



## **DRIED FISH BUSINESS DEVELOPMENT STRATEGY IN BENGKULU PROVINCE**

**Anadiya Pingki<sup>1)</sup>; Ketut Sukiyono<sup>2)</sup>; M. Mustopa Romdhon<sup>3)</sup>**

*<sup>1)</sup>Study Program of Agribusiness Master Faculty of Agriculture,  
University of Bengkulu*

*<sup>2,3)</sup>Department of Agricultural Socio-Economics, Faculty of Agriculture, University of Bengkulu  
Email: [ksukiyono@unib.ac.id](mailto:ksukiyono@unib.ac.id)*

---

### **How to Cite :**

Pingki, A., Sukiyono, K., Romdhon, M R. (2024). Dried Fish Business Development Strategy In Bengkulu Province. *Journal of Agri Socio Economics and Business*. 6(1): 73-94. DOI: <https://doi.org/10.31186/jaseb.6.1.73-94>

---

### **ARTICLE HISTORY**

*Received [31 May 2024]*

*Revised [27 June 2024]*

*Accepted [28 June 2024]*

### **KEYWORDS**

*Dried fish*

*Development strategy*

*SWOT*

*QSPM*

*This is an open access article  
under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license*

---

### **ABSTRACT**

Indonesia is one of the largest archipelagic countries in the world which has a wealth of territorial waters, namely fish producers. The fish is processed into dried fish by drying and salting. For the sustainability of the dried fish business in Bengkulu Province, it is necessary to carry out a business development strategy for dried fish MSMEs. The aim of the study was to examine the internal and external factors of the dried fish business and determine the priority strategy for the development of the dried fish business in Bengkulu Province. This research was conducted in Bengkulu Province in Sumber Jaya Village (Bengkulu City) and Koto Jaya Village (Mukomuko) by surveying and interviewing 13 dried fish producers and 9 key informants. Data are analysed by applying SWOT and QSPM matrix. Utilizing maximum raw materials to meet customer demand and Utilizing technological developments are two grand strategies to develop dried fish industries in Bengkulu Province.

---

## **INTRODUCTION**

Indonesia is a country that has the largest wealth of islands in the world with a very strategic position, between the continents of Asia and Australia and two oceans (Indian Ocean and Pacific Ocean). The number of officially

registered islands in Indonesia reaches 16,056 islands. Being the largest archipelagic country in the world, Indonesia has two-thirds of its territorial waters, namely 6.32 million (km<sup>2</sup>), 17,504 thousand islands and is the second country with the longest coastline after Canada (Pudjiastuti, 2016). Indonesia has a coastline with a length of 99,093 km<sup>2</sup>, with 3 land areas of 2.012 million km<sup>2</sup> and seas of 5.8 million km<sup>2</sup> and an Exclusive Economic Zone (EEZ) of 2.7 million km<sup>2</sup> (Muhammad, 2013). Indonesian territorial waters are capable of producing various types of fish commodities. Fish is a food commodity that has many benefits because it contains high protein. Drying with salt and preserving fish products is a long-term preservation technology that has the aim of reducing the water content in fish and preventing bacteria from growing (Marpaung, 2015).

Bengkulu Province has a strategic location and has a positive impact in the field of fishing with 9 regencies and 1 city, of which 6 regencies and 1 city are included in the coastal area. One of the preparations that can create added value from fishery products in Bengkulu Province is dried fish. The dried fish business is one type of MSMEs in Bengkulu Province which is still growing today. Dried fish MSMEs in Bengkulu Province are found in Sumber Jaya Sub-District (Bengkulu City) and Koto Jaya Sub-District (Mukomuko Regency) which have the largest number of dried fish producers. In the Sumber Jaya sub-district there are 90 dried fish producers and in the Koto Jaya sub-district there are 67 dry fish producers. Dried fish producers in the two sub-districts have preserved dried fish by drying to meet market needs. Utilization of fresh fish and dried fish for consumption and meeting market needs has an average of 32% (Bank Indonesia, 2013).

A development strategy is a way that someone takes to achieve a goal in the future by making changes and improvements that take into account several factors in a business. According to Rangkuti (2008) factors are regularly needed to formulate corporate strategy. The development strategy for the dried fish business in Bengkulu Province does not only focus on the processing subsystem, but also on the marketing subsystem which involves marketing agencies. Dried fish in Bengkulu Province still market their products in a traditional way only by word of mouth and have not taken advantage of technological developments. However, producers send dried fish outside the province which causes an increase in demand for dried fish. Effort to design development strategy become significance when dealing with business risk facing by dried fish producers as founded by Sukiyono,et al (2023).

In the dried fish business, it is known that several indicators of internal factors and external factors are known as SWOT analysis, through these indicators the rating and score of each indicator will be known using the IFAS matrix analysis for internal factors and the EFAS matrix for external factors. From the total values of the IFAS and EFAS matrices, the quadrant position of

the dried fish business can be identified using the grand strategy matrix analysis. As well as the creation of alternative strategies using the SWOT matrix analysis, the several alternative strategies found will then be assessed using the QSPM (quantitative strategy planning matrix) analysis to find out which are the priority strategies of business actors. Several studies have used SWOT and QSPM analysis, among others are Ghorbani, et al (2015) on torism development in Iran, Setyorini & Santoso (2017) and Putri, et al (2014) on restaurant developemnt, Putri (2020) on burger products, Sinaga (2020) on salt, Pasaribu (2022) on milk commodities. The purpose of this research is to examine the internal strengths and weaknesses of the dried fish business in Bengkulu Province, to examine the external factors of opportunities and threats to the dried fish business in Bengkulu Province and to review priority strategies for the development of the dried fish business in Bengkulu Province.

## RESEARCH METHODS

### Location and Time of Research

Determination of the location in the study was obtained using a cluster sampling technique. Cluster sampling is a location determination technique that is used to determine a sample if the object or area to be studied is in large numbers, for example in a country, province or district (Sugiyono, (2013); and Sukiyono (2018)). This research was conducted in Koto Jaya Village and Sumber Jaya Village, because they have the highest number of dried fish producers among the other clusters.

### Determination and Sampling Methods (Respondents)

The determination of respondents was carried out in dried fish processing businesses in Bengkulu Province, namely by purposive sampling method or intentionally. Respondents in the study were expert respondents in the dried fish business in Bengkulu Province and agencies that had links with dried fish MSMEs in Bengkulu Province. The business actor respondents in the study were:

- a) Dried fish producer, Sumber Jaya Village (5 people)
- b) Dried fish producer, Koto Jaya Village (5 people)
- c) Dried fish traders, Sumber Jaya Village (2 people)
- d) Koto Jaya Village Dried Fish Trader (1 person)

For expert respondents in dried fish research in Bengkulu Province, namely:

- a) Bengkulu City Maritime Affairs and Fisheries Service (1 person)
- b) Office of Maritime Affairs and Fisheries of Mukomuko City (1 person)
- c) ServiceBengkulu City Cooperatives and SMEs (1 person)
- d) Bengkulu City Bappeda Service (1 person)

- e) Mukomuko Regency Bappeda Service (1 person)
- f) Bengkulu City Industry and Trade Office (1 person)
- g) Office of Industry and Trade and Trade Cooperatives of UKM Mukomuko Regency (1 person)
- h) Bengkulu University Lecturer Academics (2 people)

### Method of collecting data

1. Secondary data is data whose acquisition process is in finished form and has been processed by other parties, which is contained in the form of publication (Sudaryono, 2014).
2. Primary data is data obtained from respondents or people concerned with research. The data collection can be through observation, interviews, documentation and questionnaires.
3. FGD or Focus Group Discussion in this study was used in SWOT data analysis to obtain indicators of internal factors and external factors.

### Data analysis

The methods used in this research are quantitative and qualitative analysis. Qualitative data method is done by descriptive analysis in SWOT analysis. As suggested by David (2011), quantitative method for analysis of IFAS, EFAS, Grand Strategy matrix, SWOT matrix and QSPM analysis on dried fish business development strategy in Bengkulu Province.

#### a) Identification Analysis of Internal Factors and External Factors

The data analysis method used to determine the development strategy carried out in the dried fish business in Bengkulu Province is through a SWOT analysis of strengths, weaknesses, opportunities and threats.

#### b) Internal Factor Evaluation Analysis

Data analysis is used to find out whether the indicators of strength possessed by a business are greater than indicators of weakness or vice versa, namely using IFAS matrix analysis. The IFAS matrix table is as follows:

Table 1. Calculation of IFAS

| Internal Strategy Factors | Weight | Ratings | WeightxRating |
|---------------------------|--------|---------|---------------|
| Strength                  |        |         |               |
| 1.                        |        |         |               |
| 2.                        |        |         |               |
| Weakness                  |        |         |               |
| 1.                        |        |         |               |
| 2.                        |        |         |               |
| <b>Total</b>              |        |         |               |

Source: Solihin (2012)

### c) External Factor Evaluation Analysis

The data analysis is used to find out whether the indicators of the strengths possessed in a business are greater than the indicators of weaknesses or vice versa using the EFAS matrix analysis. The EFAS matrix table is as follows:

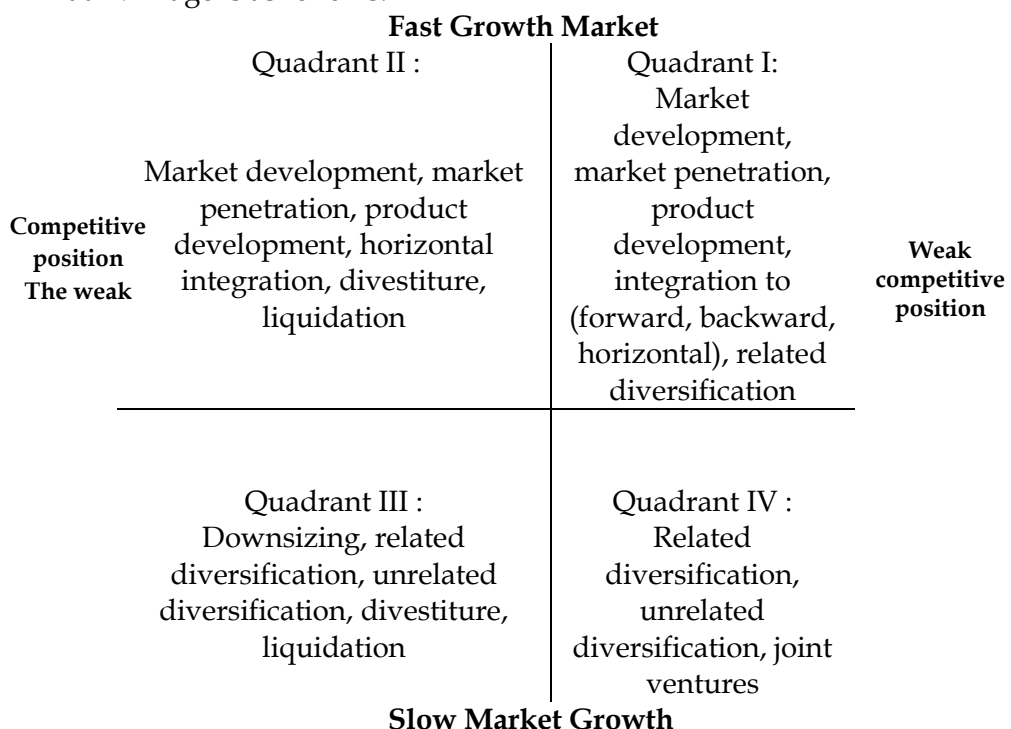
Table 2. Calculation of EFAS

| External Strategy Factors | Weight | Ratings | WeightxRating |
|---------------------------|--------|---------|---------------|
| Opportunity               |        |         |               |
| 1.                        |        |         |               |
| 2.                        |        |         |               |
| Threat                    |        |         |               |
| 1.                        |        |         |               |
| 2.                        |        |         |               |
| <b>Total</b>              |        |         |               |

Source: Solihin (2012)

### d) Strategy Design Analysis

The data analysis used is the grand strategy matrix analysis, in which the analysis will be positioned in quadrants based on two dimensions, namely competitive position and market growth (David, 2011). The grand strategy matrix image is as follows:



Source: David (2011)

### e) Analysis of Strategic Alternative Design

The analysis used to create a strategy by linking the internal and external factors of a business is the SWOT matrix analysis. Rangkuti (2016) states that the analytical tool used in the process of compiling the company's strategic factors is the SWOT matrix. The matrix provides an overview of the external factors faced by a company, the presence of internal factors that are owned. The SWOT matrix is presented in Table 3 as follow

Table 3. SWOT Matrix

|                                                                  |                                                                                                |                                                                                                     |
|------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
|                                                                  | <i>STRENGTH(S)</i><br>Determine the internal strength factors                                  | <i>WEAKNESSES(W)</i><br>Determine internal weaknesses                                               |
| <i>OPPORTUNITIES(o)</i><br>Determine the external threat factors | <i>SO STRATEGY</i><br>Create a strategy that uses strengths to take advantage of opportunities | <i>WO STRATEGY</i><br>Create strategies that minimize weaknesses to take advantage of opportunities |
| <i>THREATS(T)</i><br>Define 5-10 external threat factors         | <i>STRATEGY ST</i><br>Create strategies that use strengths to overcome threats                 | <i>WT STRATEGY</i><br>Create strategies that minimize weaknesses and avoid threats                  |

Source: David, 2009.

### f) Priority Strategy Design Analysis

The data analysis used is the QSPM matrix, by conducting an objective evaluation based on the factors that have been obtained from the previous internal and external factor analysis. The QSPM matrix analysis table is as follows:

Table 4. QSPM analysis

| Factors     | Strategy 1 |    |     | Strategy 2 |    |     | Strategy 3 |    |     |
|-------------|------------|----|-----|------------|----|-----|------------|----|-----|
|             | Weight     | US | BAG | Weight     | US | BAG | Weight     | US | BAG |
| Strength    |            |    |     |            |    |     |            |    |     |
| 1.          |            |    |     |            |    |     |            |    |     |
| 2.          |            |    |     |            |    |     |            |    |     |
| Weakness    |            |    |     |            |    |     |            |    |     |
| 1.          |            |    |     |            |    |     |            |    |     |
| 2.          |            |    |     |            |    |     |            |    |     |
| Opportunity |            |    |     |            |    |     |            |    |     |
| 1.          |            |    |     |            |    |     |            |    |     |

| Factors      | Strategy 1 |    |     | Strategy 2 |    |     | Strategy 3 |    |     |
|--------------|------------|----|-----|------------|----|-----|------------|----|-----|
|              | Weight     | US | BAG | Weight     | US | BAG | Weight     | US | BAG |
| 2.           |            |    |     |            |    |     |            |    |     |
| Threat       |            |    |     |            |    |     |            |    |     |
| 1.           |            |    |     |            |    |     |            |    |     |
| 2.           |            |    |     |            |    |     |            |    |     |
| <b>Total</b> |            |    |     |            |    |     |            |    |     |

Source: Rangkuti, 2016.

Note: US : Attractiveness Score

BAG : Total Attractiveness Score

## RESULTS AND DISCUSSION

### Characteristics of Respondents

The characteristics of the respondents are divided into three, namely based on age, education, family dependents and gender in research on the strategy for developing dried fish businesses in Bengkulu Province presented in Table 5.

Based on these results it is known that the average age of respondents is 44 years old, which is the productive age of a person doing work. Swalk with opinion according to the Central Bureau of Statistics (2018) which states that a person's productive age in doing a job is the age of 15 to 64 years. The level of education is one of the factors that will affect the mindset and performance of a person. Based on the results of the study, it was obtained that there were 6 elementary school education level data, followed by a junior high school education level, namely 4 respondents. While the number of respondents with high school education level has the lowest number, namely only 3 people.

Table 5. Characteristics of Respondents

| No | Information           | Amount | Percent (%) | Average |
|----|-----------------------|--------|-------------|---------|
| 1  | <b>Age</b>            |        |             |         |
|    | a. 27-42              | 11     | 50          |         |
|    | b. 43-57              | 8      | 36          | 44      |
|    | c. 58-72              | 3      | 14          |         |
| 2  | <b>Education</b>      |        |             |         |
|    | a. SD                 | 6      | 27          |         |
|    | b. Junior High School | 4      | 18          | 8       |
|    | c. Senior High School | 3      | 14          |         |
| 3  | <b>Gender</b>         |        |             |         |
|    | a. Woman              | 8      | 62          |         |
|    | b. Man                | 5      | 38          |         |

| No | Information       | Amount | Percent (%) | Average |
|----|-------------------|--------|-------------|---------|
| 4  | <b>dependents</b> |        |             |         |
|    | a. 0-2            | 4      | 31          |         |
|    | b. 3-4            | 7      | 54          |         |
|    | c. 5-6            | 2      | 15          |         |

Source: *Survai*, 2023.

Family dependents are the number of dependents in a family who are still the responsibility of the respondents. From these results it is known that the number of dependents for each respondent varies, ranging from no dependents at all to a total of 6 dependents. It is known that the number of dependents with the highest number of respondents is in the range of 3 to 4 dependents of 7 respondents. For the lowest number of family dependents, there are 5 to 6 people, namely 2 respondents. Gender in the results of the study can be grouped into two, namely the male and female sex. In the results of the table it is known that the female gender has a higher number than the male, namely 8 respondents or 62 percent.

### Analysis of Identification of Internal and External Factors

Analysis to identify internal and external factors of a company, namely SWOT analysis. In the dried fish business in Bengkulu Province, it is known that internal factors consist of strengths and weaknesses, as well as external factors, namely opportunities and threats. Identification of internal and external factors are based on interview and focus group discussion with key informen as well as dried fish producers. The results of internal and external factors in the processing subsystem and marketing subsystem are presented in Table 6 and 7. The internal environment for dried fish processing subsystem involving strengths and weaknesses of the processing subsystem consist of 9 indicators of strength and 10 indicators of weakness (table 6). Among these 9 power indicators of strength, the availability of fresh fish, producer skills, and availability are important indicators of strength possessed in the dried fish processing subsystem, as also explained by Antara (2023); Geffken (2017); Mamun-ur-Rashid, et al (2023); and Aristarini (2014).

Table 6. Internal Factors of Dried Fish Processing Subsystem

| Internal factors                               |                                                                 |
|------------------------------------------------|-----------------------------------------------------------------|
| Strength                                       | Weakness                                                        |
| 1. Fresh fish raw materials are easy to obtain | 1. Capital limitations on the production process                |
| 2. Producers have skills on fish processing    | 2. The production process is still using the traditional method |
| 3. Simple processing process                   | 3. Low purchase price by the merchant                           |



| <b>Internal factors</b>                                               |                                                                   |
|-----------------------------------------------------------------------|-------------------------------------------------------------------|
| <b>Strength</b>                                                       | <b>Weakness</b>                                                   |
| 4. Experienced human resources in the processing process              | 4. The production technology is still simple                      |
| 5. Availability of auxiliary materials that are easily obtained       | 5. The quality of fish, not maximally dry can be wormy or damaged |
| 6. Processing support tools are easy to obtain (knives, basins, etc.) | 6. The amount of fish produced depends on the fishermen's catch   |
| 7. Adequate production process manpower availability                  | 7. Lack of land availability for fish drying locations            |
| 8. Adequate infrastructure facilities                                 | 8. The leased land for drying locations                           |
| 9. Access to business locations is smooth and affordable              | 9. Dried fish packaging does not meet product safety standards    |
|                                                                       | 10. The product has not been registered by BPOM                   |

*Source: Primary Data Processed, 2023.*

The external environment for Processing Subsystem involve 8 opportunities and 7 threat indicators. Among the indicators in the aspect of opportunity, in line with the findings of Hasyim, & Ohoiwutun, (2018), the important factors of opportunity that exist are the presence of regular customers from dried fish and the ever-increasing demand, in addition to contributing to the regional economy. External factors in the processing subsystem can be seen as follows:

Table 9. External Factors of Dried Fish Processing

| <b>External Factors</b>                                           |                                                                                |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------|
| <b>Opportunity</b>                                                | <b>Threat</b>                                                                  |
| 1. There are regular customers                                    | 1. Business competition with SMEs outside Bengkulu Province                    |
| 2. Increased market demand                                        | 2. There is no alternative disposal of production waste                        |
| 3. The coastal location is rich in fishery products               | 3. Erratic weather affects the amount of input from fishermen                  |
| 4. Dried fish MSMEs contribute to regional income                 | 4. Erratic weather affects the quality of dried fish                           |
| 5. Including superior products that are quite in demand           | 5. Changes in people's lifestyles                                              |
| 6. The community's view of the dried fish business is good        | 6. Weather conditions affect the length or speed of the drying process         |
| 7. There is support for production facilities from the government | 7. The distance between the business location and the city center is quite far |
| 8. The development of drying production process technology        |                                                                                |

*Source: Primary Data Processed, 2023.*

Among the strength indicators in the marketing subsystem, traders can still sell products in the market because they are durable, can be stored, and the quality of salted fish that is able to compete (Wahyudi, et al (2012) and Ramadani, et al (2017) are important indicators owned by dried fish in the marketing subsystem. Meanwhile, the weaknesses include marketing activities that are not yet extensive, lack of use of online media for promotion and ordering processes (Silvia (2015); and Mustofa, et al (2021)).

Table 10. Internal Factors of Dried Fish Marketing Subsystem

| Internal factors                                                          |                                                                                         |
|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Strength                                                                  | Weakness                                                                                |
| 1. There are various types of dried fish                                  | 1. Inadequate marketing activities                                                      |
| 2. Guaranteed product quality because it takes directly from the supplier | 2. Unattractive packaging                                                               |
| 3. The quality of dried fish products can compete                         | 3. Lack of utilization of online promotional media for dried fish products              |
| 4. Smooth distribution channel                                            | 4. Packaging can still be contaminated with unknown substances (bacteria, chemicals)    |
| 5. There are regular customers                                            | 5. Packaging does not meet provisions such as labels, composition and production codes) |
| 6. Adequate workforce absorption                                          | 6. Have not utilized online media for the ordering process                              |
| 7. The purchase price to the producer is low                              |                                                                                         |
| 8. Damaged dried fish can still be sold                                   |                                                                                         |

Source: Primary Data Processed, 2023.

Table 10 shows the results of internal strengths and weaknesses in the dried fish business in Bengkulu Province from the marketing subsystem. The strength factor is known to have opportunities divided into 8 strengths and 7 weaknesses. Following table are the results of the external factors of the marketing subsystem.

Table 11. External Factors of Dried Fish Marketing Subsystem in Bengkulu Province

| No | External Factors                                              |                                                                             |
|----|---------------------------------------------------------------|-----------------------------------------------------------------------------|
|    | Opportunity                                                   | Threat                                                                      |
| 1  | Consumer demand for dried fish products continues to increase | Competition for marketing agencies for dried fish outside Bengkulu Province |
| 2  | Technological developments are constantly evolving            | There are differences in consumer tastes                                    |

| No | External Factors                                     |                                                                                 |
|----|------------------------------------------------------|---------------------------------------------------------------------------------|
|    | Opportunity                                          | Threat                                                                          |
| 3  | Increase in population                               | There are differences in consumer culture in consuming dried fish products      |
| 4  | Increasing people's income and purchasing power      | Cheaper prices for dried fish from marketing agencies outside Bengkulu Province |
| 5  | Dried fish products are one of the superior products | Differences in pricing with competitors outside Bengkulu Province               |
| 6  | Availability of adequate manpower                    | The location of the market and producers is quite far                           |

*Source: Primary Data Processed, 2023*

Competition of dried fish marketing agencies outside Bengkulu Province and price fixing differences (Kobesi (2016) are the most important threats faced by the marketing system. While consumer demand for dried fish products continues to increase, increasing population and community income are indicators of significant opportunities in the marketing subsystem, as also found by Silvia (2015).

### IFAS and EFAS Estimation

The results of the strategy design on the external factors of opportunities and threats in the dried fish business in Bengkulu Province from the marketing subsystem, the opportunity factors are divided into 6 opportunities and 6 threats.

### Internal Factor Evaluation Analysis

IFAS analysis to determine the value of internal factor weight and rating, the results of IFAS analysis on dried fish business in Bengkulu Province in the processing subsystem can be seen as follows:

Table 12. Processing Subsystem IFAS Matrix

| No | Internal factors                                             | Ratings | Weight | Rating x Weight |
|----|--------------------------------------------------------------|---------|--------|-----------------|
|    | Strength                                                     |         |        |                 |
| 1  | Fresh fish raw materials are easy to obtain                  | 3.68    | 0.114  | 0.420           |
| 2  | Producers have skills on fish processing                     | 3.27    | 0.106  | 0.346           |
| 3  | The processing process is not too complicated                | 3.36    | 0.114  | 0.383           |
| 4  | Experienced human resources in the processing process        | 3.41    | 0.107  | 0.365           |
| 5  | Availability of auxiliary materials that are easily obtained | 3.55    | 0.110  | 0.392           |

| No           | Internal factors                                                        | Ratings      | Weight   | Rating x Weight |
|--------------|-------------------------------------------------------------------------|--------------|----------|-----------------|
|              | Strength                                                                |              |          |                 |
| 6            | Processing support tools are easy to obtain (knives, basins, etc.)      | 3.64         | 0.112    | 0.406           |
| 7            | Adequate production process manpower availability                       | 3.59         | 0.115    | 0.413           |
| 8            | Sufficient infrastructure and facilities                                | 3.27         | 0.110    | 0.362           |
| 9            | Access to business locations is smooth and affordable                   | 3.55         | 0.112    | 0.396           |
| <b>Total</b> |                                                                         | <b>31.32</b> | <b>1</b> | <b>3.482</b>    |
| Weakness     |                                                                         |              |          |                 |
| 1            | Capital limitations on the production process                           | 1.59         | 0.096    | 0.153           |
| 2            | The production process is still using the traditional method            | 1.45         | 0.094    | 0.137           |
| 3            | The purchase price by the merchant is low                               | 1.55         | 0.103    | 0.160           |
| 4            | The production technology is still simple                               | 1.50         | 0.098    | 0.147           |
| 5            | The quality of fish that is not maximally dry can be grubbed or damaged | 1.59         | 0.099    | 0.158           |
| 6            | The amount of fish produced depends on the fishermen's catch            | 1.59         | 0.102    | 0.163           |
| 7            | Lack of land availability for fish drying locations                     | 1.82         | 0.102    | 0.186           |
| 8            | The land for drying locations is still leased                           | 1.91         | 0.093    | 0.177           |
| 9            | Dried fish packaging does not meet product safety standards             | 1.68         | 0.106    | 0.178           |
| 10           | The product has not been registered with BPOM                           | 1.59         | 0.106    | 0.168           |
| <b>Total</b> |                                                                         | <b>16.27</b> | <b>1</b> | <b>1.627</b>    |

*Source: Primary Data Processed, 2023*

The results of the IFAS matrix in the dried fish business in Bengkulu Province show that in the processing subsystem it is known that the strength indicator has the highest value or the most important factor is the raw material strength of fresh fish which is easy to obtain with a score of 0.420. On the weakness factor based on the lowest total score as the factor that has the highest importance, this factor is found in the weakness of the production process still using the traditional method which has a value of 0.137. The IFAS matrix will then be analyzed in the dry fish marketing subsystem in Bengkulu Province, for the value of internal factors strengths and weaknesses.

Table 13. IFAS Marketing Subsystem

| No              | Internal factors                                                                       | Ratings      | Weight   | Rating x Weight |
|-----------------|----------------------------------------------------------------------------------------|--------------|----------|-----------------|
|                 | Strength                                                                               |              |          |                 |
| 1               | There are various types of dried fish                                                  | 3.45         | 0.118    | 0.407           |
| 2               | Guaranteed product quality because it takes directly to the supplier                   | 3.45         | 0.118    | 0.407           |
| 3               | The quality of dried fish products can compete                                         | 3.50         | 0.136    | 0.475           |
| 4               | Smooth distribution channel                                                            | 3.68         | 0.131    | 0.481           |
| 5               | There are regular customers                                                            | 3.64         | 0.127    | 0.461           |
| 6               | Adequate workforce absorption                                                          | 3.59         | 0.122    | 0.437           |
| 7               | The purchase price to the producer is low                                              | 3.36         | 0.129    | 0.435           |
| 8               | Damaged dried fish can still be sold                                                   | 3.32         | 0.120    | 0.399           |
| <b>Total</b>    |                                                                                        | <b>28.00</b> | <b>1</b> | <b>3,502</b>    |
| <b>Weakness</b> |                                                                                        |              |          |                 |
| 1               | Inadequate marketing activities                                                        | 1.55         | 0.160    | 0.248           |
| 2               | Unattractive packaging                                                                 | 1.41         | 0.160    | 0.226           |
| 3               | Lack of utilization of online promotional media for dried fish products                | 1.50         | 0.162    | 0.243           |
| 4               | Packaging can still be contaminated with foreign substances (bacteria, chemicals etc.) | 1.59         | 0.171    | 0.271           |
| 5               | Packaging does not meet provisions such as labels, composition and production codes)   | 1.32         | 0.176    | 0.232           |
| 6               | Have not utilized online media for the ordering process                                | 1.32         | 0.171    | 0.225           |
| <b>Total</b>    |                                                                                        | <b>8.68</b>  | <b>1</b> | <b>1,445</b>    |

Source: Primary Data Processed, 2023

In the strength factor, it is known that the highest value is found in the smooth distribution channel factor of 0.481. The weakness factor in the dry fish business marketing subsystem in Bengkulu Province, the lowest value to the highest, is the unattractive packaging indicator with a value of 0.233.

### *Evaluation of External Factors*

The analysis was carried out to determine the value of external factors, namely opportunities and threats in a business, using the EFAS matrix analysis. The results of the analysis of the EFAS matrix for dried fish business in Bengkulu Province in the processing subsystem can be seen as follows:

Table 15. Processing Subsystem EFAS Matrix

| No            | External Factors                                                                  | Ratings      | Weight   | Rating x Weight |
|---------------|-----------------------------------------------------------------------------------|--------------|----------|-----------------|
|               | Opportunity                                                                       |              |          |                 |
| 1             | There are regular customers                                                       | 3.55         | 0.121    | 0.428           |
| 2             | Increased market demand                                                           | 3.50         | 0.123    | 0.432           |
| 3             | The coastal location is rich in fishery products                                  | 3.50         | 0.127    | 0.445           |
| 4             | Dried fish MSMEs contribute to regional income                                    | 3.36         | 0.129    | 0.432           |
| 5             | Including superior products that are quite in demand                              | 3.41         | 0.119    | 0.407           |
| 6             | The community's view of the dried fish business is good                           | 3.45         | 0.127    | 0.440           |
| 7             | There is support for production facilities from the government                    | 3.41         | 0.126    | 0.429           |
| 8             | The development of drying production process technology                           | 3.59         | 0.127    | 0.457           |
| <b>Total</b>  |                                                                                   | <b>27.77</b> | <b>1</b> | <b>3.471</b>    |
| <b>Threat</b> |                                                                                   |              |          |                 |
| 1             | Business competition with SMEs outside Bengkulu Province                          | 1.50         | 0.142    | 0.213           |
| 2             | There is no alternative disposal of production waste                              | 1.50         | 0.143    | 0.215           |
| 3             | Erratic weather affects the amount of input from fishermen                        | 1.41         | 0.155    | 0.219           |
| 4             | Erratic weather affects the quality of dried fish                                 | 1.45         | 0.148    | 0.215           |
| 5             | Changes in people's lifestyles                                                    | 1.64         | 0.140    | 0.229           |
| 6             | Weather conditions affect the length or speed of the drying process of dried fish | 1.50         | 0.154    | 0.231           |
| 7             | The distance between the business location and the city center is quite far       | 2.23         | 0.117    | 0.261           |
| <b>Total</b>  |                                                                                   | <b>11.23</b> | <b>1</b> | <b>1,584</b>    |

Source: Data processed, 2023.

The highest value on the external factor of opportunity is found in the indicator of the existence of technological developments in the drying production process 0.457. On external factors, the threat of dried fish in Bengkulu Province is known to consist of 7 indicators that have the lowest value, namely business competition with SMEs outside Bengkulu province 0.213. The next EFAS matrix analysis, namely the external factors of the marketing subsystem of dried fish business in Bengkulu Province, can be seen as follows:

Table 16. Marketing Subsystem EFAS Matrix

| No            | External Factors                                                                | Ratings | Weight | Rating x Weight |
|---------------|---------------------------------------------------------------------------------|---------|--------|-----------------|
|               | Opportunity                                                                     |         |        |                 |
| 1             | Consumer demand for dried fish products continues to increase                   | 3.41    | 0.158  | 0.537           |
| 2             | Technological developments are constantly evolving                              | 3.59    | 0.151  | 0.541           |
| 3             | Increase in population                                                          | 5.45    | 0.173  | 0.946           |
| 4             | Increasing people's income and purchasing power                                 | 3.36    | 0.182  | 0.613           |
| 5             | Dried fish products are one of the superior products                            | 3.73    | 0.175  | 0.653           |
| 6             | Availability of adequate manpower                                               | 3.50    | 0.161  | 0.564           |
| <b>Total</b>  |                                                                                 | 23.05   | 1      | 3,853           |
| <b>Threat</b> |                                                                                 |         |        |                 |
| 1             | Competition for marketing agencies for dried fish outside Bengkulu Province     | 1.41    | 0.158  | 0.222           |
| 2             | There are differences in consumer tastes                                        | 1.59    | 0.174  | 0.277           |
| 3             | There are differences in consumer culture in consuming dried fish products      | 1.50    | 0.178  | 0.267           |
| 4             | Cheaper prices for dried fish from marketing agencies outside Bengkulu Province | 1.86    | 0.174  | 0.325           |
| 5             | Differences in pricing with competitors outside Bengkulu Province               | 1.68    | 0.172  | 0.290           |
| 6             | The location of the market in the city center is quite far                      | 2.18    | 0.143  | 0.312           |
| <b>Total</b>  |                                                                                 | 10.23   | 1      | 1694            |

*Source: Data processed, 2023.*

The highest value on the external factor of opportunity is found in the indicator of increasing population 0.946. The next factor is the external threat factor which consists of 6 indicators, which has the lowest to the highest value, namely the competition of dried fish marketing institutions outside Bengkulu province 0.222.

### Analysis of Strategic Alternative Design

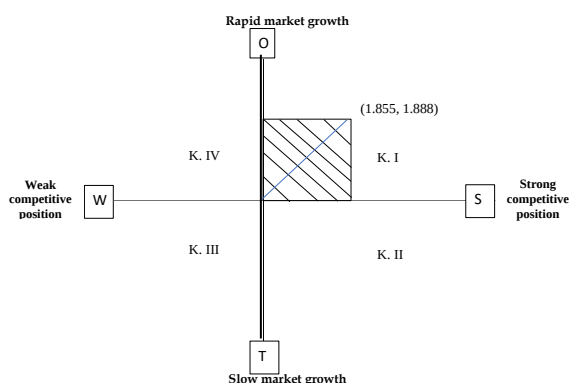
The analysis tool used to create a strategy is using the SWOT matrix analysis tool which consists of 4 strategies, namely SO, WO, ST and WT strategies. The results of the SWOT matrix analysis for the dried fish processing subsystem in Bengkulu Province are as follows:

### *Processing Subsystem Strategy Design And Marketing Subsystem*

The SWOT matrix for the dried fish processing subsystem in Bengkulu Province was carried out to find out what strategies can be created for the sustainability of the dried fish business in Bengkulu Province consisting of 9 alternative strategies. While the analysis of strategy design in the marketing subsystem of dried fish business in Bengkulu Province uses a SWOT Matrix analysis. SO, WO, ST and WT strategies, the results consist of 7 strategies.

### *Analysis of Strategic Alternative Design*

Analysis of designing alternative strategies in a business can be analyzed using a grand strategy matrix, where in this analysis it will be positioned in quadrants based on two dimensions, namely competitive position and market growth (David, 2011). Based on the analysis of the IFAS matrix and the EFAS matrix in the dried fish processing subsystem in Bengkulu Province, it is known that the total score of the IFAS matrix and the EFAS matrix in the dried fish processing subsystem in Bengkulu Province is known to determine the quadrant position in the grand strategy matrix. It is known that in the IFAS matrix analysis the strength in the dried fish processing subsystem has a value of 3,482 and a weakness factor of 1,627. The grand strategy matrix shows that the value in the processing subsystem (1.855; 1.888) is in quadrant I.



Picture 1.

Matrix Grand Strategy Processing Subsystem

Analysis of the design of alternative strategies using grand strategy matrix analysis in the dried fish business in Bengkulu Province in the processing subsystem is known to be in quadrant I. Companies in this quadrant can take advantage of opportunities and are able to face risks aggressively. It is known that the strength of the IFAS matrix analysis in the dry fish marketing subsystem has a value of 3,502 and a weakness factor of 1,445. The grand strategy matrix shows that the values in the marketing subsystem, namely



(2.057; 2.159) are in quadrant I position. These results have similarities with research conducted by Mubarok (2021) on the rice commodity resulting in a grand strategy matrix analysis in quadrant I position, where according to David (2009) if a business is in that position it is the best condition.

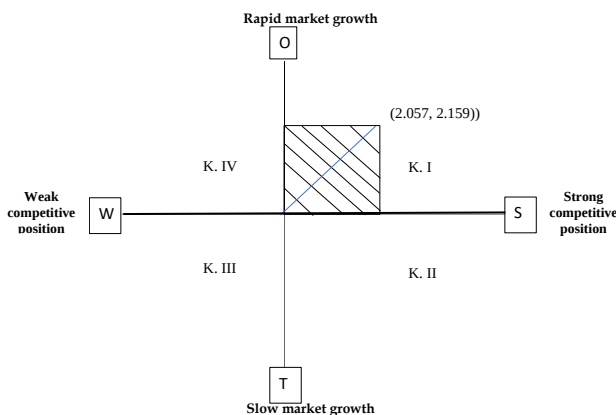


Figure 2.  
Matrix Grand Strategy Marketing Subsystem

Figure 2 shows that the results of the matrix analysis of the grand strategy for the dried fish business in Bengkulu Province in the marketing subsystem are known to be in quadrant I. In this position it is known that the company has carried out the right strategy on the dimensions (market penetration and market development) and carried out product development. David (2014) suggests that the position of quadrant I in the grand strategy analysis is the best position for a business.

### *Priority Strategy Design Analysis*

The analysis used to determine the priority strategy is using the QSPM or Quantitative Strategy Planning Matrix analysis tool. QSPM analysis on dried fish business in Bengkulu Province will be described as follows.

### **Processing Subsystem Priority Strategy Design**

Determination of the priority strategy used in the dried fish business in Bengkulu Province is using the QSPM matrix analysis. The position of the dried fish business in Bengkulu Province is in quadrant I or the SO strategy. The SO strategy on the processing subsystem is as follows:

1. Making the most of raw materials to meet customer demands within and outside Bengkulu province (S1-S5-O1-O2)
2. Maintain good producer skills in processing raw materials as superior products so that demand continues to increase (S2-S3-O2-O3-O5)

3. Utilize adequate workforce to meet market demand by following technological developments (S7-O2-O4-O8)

Based on the results of the QSPM matrix analysis for the acquisition of AS and TAS values in the dried fish processing subsystem in Bengkulu Province, it can be seen in the following table:

Table 19. QSPM Analysis of Dried Fish Business Processing Subsystem.

| No | Information | BAG   | Rating |
|----|-------------|-------|--------|
| 1  | Strategy 1  | 8.698 | 1      |
| 2  | Strategy 2  | 8.166 | 3      |
| 3  | Strategy 3  | 8.199 | 2      |

Source: Data processed, 2023.

Based on the QSPM matrix analysis table, the dried fish processing subsystem in Bengkulu Province is known to consist of three alternative strategies. Of the three strategies, it is known that the one with the highest TAS value is the strategy of making the most of raw materials to meet customer demand within and outside the Bengkulu province (S1-S5-O1-O2) with a TAS value of 8,698.

### *Marketing Subsystem Priority Strategy Design*

The results of the analysis show that in the dry fish marketing subsystem in Bengkulu Province there are 3 strategies, namely as follows:

1. Maintain the type and quality of dried fish sold to increase the number of requests (S1-S2-S3-O1)
2. Utilizing technological developments as a marketing tool to make it easier for consumers to make purchases (S5-O2)
3. Maintaining the quality of dried fish as a superior product (S2-S3-O5)

The results of the QSPM matrix analysis in the dried fish business in Bengkulu Province, the marketing subsystem can be seen in Table 33, for the acquisition of AS and TAS values as follows:

Table 20. QSPM Analysis of Dried Fish Business Marketing Subsystem

| No | Information | BAG   | Rating |
|----|-------------|-------|--------|
| 1  | Strategy 1  | 8.751 | 2      |
| 2  | Strategy 2  | 9.441 | 1      |
| 3  | Strategy 3  | 7.563 | 3      |

Source: Data processed, 2023.

The results of the analysis on the QSPM matrix of the marketing subsystem of dried fish business in Bengkulu Province are known to consist of three alternative strategies. Of the three strategies, it is known that the one with the highest TAS value is strategy two, the strategy is to utilize technological

developments as a marketing tool to make it easier for consumers to make purchases (S5-O2) with a TAS value of 9,441.

In the processing subsystem, it is known that the value of the QSPM matrix analysis is the highest TAS value, namely in strategy I with the TAS (Total Attractiveness Score) of 8,698. In the marketing subsystem, the highest QSPM value is found in strategy II, namely the TAS (Total Attractiveness Score) value of 9,441. So it can be concluded that the priority strategy for the dried fish business in Bengkulu Province is the subsystem with the highest TAS value, namely the strategy "Utilizing technological developments as a marketing tool to make it easier for consumers to make purchases" with a TAS value of 9,441, so that the results of these strategies can be implemented namely by utilizing technology such as social media and online service delivery for the development of dried fish businesses in Bengkulu Province.

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusion

From the research entitled "Dried Fish Business Development Strategy in Bengkulu Province" the conclusions can be obtained as follows:

1. In the internal factor analysis of the IFAS matrix analysis it is known that the total score obtained in the processing subsystem is a strength of 3.482 and a weakness of 1.627. For the marketing subsystem, the total score for the strength factor is 3,502 and the weakness is 1,445.
2. In the external factor analysis, the EFAS matrix analysis is known in the processing subsystem, the total score obtained is 3,471 opportunities and 1,584 threats. For the marketing subsystem, the total score for the opportunity factor is 3,853 and the threat is 1,694.
3. In the SWOT matrix analysis of the processing subsystem, 9 alternative strategies were obtained, in the grand strategy matrix analysis the position of the dried fish business in Bengkulu Province was in quadrant I and the results of the QSPM analysis of the processing subsystem were strategy I Utilizing maximum raw materials to meet customer demand inside and outside the province Bengkulu with a TAS value of 8,698. For the marketing subsystem, 7 alternative strategies are obtained, quadrant positions in the grand strategy matrix analysis, namely quadrant I and the results of the QSPM analysis, namely Utilizing technological developments as a marketing tool to make it easier for consumers to make purchases with a TAS value of 9,441.

## Suggestion

Based on the results of the research that has been carried out, there are suggestions as follows:

1. Producers and marketing agencies for dried fish in Bengkulu Province are expected to be able to maintain their position in quadrant I of the dried fish business as the best position.
2. Producers and marketing agencies for dried fish in Bengkulu Province are expected to carry out the priority strategies that have been obtained for the sustainability of the dried fish business.
3. Relevant agencies that have links with the development of the dried fish business in Bengkulu Province, can pay special attention to the sustainability of the dried fish business in accordance with the results of the priority strategy obtained.
4. Future researchers can analyze the strategy for developing a dried fish business in Bengkulu Province, not only in the two subsystems.

## REFERENCE

- Antara (2023) DKP sebut Bengkulu miliki potensi ekspor ikan. 17 januari 2023 (Diakses 29 mei 2023). Diakses dari <https://bengkulu.antaranews.com/berita/268368/dkp-sebut-bengkulu-miliki-potensi-ekspor-ikan>
- Aristarini, L. I Ketut Kirya, Ni Nyoman Yulianthini. (2014). Pengaruh Pengalaman Kerja, Kompetensi Sosial, dan Motivasi Kerja terhadap kinerja Karyawan pada Bagian Pemasaran PT. Adira Finance Singaraja, e-Journal Bisma Universitas Pendidikan Ganesha Jurusan Manajemen, 2(4), 206-213.
- Badan Pusat Statistik, 2018. *Provinsi Bengkulu Dalam Angka*. Bengkulu. BPS Provinsi Bengkulu.
- Bank Indonesia, 2013. *Pola Pembiayaan Umkm Usaha Pengolahan Ikan Kering Kota Bengkulu*. Bengkulu: Kantor Perwakilan Bank Indonesia Provinsi Bengkulu.
- David, F. R, 2009. *Manajemen Strategis Konsep*. Jakarta: Salemba Empat.
- David, F.R, 2011. *Manajemen Strategis*. Konsep, Jakarta: Salemba Empat.
- Geffken R, Hendrik, Zulkarnain. 2017. Analisis usaha pengolahan ikan asin di Kelurahan Pondok Batu Kecamatan Sarudik Kota Sibolga Provinsi Sumatera Utara. *Jurnal Online Mahasiswa*. 4(1): 1-9
- Ghorbani, A., Raufirad, V., Rafiaani, P., & Azadi, H. (2015). Ecotourism sustainable development strategies using SWOT and QSPM model: A case study of Kaji Namakzar Wetland, South Khorasan Province, Iran. *Tourism Management Perspectives*, 16, 290-297.

- Hasyim, Cawalinya & Ohoiwutun, Elisabeth. 2018. Strategi Komunikasi Pemasaran Ikan Teri (*Stolephorus* sp.) Kering. *Jurnal Penelitian Komunikasi*. 21(2). DOI:10.20422/jpk.v21i2.586.
- Kobesi Petrus, Adeline Norawati Hutapea, 2016. Prospek Pengembangan Usaha Abon Ikan Di Kelurahan Humusu C, Kecamatan Insana Utara, Kabupaten Timor Tengah Utara (Studi Kasus pada Kelompok Pengolahan Abon Ikan "Pantura Wini"). *Jurnal Agribisnis Lahan Kering*. 1(2). 21-23
- Mamun-ur-Rashid, Md., Sadat, N., Mahmood, M. T., & Musaddique, M. H. M. (2023). Women in dry fish processing activities: an in-depth study of a selected coastal region of Bangladesh. *Development in Practice*, 33(8), 910–925. <https://doi.org/10.1080/09614524.2023.2247592>
- Marpaung, Ridawati. 2015. Kajian Mikrobiologi Pada Produk Ikan Asin Kering Yang Dipasarkan Di Pasar Tradisional Dan Pasar Swalayan Dalam Upaya Peningkatan Keamanan Pangan Di Kota Jambi. *Jurnal Ilmiah Universitas Batanghari Jambi*. 15(3).
- Mubarok Robby, Suherna, Dian Anggraeni, 2021. Analisis Strategi Pemasaran Beras Merek Ciberang Di Kabupaten Lebak. *Jurnal Ilmu Pertanian Tirtayasa*, 3(2). 279-292.
- Mustofa Umar, Muhammad Imron Zamzani, Intan Wahyu Nur Rachma, Hendrik Suprayetno, Muhammad Alfiannur Al, Syamsia Wati, Andri Hanata, Bona Matanari, M. Rizqi Nugraha, Mochammad Fahmi, (2021). Pemanfaatan Teknologi Informasi Sebagai Media Promosi Olahan Buah Salak Lokal Di Karang Joang Balikpapan. *Journal SEPAKAT*. 2(1).
- Pasaribu Rina Djunita, Zharfan Inzaghi, Mohammad Riza Sutjipto, 2022. Strategi Pengembangan Bisnis Menggunakan Analisis Swot dan QSPM (Studi Kasus Pada Perusahaan Keluarga PT. Susu KPBS Pangalengan). *Journal management and business*. 5(1). 2598-8301.
- Pudjiastuti, S. (2016a). "Pemberantasan Illegal, Unreported, and Unregulated fishing : Menegakkan Kedaulatan dan Menjaga Keberlanjutan untuk kesejahteraan Bangsa Indonesia", dalam Pidato Penganugerahan Gelar Doktor Honoris Causa dibidang Pembangunan Kelautan dan Perikanan. Semarang: Universitas Diponegoro.
- Putri, N. E., Astuti, R., & Putri, S. A. (2014). Perencanaan Strategi Pengembangan Restoran Menggunakan Analisis Swot Dan Metode QSPM (Quantitative Strategic Planning Matriks)(Studi Kasus Restoran Big Burger Malang). *Industria: Jurnal Teknologi dan Manajemen Agroindustri*, 3(2), 93-106.
- Putri, Nyimas Ekinevita, Astuti, Retno, Putri, Shyntia Atica. 2014. Perencanaan Strategi Pengembangan Restoran Menggunakan Analisis Swot Dan Metode Qspm (Quantitative Strategic Planning Matriks) (Studi Kasus Restoran Big Burger Malang). *Jurnal Industria* Vol.3 No.2 Hal.93-106.

- Rahmawati Yuliana, Syahputra, 2018. Strategi Pengembangan Usaha Dengan Penggunaan Quantitative Strategic Planning Matrix (Qspm) Pada Cv. Rabbani Asysa. *E-Proceeding Of Management*. 5(3). 2533-9357.
- Ramadani Rizki, Hasman Hasyim, & Yusak Maryunianta, (2017). Analisis Dan Penyusunan Strategi Pengembangan Nilai Tambah Produk Ikan Asin.
- Rangkuti, Freddy. 2008. Analisis SWOT Teknik Membedah Kasus Bisnis. Jakarta: PT. Gramedia Pustaka Utama
- Rangkuti, Freddy. 2016. *Analisis SWOT Teknik Membedah Kasus Bisnis*. PT Gramedia, Jakarta.
- Setyorini, H., & Santoso, I. (2017). Analisis strategi pemasaran menggunakan matriks SWOT dan QSPM (studi kasus: Restoran WS Soekarno Hatta Malang). *Industria: Jurnal Teknologi dan Manajemen Agroindustri*, 5(1), 46-53.
- Silvia, E. (2013). Aplikasi Quality Function Deployment untuk Meningkatkan Kualitas Ikan Bleberan Kering di Kota Bengkulu. *Jurnal Agroindustri*. 3 (2) : 116 - 123.
- Sinaga Opattriani, Made Antara, Ratna Komala Dewi, 2020. Strategi Pengembangan Usaha Garam Rakyat di Desa Kusamba, Kecamatan Dawan, Kabupaten Klungkung. *Jurnal Sosial Ekonomi dan Kebijakan Pertanian*. 4(1). 96-110.
- Solihin, I. 2012. Manajemen Strategik. PT.Gelora Aksara Pratama : Erlangga : Bandung.
- Sudaryono, 2014. *Aplikasi Statistik Untuk Penelitian*. Jakarta: PT. Lentera Ilmu Cendikia.
- Sugiyono, 2013. Metode Penelitian Kuantitatif. Bandung: Alfabeta.
- Sukiyono, K. (2018). Penelitian survai dan teknik sampling. BFP. Universitas Bengkulu.
- Sukiyono, K., Romdhon, M. M., Nabiu, M., & Windirah, N. (2023). Risk Management in Micro, Small, and Medium Enterprises: An Empirical Analysis of SMEs Dried Fish in Bengkulu Province. *Jurnal Ilmiah Perikanan dan Kelautan*, 15(1): 106 - DOI: 10.20473/jipk.v15i1.38409.
- Wahyudi Didik, Ribut Santosa, & Imam Juhari, (2012). Analisis Nilai Tambah Dan Strategi Pengembangan Agroindustri Pengeringan Ikan Di Kecamatan Ambunten. *Jurnal Cemara*. 9(1). 2087-3484