

Analysis of Maritime Potential Development in Improving Fishermen's Welfare: Islamic Economic Review (Case Study of Belawan Fishermen)

**Aqli Nadzhari Rambe¹, Muhammad Syukri Albani Nasution²,
Muhammad Lathief Ilhamy Nasution³**

Universitas Islam Negeri Sumatera Utara^{1,2,3}

aqlirambe160603@gmail.com; muhammadsyukrialbani@uinsu.ac.id; mlathiefilhamy@uinsu.ac.id

Article History

Received:

14-02-2026

Revised:

03-04-2026

Accepted:

06-04-2026

Available online:

30-05-2026

ABSTRACT

The welfare of traditional fishermen remains a major challenge in coastal areas despite the significant maritime potential available, particularly in Belawan, Indonesia. Previous studies have primarily focused on economic and technical aspects of fisheries development, with limited integration of Islamic economic principles in designing sustainable welfare strategies. Therefore, this study aims to analyze maritime development strategies to improve the welfare of traditional fishermen through an Islamic economic approach. This research employs a qualitative field study with a case study design conducted in Belawan Bahagia and Belawan Bahari sub-districts. The population consists of traditional fishermen communities, with informants selected purposively, including fishermen, community leaders, and related stakeholders. Data were collected through in-depth interviews, observation, and documentation using interview guidelines and field notes as instruments. Data analysis was conducted using the marketing mix (4Ps) and SWOT framework, supported by IFAS and EFAS matrices to determine strategic positioning. The results indicate that fishermen possess strong internal potential, particularly in maintaining the quality of fresh, preservative-free seafood and strong social networks. However, constraints such as limited cold storage, low digital literacy, and dependence on middlemen remain significant challenges. The IFAS score (3.06) and EFAS score (2.50) place fishermen in an aggressive (growth-oriented) strategic position, emphasizing product diversification, strengthening sharia-compliant cooperatives, and digital market expansion. From an Islamic economic perspective, these strategies align with maqasid al-shariah values, including welfare (maslahah), justice ('adl), and sustainability (barakah). The findings imply that integrating Islamic ethical principles into maritime economic policies is essential for achieving sustainable and equitable welfare improvements among traditional fishermen.

Keywords: Maritime Potential, Fishermen's Welfare, Islamic Economics, SWOT Analysis.

ABSTRAK

Kesejahteraan nelayan tradisional masih menjadi tantangan utama di daerah pesisir meskipun terdapat potensi maritim yang signifikan, khususnya di Belawan, Indonesia. Studi-studi sebelumnya sebagian besar berfokus pada aspek ekonomi dan teknis pengembangan perikanan, dengan integrasi prinsip-prinsip ekonomi Islam yang terbatas dalam merancang strategi kesejahteraan berkelanjutan. Oleh karena itu,

penelitian ini bertujuan untuk menganalisis strategi pengembangan maritim untuk meningkatkan kesejahteraan nelayan tradisional melalui pendekatan ekonomi Islam. Penelitian ini menggunakan studi lapangan kualitatif dengan desain studi kasus yang dilakukan di Kecamatan Belawan Bahagia dan Belawan Bahari. Populasi terdiri dari masyarakat nelayan tradisional, dengan informan yang dipilih secara purposif, termasuk nelayan, pemimpin masyarakat, dan pemangku kepentingan terkait. Data dikumpulkan melalui wawancara mendalam, observasi, dan dokumentasi menggunakan pedoman wawancara dan catatan lapangan sebagai instrumen. Analisis data dilakukan menggunakan bauran pemasaran (4P) dan kerangka kerja SWOT, didukung oleh matriks IFAS dan EFAS untuk menentukan posisi strategis. Hasil penelitian menunjukkan bahwa nelayan memiliki potensi internal yang kuat, khususnya dalam menjaga kualitas makanan laut segar tanpa pengawet dan jaringan sosial yang kuat. Namun, kendala seperti keterbatasan penyimpanan dingin, rendahnya literasi digital, dan ketergantungan pada perantara masih menjadi tantangan yang signifikan. Skor IFAS (3,06) dan skor EFAS (2,50) menempatkan nelayan pada posisi strategis yang agresif (berorientasi pertumbuhan), menekankan diversifikasi produk, penguatan koperasi yang sesuai syariah, dan perluasan pasar digital. Dari perspektif ekonomi Islam, strategi-strategi ini selaras dengan nilai-nilai maqasid al-shariah, termasuk kesejahteraan (masalah), keadilan ('adl), dan keberlanjutan (barakah). Temuan ini menyiratkan bahwa mengintegrasikan prinsip-prinsip etika Islam ke dalam kebijakan ekonomi maritim sangat penting untuk mencapai peningkatan kesejahteraan yang berkelanjutan dan adil di kalangan nelayan tradisional.

Kata kunci: Potensi Maritim, Kesejahteraan Nelayan, Ekonomi Islam, SWOT.

A. INTRODUCTION

Indonesia is the world's largest archipelagic nation, with a coastline of over 108,000 kilometers and a sea area covering two-thirds of its territory (Selmier & Newenham-Kahindi, 2021). This enormous potential makes the maritime and fisheries sector a key pillar of national economic development (Silalahi, Hafizh, Nasution, & Sugianto, 2021). However, a major irony exists on the ground (Rizka, Izzadieny, Prabowo, Negeri, & Laut, 2025): many coastal communities, particularly traditional fishermen, still live in conditions of low well-being. One area that exemplifies this paradox is Medan Belawan, North Sumatra.

Medan Belawan is known as one of the largest and oldest ports in Sumatra. In addition to logistics activities, this region is also a center of maritime economic activity, particularly traditional fisheries (Lesmana, Yanti, Islam, & Sumatera, 2025). Unfortunately, this enormous potential has not been matched by the well-being of its coastal communities. According to studies (Statistik, 2024), The following is the average income of fishermen in Medan Belawan District.

Table 1. Average Income of Fishermen in Medan Belawan District

Village / Type of Fisherman	Average Income
Belawan Bahagia (Traditional Fishermen)	Rp 771.757
Belawan Bahagia (Outboard Motor Boats)	Rp 3.962.000 - Rp 5.556.000
Belawan Bahari (Boat Master Fishermen)	Rp 8.976.233

Source: Central Statistics Agency

This income falls far short of a decent income and contributes to various social problems, ranging from limited access to education and poor health conditions to high rates of structural poverty.

This phenomenon indicates that the management of Belawan's maritime potential is still suboptimal. The marine development model currently implemented tends to be exploitative, prioritizing economic growth alone without considering ecological sustainability or the well-being of local communities (Statistik, 2024). In fact, from an Islamic economic perspective, ideal development must prioritize the principles of balance (mizan), justice (adl), and welfare (maslahah) (Harahap, Asmuni, & Soemitra, 2023). Natural resources, including marine resources, are seen as a trust from Allah SWT which must be managed responsibly for the benefit of all mankind (Rahmayati Mujiatun, Siti Nasution & Muhklis Ismal, 2023).

The grand theory underlying this research is the concept of Maqashid al-Shariah, namely the five main objectives of Islamic law: protecting religion (deen), life (nafs), reason (aql), descendants (nasl), and wealth (maal) (Haryati, 2022). In the context of managing maritime potential, maqashid al-shariah provides the basis that resource utilization must take into account the protection of life, economic balance, and social justice (Imsar, Nurhayati, 2023). Marine resources should not be controlled by a single group, but rather should be used as an instrument to improve collective well-being, including for small-scale fishers who are often marginalized (Dewi, 2024).

Meanwhile, previous research has extensively discussed the concept of the Blue Economy as an alternative approach to sustainably managing maritime potential (Setyawati et al., 2021); (Hadad, Salim, Basri, Satria, & Niode, 2020); (Prastyatini, Mukaromah, Sarjanawiyata, & Yogyakarta, 2025) and (Putri, Muhammad, & Fandeli, 2021). The blue economy emphasizes the use of marine resources for economic growth without damaging the environment, as well as encouraging social inclusion (Gusrah, Anwar, & Parawansa, 2024); (Dwimaputra, 2021); (Meidina Putri Sakinah, R Deni Muhammad Danial, 2024) and (Marihot Nasution, 2022). However, research gaps remain in several areas: First, few studies integrate Islamic economic values into marine economic analysis, particularly those based on the maqasid al-shariah (Islamic principles). Second, most previous research focuses on technical aspects (such as environmentally friendly fishing techniques or coral reef conservation) without exploring the socio-economic dimensions of justice for fishing communities. Third, the specific context of urban port areas like Belawan, with its complexities (urbanization, competition for maritime space, and ecological pressures), has rarely been comprehensively studied.

The novelty of this research lies in its analytical approach based on Islamic economic values to evaluate maritime potential development. This research offers a framework for a maritime economic development model based on the maqasid al-shariah (Islamic principles), which focuses not only on economic growth but also on equitable distribution of welfare, environmental preservation, and the fulfillment of the social rights of coastal

communities. Furthermore, this research also highlights the strategic aspect of strengthening local community-based institutions (co-management), a crucial pillar of a justice-based economy.

Practically, this research seeks to contribute to the formulation of more equitable and sustainable coastal development policies. Islamic Maritime Economy-based solutions are proposed, including optimizing marine asset management based on halal and thayyib (good) concepts. Strengthening sharia-compliant fishing cooperatives to break the chain of dependence on middlemen. Diversifying the coastal economy based on added value from marine products. Empowering communities based on productive waqf (endowments) for the development of fisheries infrastructure. Strengthening marine ecological awareness as part of religious responsibility (amanah).

By examining the Belawan fishermen's case in depth, this research is expected to not only contribute to the development of applied Islamic economics but also provide concrete recommendations for policymakers, fishing communities, and the private sector in creating a just, sustainable, and progressive maritime ecosystem.

B. RESEARCH METHOD

The research approach used by the author is a qualitative approach and is a field research (Sugiyono, 2017). Qualitative research methods are research methods based on post-positivism philosophy, used to research in natural object conditions (as opposed to experiments) where the researcher is the key instrument, data collection techniques are carried out through triangulation (combination), data analysis is inductive/qualitative, and qualitative research results emphasize meaning more than generalization (Ramdhan, 2021). This case study was chosen to explore the specific context of traditional fishermen in the Belawan area as the primary unit of analysis.

The research was conducted in Belawan Bahagia and Belawan Bahari Villages, Medan Belawan District, Medan City, North Sumatra Province. This location was chosen purposively because it is a center of traditional fishing activity, with various welfare issues reflecting the relevance of the research topic. The subjects of this study were traditional fishermen in Belawan (with at least 5 years of experience). The number of informants was adjusted to meet the principle of data saturation, estimated at around 5 people.

The types of data used were Primary Data: Obtained through in-depth interviews were conducted to obtain comprehensive information regarding the socio-economic conditions, business strategies, and challenges faced by traditional fishermen in Belawan. This technique allows researchers to explore the perceptions, experiences, and adaptive strategies of fishermen directly in their natural setting, which cannot be captured solely through quantitative data. The interview results also served to validate the SWOT analysis by providing empirical evidence related to internal and external factors influencing fishermen's welfare, direct field observations, and documentation of fishermen's economic activities. Secondary Data: Documents, statistical reports, scientific journals, media articles,

and other relevant literature on fishermen's welfare, maritime potential development, and Islamic economics (Rahmani, 2022).

A SWOT analysis systematically identifies various factors to formulate a company's strategy. This analysis is based on logic to formulate strengths and opportunities, while simultaneously minimizing weaknesses and threats. These are strategic factors that must be analyzed in the current situation. The strategic decision-making process will always be related to the development of the company's mission, objectives, strategies, and policies (Sugiyono, 2021). Thus, strategic planners must analyze the strategic factors of fishermen (strengths, weaknesses, opportunities and threats) in the current conditions

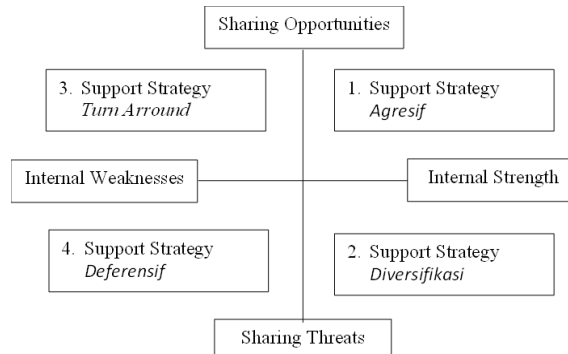


Figure 1. SWOT Diagram

The SWOT analysis diagram in the image above yields four quadrants, which can be explained as follows (Mubarrok, 2018):

Quadrant 1: This quadrant represents a highly favorable situation. The company possesses both opportunities and strengths, enabling it to capitalize on these opportunities. The strategy that should be implemented in this situation is to support an aggressive growth policy (Growth-Oriented Strategy).

Quadrant 2: Despite facing various threats, the company still possesses internal strengths. The strategy that should be implemented is to use these strengths to capitalize on long-term opportunities through a diversification strategy (product/market).

Quadrant 3: The company faces significant market opportunities, but also faces internal constraints or weaknesses. The focus of the company's strategy is to minimize these internal problems so that it can seize a much larger market opportunity.

Quadrant 4: This represents a highly unfavorable situation, as the company faces various external threats and internal weaknesses.

C. RESULTS AND DISCUSSION

Result

This research was conducted using a qualitative approach through field studies of traditional fishermen in the Belawan area, specifically in the Belawan Bahagia and Belawan Bahari sub-districts. The analysis was based on a marketing mix strategy (4Ps) that illustrates the microeconomic dynamics of fishermen and the strategies they employ to independently improve their welfare.

1. Product Strategy

Fishermen in Belawan demonstrate considerable creativity in maintaining the quality of the seafood they market. Based on in-depth interviews with informants, several key strategies were identified. First, in terms of catch quality, fishermen prioritize freshness as their primary selling point. Fishing activities are generally conducted early in the morning so that the catch can be landed quickly and sold in fresh condition. They also consciously avoid the use of formalin or other chemical preservatives to ensure that their products remain safe for consumption and in accordance with halal standards. Second, regarding product differentiation, some fishermen classify their catch based on size and species before distribution to the market. In addition, a number of fishermen have begun developing simple processed products such as salted fish, shrimp paste, and fish crackers, although production capacity remains limited and still uses traditional methods. Third, in terms of packaging, the catch is packaged using simple materials such as Styrofoam boxes, plastic buckets, or bamboo baskets, depending on the type of buyer, whether household consumers, collectors, or wholesalers. These strategies collectively reflect fishermen's adaptive efforts to maintain product quality and market competitiveness despite existing resource limitations.

2. Pricing Strategy

The selling price of fishermen's catch in Belawan is largely influenced by seasonal conditions, fish species, and fluctuations in market supply. Field findings show that fishermen often determine minimum prices collectively through associations or informal discussions at the Fish Auction Place (TPI) to avoid price manipulation by middlemen. Price flexibility also occurs according to seasonal patterns, where prices tend to decline significantly during peak harvest periods but may increase two to three times during the lean season. However, small-scale fishermen generally lack adequate storage facilities, forcing them to sell their catch immediately even when market prices are unfavorable. In addition, many fishermen operate under profit-sharing arrangements with boat owners or skippers, and some rely on loans from middlemen before going to sea. This financial dependence reduces their bargaining power in determining the selling price of their catch and often places them in a structurally disadvantaged economic position.

3. Place Strategy

Distribution channels and location accessibility play an important role in the marketing of seafood products in Belawan. Most fishermen sell their catch directly at the Fish Auction Place (TPI) or distribute it to traditional markets in Medan, with some networks extending to nearby regions such as Binjai and Deli Serdang. Nevertheless, limited infrastructure, particularly the lack of cold storage and adequate transportation facilities, restricts market reach and prevents fishermen from accessing modern markets such as supermarkets or larger commercial buyers. Despite these constraints, Belawan possesses significant potential for development as a seafood culinary tourism destination due to its coastal location, port activities, and scenic sea views. Unfortunately, there is currently no

integrated collaboration between the fisheries sector and tourism development initiatives, resulting in underutilization of this economic opportunity.

4. Promotion Strategy

Promotional activities conducted by fishermen remain largely conventional and rely heavily on direct interpersonal interactions with consumers. Word-of-mouth communication continues to be the dominant marketing approach and plays a crucial role in maintaining customer relationships. However, the level of digital adoption among fishermen is still minimal, as most have not utilized social media platforms, e-commerce, or other digital marketing tools to expand their market reach. This limitation is primarily caused by low digital literacy and inadequate technological infrastructure in coastal communities. To retain loyal customers, some fishermen provide incentives such as price discounts or additional seafood for bulk purchases. Although simple, this strategy reflects an effort to maintain long-term customer relationships and sustain market demand within their limited promotional capacity.

SWOT Analysis of Belawan Traditional Fishermen

A SWOT analysis is a powerful analytical tool when used correctly. "SWOT" is an acronym for Strengths, Weaknesses, Opportunities, and Threats. This analysis is used to identify the strengths, weaknesses, opportunities, and threats/challenges facing a company, both internally and externally.

1. Internal Environmental Analysis

The internal environmental analysis of traditional fishermen in Belawan was conducted to identify the main strengths and weaknesses influencing their economic activities. Based on field findings, several internal strengths were identified. First, fishermen produce fresh seafood without the use of preservatives, which increases consumer trust and product quality. Second, close social relationships between fishermen and customers contribute to customer loyalty and stable market access. Third, the strategic location of the Fish Auction Place (TPI) in the center of the port city provides advantages in distribution and accessibility. Fourth, fishermen benefit from a direct supplier network without intermediaries, allowing them to maintain competitive prices. Fifth, product variation, including fresh fish and traditional processed products, adds value to their economic activities. Sixth, competitive pricing is possible because the marketing chain does not fully depend on middlemen. Finally, a collaborative work system among fishermen strengthens social capital and mutual support in their economic operations.

However, several weaknesses were also identified. Fishermen still lack modern promotional strategies, particularly the use of digital marketing and social media platforms. Limited infrastructure, especially the absence of cold storage facilities, restricts their ability to store products and manage price fluctuations. Prices tend to fluctuate and remain uncertain due to seasonal dependence and market instability. In addition, fishermen rely heavily on daily catches, which creates income vulnerability. Market access is also relatively limited and mostly local in scope. Another constraint is the lack of business management

training, which affects professionalism and financial planning. Weather uncertainty further complicates fishing activities and directly impacts productivity.

2. External Environmental Analysis

The external environmental analysis identified several opportunities and threats affecting the sustainability of fishermen’s economic activities in Belawan. Opportunities include the potential development of seafood-based culinary tourism in the Belawan coastal area, which could increase market demand. Government support programs for coastal economic development also provide opportunities for institutional strengthening and infrastructure improvement. Increasing consumer awareness of fresh and locally sourced seafood products further supports fishermen’s competitiveness. The development of sharia-compliant fishing cooperatives offers an alternative institutional model to improve access to capital and marketing. Additionally, growing domestic and export demand for seafood products presents significant economic potential.

On the other hand, fishermen face several external threats. Competition with large-scale fisheries and modern fishing industries poses challenges in terms of productivity and market dominance. Marine pollution and ecosystem degradation also threaten long-term sustainability of fish resources. Government policies that are not fully supportive of small-scale fishermen can create structural barriers. Fluctuating fuel prices significantly affect operational costs and profitability. Furthermore, the presence of middlemen who monopolize prices weakens fishermen’s bargaining position and reduces income potential.

3. IFAS Matrix (Internal Factor Analysis Summary)

The Internal Factor Analysis Summary (IFAS) matrix was used to systematically evaluate the strengths and weaknesses of traditional fishermen in Belawan. According to David, the preparation of the IFAS matrix involves several stages. First, internal factors such as catch quality, market access, and supporting facilities are identified to determine strengths and weaknesses. Second, each factor is assigned a weight ranging from 0.0 (not important) to 1.0 (very important), reflecting its relative importance to fishermen’s business success. The total weight of all factors must equal 1.0. Third, each factor is given a rating between 1 and 4, where a score of 1 indicates a major weakness, 2 indicates a minor weakness, 3 indicates a minor strength, and 4 indicates a major strength. In this context, the rating reflects the current condition of fishermen, while the weight represents the significance of the factor within the traditional fisheries industry. Fourth, the weight of each factor is multiplied by its rating to obtain a weighted score. Finally, all weighted scores are summed to obtain the total IFAS score, which indicates the overall internal strategic position of fishermen.

Based on the number of factors included in the IFAS matrix, the total weighted average ranges from a low of 1.0 to a high of 4.0, with an average of 2.5. A total average below 2.5 indicates a trader's internal weakness. A total value above 2.5 indicates strong internal potential.

Table 2. IFAS Matrix (Internal Factor Analysis Summary)

No	Internal Factors	Weight	Rating	Score
----	------------------	--------	--------	-------

Strength				
1	Fresh and natural products	0.10	4	0.40
2	Close social relationships	0.08	3	0.24
3	Strategic location	0.10	4	0.40
4	Direct supplier network	0.07	3	0.21
5	Varied products	0.08	3	0.24
6	Competitive prices	0.06	3	0.18
7	Collaborative work system	0.05	3	0.15
Subtotal Strength		0.54	-	1.82
Weakness				
1	Minimal promotion	0.10	4	0.40
2	No cold storage	0.08	3	0.24
3	Fluctuating prices	0.08	2	0.16
4	Seasonal and weather-related	0.07	2	0.14
5	Limited market	0.06	2	0.12
6	Minimal training	0.04	3	0.12
7	Fuel dependence	0.03	2	0.06
Subtotal Weaknesses		0.46	-	1.24
Total		1.00	-	3.06

Source: Data processed 2025

The total overall score was 3.06, which is above the standard average (2.5). This indicates that the internal strengths of Belawan fishermen outweigh their weaknesses, thus they have strong internal potential to develop and compete if managed well.

4. EFAS Matrix (External Factor Analysis Summary)

The External Factor Analysis Summary (EFAS) matrix, according to David, consists of five main stages designed to measure how well an organization responds to external factors that influence business sustainability. In this study, the EFAS matrix was used to analyze the external conditions faced by traditional fishermen in Belawan, particularly opportunities and threats affecting their economic activities. The first stage involves identifying external factors that represent potential opportunities and threats. The second stage is assigning a weight to each factor, ranging from 0.0 (not important) to 1.0 (very important), based on its level of influence on fishermen’s success, with the total weight equal to 1.00. The third stage is providing a rating for each factor on a scale from 1 to 4, where 4 indicates a very good response, 3 indicates an above-average response, 2 indicates an average response, and 1 indicates a weak response. While weights reflect the relative importance of external factors within the industry, ratings describe the fishermen’s actual response to those factors. The fourth stage involves calculating the weighted score by multiplying the weight by the rating for each factor, which indicates the relative impact of opportunities and threats on the fishermen’s strategic position. The final stage is summing all weighted scores to obtain the total EFAS score, which reflects the overall ability of fishermen to respond to external dynamics, with a possible score range between 1.0 and 4.0.

Table 3. EFAS (External Factor Analysis Summary) Matrix

No	External Factors	Weight	Rating	Score
Opportunity				

1	Culinary tourism potential	0.10	4	0.40
2	Government support	0.08	3	0.24
3	Local product awareness	0.07	3	0.21
4	Sharia cooperatives	0.08	3	0.24
5	Domestic and export demand	0.07	4	0.28
Subtotal Opportunities		0.40	-	1.37
Threat				
1	Major competitors	0.10	3	0.30
2	Marine pollution	0.08	3	0.24
3	Government policies	0.07	2	0.14
4	Fuel price fluctuations	0.08	3	0.24
5	Middlemen	0.07	3	0.21
Threat Subtotal		0.40	-	1.13
Total		1.00	-	2.50

Source: Data processed 2025

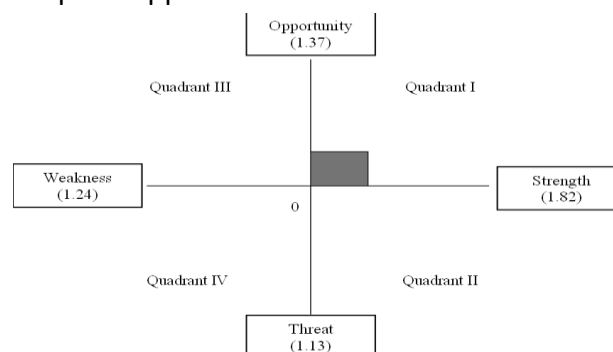
A total EFAS score of 2.50 indicates that fishermen are responding to opportunities and threats quite effectively. Because this score is above the standard average (2.5), fishermen are in a relatively strong external position, and opportunities are assessed as greater than threats.

Based on the analysis of the IFAS and EFAS tables above, the total IFAS (Internal Factor Analysis Summary) score is 3.06, consisting of a Strength of 1.82 and a Weakness of 1.24. This score indicates that traditional fishermen in Belawan possess significant internal strengths.

Meanwhile, the total EFAS (External Factor Analysis Summary) score is 2.50, consisting of an Opportunity of 1.37 and a Threat of 1.13. This score indicates that fishermen are responding to existing opportunities quite well and have the ability to adequately address market threats.

1. The difference in total scores between internal factors (Strength - Weakness) is: $1.82 - 1.24 = 0.58$
2. The difference in total scores between external factors (Opportunity - Threat) is: $1.37 - 1.13 = 0.24$

With a positive difference on both sides, the fishermen's position is in Quadrant I of the SWOT Cartesian Diagram, meaning the most appropriate strategy to implement is an Aggressive Strategy (Growth-Oriented Strategy). This strategy aims to optimize all strengths to seize and expand opportunities available in the external environment.



Source: Data processed 2025

Figure 2. Cartesian Diagram of SWOT Analysis of Belawan Traditional Fishermen

5. SWOT Matrix

The SWOT matrix is a strategic tool used to identify, analyze, and formulate strategies based on a combination of internal and external factors that influence business sustainability. In the context of traditional fishermen in Belawan, this matrix serves to systematically describe the strengths, weaknesses, opportunities, and threats they face in their marine economic activities.

The SWOT matrix demonstrates how fishermen respond to external opportunities, such as the growing interest in seafood tourism and support from coastal government programs, and how they face challenges like marine pollution, fluctuating fuel prices, and competition from large-scale industrial fishermen.

This matrix serves as the basis for developing various alternative strategies, including strengthening (aggressive), defensive, diversification, and risk reduction strategies, tailored to the fishermen's position within the SWOT quadrants. Using this approach, the resulting strategies are more targeted and realistic, considering objective conditions on the ground.

The alternative strategies generated from the Belawan traditional fishermen's SWOT Matrix can be viewed and further analyzed in the SWOT strategy table below:

Table 4. SWOT Matrix

EFAS	Opportunities	Threats
	<ol style="list-style-type: none"> 1. Potential seafood tourism market in Belawan. 2. Government support for the coastal economy. 3. Increasing consumer awareness of fresh and local products. 4. Development of sharia-compliant fishing cooperatives. 5. Increasing demand for domestic and export seafood 	<ol style="list-style-type: none"> 1. Competition with large-scale fisheries and the modern fishing industry. 2. Marine pollution and ecosystem damage. 3. Unfavorable government policies. 4. Fluctuating fuel prices. 5. The entry of middlemen who monopolize prices.
IFAS	SO Strategy	ST Strategy
<ol style="list-style-type: none"> 1. Fresh seafood products without preservatives. 2. Strong social relationships between fishermen and customers. 3. Strategic location of the Fish Auction Place (TPI) in the center of the port city. 4. Direct supplier network without intermediaries. 	<ol style="list-style-type: none"> 1. Improve the quality and volume of fresh seafood. 2. Establish a sharia-compliant fishermen's cooperative for distribution and marketing. 	<ol style="list-style-type: none"> 1. Leverage the image of fresh products to build customer loyalty and compete against major competitors. 2. Maintain good relationships with consumers in the face of price fluctuations

- 5. Varied products (fresh fish and traditional processed products).
- 6. Competitive prices because they don't go through middlemen.
- 7. Collaborative work system among fishermen.

and the dominance of middlemen.

Weaknesses	WO Strategy	WT Strategy
1. No modern promotional strategies (minimal social media).	1. Conduct digital marketing and packaging training.	1. Increase the variety of processed seafood products to reduce dependence on daily catches.
2. No cold storage facilities.	2. Expand market access through social media and community-based e-commerce.	2. Form fishermen's associations to strengthen their bargaining position and mitigate government policies.
3. Prices fluctuate and are often uncertain.		
4. Dependence on daily catches.		
5. Limited market access, local only.		
6. Lack of business management training.		
7. Weather uncertainty affects catches.		

Source: Data processed 2025

Thus, the strategy for developing the traditional fishermen's economy in Belawan can be directed at improving the quality and competitiveness of marine products, modernizing the management of fishermen's businesses, and expanding market access based on Islamic economic values.

SWOT Strategy of Belawan Traditional Fishermen

Based on the results of the SWOT matrix measurements in the previous table, the following are alternative strategies that can be implemented by traditional fishermen in Belawan:

The SO (Strength–Opportunity) strategy represents a combination of internal strengths and external opportunities aimed at maximizing existing advantages to capture potential opportunities. In the context of traditional fishermen in Belawan, this strategy can be implemented through the development of value-added marine products, such as smoked fish, fish crackers, and seafood floss, while maintaining product quality and freshness as the main competitive advantage. In addition, optimizing sharia-compliant fishermen’s cooperatives is an important step, considering the strong social networks among fishermen and the availability of government support. The establishment of such cooperatives can expand access to distribution channels, capital resources, and more professional marketing systems.

The ST (Strength–Threat) strategy focuses on utilizing internal strengths to overcome various external threats faced by fishermen. This strategy can be applied by strengthening local promotion and branding efforts, for example through simple promotional media in strategic locations and collaboration with seafood culinary tourism businesses and local markets. The image of fresh, natural, and locally sourced seafood products can serve as a distinctive competitive advantage against large-scale fisheries. Furthermore, maintaining product quality and safety standards is essential to prevent

consumer switching behavior toward competing products, particularly those produced by industrial fishing sectors.

The WO (Weakness–Opportunity) strategy aims to take advantage of external opportunities to address or minimize internal weaknesses. This can be achieved through capacity building programs such as training and mentoring in business management, packaging innovation, and digital marketing, which may enhance fishermen’s professionalism despite limitations in educational background. In addition, market expansion through technology utilization is also crucial. Introducing social media platforms and local e-commerce systems can open broader market access, increase product visibility, and gradually reduce dependence on middlemen.

The WT (Weakness–Threat) strategy represents a defensive approach designed to reduce internal weaknesses while simultaneously avoiding or mitigating external threats. One important effort is building collaboration among fishermen in the procurement of shared infrastructure, such as cold storage facilities, to prevent rapid spoilage of catches and reduce pressure to sell at low prices. Moreover, diversifying catches and seasonal products is necessary to reduce dependence on specific fish types or seasons. Fishermen can adjust their catches according to sea conditions and develop processed seafood products as alternative income sources during periods of low harvest.

By implementing these strategies, Belawan's traditional fishermen can move towards strengthening a community-based economy that is independent, fair, and sustainable.

Discussion

This study examines the maritime potential development strategies of traditional fishermen in Belawan through a marketing mix (4P) approach and SWOT analysis, integrating them with Islamic economic principles. The results indicate that although fishermen possess various internal strengths and external opportunities, structural limitations and managerial weaknesses remain major challenges.

1. Product Strategy and Halal-Tayyib Principles

In its product strategy, Belawan fishermen have demonstrated a high level of awareness of the quality of their seafood, emphasizing freshness and cleanliness. This aligns with the principles of halal and tayyib in Islamic economics, which emphasizes food that is not only legally halal but also good in terms of quality and health (Quran, Al-Baqarah: 168).

يَا أَيُّهَا النَّاسُ كُلُوا مِمَّا فِي الْأَرْضِ حَلَالًا طَيِّبًا وَلَا تَتَّبِعُوا خُطُوَاتِ الشَّيْطَانِ إِنَّهُ لَكُمْ عَدُوٌّ مُبِينٌ ۝ ١٦٨
 Meaning: “O mankind, eat of the lawful and good things on earth, and do not follow the footsteps of Satan. Indeed, he is to you an open enemy.” (QS. Al-Baqarah: 168).

Furthermore, the concept of tayyib encompasses not only physical but also ethical production. By avoiding harmful preservatives and prioritizing honesty in quality, fishermen have implemented the values of shiddiq (honesty) and amanah (trustworthiness) in their business practices, which are the foundation of Islamic transactions (Kalsum, 2020).

This is in accordance with previous studies by (Ummu Khoirotnun Nisfah, Sri Ramadhani, 2024); (Malinda Budiati, Yuanita FD Sidabutar, Raflis Tanjung & Raymond, 2024) and (Nilam Cahaya, Hendra Harmain, 2023) which states that business actors who consistently apply the halal-tayyib principles are not only able to increase consumer trust, but also strengthen product competitiveness in a market that is increasingly concerned with aspects of sustainability and Islamic business ethics (Jannah, Adistia, & Renfiana, 2023).

2. Pricing Strategy and Distribution Fairness

Collective price-setting through the fishermen's association at the TPI is a concrete manifestation of deliberation (shura) and justice ('adl) in economic transactions. In Islam, prices should not be manipulatively determined by middlemen or more powerful market players (hisbah). A fair pricing system is essential to prevent exploitation, as emphasized in QS. Al-Mutaffifin: 1-3 concerning the prohibition of reducing weights and measures.

وَيْلٌ لِّلْمُطَفِّفِينَ ۝ ۱ الَّذِينَ إِذَا اكْتَالُوا عَلَى النَّاسِ يَسْتَوْفُونَ ۝ ۲ وَإِذَا كَالُوا لَهُمْ أَوْ وَزَنُوا لَهُمْ يُخْسِرُونَ ۝ ۳

Meaning: "*Woe to those who cheat (in measuring and weighing)! (They are) those who, when they receive a measure from someone else, they ask to fulfill it. (Conversely,) when they measure or weigh for someone else, they reduce it.*" (QS. Al-Mutaffifin: 1-3)

However, the debt system from middlemen that burdens fishermen and reduces their bargaining power is a form of economic practice that is contrary to the principle of justice and leads to forms of gharar (uncertainty) and dzulm (injustice) (Ahmad Tamami, Syafruddin Syam, 2022); (Hamid, 2023) and (Sudarmi & Rusdi, 2022). Therefore, strengthening sharia fishermen's cooperatives is a solution so that fishermen have access to finance without usury and monopolistic practices (Fachriyan, Jamhari, Irham, & Waluyati, 2021).

3. Distribution Strategy and Infrastructure Limitations

The limited distribution of catches to local markets indicates that market potential has not been optimally tapped. Limited cold storage facilities hinder fishermen from storing seafood when prices are unfavorable. This relates to the principle of maslahah (benefit) in Islamic economics, which emphasizes the importance of managing resources for long-term benefit (Tambunan, Siregar, Tarigan, & Harahap, 2022).

In this context, the procurement of collective-based infrastructure such as cooperative cold storage is in accordance with the spirit of al-ta'awun (mutual assistance) in Islam, where the community plays an active role in strengthening the economic resilience of its members (Khafian, 2023).

4. Promotion Strategy and Digital Literacy

Belawan fishermen's promotional strategies remain conventional, relying heavily on word-of-mouth advertising and customer loyalty. Low digital literacy and technology-based marketing hinder their market growth. This highlights the need for a professional approach

to trade, a key Islamic value for Muslims to excel in economic performance and to preach through business ethics.

Study from (Muhammad Iqbal Nasution, Nasution, & Rahmani, 2024); (Muna & Qomar, 2020); (Sumatera, 2022) and (Wahyuni, Asmuni, & Anggraini, 2023) stated that digital literacy and online marketing are highly relevant in improving sharia-based micro-economy, particularly in increasing the competitiveness of MSMEs of fishermen and farmers in coastal areas (Renata Dian Kusuma Wardani, Teguh Soedarto, 2024).

5. SWOT Analysis and Integration of Islamic Strategy

The IFAS and EFAS analyses indicate that Belawan's traditional fishermen are in Quadrant I, meaning they are in an aggressive position. Growth strategies can be implemented by maximizing strengths to seize opportunities, particularly by expanding marketing networks, improving the quality of processed seafood products, and establishing sharia cooperative institutions (Siswanto & Astuty, 2024). SO and ST strategies based on Islamic values are the primary choice:

- a. SO strategies such as developing value-added products and strengthening sharia cooperatives are highly aligned with the concepts of iqtisad (efficiency) and shirkah (partnership) in Islamic economics.
- b. ST strategies such as local branding and maintaining product quality reflect the values of ihsan (perfection of work) and kifayah (sufficiency and sufficiency), namely meeting community needs with quality.

While WO and WT strategies serve to address internal weaknesses and anticipate external threats, the emphasis on management training and marketing technology demonstrates that increasing the human resource capacity of fishermen is also a long-term investment in the Islamic economy.

D. CONCLUSION

This research shows that traditional fishermen in Belawan have significant economic potential for development through strategies based on internal strengths and external opportunities. The SWOT analysis places the fishermen in quadrant I (aggressive strategy), meaning they are in a relatively strong position for growth if they are able to optimally manage their resources and institutions. Through the marketing mix strategy (4Ps) of product, price, place, and promotion, it is known that the fishermen have implemented the basic principles of honesty, trustworthiness, and simplicity in conducting their economic activities. This strategy, although still conventional, demonstrates a form of economic practice that aligns with Islamic values, such as halal (halal) and thayyib (lawful), justice ('adl), deliberation (shura), and benefit (maslahah). The total IFAS score of 3.06 and EFAS score of 2.50 indicate that internal strengths outweigh weaknesses, and that responses to external opportunities are quite positive. Priority strategies in this context are the development of sharia-compliant fishermen's cooperatives, improving product quality and differentiation, and modernizing distribution and promotion through digital technology and community-based e-commerce.

By integrating an Islamic economic approach, maritime potential development focuses not only on increasing income but also on aspects of blessing, social justice, environmental sustainability, and strengthening coastal community solidarity. Therefore, solutions based on the Islamic Maritime Economy need to be prioritized in coastal development policies, by strengthening institutions based on Sharia values, empowering local communities, and equitable marine resource governance.

E. REFERENCES

- Ahmad Tamami, Syafruddin Syam, Muhammad Syukri Albani Nasution. (2022). Kesadaran Hukum Nelayan Pengguna Jaring Tarik Dan Jaring Hela Di Kecamatan Medang Deras (Analisis Hifz Al-Biah). *Istinbáth Jurnal Hukum Dan Ekonomi Islam*, 21(2), 288–310.
- Dewi, Nurul Aulia. (2024). Dinamika Pemikiran Ekonomi : Konstruksi Pemikiran Sistem Ekonomi Abad Klasik Pertengahan dan Kontemporer. *Indonesian Journal of Multidisciplinary Scientific Studies (IJOMSS)*, 2(1), 72–83.
- Dwimaputra, Supardi. (2021). Agama, Negara, Ekonomi Dan Kesejahteraan: Pemikiran Sjafruddin Prawiranegara (1911-1989). *Saqifah Jurnal Hukum Ekonomi Syariah*, 6(2), 101–110. Retrieved from <https://journals.fasya.uinib.org/index.php/saqifah/article/viewFile/233/122>
- Fachriyan, H. A., Jamhari, J., Irham, I., & Waluyati, L. R. (2021). Effect of E-Marketing Mix Based on E-Marketplace on Marketing Performance of Food Msmes. *Russian Journal of Agricultural and Socio-Economic Sciences*, 116(8), 147–158. <https://doi.org/10.18551/rjoas.2021-08.18>
- Gusrah, G., Anwar, A., & Parawansa, P. (2024). Implementasi Skema Ekonomi Biru dalam United Nations Convention On The Law Of The Sea: Kajian Keberlanjutan Sumber Daya Perikanan di Pesisir Sulawesi. *Innovative: Journal Of Social*, 4(1), 416–427. Retrieved from <https://j-innovative.org/index.php/Innovative%0AImplementasi>
- Hadad, Ismid, Salim, Emil, Basri, Faisal, Satria, Arif, & Niode, Amanda Katili. (2020). Pembangunan Berkelanjutan: Menuju Indonesia Tinggal Landas 2045. In *90 Tahun Prof. Emil Salim, Pembangunan Berkelanjutan: Menuju Indonesia Tinggal Landas 2045*. Jakarta: Yayasan KEHATI.
- Hamid, Hendrawati. (2023). Fishermen Empowerment Strategies Through The Fishermen Group Program By The Takalar District Marine And Fisheries Office. *Journal of Management*, 2(1), 60–65.
- Harahap, Raja Sakti Putra, Asmuni, Asmuni, & Soemitra, Andri. (2023). Islamic Smart City: Study of Literacy and Inclusion in Financial Behavior and Empowerment of Micro, Small and Medium Enterprises (MSMEs). *Edukasi Islami: Jurnal Pendidikan Islam*, 11(03). <https://doi.org/10.30868/ei.v11i03.3301>
- Haryati, Tantina. (2022). The Role of Environmental Accounting in Social Responsibility with the Classical and Contemporary Maqashid Sharia Approach. *Nusantara Science and Technology Proceedings*, 22(02), 1–5. <https://doi.org/10.11594/nstp.2022.2301>
- Imsar, Nurhayati, Isnaini harahap. (2023). Analysis of Digital Education Interactions,

Education Openness, Islamic Human Development Index (I-HDI) and Indonesia's GDE Growth. *Edukasi Islami: Jurnal Pendidikan Islam*, 12(1), 753–773.

Jannah, Erfina Miftahul, Adistia, Erika, & Renfiana, Lilis. (2023). Analisis Strategi Bauran Pemasaran (Marketing Mix) Untuk Meningkatkan Daya Saing (Studi Pada Saung Enggal). *Journal of Creative Student Research (JCSR)*, 1(6), 117–131.

Kalsum, S. U. (2020). *Pengaruh Etika Bisnis Islam Terhadap Keuntungan Pada Usaha Mikro Dan Usaha Kecil Di Kecamatan Watang Sawitto Kabupaten Pinrang*. UIN Pinrang.

Khafian, Nidaan. (2023). *The Role Of Collaborative Governance In Indonesian Disaster Management Peran Tata Kelola Kolaboratif Dalam Manajemen Bencana Di Indonesia*. 4(2), 158–175. Retrieved from <https://e-journal.unair.ac.id/JGAR/index>

Lesmana, Angga, Yanti, Nursantri, Islam, Universitas, & Sumatera, Negeri. (2025). ENTREPRENEURIAL ORIENTATION, DYNAMIC CAPABILITY AND INNOVATION: THE EFFECT ON THE PERFORMANCE OF MSMES. *Edueksos : Jurnal Pendidikan Sosial Dan Ekonomi*, 14(02), 243–258.

Malinda Budiati, Yuanita FD Sidabutar, Rafli Tanjung, Malahayati Rusli Bintang, & Raymond. (2024). Journal IDevelopment Potential of Fisheries as a Maritime Activity in Supporting Area Planning a lifesci. *Journal La Lifesci*, 05(05), 454–470. <https://doi.org/10.37899/journallalifesci.v5i5.1500>

Meidina Putri Sakinah, R Deni Muhammad Danial, Asep Muhamad Ramdan. (2024). Enhancing MSMEs Business Growth: Exploring Market Orientation and Innovation Capability as Catalysts. *Edueksos : Jurnal Pendidikan Sosial Dan Ekonomi*, XIII(02), 288–302.

Mubarrok, Ujang Syahrul. (2018). *Penerapan SWOT Balanced Scorecard Pada Perencanaan Strategi Bisnis*. Surabaya: Jakad Publishing.

Muna, Titin Izzatul, & Qomar, Mohammad Nurul. (2020). Relevansi Teori Scarcity Robert Malthus Dalam Perspektif Ekonomi Syariah. *SERAMBI: Jurnal Ekonomi Manajemen Dan Bisnis Islam*, 2(1), 1–14. <https://doi.org/10.36407/serambi.v2i1.134>

Nasution, Marihot. (2022). Potensi Dan Tantangan Blue Economy Dalam Mendukung Pertumbuhan Ekonomi Di Indonesia: Kajian Literatur. *Jurnal Budget : Isu Dan Masalah Keuangan Negara*, 7(2), 340–363. <https://doi.org/10.22212/jbudget.v7i2.136>

Nasution, Muhammad Iqbal, Nasution, Muhammad Syukri Albani, & Rahmani, Nur Ahmadi Bi. (2024). Marketing Strategical Analysis of Products UMKM Markets with Tol. *Kontigensi : Jurnal Ilmiah Manajemen*, 12(1), 390–395. <https://doi.org/10.56457/jimk.v12i1.570>

Nilam Cahaya, Hendra Harmain, Muhammad Lathief Ilhamy Nasution. (2023). Analisis Pengembangan Potensi Ekonomi Desa Dalam Meningkatkan Kesejahteraan Melalui Badan Usaha Milik Desa (BUMDes) di Desa Kisam Lestari Kec. Lawe Sumur Kab. Aceh Tenggara. *Jurnal Manajemen Akuntansi (JUMSI)*, 3(3), 149–200. Retrieved from <https://repositorio.ufsc.br/xmlui/bitstream/handle/123456789/167638/341506.pdf?sequence=1&isAllowed=y%0Ahttps://repositorio.ufsm.br/bitstream/handle/1/8314/LOEBLEIN%2C>

LUCINEIA

CARLA.pdf?sequence=1&isAllowed=y%0Ahttps://antigo.mdr.gov.br/saneamento/praes

- Prastyatini, Sri Lestari, Mukaromah, Dinina, Sarjanawiyata, Universitas, & Yogyakarta, Tamansiswa. (2025). IMPACT OF E-COMMERCE AND ENTERPRISE RESOURCE PLANNING PERCEPTION ON. *Edueksos : Jurnal Pendidikan Sosial Dan Ekonomi*, 14(01), 89–103.
- Putri, Agnes Caesarika Githanto, Muhammad, Muhammad, & Fandeli, Cafid. (2021). Strategi pengelolaan pariwisata berkelanjutan di kawasan wisata alam sumber maron, kabupaten Malang. *Jurnal Teknosains*, 11(1), 51. <https://doi.org/10.22146/teknosains.59115>
- Rahmani, Nur Ahmadi Bi. (2022). Metodologi Penelitian Kualitatif dan Kuantitatif. In *Rahmani*.
- Rahmayati Mujiatun, Siti Nasution, Yenni Samri Juliati, & Muhklis Ismal, Rifki. (2023). Preferences and Perceptions of MSME Entrepreneurs Towards Islamic Banking QRIS Products and Services in the City of Medan Post COVID 19 era. *International Journal of Professional Business Review*, 8(5), e01099. <https://doi.org/10.26668/businessreview/2023.v8i5.1099>
- Ramdhan, M. (2021). *Metode penelitian*. Medan: Cipta Media Nusantara.
- Renata Dian Kusuma Wardani, Teguh Soedarto, Mirza Andrian Syah. (2024). Analysis of the Influence of The 7P Marketing Mix on Customer Satisfaction of Bikla Coffee, Jember District. *Business and Economics Research Journal*, 11(1), 1–16.
- Rizka, Nor Rahma, Izzadieny, Fitra, Prabowo, Kristianto Tricahya, Negeri, Politeknik, & Laut, Tanah. (2025). Edueksos : Jurnal Pendidikan Sosial MICRO, SMALL, AND MEDIUM ENTERPRISES, CASHLESS, AND ECONOMIC GROWTH: STUDY IN THE NATIONAL CAPITAL CITY BUFFER AREA dan Ekonomi. *Edueksos : Jurnal Pendidikan Sosial Dan Ekonomi*, 14(01), 1–19.
- Selmier, W. Travis, & Newenham-Kahindi, Aloysius. (2021). Communities of place, mining multinationals and sustainable development in Africa. *Journal of Cleaner Production*, 292, 125709. <https://doi.org/10.1016/j.jclepro.2020.125709>
- Setyawati, Lutvia Resta, Hadistian, Cahya, Dimas Danur, Marsetio, Novarianti, Ariska Dian, & Said, Budiman Djoko. (2021). Implementasi Konsep Ekonomi Biru dalam Pembangunan Masyarakat Pesisir di Kota Sabang. *Jurnal Education and Development*, 9(4), 178–185.
- Silalahi, Purnama Ramadani, Hafizh, Muhammad, Nasution, Salman, & Sugianto, Sugianto. (2021). Psychology of Muslim Investors in Stock Investment During Covid-19 Pandemic. *Tazkia Islamic Finance and Business Review*, 14(1), 65–90. <https://doi.org/10.30993/tifbr.v14i1.223>
- Siswanto, Sugeng, & Astuty, Pudji. (2024). Implementation of Coastal Resource Management Based on Integrated Management to Enhance Fishermen ' s Welfare. *ICLSSEE*, 20(2), 1–12. <https://doi.org/10.4108/eai.25-5-2024.2349003>
- Statistik, Badan Pusat. (2024). *Ekonomi Laut Berkelanjutan dan Pengelolaan Kawasan*

Pesisir.

- Sudarmi, Sudarmi, & Rusdi, Muh. (2022). Optimalisasi Tata Kelola Berkelanjutan Destinasi Wisata Pantai Tete: Studi Kasus Area Pantai Militer. *Jurnal Master Pariwisata (JUMPA)*, 8(1), 401. <https://doi.org/10.24843/jumpa.2022.v08.i02.p03>
- Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: PT Alfabeta, cet.
- Sugiyono. (2021). *metode penelitian kualitatif*. Bandung: alfabeta.
- Sumatera, West. (2022). Determinants of Improving the Welfare of Fishermen ' s Households in the Coastal Areas of. *International Journal of Sustainable Development and Planning*, 17(8), 2601–2614.
- Tambunan, Khairina, Siregar, Rahmat Azahar, Tarigan, Azhari Akmal, & Harahap, Isnaini. (2022). Konsep Indeks Pembangunan Manusia (IPM) Dalam Al-Qur'an Perspektif Quraish Shihab. *Human Falah: Jurnal Ekonomi Dan Bisnis Islam*, 9(2), 61–76.
- Ummu Khoirotun Nisfah, Sri Ramadhani, Muhammad Lathief Ilhamy Nasution. (2024). Analisis Peran Ekonomi Kreatif Berbasis Budaya Lokal Untuk Meningkatkan Pendapatan Pengrajin Kerawang Gayo Dalam Kajian Ekonomi Islam (Studi Kasus Pengrajin Kerawang Gayo di Kecamatan Bebesen, Kabupaten Aceh Tengah). *JURNAL MANAJEMEN AKUNTANSI (JUMSI)*, 4(3), 815–823.
- Wahyuni, Sri, Asmuni, Asmuni, & Anggraini, Tuti. (2023). Analisis maqashid dan masalah transaksi e-commerce di Indonesia. *Jurnal Riset Pendidikan Ekonomi*, 8(2), 124–133. <https://doi.org/10.21067/jrpe.v8i2.8703>