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Analysis of Sagarurung Smoked Fish Agroindustry Business Development Strategies in Fish Processing Groups in Talang Ubi District Penukal Abab Lematang Ilir Regency

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© 2024 The Authors. This open access article is distributed under a (CC-BY License) **Abstract:** The objectives of this research are (1) To determine and analyze the strategy for developing the sagarurung smoked fish agroindustry business in the fish processing group in Talang Ubi District, PALI Regency; (2) Identify and identify the factors that influence the development of the smoked sagarurung fish agro-industry business in the fish processing group in Talang Ubi District, PALI Regency. This research was carried out in the sagarurung fish processing and marketing group in Talang Ubi District, PALI Regency. Based on the results of the research that has been carried out, it can be concluded that the most appropriate business development strategy to implement is: (a) Increasing the quality and quantity of sagarurung fish production so that it is able to compete with other business actors; (b) taking advantage of the government's role in supporting the development of the sagarurung fish business; (c) Innovating to always develop sagarurung fish products, attend training on how to package processed fish products properly and correctly; (d) Learn knowledge about technology in the product dissemination; (e) Developing an information system for developing the sagarurung fish processing and marketing section and marketing of a product.

Keywords: Agroindustry; Sagarurung Smoked Fish; Strategy.

Introduction

Indonesia is the largest archipelagic country in the world with approximately 17,491 islands in Indonesia, which have been standardized and registered with the United Nations with a total of 16,671 islands, where the area of Indonesia's in land sea waters and archipelagic waters is 3,110,000 km2, Indonesia's territorial area is 290,000 km2, The area of Indonesia's additional zone is 270,000 km2, the area of Indonesia's exclusive economic zone is 3,000,000 km2, the area of Indonesia's continental shelf is 2,800,000 km2 with the length of Indonesia's coastline being 108,000 km. The large territorial waters in Indonesia are an indication of the large maritime potential in Indonesia, especially in the fisheries sector (OKTOPURA, 2020)

Based on data from the Ministry of Maritime Affairs and Fisheries, fisheries production data in Indonesia in 2023 will increase from 2022, namely 22,265,452.42 tonnes to 24,737,618.25 with a fish consumption figure of 57.27 kg/capita. The fisheries production data was contributed by capture fisheries production of 7,770,100.00 tons and aquaculture production of 16,967,518.25 tons. From these data it can be seen that domestic demand for fisheries commodities is increasing, influenced by the increasing population and awareness of the importance of nutrition for growth (Aliyah et al., 2015).

Fish as the main commodity in the fisheries subsector is one of the foods that can meet the nutritional needs of Indonesian people. As a food ingredient, fish not only functions as a source of protein, but fish also serves as a good and prospective source of fats, vitamins and minerals. Fish has advantages in quantity as a source of animal protein. Because the protein content ranges from 15-24% and quality is indicated by the completeness of essential amino acids and a digestibility level that reaches 95% (Rahayu., et al. 1992). Apart from

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that, fish also contains omega-3 fatty acids which are important for the development of brain tissue and prevent heart disease, stroke and high blood pressure. Apart from that, the content of fish for pregnant women is believed to help fetal brain growth and improve student learning achievement (Djunaidah, 2017).

One of the foodstuffs that has high protein so it is good to consume every day is fish. However, fish is a commodity that quickly spoils (perishable food) and as technology advances, fish is used as a raw material for processed products. One of the processed products that is quite well known in the community is smoked fish. According to (Sahar et al., 2022)Smoked fish is a processed fishery product that goes through a salting and smoking process. Fish smoking is a method of preserving chemical compounds in smoke such as phenols, carbonyls, acids, furans, alcohols, esters, lactones, aliphatic hydrocarbons and polycyclic aromatic hydrocarbons.

One of the districts that has a regional specialty in the form of smoked fish is Penukal Abab Lematang Ilir (PALI) Regency. PALI Regency is one of the districts in South Sumatra Province. PALI Regency was formed from the expansion of Muara Enim Regency. Consists of 5 sub-districts, 65 villages, 6 sub-districts, 213 hamlets, 47 RWs and 148 RTs. PALI Regency has two river basins (DAS), namely the Musi River and the Lematang River. The existence of waters in the PALI Regency area shows that there is potential for fisheries resources both from fishing (public waters) and cultivation. Talang Ubi District is the capital of PALI Regency with an area of around 648.38 km2. Talang Ubi is divided into 25 subdistricts/villages and is located in the northwestern part of the PALI Regency(Badan Pusat Statistik, 2022).

PALI has a special food made from fish which local people call sagarurung fish. Sagarurung is a typical processed smoked fish from PALI Regency which is seasoned with various typical Indonesian spices. Sagarurung is similar in terms of processing to smoked fish but has a different taste because it has a distinctive taste from the spices. Sagarurung fish is usually made from fish that are easily available around Talang Ubi District or PALI Regency, namely catfish, catfish, tilapia and toman fish (Muhammad Raihan Febriansyah, 2023). Several business actors making sagarurung fish in Talang Ubi District are home industry that produces processed fish products in the form of sagarurung fish. In Talang Ubi District, sagarurung fish is quite popular with the public because of its distinctive taste. People usually make sagarurung fish as a side dish to accompany rice, even processed sagarurung fish is often used as a souvenir given to people from outside PALI Regency.

The problem faced by sagarurung fish business actors is the lack of access to information, especially

market information, packaging design of processed products and the quality of sagarurung fish processing products. According to Rhina and Heru (2019) packaging is a trigger because its function is directly facing consumers. Because business development in this field refers to the packaging process to assist in product marketing. Sagarurung fish products should have an attractive packaging design, and there should be various information related to the product such as product name, company name, net weight, expiry date, composition, nutritional content, Indonesian National Standards, and halal markings (Izzhati et al., 2018).

Lack of information can be an obstacle in marketing.(Morgan et al., 2019) defines marketing strategy as a fundamental tool designed or planned to achieve a company's goals by developing sustainable competitive advantages through the markets it enters and the programs used to serve its target markets. In principle, an organization's goal lies in their ability to understand customer desires and meet their needs more effectively and efficiently than competitors.

In line with increasing competition and marketing, the industry is trying to improve its business. Every business actor certainly has a strategy to implement in carrying out his business in order to achieve his goals. Based on this, sagarurung fish business actors in Talang Ubi District must have good prospects for the future so they need their own advantages and business development strategies to be able to compete with other business actors. Based on the background described previously, the problem formulation in this research is the strategy used in developing the sagarurung fish business. Based on the problem formulation above, the aim of this research is to determine and analyze the strategy for developing the sagarurung smoked fish agro-industry business in the fish processing group in Talang Ubi District, PALI Regency.

Method

This research was carried out in the Talang Ubi District area, PALI Regency. The data collected in this research consists of primary data and secondary data (Fadli, 2021). Primary data was obtained from observations and interviews with the sagarurung fish processing and marketing group in Talang Ubi District using a list of questions or questionnaires that had been prepared. Primary data sources were obtained from BPS, PALI Fisheries Service as well as several literatures that support competence in this research.

The respondents in this research were the sagarurung fish processing and marketing group in the Talang Ubi District area. From each group, 1 respondent was taken who represented each group. Respondents were selected using a purposive sampling method based on certain criteria according to research needs. Primary data was obtained by observing and interviewing respondents. Interviews were conducted in a structured manner with the help of questionnaires. Secondary data was obtained by searching literature related to research. This research was conducted to analyze the strategy for developing the sagarurung fish agro-industry business in Talang Ubi District, PALI Regency.

Stages of Strategic Planning

The strategic preparation process is carried out through three stages of analysis and decision making stages. To make the process of preparing strategic planning clearer, see Table 1 below:

 Table 1. Stages of the strategic planning preparation

 process

process		
1. Input Stages		
External Factor	Internal Factor Evaluation	
Evaluation Matrix (EFE)	Matrix (IFE)	
2. Analysis Stages		
Swot Matrix	Internal & External Matrix	
2. Decision Making Stage		
Quantitative Strategic Planning Matrix (QSPM)		

Input Stage

This stage is basically not just a data collection activity, but also a pre-analysis classification activity. At this stage, data is divided into two, namely internal data and external data.

External Strategy Factor Matrix

Before creating external strategy factors, it is necessary to first know the external strategy factors (EFAS). The following are ways to determine EFAS (external factors analysis summary):

- Arrange them in column 1 (5 to 10 opportunities and threats), Give each factor a weight in column 2, starting from 1.0 (very important) to 0.0 (not important). These factors are likely to have an impact on strategic factors
- Calculate the rating (in column 3) for each factor by giving a scale starting from 4 (Outstanding). Up to (poor) based on the influence of these factors on the condition of the company concerned. The rating value for the opportunity factor is positive (a very large opportunity is given a rating of +4, but if the opportunity is small it is given a rating of +1). Threat rating scoring is the opposite. For example, if the threat value is very large the rating is 1. Conversely, if the threat value is small it is given a rating of 4.
- Multiply the weight in column 2 with the rating in column 3, to obtain the weighting factor in column 4,

the result is a weighting score for each factor whose value varies from 4.0 (outsanding) to 1.0 (poor).

Internal Strategy Factor Matrix

After the internal strategic factors of a company have been identified, an IFAS (Internal Factors Analysis Summary) table is prepared to formulate the internal strategic factors within the framework of the company's strengths and weaknesses, the stages are:

- Determine the factors that are the company's strengths and weaknesses in column 1.
- Give each factor a weight on a scale ranging from 1.0 (most important) to 0.0 (not important), based on the influence of these factors on the company's strategic position. All these weights must not exceed a total score of 1.00.
- Calculate the rating (in column 3) for each factor by providing a scale ranging from 4 (outstanding) to 1 (poor), based on the influence of the factor on the condition of the company concerned. Positive variables (all variables included in the strength category) are given a value ranging from +1 to +4 (very good), while negative variables are the opposite.
- Multiply the weight in column 2 with the rating in column 3, to obtain the weighting factor in column 4. The result is a weighting score for each factor whose value varies from 4.00 (outstanding) to 1.0 (poor)
- Add up the weighting scores (in column 4) to obtain the total weighting score for the company concerned. This total value shows how a particular company reacts to internal strategic factors.

Analysis Stage

The second stage of analysis was carried out using SWOT analysis. SWOT analysis is the systematic identification of various factors in formulating company strategy(Phadermrod et al., 2019). This analysis is based on logic that can maximize strengths and opportunities, but can simultaneously minimize weaknesses and threats(Wahab et al., 2023). This analysis is based on the assumption that an effective strategy will maximize existing strengths and opportunities and minimize weaknesses and threats. When implemented accurately, this simple assumption has a huge impact on the design of a successful strategy and analysis of the business environment which provides the information needed to identify opportunities and threats within the company (Quezada et al., 2019).

SWOT analysis is divided into 2 types, namely qualitative and quantitative. Qualitatively or descriptively, that is, it only explains how an organization develops without explaining the strategy of its internal and external factors. Meanwhile, quantitatively, namely explaining in detail the internal and external factors using weights and how the development strategy is beneficial for a business or organization. After obtaining an assessment of each factor from all respondents, the geometric average is then found. The value and geometric mean are found using the Formula 1.

 $G = n\sqrt{X1}. X2. X3 \dots Xn$ (1) Ket: X1 = Value for respondents 1 X2 = Value for respondents 2

X3 = Value for respondents 3

- Once the geometric average value is known, then the average value is normalized to obtain the value of each strategic factor. This value will be the weight of strategic factors.
- After obtaining the weight for each strategic factor, the weighted score is found by multiplying the score for each factor with the weight obtained for each factor. The value of this weighted score is used to determine the potential for developing the sagarurung smoked fish agro-industry business in Talang Ubi District.

Then strategic factors are prepared using the SWOT matrix. This matrix can clearly illustrate how the external opportunities and threats faced by the company correspond to its weaknesses and strengths. This matrix can produce four sets of possible strategic alternatives as shown in Table 2.

Table 2. SWOT Matrix

Unternal Factors		Strengths		Weakness	
	(S)		(W)		
External					
Factors					
Oppurtunity (O)	Strategy (SO)		Strategy (WO)		
	Create	strategies	Create	strategies	
	that use	e strengths	that	minimize	
	to take advantage		e weaknesses to		
	of opportunities		take advantage of		
			opportunities		
Treathts (T)	Strategy (ST)		Strategy (SW)		
	Create	strategies	Create	strategies	
	that use	e strengths	that	minimize	
	to	overcome	weakne	sses to	
threats			avoid threats		

- SO strategy, this strategy is carried out by using all your strengths to take advantage of opportunities.
- ST strategy, this strategy is carried out by using all forces to overcome threats.
- WO strategy, this strategy is implemented based on exploiting existing opportunities by overcoming existing weaknesses.
- WT strategy, this strategy is based on defensive activities and is aimed at minimizing existing weaknesses and avoiding threats.

Stages of Making Decision

After the previous stages have been created and analyzed, the next stage is a list of priorities that must be implemented. Quantitative Strategic Planning Matrix (QSPM) is a technique that can objectively determine prioritized alternative strategies.

QSPM analysis is used to evaluate options for alternative strategies that have been determined previously. The attractiveness score (AS) is determined by examining internal and external factors, and the role of each factor in the strategy selection process being made(Indriarti & Rachmawati Chaidir, 2021).

The steps in compiling a QSPM are as follows:

- Create external factors (opportunities/threats) and internal factors (strengths/weaknesses) on the left of the QSPM matrix column
- Give weight to each external and internal factor
- Analyze the appropriate matrix from the second step by identifying alternative strategies that should be implemented
- Give an alternative score (SA) with the following score range:
 - 1 = has no attraction
 - 2 = low attractiveness
 - 3 = moderate attractiveness
 - 4 = high attractiveness
- Multiply the weight by SA for each external / internal factor in each strategy

Result and Discussion

Analysis of the Strategy Required for the Development of the Sagarurung Smoked Fish Business in Talang Ubi District, Penukal Abab Lematang Ilir Regency

1. Internal Factor Analysis

Analysis of internal environmental factors used as strengths and weaknesses

Strength (Strength)

Several internal factors are strengths for developing the smoked sagarurung fish business in Talang Ubi District, Penukal Abab Lematang Ilir Regency, namely:

- The main job is as a sagarurung fish processor
- The sagarurung fish processing business is carried out in groups
- The number of traders is relatively large
- Experience in managing fish is sufficient
- Cohesive work among group members
- The education level of business actors is high
- There is support from the local government
- Has a distinctive taste and is different from other smoked fish
- Popular with the public as a food that is high in protein

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Weaknesses

- Low knowledge about technology
- Low implementation of management
- Difficulties in marketing sagarurung fish
- The price of fish in the market is high
- Lack of facilities and infrastructure
- Limited fish processing skills training
- Far from the city
- Lack of knowledge about how to produce processed food properly and correctly
- The packaging of the sagarurung fish is less attractive

2. External Factor Analysis

Analysis of internal environmental factors used as opportunities and threats

Opportunities

- Market demand continues to increase
- Financial institutions and capital are available
- There are various government programs that support the growth of the sagarurung fish business
- The taste of sagarurung fish is liked by the public
- Raw materials are always available
- Made into a typical souvenir from Penukal Abab Lematang Ilir Regency
- There is support from the government in the form of facilities and infrastructure for processing

- 8. One of the government programs to prevent stunting in children is by giving them processed fish food

Threats (Treaths)

- 1. High market competition
- 2. The higher transportation costs
- 3. Insufficient marketing strategy
- 4. Difficult to keep up with technological developments
- 5. Fish prices tend to increase
- 6. Unattractive packaging and marketing

3. Determining Alternative Strategies

The strategy for developing the sagarurung fish business in Talang Ubi District, Penukal Abab Lematang Ilir Regency is carried out by creating a SWOT matrix. This SWOT matrix is built based on strategic factors, both internal factors (strengths and weaknesses) and external factors (opportunities and threats). Based on the position of the SWOT analysis, 4 (four) main strategies can be prepared, namely SO (Strengths – Opportunities), WO (Weakness Opportunities), ST (Strengths – Threats) and WT (Weakness – Threats)(Puyt et al., 2023).

Determining the strategy for developing the sagarurung fish business in Talang Ubi District, Penukal Abab Lematang Ilir Regency is presented in Table 3. As follows:

Jushiess Development Strategy	•		
Strength (S)	Weakness (W)		
1. The main job is as a sagarurung fish			
processor	1. Low knowledge about technology		
2. Fish processing businesses are	2. Low implementation of		
carried out in groups	management		
3. The number of traders is relatively	3. Difficulties in marketing sagarurung		
large	fish		
4. Experience in managing fish is	4. The price of fish in the market is high		
sufficient	5. Lack of facilities and infrastructure		
5. Teamwork in groups	6. Limited fish processing skills		
6. The education level of business	training		
actors is high	7. Far from the city		
7. There is support from the local	8. Lack of knowledge about how to		
government	produce processed food properly		
8. Has a distinctive taste and is	and correctly		
different from smoked fish other	9. Attractive sagarurung fish		
9. Popular with the public as a food	packaging		
that is high in protein			
1. Improve the quality and quantity of	1. Increase the active role of the		
	government to facilitate sagarurung		
0 0 1	fish business actors		
actors	2.Improve the entrepreneurial spirit		
2. Able to utilize services from	and spirit of Sagarurung fish		
marketplaces such as Tokopedia,	business actors		
	3. Provide information regarding fish		
	selling prices and potential markets		
	Strength (S) 1. The main job is as a sagarurung fish processor 2. Fish processing businesses are carried out in groups 3. The number of traders is relatively large 4. Experience in managing fish is sufficient 5. Teamwork in groups 6. The education level of business actors is high 7. There is support from the local government 8. Has a distinctive taste and is different from smoked fish other 9. Popular with the public as a food that is high in protein 1. Improve the quality and quantity of sagarurung fish production so that it can compete with other business actors		

Table 3. Determining Sagarurung Fish Business Development Strategy

5. Raw materials are always available	sending sagarurung fish out of	that benefit Sagarurung fish
6.Made into a typical souvenir from	Talang Ubi sub-district	business actors
Penukal Abab Lematang Ilir Regency	3. Learn knowledge about technology	4.Improving the quality of sagarurung
7. There is support from the government	in the production and marketing of	fish production
in the form of facilities and	a product. Utilizing technology as a	5.Develop a marketing information
infrastructure for processing	medium for product dissemination	system for sagarurung fish
8.One of the government programs to	4. Creating a conducive situation in	6.Participate in entrepreneurship
prevent stunting in children is by	the development of the sagarurung	training
giving them processed fish food	fish business	7. Attend training on how to market
	5. Innovate to always develop	and package processed food
	sagarurung fish products, attend	
	training on how to package	
	processed fish products properly	
	and correctly	
Threat (T)	1. Improve services in marketing the	1. Develop an information system for
1. High market competition	sagarurung fish business	developing the Sagarurung fish
2. The higher transportation costs	2. Creating a conducive situation in	processing business
3. Insufficient marketing strategy	the development of sagarurung	2. Increase the partnership network
4. Difficult to keep up with technological	fish processing	3. Utilize the government's role in
developments	3. Utilize fish farmers to get fish at	supporting the development of the
5. Fish prices tend to increase	cheaper prices	sagarurung fish business
6. Unattractive packaging and marketing		

SO Strategy (Strengths-Opportunities)

The strategy implemented in developing the sagarurung fish business in Talang Ubi District, Penukal Abab Lematang Ilir Regency is by using strengths to take advantage of opportunities as follows:

- a. Improve the quality and quantity of sagarurung fish production so that it can compete with other business actors
- b. Able to utilize services from marketplaces such as Tokopedia, Shopee, and Lazada or other online shopping applications so that you get the free shipping feature for sending sagarurung fish out of Talang Ubi District
- c. Learn knowledge about technology in the production and marketing of a product. Utilizing technology as a medium for product dissemination
- d. Create a conducive situation in the development of the sagarurung fish business
- e. Innovate to always develop sagarurung fish products, attend training on how to package processed products properly and correctly

ST Strategy (Strengths-Threaths)

The strategy used to use force to overcome threats is as follows:

- a. Improve services in marketing the sagarurung fish business
- b. Creating a conducive situation in the development of the sagarurung fish processing business
- c. Utilizing fish farmers to get fish raw materials at cheaper prices than the market

WT Strategy (Weakness-Threaths)

The strategy used to minimize weaknesses to take advantage of opportunities is as follows:

- a. Develop an information system for developing the Sagarurung fish processing business
- b. Increase the partnership network
- c. Utilize the government's role in supporting the development of the sagarurung fish business

Analysis of IFE Matrix (Internal Factor Evaluation) and EFE (External Factor Evaluation) Matrix of Sagarurung Fish Business Development in Talang Ubi District, Penukal Abab Lematang Ilir Regency

IFE and EFE analysis was carried out to identify internal and external factors in the processing business in the sagarurung fish business in Talang Ubi District. To obtain the identification results, this was done by asking several points to the sagarurung fish processing group in Talang Ubi District. This identification includes management in producing sagarurung fish, the amount of production in one day, marketing of sagarurung fish. The results of this identification are then placed in the columns in the SWOT analysis assessment, namely strengths, weaknesses, opportunities and threats. To find out the results of the scores for each external and internal strategy factor, the ratings and weights are calculated as shown in Table 4.

No.	Strenghts (S)	Weight	Rating	Score
1.	The main job is as a sagarurung fish processor	0.10	2	0.20
2.	Fish processing businesses are carried out in groups	0.10	3	0.30
3.	The number of traders is relatively large	0.10	2	0.20
4.	Experience in managing fish is sufficient	0.12	4	0.48
5.	Cohesive work in groups	0.10	4	0.40
6.	The educational level of business actors is already high	0.10	4	0.40
7.	There is support from the local government	0.15	4	0.60
8.	It has a distinctive taste and is different from other smoked fish	0.11	4	0.44
9.	Popular with the public as a high protein food	0.12	3	0.36
	Total Strengts	1,00		3.38
No.	Weaknesses (W)	Weight	Rating	Score
1.	Low knowledge about technology	0.15	4	0.6
2.	Low implementation of management	0.13	4	0.52
3.	Difficulties in marketing sagarurung fish	0.10	3	0.3
4.	The price of fish in the market is high	0.10	2	0.2
5.	Lack of facilities and infrastructure	0.12	3	0.36
6.	Training in fish processing skills is limited	0.10	2	0.2
7.	Far from city	0.08	1	0.08
8.	Lack of knowledge about how to produce processed food properly and correctly	0.12	4	0.48
9.	Lack of innovation in sagarurung fish packaging	0.1	3	0.3
	Total Weaknesses	1,00		3,04
	χ =	Strenghts - Wea	akness = 3,38 - 3	

Table 4. IFE Matrix of Sagarurung Fish Processing Business

Based on the table above, it is known that there are nine strength factors and nine weakness factors in identifying IFE or internal factors in the sagarurung fish processing business in Talang Ubi District, Penukal Abab Lematang Ilir Regency. Where the total strength score is 3.38 and the total weakness score is 2.93, so the difference between strengths and weaknesses is positive, namely 0.34. These results indicate that the strengths of the Sagarurung fish processing business are greater than its weaknesses. The X value (strengths) in IFE matrix of the sagarurung fish processing business in Talang Ubi District, PALI Regency will have greater numbers if the internal environmental factors are strong and minimize the weaknesses that occur in the sagarurung fish processing business.

Respondents, namely the fishery product processing and marketing group, namely the dominant sagarurung fish processors and marketers, are indeed focused on working as sagarurung fish processors, which is one of the supporting strength factors in the success of sagarurung fish development in Talang Ubi District, PALI Regency. By studying technology and mastering it, as well as the training provided, it is hoped that Sagarurung fish business actors will be able to develop their business more professionally.

Experience in running a sagarurung fish business in Talang Ubi District is sufficient because the average age of starting a business up to now is 3-5 years and the age of business actors who are still productive can still be increased and developed to take advantage of technological innovations developing in the fisheries sector, especially fish processing.

The x value (weakness) in the IFE matrix of the sagarurung fish processing business in Talang Ubi District, PALI Regency has a smaller number for the internal environmental factors in the sagarurung fish business. Weaknesses experienced by business actors can minimize the weaknesses that occur in the sagarurung fish processing business so that they can further improve the development of the sagarurung fish processing business in Talang Ubi District.

Recording includes recording income, recording expenses, preparing financial reports, storing evidence of transactions. Business actors do not yet understand the importance of recording to find out the progress of the business and what actions must be taken to maximize the productivity of the sagarurung fish business. For example: how much sagarurung fish is produced, how much profit is made, how much capital is spent, what marketing strategy is implemented.

Marketing includes ways for business actors to promote products to consumers with the aim of increasing brand awareness, consumer interest and desire to buy the product. Product marketing is closely related to sales. When marketing is successful in reaching the market, sales of Sagarurung fish will grow.

The price of fish in the market often experiences increases (unstable). This price increase affects the production process of sagarurung fish. Buying raw materials such as fish directly from fish farmers is one solution that can be taken by buying directly, hopefully getting a cheaper price from the market, so that can sell sagarurung fish at a stable price.

Sagarurung fish production really requires facilities and infrastructure that will support successful production. The production results of business actors

Table 5. EFE Matrix of Sagarurung Fish Business

who use simple tools are different from those of business actors who use more advanced tools. The tools used in sagarurung fish production are cool boxes, vacuum machines and smoking equipment

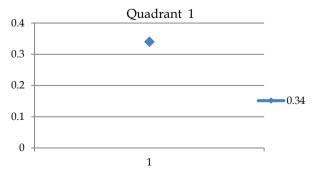
No.	Opportunities (O)	Weight	Rating	Score
1.	Market demand continues to increase	0.20	4	0.80
2.	Financial institutions and capital available	0.10	3	0.30
3.	There are various government programs that support the growth of the sagarurung fish business	e 0.12	4	0.48
4.	The taste of Sagarurung fish is liked by the public	0.12	4	0.48
5.	Raw materials are always available	0.11	3	0.33
6.	Made into a typical souvernir from PALI Regency	0.20	4	0.80
7.	There is support from the government in the form of facilities and	0.15	4	0.60
	infrastucture for processing			
	Total Opportunities	1,00		3.79
No.	Treaths (T)	Bobot	Rating	Skor
1.	High market competition	0.20	3	0.60
2.	The higher the transportation costs	0.15	2	0.30
3.	Insufficient marketing strategy	0.20	3	0.60
4.	It's difficult to keep up with technological developments	0.15	2	0.30
5.	Fish prices tend to increase	0.15	2	0.30
6.	Unattractive packaging and marketing	0.15	3	0.45
	Total Threats	1,00		2.55
		Y = Opportunities -	Treaths = 3.79-2	2.55 = 1.24

Based on the table above, it is known that there are seven opportunity factors and six threat factors in identifying EFE or external factors in the sagarurung fish processing business in Talang Ubi District, Penukal Abab Lematang Ilir Regency. Where the total opportunity factor (Opportunities) is 3.79 and the total Threat factor score (Treaths) is 2.55 so the difference between strengths and weaknesses is positive 1.24. This shows that the opportunity factor of the sagarurung fish

Matriks SWOT

business is greater than the threats.

After carrying out calculations on the IFE and EFE tables, the average results from the two tables will be depicted on the SWOT analysis graph and explained in the SWOT matrix analysis beow (Figure 1).



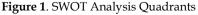


Figure 1 shows that the results of IFE (X) and EFE (Y) are in quadrant 1. These results show that the sagarurung fish business has a combination of strengths and opportunities that can be utilized in future development.

Analysis of Strategy QSPM

The decision-making stage is the stage for determining a priority list of strategic alternatives with the most priority to be implemented. The QSPM quantitative strategic planning matrix is a technique that can objectively determine the most priority alternative strategies for implementation. The priority of alternative strategies is determined by looking at the Total Attractiveness Score (TAS). Determination of priority strategies is carried out based on the results of alternative strategies generated from the existing SWOT matrix using QSP matrix analysis:

- The main job is as a sagarurung fish processor.
- Fish processing businesses are carried out in groups
- The number of traders is relatively large
- Experience in managing fish is sufficient
- Cohesive work in groups
- The educational level of business actors is high
- There is support from the local government
- Has a distinctive taste and is different from other smoked fish
- Popular with the public as a high protein food

- Market demand continues to increase
- Financial institutions and capital available
- There are various government programs that support the growth of the sagarurung fish business
- The taste of sagarurung fish is liked by the public
- Raw materials are always available
- Made into a typical souvenir from PALI Regency
- There is support from the government in the form of facilities and infrastructure for processing

Based on the QSPM matrix calculation, there are 5 (five) priority alternative strategies that are most appropriate to implement, namely:

- Increase the quality and quantity of sagarurung fish production so that it is able to compete with other business actors,
- Utilizing the government's role in supporting the development of the sagarurung fish business,
- Innovate to always develop sagarurung fish products, attend training on how to package processed fish products properly and correctly,
- Learn knowledge about technology in the production and marketing of a product. Utilizing technology as a medium in product dissemination,
- Develop an information system for developing the Sagarurung fish processing business

Conclusion

Based on the result of the research that Talang Ubi District, PALI Regency has quite significant potential in developing the smoked sagarurung fish business. The most appropriate business development strategy to implement is: (1) Increasing the quality and quantity of sagarurung fish production so that it can compete with other business actors; (2) Taking advantage of the government's role in supporting the development of sagarurung fish businesses; (3) Innovating to always develop sagarurung fish products following training on how to packaging processed fish products properly and correctly; (4) Studying knowledge about technology in the production and marketing of a product. Utilizing technology as a medium for product dissemination; (5) Developing an information system for developing the sagarurung fish processing business, and strategic key factors which are strengths and weaknesses as well as challenges and opportunities can be utilized to maximize the potential for developing the sagarurung smoked fish business: (a) Internal factors (strengths) in developing the smoked sagarurung fish business are: The main job is as a sagarurung fish processor, the fish processing business is carried out in groups, the number of traders is relatively large, the experience in managing fish is adequate, the teamwork in groups, the existence

of support from the local government, Has a distinctive taste and is different from other smoked fish. Popular with the public as a high protein food with a score of 3.38; (b) Internal factors (weaknesses) in the smoked sagarurung fish business are low knowledge of technology, low application of management, difficulties in marketing sagarurung fish, high price of fish in the market, lack of facilities and infrastructure, limited training in fish processing skills, far from the city, lack of knowledge regarding good and correct methods of producing processed food, Lack of innovation in sagarurung fish packaging with a score of 3.04; (c) External factors (opportunities) in the smoked sagarurung fish business are market demand continues to increase, financial institutions and capital are available, there are various government programs that support the growth of the sagarurung fish business, the taste of sagarurung fish is liked by the public, raw materials are always available, used as souvenirs typical of PALI Regency, there is support from the government in the form of facilities and infrastructure for processing with a score of 3.79. (d) External factors (threats) in the sagarurung smoked fish business are high market competition, higher transportation costs, poor marketing strategies, difficulty following technological developments, fish prices tend to increase, less attractive packaging and marketing with a score of 2.55.

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Conflicts of Interest

The authors declare no conflict of interest.

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