This aquaculture business provides a significant opportunity for future business development by identifying internal strengths and utilizing existing opportunities to provide benefits for the aquaculture business.

The appropriate development strategy for a business is an aggressive growth strategy or a growth-oriented strategy. An aggressive strategy is a situation where a business takes high risks to further develop its business, exploiting existing opportunities and strengths to encourage growth and maximize profits achieved during the business (Rangkuti 2008).

SWOT analysis of business development

Based on the results of the SWOT analysis conducted on the catfish farming business in the circular pond owned by the Mina Mulya Maju Mandiri Cooperative, the analysis position was found to be in quadrant I, indicating an aggressive strategy. This strategy was implemented by optimizing the SO (Strengths-Opportunities) approach. Furthermore, the WO (Weaknesses-Opportunities), ST (Strengths-Threats), and WT (Weaknesses-Threats) strategies were implemented as anticipatory measures to prevent and minimize the impact of conditions that could potentially be detrimental or unfavorable to the business's sustainability.

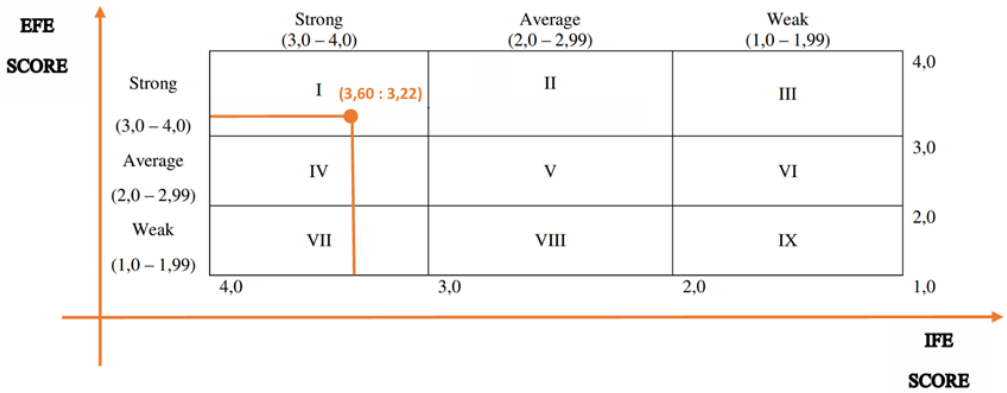


Figure 4. Internal and external matrix of catfish farming business at Mina Mulya Maju Mandiri Cooperative, Yogyakarta.

Table 5. SWOT matrix of catfish farming business at Mina Mulya Maju Mandiri Cooperative, Yogyakarta.

IFAS / EFAS	STRENGTHS (S)	WEAKNESS (W)
	a. The only fisheries cooperative in Gunungkidul Regency, Yogyakarta (S1) b. Capable of producing supplementary feed from catfish heads and bones (S2) c. Has a catfish farming community that operates independently under the supervision of the Cooperative (S3) d. Has a good aquaculture SOP, administration system, business capital, and capital development system (S4) e. Uses a circular tarpaulin pond model (S5)	a. Lack of active product promotion on social media (W1) b. The fish farming ponds still have dirt floors, not concrete, so the soil becomes muddy when it rains, disrupting cultivation activities (W2) c. Some members of the fish farming team fail to adhere to aquaculture standard operating procedures (W3) d. Lack of biosecurity in the round pond catfish farming process (W4) e. The fish farming area lacks a fence, thus providing zero security from snakes, frogs, and other pests (W5)
OPPORTUNITIES (O)	**SO STRATEGY**	**WO STRATEGY**
a. High market demand (O1) b. Support and capital resources from the Ministry of Maritime Affairs and Fisheries through the LPMUKP (Public Service Agency) program (O2) c. Increasing public interest in catfish farming (O3) d. Private investors/banks (O4) e. Large vacant land area in Semin Subdistrict (O5)	a. Optimizing high market demand using its strengths as the only fisheries cooperative in Gunungkidul Regency (S1, O1) b. Maximizing capital from the Ministry of Marine Affairs and Fisheries' Public Service Agency (BLU LPMUKP) by expanding the cooperative's reach by adding members to the fish farmer community using a circular tarpaulin tank fish farming system and producing processed catfish products to add value to the business (S3, S4, S5, O2, O3) c. Creating new freshwater aquaculture clusters in other areas of Semin District and Gunungkidul by utilizing vacant land (S4, S3, O3, O5) d. Implementing aquaculture SOPs, a robust administration system, and developing feed production to attract investors, strengthen the business, and accelerate its development (S2, S4, O4)	a. Increasing the effectiveness and efficiency of promoting aquaculture products on social media and through cooperative-owned activities to meet high market demand (W1, O1) b. Building facilities in the form of fish farming tanks with rebates on the floor (W2, O2) c. Optimizing training for members of the aquaculture cooperative on the proper implementation of aquaculture SOPs and biosecurity (W3, W4, O2) d. Utilizing vacant land in the Semin District by increasing security and inviting private investors/banks (W5, O2, O4, O5)
THREATS (T)	**ST STRATEGY**	**WT STRATEGY**
a. Rising feed prices (T1) b. Fluctuating fish selling prices (T2) c. Price competition with other producers (T3) d. Other fishery products (T4) e. Natural factors in Gunungkidul Regency, including dry land areas (T5)	a. Increasing production of supplementary feed to reduce the need for manufactured feed purchases (S2, T1) b. Improving product quality by implementing aquaculture standard operating procedures (S4, T3, T4) to compete with other fishery products (S4, T3, T4) c. Expanding market networks to address fluctuating selling prices (S1, T2) d. Creating a water retention pond system for processed aquaculture wastewater that is then reused and distributed to the cultivation ponds (S4, T5)	a. Improving security at fish farming ponds that still have zero security (W5, T5) b. Improving biosecurity during the fish farming process so that when fish prices fluctuate, profits can be increased and losses can be minimized if prices decrease (W3, W4, T2, T3) c. Expanding and providing services and bonuses to loyal customers to address price competition with other producers (W1, T3)

Table 6. Calculations to determine coordinate points in the catfish farming development strategy at the Mina Mulya Maju Mandiri Cooperative, Yogyakarta.

No	Factor	Number	Deviation	Value	Note
1	Strenghts / S	2.36	1.12	+ (Positif)	X axis
2	Weakness / W	1.24			
3	Opportunities / O	2.21	1.2	+ (Positif)	Y axis
4	Threats / T	1.01			

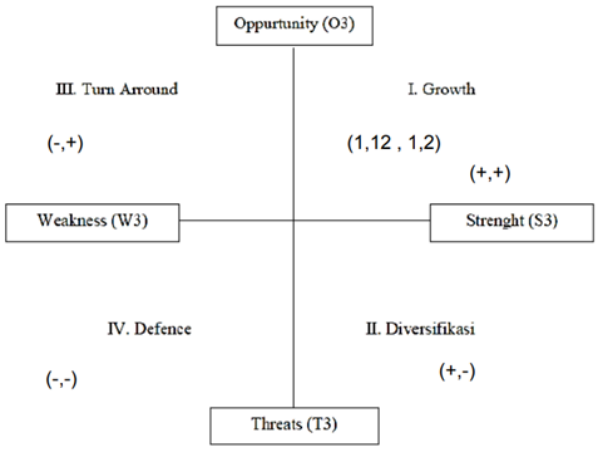


Figure 5. SWOT analysis diagram in the catfish cultivation development strategy at the Mina Mulya Maju Mandiri Cooperative, Yogyakarta.

The aggressive strategy derived from the SWOT analysis diagram is the SO strategy for the catfish farming business at the Mina Mulya Maju Mandiri Cooperative, including:

a. Optimizing our strengths as the only fisheries cooperative in the Gunungkidul area (Yogyakarta) to maximize market demand.
b. Growing with a circular tarpaulin tank aquaculture system by expanding the cooperative's footprint by adding community members and maximizing capital from the Ministry of Marine Affairs and Fisheries (KKP) through the BLU LPMUKP program.
c. Increasing interest in catfish farming among the community.
d. Implementing cultivation standard operating procedures (SOPs), a sound management system, and expanding feed production to attract investors.

The SO (Strengths-Opportunities) strategy is a business development approach that optimally utilizes internal strengths and external opportunities. In the context of round pond catfish farming at the Mina Mulya Maju Mandiri Cooperative, this strategy is implemented through the following steps:

1. Optimizing production to meet market demand
   The high market demand for catfish is being utilized by increasing production through coordination between cooperatives and members of the fish farmer community. This effort is being implemented through effective fish farming management, one of which is the concept of rotational fish farming, which involves spreading seeds at different times among community members. This approach allows for daily harvests, preventing excess stock at any one time and ensuring product distribution is well-managed. This strategy also helps cooperatives and their members meet market demand sustainably.
2. Utilizing capital for business expansion
   Capital from programs provided by the Ministry of Maritime Affairs and Fisheries (KKP), such as the BLU LPMUKP, is being utilized optimally to expand cooperative businesses. This includes opening new fish farming areas and inviting the community to join the cooperative farming community. Appropriate capital utilization allows for increased production, expanding distribution networks, launching processed catfish products, and empowering communities through catfish farming as a primary or supplementary source of income.
3. Developing vacant land for integrated aquaculture
   Vacant land in the Semin and Gunungkidul

areas is being utilized for freshwater aquaculture using a circular tarpaulin pond system. This aims to establish a new aquaculture cluster by implementing aquaculture SOPs, good administrative management, and developing a self-sufficient feed system. This step not only increases productivity but also creates new jobs for the local community by considering the quality of available human resources.

4. Strengthening Identity and Marketing Network
   As the only fisheries cooperative in the Kapanewon Semin and one of the cooperatives receiving special attention from the Ministry of Marine Affairs and Fisheries (KKP), the Mina Mulya Maju Mandiri Cooperative has a competitive advantage. This identity is being utilized to attract investors and banking institutions. Furthermore, the marketing network is being strengthened through collaborations with restaurants, distribution of aquaculture products through the cooperative, and promotion of superior products outside the Gunungkidul region to increase competitiveness in a broader market.

Through the implementation of this SO strategy, the Mina Mulya Maju Mandiri Cooperative is expected to optimize internal and external potential, create sustainable business growth, and contribute to the welfare of the surrounding community.

Development planning

The development plan is carried out from several aspects, namely financial, technical, management, and marketing. This is based on the analysis conducted in the first quadrant using an aggressive strategy. Steps taken are to expand the operational reach of the cooperative in Kapanewon Semin in Gunungkidul Regency and outside the Special Region of Yogyakarta. Developed as an educational tourism destination and fishing pond with a cooperative-owned restaurant. Increase the quantity and quality of aquaculture, increase the number of ponds and cooperative fish farmer members, produce feed independently and sustainably, and develop innovative catfish cultivation products, ranging from frozen catfish to processed catfish products such as catfish crackers, catfish meatballs, catfish floss, and others. Through the processing and preservation of fishery products, it can become an economic opportunity that can increase added value and create new jobs, especially for processing involving housewives, expand marketing reach, and increase product promotion through e-commerce, eFishery, and other digital sales services and platforms. Thus, the application of technology in every stage of fishery cultivation and processing can not only increase productivity but also strengthen the competitiveness of catfish products in the market, as well as support the sustainability of fishery businesses in the future.

To deepen our understanding of the position and development strategy of the Mina Mulya Maju Mandiri Cooperative for catfish farming, we need to compare it with similar businesses in other locations. For example, a study conducted by Ardiansyah and Alkemega (2024) on catfish farming in Karang Sari Village, South Lampung, showed that the strategy employed emphasized product diversification and partnerships with restaurants and supermarkets. The advantages of this location lie in the abundant availability of water and closer market access to urban areas. Meanwhile, the 4M Cooperative in Gunungkidul faces geographical challenges in the form of dry land and limited water access, but has managed to survive and thrive through a circular pond system and collective cooperative management.

This comparison demonstrates that although Gunungkidul's geographical conditions are more challenging than those of South Lampung, the existence of cooperative institutions, the implementation of standard operating procedures (SOPs), and aggressive strategies based on internal strengths allow businesses in Gunungkidul to remain competitive. This confirms that the success of aquaculture businesses is determined not only by the physical environment but also by the effectiveness of the institutions and managerial strategies implemented (Wahid *et al.* 2021).

The sustainability of the round pond catfish cultivation business at the Mina Mulya Maju Mandiri (4M) Cooperative have been supported by an integrated business ecosystem from upstream to downstream. The cooperative acts as the primary manager, coordinating the provision of production inputs, the fish farming process, marketing, and access to financing for members. Upstream, seed is supplied through controlled suppliers with quality control by the cooperative, ensuring fish productivity and survival rates. Feed, the largest cost component, is addressed through the development of supplementary feed based on fishery waste, which serves to reduce dependence on manufactured feed and increase production cost efficiency.

In the production subsystem, the implementation of aquaculture SOPs and the use of a circular tarpaulin tank system improve land

and water efficiency, relevant to the conditions in the Gunungkidul region with limited water resources. The cooperative's mentoring model for members ensures consistent production quality while strengthening business institutions. Downstream, the cooperative acts as the primary offtaker, purchasing members' harvests and connecting them to markets, thereby providing marketing certainty and mitigating the risk of price fluctuations at the farmer level. High market demand is a key factor supporting business sustainability.

From a financing perspective, the sustainability of the business ecosystem is strengthened by capital support from the Public Service Agency (BLU) LPMUKP program, a cooperative savings and loan system, and collaboration opportunities with banks and private investors. This integration of input, production, marketing, and financing demonstrates that the circular pond catfish farming business ecosystem at the Mina Mulya Maju Mandiri Cooperative has a strong institutional base and supports economic sustainability.

Overall, the integration between the input supply subsystems (seed and feed), production processes, marketing, and the cooperative's financing and institutional support creates a relatively integrated catfish farming business ecosystem. This condition is a key factor supporting the sustainability of the circular tank catfish farming business at the Mina Mulya Maju Mandiri Cooperative, both from an economic and institutional perspective, as well as from a long-term business sustainability perspective.

CONCLUSION

The results of the study indicate that the development strategy for the catfish farming business at the Mina Mulya Maju Mandiri Cooperative is in quadrant I (growth) based on a SWOT analysis, indicating that the business conditions are very favorable for further development. By leveraging internal strengths as the only fisheries cooperative in Gunungkidul and external opportunities such as high market demand and capital support, the cooperative can implement an aggressive strategy to support optimal growth. The SO (Strengths-Opportunities) strategy is the main approach, which includes increasing production, expanding networks, utilizing vacant land, and strengthening the cooperative's identity. These steps are expected to encourage sustainable cooperative growth while making a positive contribution to the surrounding community.

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