



THE ROLE OF SMES FUFU SKIPJACK PROCESSING TO MARINE INDUSTRY DEVELOPMENT IN BITUNG CITY NORTH SULAWESI

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Abstract

The role of SMEs Fufu Skipjack Processing is crucial in improving the maritime industry in Indonesia, especially in Bitung City, North Sulawesi Province. There needs to be a deeper understanding of this role, particularly in terms of various factors such as the advantages, opportunities, disadvantages, and challenges that must be faced from the development of SMEs, especially in improving the maritime industry. This paper mainly examines the role of SMEs in the development of the marine industry in Bitung City with a study on SMEs in traditional fish processing. This study is in the form of a qualitative empirical study in direct interviews with entrepreneurs engaged in Fufu Skipjack processing. Data analysis is in the form of a SWOT analysis of this industry's strengths, weaknesses, opportunities, and threats. This study concludes that the SWOT analysis provides understanding and knowledge of various factors in the maritime industry development in Bitung City, especially the fish processing SMEs industry popular by people in Eastern Indonesia, namely Fufu Skipjack Processing.

Keywords: Maritime Industry, SMEs, Fish Processing, Fufu Skipjack, SWOT

INTRODUCTION

The maritime industry is one of the leading industries in Indonesia (McKinsey, 2012). Indonesia's advantages in terms of ocean area compared to land area in the world, approximately 70 to 30 (BPS RI, 2020). Geographically, Indonesia is an archipelagic country with two-thirds of the ocean area more extensive than the land area. This uniqueness can be seen from the coastline on almost every island in Indonesia (approximately 81,000 km). This advantage makes Indonesia ranks second after Canada as a country with the longest coastline in the world. This strength has great potential to advance the Indonesian economy (CSIS, 2014).

Data in 2019, Indonesia ranks third in the world's most significant fishery production after China and India, which is 6.10 million tons and contributes 3% of Indonesia's GDP (Sapari, 2019). This contribution shows that the Indonesian people have not felt the significant role of their maritime potential, which is marked by the not being managed optimally in Indonesia's marine potential, which can make a substantial contribution to the welfare and prosperity of the Indonesian people (Nugroho et al., 2020).

One part of the maritime industry with great potential apart from the fishing industry is the fish processing industry, especially the traditional ones. The fish processing industry has the opportunity to develop due to several factors such as (Nurcaya, 2020): (1) the level of fish consumption in Indonesia is still low; namely, 50.7 million kilograms per capita, which is still half the level of fish consumption from Japan; (2) utilization of the fish processing industry which is only 51%; (3) new exports reached US\$4.1 billion, and new imports reached US\$0.28 billion with production levels in 2019 only reaching 1.4 million tons; (4) the number of fish processing industries is still not significant, namely 718 large industries, 715 medium industries, and small industries which only reach 3000 SMEs; and (5) a

production capacity of 2.7 million tons and raw materials for processed fish 1.4 million tons and a raw material deficit of 1.3 million tons.

One of the sectors under the authority of local governments in Indonesia in the maritime industry is the management of industry and fishery resources (Badrudin, 2015). North Sulawesi is one of the provinces in Indonesia with a wealth of marine industries (BPS, 2018), vast fishery resources, and this is due to the geographical area of North Sulawesi (Mintardjo et al., 2021), which has an expansive coastline and is surrounded by various large and small islands. Based on a study from the Marine Directorate of Bappenas, North Sulawesi is one of 10 provinces with significant advantages in the maritime industry, both in marine fishing and production (Bappenas, 2016). This potency causes the province to focus on developing the marine industry in various sectors, including optimizing the potentials of the marine sector, such as the SMEs-based fish processing industry in this area. This condition is because the fish processing industry is an important sector in North Sulawesi (Sumual et al., 2019).

This paper aims to examine the various advantages, disadvantages, opportunities, and challenges faced for developing the maritime industry in North Sulawesi, especially the development of SMEs in the fish processing industry with a focus on processing Fufu Skipjack fish in Bitung City. Analysis of research data in the form of qualitative analysis in SWOT analysis.

METHOD AND PROCEDURES

This paper is field research using the descriptive qualitative method. Research data is sourced from primary and secondary data for preliminary data in interviews and direct observations to informants, namely SMEs Fufu Skipjack Processing in Bitung City. Bitung City chose it because it has long been known as a fishing port city and a producer of fishery products in Eastern Indonesia with various scales of fishery production companies for both export and regional and local needs. Analysis of research data in the form of a SWOT (Strength, Weakness, Opportunity, and Threat) analysis (Valentin, 2001) to understand and identify various factors related to the development of the maritime industry, especially SMEs Fufu Skipjack Processing in Bitung City.

RESULTS

Strength

Strength owned herein is the forces generally held in the operations and the power that influences business development amid the competition and the advancement of the business.

First, Abundant Products. The strength possessed by fish processing SMEs, especially smoked fish or better known as skipjack fufu, is the raw material for producing skipjack fufu which is so abundant. The raw material is skipjack tuna which is widely found in the waters of the Sulawesi Sea, especially North Sulawesi. Bitung City is known as Cakalang City, where this area is a center for

Cakalang fish production. Especially for SMEs processing Skipjack Fufu in this city, it is located in Madidir District, Bitung City.

Second, Typical Raw Materials. The availability of skipjack tuna, which is not found everywhere because it is only found in Sulawesi sea waters, is a unique characteristic of this region.

Third, Competitive Prices Mindless availability of plentiful raw materials so that the price of Skipjack as raw material cost or affordable enough, so prices Fufu Cakalang fish that are sold with the market also sold at affordable prices.

Fourth, Product Quality. Product quality Skipjack Fufu produced by There is no doubt about the UMKM in Bitung City. With the workers' ability and skill, they could cultivate raw Cakalang products then smoke them so that it becomes Products Skipjack Fufu with product quality good.

Fifth, Availability. Workforce to process and produce tuna fufu only come from the surrounding area. The workers are generally community members who live around the Fufu skipjack production site, namely in the Madidir village.

Sixth, Basic Knowledge of Traditional Fish Processing. In the manufacture or processing or production process of Skipjack Fufu, where the processing is still done, so it is not difficult to do. Therefore, the processing of Cakalang Fufu fish products is easy to learn because it is done traditionally.

Seventh, there is support from the local community and the government. The Cakalang Fufu fish product is a typical product of the North Sulawesi region. Automatically Support from the Government and Local Communities is very visible, among others, by consuming, promoting, and making this product a regional specialty.



Figure 1. Raw Materials of Skipjack or Cakalang



Figure 2. Cleaning of Skipjack Before Fufu or Smoking Process

Opportunities

Opportunities are conditions that support or provide opportunities for SMEs to grow and develop. As for the factors of opportunity, among others, they are as follows:

First, Regional Leading. Products Cakalang Fufu Fish Product is a regional specialty product that is not produced by other regions, so that this product becomes a regional advantage. This advantage is an opportunity for SMEs to continue to exist and develop.

Second, Wide Market Share. Fufu skipjack tuna products are widely known and consumed by people outside the region because they are typical souvenirs. This product creates a vast market opportunity and potential.

Third, Opportunities are open for Export and Domestic shares. There are pretty significant opportunities for the Domestic market and even exports for this Fufu Cakalang Fish Product because it is not produced in other areas.

Fourth, Rising demand for Processed Products. The demand for Processed Fish products continues to increase in line with the increasing public need for community nutrition originating from fish rich in vitamins, proteins, and minerals is an opportunity for SMEs to continue developing.

Fifth, The increase in market demand / high consumption. An increase also follows the rise in fish consumption among the public in market demand for Cakalang Fufu products. Apart from being consumed by local people, they are also used as local souvenirs.

Sixth, Smooth Supply of Raw Materials. A smooth supply of readily available raw materials is an opportunity for SMEs to continue producing and developing their business.



Figure 3. The Process Of Installing Bamboo Before Smoking Fish



Figure 4. The Process Of Smoking Skipjack Fufu 4-5 Hours

Threats

With the development of the economy, technology, social and culture in public, this research has several threats. Researchers identify some of these developments as a threat to the sustainability of the SMEs Processing Cakalang Fufu. Several things are considered a threat to business continuity, among others:

To begin, competitors with similar products from another area. The competitors/competitors for skipjack fufu fish products are fish processing products originating from other regions, smoked fish, but the raw materials are not skipjack tuna.

Second, Competitors of Other Processed Fishery Other. Products processed fishery products that are competitors of Cakalang fufu fish products are Smoked Cakalang Fish/Fufu but made whole,

different from Cakalang Fufu which is clamped using bamboo. Processed fish products such as dried Roa Fish are also a typical product of the North Sulawesi region, used as souvenirs.

Third, Technological developments. Developments Current technological advances can threaten SMEs processing skipjack fufu in Bitung City if there are SMEs in other areas that can produce by utilizing technological developments, namely modern equipment and sophisticated production techniques.

Fourth, Climate Weather Effects Raw Materials. Because This product has fish as raw material, its availability is quite influenced by climate/weather. If the weather is raining or windy, the ocean waves are big enough to affect going to the sea.



Figure 5. The Final Product of Fufu Skipjack



Figure 6. Interview with Entrepreneurs About Strength, Weakness, Opportunity, and Threat SMEs Maritime Industry

SWOT Analysis

Based on the findings presented previously, a SWOT analysis make based on these results. This analysis refers to the conclusions that have been grouped into groups of strengths, weaknesses, opportunities, and challenges faced by SMEs Fufu Skipjack Processing in Bitung City. These results are made in an Internal Factor Evaluation Matrix (IFE matrix) and an External Factor Evaluation Matrix (EFE Matrix) diagram. External Factor Evaluation–EFE Matrix).

IFAS	STRENGTHS 1.Abundant Raw Material Specialty Products 2.Competitive price Product quality 3. Availability of Labor 4. Basic knowledge of traditional fish processing 5. Local community and government support	WEAKNESS (W) 1.Simple management 2.Simple production equipment 3. Limited capital 4.Processing skills still low 5. Product marketing not evenly distributed in particular area far from the market 6. Products are damaged
EFAS		
OPORTUNITIES (O) 1. Regional superior products 2. Wide market share 3. Open opportunities for Export market and domestic 4. Increasing demand processed products 5. Rising demand market/high consumption 6. Smooth supply raw material	SO STRATEGY 1.Optimizing the use of abundant raw materials to meet high demand 2. Take advantage of market opportunities by maintaining affordable prices	WO STRATEGY Utilizing the role of government to improve processing skills 2. Utilizing Technology to improve product quality
THREATS (T) 1.Competitors / Competitors similar products from Other region 2. Competitors for processed products other fishery 3. Technological Development 4. Climate/weather affect price raw material	ST STRATEGY 1. Strengthen inventory management to cope with seasonal influences 2. Training for workers	WT STRATEGY 1. Strive for HR development and training 2. Establish partners with fishermen in the availability of raw materials

Figure 7. Maritime Industry SWOT Analysis of Fufu Skipjack Processing SMEs in Bitung City

Strategy Streght-Opportunities

SMEs usually expect this condition because the advantages or strengths possessed by SMEs are used to take advantage of all current opportunities to have a tremendous competitive advantage compared to similar SMEs. As for some of the forces of SMEs processing Skipjack Fufu in taking advantage of existing opportunities: (1) Optimizing the use of abundant raw materials. To meet the high demand for local and overseas markets, optimizing excellent raw materials is a strength and taking advantage of developing opportunities. (2) Taking advantage of market opportunities by maintaining affordable prices is a strategy for SMEs to remain competitive in the market. Applying the price strategy is one of the strategies to face increasingly fierce market competition, namely other fish processing products.

Weaknesses-Opportunities

Strategy This strategy is determined based on utilizing existing opportunities by minimizing existing weaknesses. In this study of fish processing SMEs, the following framework used: Weaknesses-Opportunities: (1) Using the government's role to improve workforce skills due to the SMEs' workforce's weakness in processing skipjack fufu, which is still relatively low and traditionally processed, necessitating the use of the government's role. (2) Leveraging technology to improve product quality. Technological Progress is now an opportunity for UMKM to improve product quality, including improving innovation and creative packaging.

Strategy Strengths-Threat

This strategy uses the power of SMEs to overcome existing threats. These strengths are as follows: (1) Strengthening inventory management to overcome seasonal effects. Because the raw materials used are fish products that are strongly influenced by weather/climate, the strategy to overcome this weakness is to strengthen inventory management. (2) Training for workers. Training for workers/labor due to limited skills possessed is a solution as well as a strength that is used to overcome weaknesses.

Strategies Weaknesses-Threats

This strategy seeks to minimize weaknesses and avoid threats. In this condition, SMEs are required to immediately improve themselves because they can only survive in the face of increasing competitive competition. WT strategies include: (1) Strive for HR development and training. In the competitive world of business, SMEs must compete by having strategies, among others, overcoming existing weaknesses that also pose a threat. HR development by organizing training to minimize the weaknesses of workers' limited human resources. (2) Partnering with anglers in the availability of raw materials To overcome the availability of raw materials that are influenced by climate/weather,

strengthening the inventory method by collaborating with fishers is a strategy that SMEs can do to overcome weaknesses as threats to the business continuity of SMEs.

CONCLUSION

Based on the SWOT analysis performed using the matrix (Internal Factor Evaluation - IFE matrix) and (External Factor Evaluation - EFE Matrix), it is possible to conclude that SWOT analysis Strengths has a higher score than position Weaknesses. The weight of the value Strengths in SMEs processing skipjack fufu is higher in the internal factor, and Opportunities are more significant than Threats (1.91). The weight value Weaknesses in SMEs processing skipjack fufu is (0.92). In contrast, on external factors, SMEs processing skipjack fufu has a weighted value Opportunities of (1.92) while in position Threats has a weighted value of (0.89).

Based on the weight values mentioned above, as explained in the theoretical foundation chapter, the SWOT analysis skipjack tuna, SME is if the Opportunities are more excellent than threats and if the Strengths greater than Weaknesses and vice versa. So, based on the weight of the value of the SWOT analysis above, SMEs are good SMEs because the internal factors of SMEs are Strengths that have a more excellent weight value compared to Weaknesses. The external weight of Opportunities. also more significant than the weight of the Threats. In this case, SMEs have implemented a SWOT analysis, but not entirely. In this case, SMEs must optimize the implementation of SWOT analysis to be more comprehensive in knowing the state of the business being run.

Based on the analysis of the research findings above, it can conclude that SMEs processing skipjack fufu has implemented a SWOT analysis using business strategies from both internal and external factors, but the implementation has not been optimal. This analysis can be seen based on the value weights through the Internal Factor Evaluation Matrix (IFE Matrix) and the External Factor Evaluation Matrix (EFE Matrix).

Internal factors include strengths and Weaknesses, wherein element intern this the position Strengths has a more excellent weight value than the value weight Weaknesses. Internal factors include the position Strengths, which has a weight value of (1.91), and Weaknesses, which has a weight value of (0.92). In contrast, external factors include Opportunities and Threats, which have a weighing value of (1.92) and a weight value of (0.89), respectively. As a result, the position of SMEs can be said to be quite good because the part of Strengths and Opportunities has a higher value weight than Threats and Weaknesses.

From the results listed in conclusion, SMEs are more specifically processing skipjack fufu to continue to improve their resources and keep abreast of and take advantage of technological developments. In the current era, most people look for goods they want quickly, so there is a need for promotion through social media and distribution to make it easier for consumers to use services. With the increasing number and development of SMEs, the government's role is needed to support all forms of SMEs activities.

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