Fisheries Journal, 15 (6), 3437-3448 (2025)
http://doi.org/10.29303/jp.v15i6.1963

POLICY STRATEGY FOR THE DEVELOPMENT OF GURAMI FISH FARMING AREAS IN KEMRANJEN DISTRICT, BANYUMAS REGENCY

Strategi Kebijakan Pengembangan Kawasan Budidaya Ikan Gurami di Kecamatan Kemranjen Kabupaten Banyumas

Frentina Murti Sujadi[1,2*], Asro Nurhabib[1,2], Taufik Budhi Pramono[1]

[1]Aquaculture Study Program, Jenderal Soedirman University, [2]Aquabio Research Group, Faculty of Fisheries and Marine Sciences, Jenderal Soedirman University, Indonesia

Dr. Soeparno Street, Grendeng, Purwokerto, Central Java 53122

*Corresponding Author: frentina.murti@unsoed.ac.id

(Received November 18th 2025; Accepted December 22th 2025)

ABSTRACT

Gourami fish (Osphronemus goramy) is a freshwater commodity with high economic value and stable market demand, playing an important role in supporting community income and food security. Kemranjen Subdistrict, Banyumas Regency is known as a centre for gourami cultivation with great potential due to the availability of water resources, the experience of farmers, and government programme support. However, the development of this area still faces various obstacles such as technological limitations, fluctuations in feed prices, variations in the quality of cultivation management, environmental challenges and suboptimal digital marketing. These conditions require appropriate policy strategies to increase productivity and business sustainability. This research aims to formulate a strategy for developing the gurami farming area in Kemranjen Subdistrict through SWOT analysis to identify the strengths, weaknesses, opportunities, and threats that affect the development of the area. Primary data was collected through observation, interviews, and questionnaires to 40 respondents consisting of farmers, fisheries extension workers, village officials, and the Banyumas Regency Fisheries Service. IFAS (Internal Factors Analysis Summary) and EFAS (External Factors Analysis Summary) analyses were used to determine the position of the area development strategy. The results of the study show a value of (S-W) = +0.408 and (O-T) = +0.336, placing the area in Quadrant I (aggressive strategy), which is a condition where internal strengths can be optimally utilised to seize external opportunities. The priority strategies include the application of modern cultivation technology, strengthening digital marketing, increasing human resource capacity, and sustainable environmental management. The implementation of these strategies is expected to increase the competitiveness of the gurami cultivation area and support the improvement of the welfare of farmers in Kemranjen Sub-district.

Keywords: Regional Development, Gurame Fish, SWOT

ABSTRAK

Ikan gurami (*Osphronemus goramy*) merupakan komoditas air tawar bernilai ekonomi tinggi dengan permintaan pasar yang stabil serta berperan penting dalam mendukung pendapatan dan

ketahanan pangan masyarakat. Kecamatan Kemranjen, Kabupaten Banyumas, dikenal sebagai sentra budidaya gurami yang memiliki potensi besar karena ketersediaan sumber daya air, pengalaman pembudidaya, serta dukungan program pemerintah. Namun, pengembangan kawasan ini masih menghadapi berbagai kendala seperti keterbatasan teknologi, fluktuasi harga pakan, variasi kualitas manajemen budidaya, tantangan lingkungan, serta pemasaran digital yang belum optimal. Kondisi tersebut menuntut adanya strategi kebijakan yang tepat untuk meningkatkan produktivitas dan keberlanjutan usaha. Penelitian ini bertujuan merumuskan strategi pengembangan kawasan budidaya gurami di Kecamatan Kemranjen melalui analisis SWOT untuk mengidentifikasi kekuatan, kelemahan, peluang, dan ancaman yang memengaruhi pengembangan kawasan. Data primer dikumpulkan melalui observasi, wawancara, dan kuesioner kepada 40 responden yang terdiri atas pembudidaya, penyuluh perikanan, perangkat desa, dan Dinas Perikanan Kabupaten Banyumas. Analisis IFAS (*Internal Factors Analysis Summary*) dan EFAS (*External Factors Analysis Summary*) digunakan untuk menentukan posisi strategi pengembangan kawasan. Hasil penelitian menunjukkan nilai (S-W) = +0,408 dan (O-T) = +0,336 sehingga kawasan berada pada Kuadran I (strategi agresif), yaitu kondisi di mana kekuatan internal dapat dimanfaatkan secara optimal untuk meraih peluang eksternal. Strategi prioritas mencakup penerapan teknologi budidaya modern, penguatan pemasaran digital, peningkatan kapasitas sumber daya manusia, serta pengelolaan lingkungan yang berkelanjutan. Implementasi strategi ini diharapkan mampu meningkatkan daya saing kawasan budidaya gurami serta mendukung peningkatan kesejahteraan pembudidaya di Kecamatan Kemranjen.
Kata Kunci: Pengembangan Kawasan, Ikan Gurami, SWOT

INTRODUCTION

The Ministry of Maritime Affairs and Fisheries (KKP) plays a central role in the development of the aquaculture sector in Indonesia. Various programs and policies have been launched aimed at increasing production, productivity, competitiveness, and the sustainability of fish farming businesses. The government has several key focuses in developing aquaculture areas, including programs for developing aquaculture areas based on superior commodities and aquaculture villages (KKP, 2021).

The aquaculture village program is planned to run from 2021 to 2024, highlighting the potential of aquaculture based on superior commodities from each selected location or region. Kemranjen District has long been known as a center for gourami cultivation in Banyumas Regency (Khairuman and Amri, 2011). Its geographical location and the availability of adequate water resources make this area highly suitable for aquaculture. Gourami has high economic value, both for local consumption and markets outside the region, contributing significantly to the local economy. Gourami cultivation also serves as a primary livelihood for a large portion of the population, indirectly supporting food security and job creation.

Despite its significant potential, the development of gourami cultivation in Kemranjen is not without challenges. According to Aprilla et al. (2024), farmers often face uncertain selling prices, which can impact their income. Limited market access and a lack of an efficient supply chain are also obstacles. Furthermore, various cultivation management practices, from feed use and water management to pest and disease management, remain suboptimal, necessitating improved standards to achieve maximum efficiency and productivity (Handajani and Sutarjo, 2022). Limited access to business capital and the latest cultivation technology often hinders farmers from expanding their businesses and improving product quality.

Another obstacle relates to the environmental impact of fish farming activities (Fatimah et al., 2023). Uncontrolled intensification of cultivation has the potential to cause environmental problems, such as water pollution from leftover feed and cultivation waste,

which can threaten environmental quality and fish health. An unstable and inconsistent supply of seed and feed can impact fish growth and survival rates (Andrian et al., 2024). Changes in extreme climate patterns and the potential for natural disasters such as flooding can pose serious threats to the sustainability of aquaculture businesses (Rusliani et al., 2023). The lack of comprehensive supportive policies or suboptimal implementation of existing regulations can hinder regional development (Utomo et al., 2024). In determining optimal areas for cultivation, land suitability analysis is crucial. In line with Nurhabib's (2024) research, which examined land suitability for whiteleg shrimp cultivation, selecting the right location with supportive natural resources will contribute to the success of gourami cultivation in Kemranjen District.

Therefore, this strategy will serve as a comprehensive roadmap, considering various factors, including internal and external factors, including strengths and weaknesses, as well as opportunities and threats, in carrying out these cultivation activities. The goal is to create a competitive, sustainable gourami cultivation area in Kemranjen District that improves the welfare of the local community. It is hoped that the results of this study can provide recommendations from a socio-economic perspective to policy makers regarding the development of fisheries cultivation areas to increase local economic growth, especially in Kemranjen District, Banyumas Regency.

RESEARCH METHODS

Place and Time

This research was conducted in Kemranjen District, Banyumas Regency, Central Java Province, Indonesia, which is known as one of the centers for gourami (Osphronemus goramy) cultivation. The location was selected purposively due to its abundant water resources, the community's experience in freshwater fish cultivation, and its focus on the local government's aquaculture development program. The research lasted two months, encompassing preparation, field data collection, data analysis, and the preparation of a final report.

Method of collecting data

The primary data in this study were collected using purposive sampling, a judgmental sampling technique that considers respondents' level of involvement and experience with the gourami fish farming system in Kemranjen District (Sari & Yuliawati, 2019). This approach was chosen because the study population is heterogeneous and comprises various stakeholder groups with different roles in farming activities. This technique is considered appropriate for a case study of fisheries area development because it allows for more accurate, in-depth, and relevant data collection to meet the research objectives (Mahfuzhah & Rini, 2023).

A total of 40 respondents were involved in this study, consisting of gourami fish farmers, fisheries extension workers, village officials, and officials from the Banyumas Regency Fisheries Office. The respondent composition was designed to represent various elements of the fish farming system in the study area, from a technical, social, and institutional perspective. The research instrument was a closed-ended questionnaire using a Likert scale of 1-4, in which respondents rated the importance weight and actual condition (performance rating) of each SWOT factor. In-depth interviews and field observations were also conducted to strengthen the validity of the questionnaire results and obtain contextual data regarding the actual conditions of the cultivation business in the field (Kurniati, 2024). The following table shows the distribution of respondents based on their background and role in the gourami cultivation system in Kemranjen District, Banyumas Regency.

Table 1. Distribution of Research Respondents in Kemranjen District, Banyumas Regency

Respondent Categories	Number of people
Gourami Fish Farmers	25
Fisheries Extension Workers and Field Officers	5
Village and Regional Officials	4
Banyumas Regency Fisheries Service Employees	3
Local Academics/Fisheries Experts	3

This respondent composition reflects the representation of all key elements in the gourami fish farming development system. With this approach, the data obtained is expected to provide a comprehensive overview of the potential, constraints, and strategic direction for developing the fish farming area in Kemranjen District.

Data Analysis

Data analysis was conducted using a mixed methods approach that combines qualitative and quantitative analysis. The analysis stages include:

a. Identification of Internal and External Factors

Internal factors (strengths and weaknesses) and external factors (opportunities and threats) are determined based on the results of field observations, in-depth interviews and literature reviews (Setiawan et al., 2021).

b. Weighting, Rating, and Scoring

Each factor is assigned a weight (0.0-1.0) to indicate its level of importance, and a rating (1-4) to reflect the actual condition. The score is obtained by multiplying the weight and rating. The total score for each factor group is used in the preparation of the IFAS and EFAS matrices to determine the strategic position of the cultivation area (Sejati & Irawati, 2024).

c. Determining Strategy Quadrant Position

The difference between the total strengths and weaknesses is calculated as the X-axis (S-W), while the difference between the total opportunities and threats is calculated as the Y-axis (O-T). The combination of these two values indicates the quadrant position of the regional development strategy (Sejati & Irawati, 2024).

d. Instrument Validation and Reliability

The questionnaire was tested for validity using Pearson Product-Moment and for reliability using Cronbach's Alpha ($\alpha \geq 0.70$) to ensure data consistency (Amalia et al., 2022).

The results of the SWOT analysis were used to formulate a strategy for developing a gourami cultivation area in Kemranjen District that is competitive, sustainable, and oriented toward improving the welfare of the fish farming community.

RESULT

Aquaculture Potential in Kemranjen District, Banyumas Regency

Kemranjen District has significant potential for aquaculture development, particularly for gourami (Osphronemus goramy). Its strategic geographic location, supported by abundant water resources from irrigation channels, reservoirs, and natural springs, are key factors supporting freshwater aquaculture. The region's stable temperature and ample land availability make Kemranjen a promising center for gourami cultivation in Banyumas. The local community also possesses local wisdom and cultivation experience, evolving from traditional methods to semi-intensive and intensive systems.

The economic potential of gourami is significant, given the increasing market demand both locally and regionally. Stable selling prices make gourami a leading commodity for farmers (Aryadi et al., 2023). Government support in the form of training, production facilities,

and marketing facilitation also strengthens the competitiveness of gourami cultivation. With proper management, this sector plays a role in increasing community income and local food security. This location advantage is further strengthened by the existence of an active network of farmer groups, facilitating the distribution of knowledge, access to production facilities, and coordination of cultivation activities.

Problems in Developing Aquaculture Villages in Kemranjen District, Banyumas Regency

Despite its significant potential, the development of aquaculture villages still faces several obstacles. The main challenges include limited availability of superior seeds and quality feed, fluctuating feed prices, and the use of traditional methods that lead to low productivity (Shobihah et al., 2022). The lack of synergy between farmers, the government, and the private sector also hampers institutional strengthening and marketing. Lack of training, suboptimal infrastructure, and post-harvest facilities also impact competitiveness (Rhamadhan & Is, 2025). Environmental and economic constraints are also significant, particularly water shortages during the dry season, water source closures, and high land rental costs (Chefany et al., 2024; Andriani & Zaelani, 2025). Conflicts between water use and the agricultural sector and limited capital for providing cultivation facilities further limit opportunities for business development (Hamdani, 2018; Hakim dan Eriyanti, 2019).

Problems in Developing Aquaculture Villages in Kemranjen District

The IFAS results indicate that the main strengths are the non-conflict cultivation efforts and the availability of assistance from the government (score 0.404). The biggest weaknesses are marketing that does not yet use information technology and the irrigation system that is not implemented (score 0.347). The total IFAS score of 3.304 indicates strong internal conditions. The EFAS results indicate the greatest opportunities are the availability of fish medicine and increasing income from the cultivation business (score 0.362), while the main threat is the underutilization of digital media for marketing (score 0.327). The total EFAS score indicates that opportunities are greater than threats. The strategic position based on SWOT coordinates is in Quadrant I (aggressive strategy) with a value of (S–W) = +0.408 and (O-T) = +0.336. This means that the region has significant internal strengths and extensive external opportunities.

SWOT Analysis Results

Table 2. Internal and External Factors in SWOT Analysis

FACTOR	WEIGHT	RANKING	SCORE
Internal Factors			
Strengths			
1. Production facilities are easily accessible	0,11	4	0,396
2. Seed survival rate is high	0,10	3	0,326
3. Income from cultivation is sufficient to increase family income/economy	0,10	3	0,326
4. Cultivation efforts do not trigger conflict	0,11	4	0,404
5. There is assistance and supervision from the service	0,11	4	0,404
Amount	0,53		1,856
Weakness			
1. High feed prices	0,10	3	0,320
2. 2. Marketing results do not use information technology (IT)	0,10	3	0,347
3. Irrigation system is not implemented	0,10	3	0,347

FACTOR	WEIGHT	RANKING	SCORE
4. Climate change has a significant impact	0,08	3	0,223
5. Frequently attacked by disease	0,08	3	0,212
Amount	***0.47***		***1,448***
External Factors			
Oppurtunity			
1. The feed used is of high quality	0,11	3	0,348
2. Availability of fish medicine	0,11	3	0,362
3. Income increased from this business	0,11	3	0,362
4. Family members contribute	0,11	3	0,355
5. Water quality conditions at the cultivation site	0,10	3	0,314
Amount	***0.53***		***1,741***
Threats			
1. The harvest is not easy to sell	0,10	3	0,320
2. Not yet utilizing digital media for marketing	0,10	3	0,327
3. Cultivation waste (IPAL) has not been managed	0,09	3	0,245
4. Biosecurity has not been implemented at the cultivation site	0,09	3	0,256
5. Rain intensity affects production	0,09	3	0,256
Amount	***0,47***		***1,405***

Source: Processed Primary Data, 2025

DISCUSSION

Interpretation of the Potential and Challenges of Gourami Cultivation

Kemranjen's potential as a gourami cultivation area aligns with regional characteristics that support water resources and the community's experience in cultivation. However, the challenges identified in this study confirm that technical, socioeconomic, and environmental factors remain barriers to productivity and business sustainability. This is relevant to previous studies that emphasized the importance of improving input efficiency, market access, and technological support (Aryadi et al., 2023). Water limitations during the dry season and conflicts between water use and agriculture indicate that water resource management must be a priority. Limited access to financing also reinforces the findings of various studies that capital is a major constraint for small-scale farmers. These findings suggest that without targeted policy intervention, the region's vast potential will not be able to optimally contribute to increasing the productivity and competitiveness of gourami cultivation.

Problems in Developing Aquaculture Villages in Kemranjen District, Banyumas Regency

Although Kemranjen District has significant potential for developing aquaculture villages, several issues remain major obstacles to optimizing this sector. One major challenge is limited access to sustainable, high-quality seeds and feed. Farmers often rely on supplies from outside the region at fluctuating prices, impacting production costs and business stability. Furthermore, some farmers still use traditional methods without adequate technological support, resulting in low productivity and suboptimal business efficiency (Shobihah et al., 2022).

Another issue is the lack of synergy between farmers, the government, and the private sector in institutional development and product marketing. The lack of technical training, ongoing mentoring, and supporting infrastructure such as farm roads, water treatment plants, and post-harvest facilities also hinders the realization of independent and competitive aquaculture villages (Rhamadhan & Is, 2025). Therefore, integrated interventions through

targeted policies, strengthening the capacity of local human resources, and multi-stakeholder collaboration are needed to promote sustainability and fisheries-based economic growth in the Kemranjen region.

In addition to technical and institutional constraints, there are other challenges related to the development of aquaculture villages in Kemranjen District, namely complex environmental and economic issues. During the dry season, water availability becomes extremely limited, disrupting the sustainability of fish farming, especially in earthen ponds that rely heavily on surface water supplies (Chefany et al., 2024). This situation is exacerbated by the closure of one of the rivers that has been the primary source for the ponds, forcing farmers to find alternative water supplies at additional costs. Furthermore, land rental prices for fish farming tend to be high, making it difficult for small-scale farmers to expand their businesses (Andriani and Zaelani, 2025).

Competition for water use between the fisheries and agriculture sectors also often leads to conflict, particularly during the rice planting season, which requires intensive irrigation (Hamdani, 2018). This forces farmers to compromise with other farmers' planting schedules and even delay cultivation activities to maintain social relations at the local level. Furthermore, limited capital is a major obstacle to procuring cultivation facilities and infrastructure, such as permanent ponds, water pumps, aerators, and automatic feed installations (Hakim and Eriyanti, 2019). Limited access to financing institutions or people's business credit (KUR) further restricts farmers' ability to develop their businesses professionally and sustainably.

Strategy for Developing a Gurami Fish Cultivation Village in Kemranjen District, Banyumas Regency

Based on the existing potential and problems, a SWOT analysis was conducted to identify internal and external factors (IFAS and EFAS). A SWOT analysis is a strategic planning method for assessing the strengths, weaknesses, opportunities, and threats that contribute to achieving the objectives of a project, business, or institution on a broader scale. This requires a study of the strategic environment, both internal and external, that influences the direction and strategic patterns of the institution/institution in achieving these objectives.

After identifying internal and external factors, the next step is to assign weights and ratings. The score for each factor is obtained by multiplying the weight by the rating. Weights are set at a range of 0.0 (not important) to 1.0 (very important), with a total weight for the opportunities and threats group of 1.00; the same applies to the strengths and weaknesses group.

For opportunities, the rating uses a 1-4 scale: 1 = below average, 2 = average, 3 = above average, and 4 = excellent, determined based on their impact on the organization's conditions and objectives. For threats, the assessment is inversely oriented, with the greater the threat, the higher the score (e.g., 4). A similar inverse principle applies to strengths and weaknesses. In a SWOT analysis, based on the scores obtained, whether there are opportunities (positive) or threats (negative), and whether the strengths outweigh the weaknesses (+), four quadrants of recommendations are generated.

The analysis results for the IFAS matrix indicate that the highest weighting for the strengths factor is that the cultivation business does not trigger conflict and that there is assistance and supervision from the government agency, with a score of 0.404. This indicates that these factors have a significant influence and are strengths that should be utilized in developing gourami cultivation areas. The highest ranking value for the strengths factor is that the cultivation business does not trigger conflict and that there is assistance and supervision from the government agency, with a score of 4. These factors have a high influence on the development of the cultivation village. Meanwhile, the main weaknesses are the lack of

information technology (IT) in marketing and the lack of an irrigation system, with the highest weighting of 0.347. The total internal weighting score generated from the IFAS matrix is 3.304, indicating a strong internal position in leveraging strengths and addressing weaknesses.

The EFAS matrix results show that the highest weighting of the opportunity factor is the availability of fish medicine and increased revenue from this business, with a weighting of 0.362, indicating that these factors can significantly impact performance. The ranking value indicates that the availability of fish medicine and increased revenue from this business received a score of 3, indicating a significant impact on business activities. The main threat factor is the failure to utilize digital media for marketing, with a weighting of 0.327. This factor rating indicates that the inability to utilize digital platforms for marketing can increase vulnerability to intense business competition and dependence on gourami suppliers from other regions, which poses a high threat to business continuity.

The IFAS weighting results for the internal strengths factor (1.856) were higher than the weaknesses factor (1.448). Meanwhile, the EFAS weighting results for external factors yielded an opportunity value of 1.741 and a final value for threats of 1.405. This indicates that respondents responded more favorably to the strengths factor in the IFAS than to the weaknesses factor. Based on the SWOT analysis, the X-axis coordinates for the strengths and weaknesses strategy and the Y-axis coordinates for the opportunities and threats strategy were calculated (Figure 1).

The calculation results show a value of 0.408 for the X-axis coordinate and 0.336 for the Y-axis coordinate. Figure 2 shows the coordinates in quadrant I, where the quadrant points fall within the SO strategy. This indicates that the development of this gourami fish farming area has the strength to exploit profitable external opportunities. Therefore, the appropriate strategy to implement in such circumstances is to maximize profits by leveraging existing strengths to seize opportunities outside the organization. SO (Strengths-Opportunities) strategy is a business strategy that focuses on utilizing the strengths that an organization has to take advantage of opportunities that exist in the market or environment.

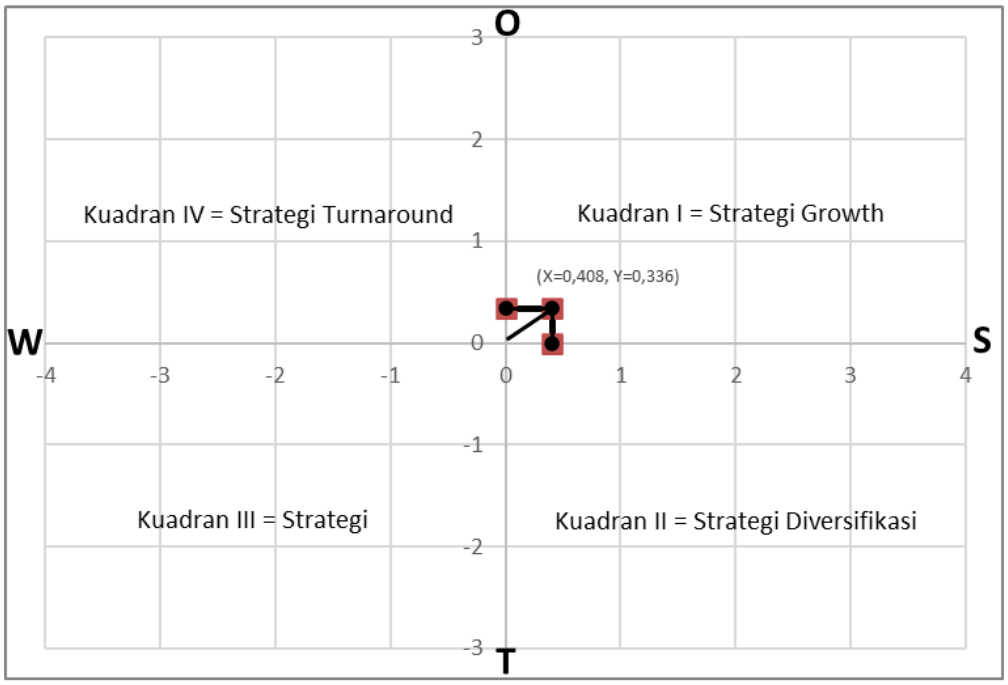

Figure 1. Position of Coordinate Points in Quadrants
Source: Processed Primary Data, 2025

Based on the SWOT analysis matrix, strategies that can be implemented for developing gourami fish farming areas in Kemranjen District, Banyumas Regency include expanding the market through digital marketing (using social media or e-commerce platforms) to reach a wider consumer base, increasing family income through efficient cultivation management, improving production quality and quantity by ensuring optimal water quality, increasing training and mentoring to enhance the skills of family members so they can actively contribute to the cultivation business, and optimizing business management to minimize conflict (Table 1).

This aligns with the results of a study by Meisaroh et al. (2023), which stated that fish farming business development strategies should include improving product quality and expanding market reach through digital promotions, including social media and e-commerce platforms. Furthermore, improving family members' business management skills through structured training will enable them to contribute more optimally to cultivation operations. Similar results were found in a study by Harmilia et al. (2020), which emphasized the importance of water quality management in fish farming to increase production and yield quality. These findings reinforce the point that the success of developing aquaculture areas depends not only on technical production aspects, but also on the ability of business actors to manage innovation, marketing, and continuously improve human resource capacity.

According to a study by Sujadi et al. (2025), the application of bioremediation technology using microorganisms can be part of a better water quality management strategy to improve the environmental quality of gourami cultivation and support production efficiency. Additionally, a study by Putri et al. (2024) highlights the need for a more holistic approach to business management by optimizing financial and managerial aspects to minimize risks and internal conflicts in fish farming. Furthermore, increasing the integration of water treatment technology and adaptive business management is considered capable of strengthening the resilience of the cultivation system to environmental fluctuations and market dynamics.

Table 3. Strategy for Developing Gourami Cultivation Areas in Kemranjen District, Banyumas Regency

Strength (S)	Oppurtunity (O)	SO Strategy
Production facilities are easily accessible	The feed used is of high quality	Optimizing the production process by using high-quality feed will increase the growth rate and health of fish. Ensuring quality feed will increase production and attract more consumers who prioritize fish quality. In line with research by Pramono (2023), the use of herbal ingredients in feed can have a positive impact on the growth performance of tilapia (Oreochromis sp.), indicating that selecting the right feed ingredients plays a crucial role in improving the quality of aquaculture products.
Percentage of Survival Rate (SR) of seeds sown (SR)	Availability of fish medicine in the Aquaculture Fishery Village	Leveraging the availability of fish medicines can further improve survival rates by implementing health precautions. Routine use of available fish medicines will reduce mortality and improve fish quality, thereby increasing production efficiency.
Income from cultivation is	Income increased	Strengthening family businesses by expanding production scale and increasing output through better management

Strength (S)	Oppurtunity (O)	SO Strategy
sufficient to increase family income/economy	from this business	practices. This can be done by improving cultivation efficiency, expanding market access, and reinvesting in business infrastructure to increase income.
This cultivation effort triggers conflict	Family members contribute	Focus on conflict resolution strategies in family businesses by involving all members in decision-making. Ensuring clear roles and responsibilities can reduce conflict and increase collaborative efforts to improve the business, leveraging each member's strengths.
There is assistance and supervision from the departments	Water quality conditions at the cultivation site	Leverage support and guidance from authorities to ensure optimal water quality management. By implementing better water quality monitoring and maintenance systems, fish survival and growth rates will improve, which in turn will result in better production.

CONCLUSION

The development of a gourami fish farming area in Kemranjen District, Banyumas Regency, shows significant potential for supporting the local economy and food security. However, several obstacles must be overcome, including unstable feed prices, limited technology in cultivation management, and environmental challenges such as limited water supply and climate fluctuations. The local community has demonstrated local wisdom in fish farming, but improvements are still needed in terms of the use of more efficient technology and sustainable environmental management.

A SWOT analysis concluded that the area's main strengths lie in easy access to production facilities and a high seed survival rate. Opportunities for development are significant, especially with government support and a stable market for gourami. However, threats such as limited digital marketing and waste management must be addressed to ensure the sustainability of this cultivation business.

ACKNOWLEDGEMENT

The author would like to thank the gourami fish farmers in Kemranjen District, the Fisheries Extension Workers, the Village Government, and the Banyumas Regency Fisheries Service for their assistance, information, and the opportunity to collect data, which enabled this research to be carried out successfully. He also expresses his appreciation to his academic colleagues and the team from the Faculty of Fisheries and Marine Sciences, Jenderal Soedirman University, for their support, scientific input, and facilitation during the preparation of this article.

REFERENCES

Amalia, R. N., Dianingati, R. S., & Annisaa', E. (2022). Pengaruh Jumlah Responden Terhadap Hasil Uji Validitas dan Reliabilitas Kuesioner Pengetahuan dan Perilaku Swamedikasi. *Generics: Journal of Research in Pharmacy*, *3*(1), 9-15, https://doi.org/10.14710/genres.v2i1.12271.

Andrian, S. H., Yusuf, A., Biworo, M., Khosyiati, N. E. & Wulida, S. N. (2024). Bifation Inovasi Budi Daya Perikanan Terintegrasi Aerator dan Sirkulasi Kualitas Air Guna Optimalisasi Perikanan Berkelanjutan. *Jurnal Ilmu Teknik*, *1*(4), 91-95.

Andriani, Y., & Zaelani, A. (2025). Sosialisasi Penerapan Budidaya Ikan Sistem Resirkulasi Sebagai Solusi Keterbatasan Lahan dan Sumber Daya Airdi Kecamatan Situraja dan Cisitu. *Jurnal Abdi Insani*, *12*(6), 2746-2758. https://doi.org/10.29303/abdiinsani.v12i6.2584.

Aprilla, T. A. S., Hanafi, I., & Supii, A. I. (2024). Pengaruh Fluktuasi Harga Nener Bandeng Terhadap Etos Kerja Petani Pembudidaya di Kabupaten Buleleng, Bali. *Samakia: Jurnal Ilmu Perikanan, 15*(2), 231-240.

Aryadi, M. A., Elfitasari, T., & Windarto, S. (2023). Pengaruh Corona Virus Disease (Covid-19) Terhadap Faktor Produksi dan Pemasaran Budidaya Ikan Gurami (*Osphronemus goramy*) di Desa Beji, Kecamatan Kedungbanteng Kabupaten Banyumas. *Jurnal Sains Akuakultur Tropis*k, *1*, 69-77.

Chefany, H. F., Nugroho, M. R., & Jannah, R. R. (2024). Ketersediaan Air Bersih dan Kondisi Iklim (Studi Krisis Air di Nusa Tenggara Timur). *Jurnal Pendidikan Sosial dan Humaniora*, *3*(4), 5185-5201.

Fatimah, S., Syazanani, T., Yusuf, M., & Hasibuan, A. (2023). Pemanfaatan dan Dampak Budidaya Keramba Jaring Apung terhadap Lingkungan di Kecamatan Haranggaol. *Cross-border*, *6*(2), 1048-1054.

Hakim, M. A., & Eriyanti, F. (2019). Faktor Penghambat dalam Pemberdayaan Kelompok Budidaya Ikandi Kecamatan Koto Tangah Kota Padang. *Journal of Multidisiplinary Research and Development*, *1*(3), 367-375.

Hamdani, Y. 2018. Permasalahan Sumber Daya Air dalam Pengelolaan Terpadu Daerah Irigasi Deras Di Kabupaten Musi Rawas. *Jurnal Teknik Sipil UNPAL*, *8*(2), 112-117.

Handajani, H., & Sutarjo, G. A. (2022). Penerapan Manajemen Budidaya Ikan Nila yang Baik Dikelompok Pembudidaya Ikan Gemari Jaya Kabupatenmalang. *Jurnal Abdi Insani*, *9* (2), 400-409.

Harmilia, E. D., Helmizuryani., Khotimah, K., & Anggoro, M. T. (2020). Penyuluhan Kualitas Air yang Baik untuk Budidaya Ikan (Parameter Fisika Kimia). *Suluh Abdi: Jurnal Ilmiah Pengabdian Kepada Masyarakat*, *2*(1), 37-40. https://doi.org/10.32502/sa.v2i1.2729

Kementerian Kelautan dan Perikanan. 2024. *Rencana Strategis Kementerian Kelautan dan Perikanan 2020-2024*. Kementerian Kelautan dan Perikanan.

Khairuman, & Amri, K. (2011). *Petunjuk Praktis Pembenihan Gurami*. Jakarta Selatan: PT. AgroMedia Pustaka.

Kurniati, A., Fakhruddin, F., Sundari, P., Mahdiyyah, Y., & Rahayu, R. (2024). Upaya Peningkatan Pengetahuan dan Kesadaran Masyarakat Mengenai Pengolahan Lahan dengan Budidaya Akuaponik Berbasis *Internet of Things*. *Jurnal Pengabdian Masyarakat Inovasi Indonesia*, *2*(4), 483-490. https://doi.org/10.54082/jpmii.535.

Leven, W. A., Liufeto, F. C., & Pasaribu, W. (2023). Sustainable Development Strategy of Milkfish (*Chanos chanos*) Aquaculture Using The SWOT and QSPM Approach: A Study in Fahiluka, Malaka Regency, East Nusa Tenggara. *IOP Conf. Series: Earth and Environmental Science*, *12*(24), 1-8.

Mahfuzhah, H.M. & Rini, W. (2023). Partisipasi Anggota Kelompok Pembudidaya Ikan Mina Jaya dalam Kegiatan Pengembangan Kelompok Di Kelurahan Selomartani Kapanewon Kalasan Kabupaten Sleman. *Journal of Agricultural Social and Business*. https://doi.org/10.31315/asb.v2i2.10206.

Meisaroh, F., Hermawan, A., & Winarno, A. (2023). Strategi Pemasaran Digital Budidaya Lele dalam Upaya Penguatan Ekonomi Masyarakat Kelurahan Arjowinangun. *Jurnal*

Kreativitas dan Inovasi (Jurnal Kreanova), *3*(1), 17-23. https://doi.org/10.24034/kreanova.v3i1.5075

Nurhabib, A., Sartimbul, A., Primyastanto, M., Widodo, M. S., Handoko, L. T., Rahayu, A. R. & Martudi, S. (2024). Sustainable Pangasius Aquaculture Management Strategy Using Multidimensional Scaling (MDS) and Analytical Hierarchy Process (AHP) in Tulungagung Regency, East Java, Indonesia. *Jurnal Ilmiah Perikanan dan Kelautan*, *16*(***1***), 66-91.

Pramono, T. B., Marnani, S., Junaidi, T., Setyawan, A. C., Nasikhah, A. L., & Wulan, T. S. (2023). Ramuan Jamu Herbal pada Pakan Terhadap Performa Pertumbuhan Ikan Nila (*Oreochromis* sp.). *Lempuk: Jurnal Ilmu Kelautan dan Perikanan, 2*(2), 11-15.

Putri, V. W., Wicaksari, E. A., Siyam, N., & Rafinda, A. (2024). Peningkatan Produktivitas Budidaya Ikan Nila Salin Melalui Implementasi Manajemen Risiko pada Kelompok Petani Tambak Kecamatan Dukuhseti, Kabupaten Pati. *Jurnal Abdi Insani, 11*(2): 1595-1607. https://doi.org/10.29303/abdiinsani.v11i2.1313

Rhamadhan, G., & Is, M. (2025). Strategi Peningkatan Produktivitas Petani Ikan melalui Inovasi Budidaya di Kabupaten Jember. *Jurnal Penelitian Nusantara*, *1*(3), 753-757.

Rusliani, H., Subhan, M., & Zidni, M. A. (2023). Pemberdayaan Ekonomi Masyarakat Berbasis Budidaya Ikan Nila Di Desa Sarang Burung Kecamatan Jambi Luar Kota Kabupaten Muaro Jambi. *Jurnal Publikasi Manajemen Informatika (JUPUMI)*, *2*(3), 52-58.

Sari, A. N. & Yuliawati. (2019). Faktor Yang Mempengaruhi Respon Petani Garam Tentang Sistem Resi Gudang Di Desa Raci Kecamatan Batangan. *SOCA: Jurnal Sosial, Ekonomi Pertanian, 13*(1), 1-13.

Sejati, H. D. D. & Irawati, S. (2024). Strategi Pengembangan Wisata Kuliner Melalui Pendekatan Matrik Ifas dan Efas di Kawasan Alun-Alun Trunojoyo Kabupaten Sampang. *Journal of Economic Bussines and Accounting (COSTING), 1*(2), 12-15. https://doi.org/10.31539/costing.v7i6.12851.

Setiawan, A., Ruslan, M., & Abubakar, H. (2021). Analisis Strategi Bersaing Produk Kredit Kepemilikan Kendaraan Bermotor pada PT. Bank Rakyat Indonesia (Persero)Tbk Kantor Wilayah Makassar, *2*(2), 112-120. https://doi.org/10.35965/JBM.V2I2.565.

Shobihah, H., Yustiati, A., & Andriani, Y. (2022). Produktivitas Budidaya Ikan dalam Berbagai Konstruksi Sistem Akuaponik (*Review*). *Jurnal Akuatika Indonesia*, *7*(1), 34-41.

Sujadi, F. M., Anjaini, J., Kusuma, B., Nurhabib, A., Setiyaningsih, L., & Kurniawan, S. B. (2025). Bioremediation in Aquatic Systems: A Literature Review on Fish as Natural Agents for Water Quality Management in Aquaculture. *Journal of Fish Health*, *5*(3), 418-425. https://doi.org/10.29303/jfh.v5i3.7942

Utomo, P. B., Nadapdap, B., & Widiarty, W. S. (2024). Analisis Dampak Regulasi Importasi Hasil Perikanan (2017-2023) dalam Perspektif Hukum Investasi. *Journal Syntax Idea, 6* (3), 138-150.