

## STRATEGY FOR DEVELOPING SEAWEEDS STICKS BUSINESS AT SINAR DUNIA INDUSTRY IN SANROBONE DISTRICT, TAKALAR REGENCY

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### **Abstract**

*Indonesia as an archipelagic country has great potential in the fisheries sector, especially seaweed cultivation which has high economic value and plays an important role in increasing the income of coastal communities. Takalar district in South Sulawesi is a potential area with most of the population relying on seaweed cultivation. However, this business faces various obstacles such as low income, limited information on business profits, to overcome these problems, community empowerment is carried out through training in processing seaweed into value-added products such as seaweed sticks. This research aims to identify strengths, weaknesses, opportunities, and threats and formulate appropriate development strategies to improve the competitiveness of seaweed stick products "Sinar Dunia" using qualitative methods through SWOT and AHP analysis. The results of this study show that the development strategy of Sinar Dunia Seaweed Sticks includes innovating flavor variants and product diversification to expand the market, improving packaging and consumer education through digital marketing, maintaining taste quality and production efficiency to face competition, as well as establishing partnerships with local farmers and including health information on packaging to reduce risk and increase competitiveness. From the above results, it can be concluded that Sinar Dunia Grass Sticks have great potential to be developed through product innovation, improved packaging, digital marketing, and cooperation with local suppliers, and need to overcome market weaknesses and threats in order to compete sustainably.*

**Keywords:** strategy, seaweed, swot analysis, innovation.

### **INTRODUCTION**

Approximately 70 percent of Indonesia's territory consists of the sea, whose coasts are rich in various biological resources and potential environments. This situation is one of the factors

supporting success in the fisheries sector which is currently a new source of growth. This potential has a very strategic place, both in earning foreign exchange and to grow the economy in the villages and even increase income, especially for the weak economic community and the achievement of a harmonious and balanced environmental system.

As an archipelago with 17,504 islands and 81,000 km of coastline, Indonesia has enormous opportunities and potential for marine commodity cultivation to be developed. Therefore, most of the population meets their needs through the fisheries sector, especially coastal communities. The coastal sea holds trillions of types of natural resources that are potential for the development of this country. Like the potential resources of coastal areas, Indonesia is able to give a thick color in national economic activities. The form is in the fulfillment of domestic needs, exported abroad, and regional development such as expanding employment opportunities in the countryside, increasing income, and improving the livelihood of the people.

farmers/fishermen, and the improvement of family welfare. Advanced, efficient, and resilient fisheries require intensive management by the relevant parties, including the government, facilitators, investors, industrialists, and the farmers involved.

Efforts to increase fishery production can be pursued through cultivation efforts, both on land and at sea. Seaweed cultivation is one type of aquaculture that has the potential to be developed in Indonesian waters.

Seaweed commodities are one of the sources of accelerating growth in the agricultural sector due to their demand elasticity with respect to income. Along with the population growth rate accompanied by increased income, the development of industrial and tourism centers, and liberalization, these are potential factors for the increase in demand for seaweed products. However, the large market potential has not yet been fully utilized by agribusiness actors.

Seaweed cultivation is one type of aquaculture that has the potential to be developed in Indonesian waters. Seaweed is one of the sources of foreign exchange for the country and a source of income for coastal communities, as well as one of the popular marine commodities in global trade. Therefore, seaweed is commonly processed as a source of food, medicine, and raw materials for other industries. In addition, seaweed is a commodity of high economic value.

with a wide market opportunity, both nationally and internationally. Seaweed can be cultivated on a large scale, making it one of the strategic commodities in the government's program through the revitalization of the fisheries industry initiated by the Ministry of Maritime Affairs and Fisheries. The achievement of targets in the seaweed industry is determined by many factors and the sustainability strategies of seaweed agribusiness, thus ensuring the quality and quantity of production, market, business capital, and business guarantees (Naufal, 2018).

The development of seaweed cultivation businesses began in 2008 with species such as *Eucheuma cottonii*, *Gracilaria*, and *Caulerpa*, and the prospects for the seaweed business are very bright. However, there are still many challenges faced in its development (Rajagukguk, 2009). In the cultivation sector, for example, the availability of quality seeds is still rarely found, in addition to the factors of changing water conditions and seasons that can also affect the quality of the seaweed produced. The lack of information and knowledge related to the processing of high-quality seaweed products is the main obstacle. This can be seen from the production process and the equipment used,

which are still far from the Standard Operating Procedures (SOP) for fishery products. (Anggadiredja et al., 2011)

The rapid development of seaweed at present indicates the rapid growth of business among the community as well. The reason is that currently, seaweed products have started to enter the tourism sector or become a supporting element.

tourism in marine tourism areas. The high consumer interest in processed seaweed products in the area adds value to a destination.

Takalar Regency is one of the regencies in South Sulawesi Province that has potential for seaweed development due to its coastline of approximately 74 km and an area of 566.51 km<sup>2</sup>. Based on the annual reports from the Takalar Regency Marine and Fisheries Office from 2013 to 2017, it is not surprising that most of the Takalar Regency residents living in the coastal areas, particularly in Takalar Regency, choose seaweed farming as one of their sources of livelihood. The ease of the production process in seaweed farming has led the population of Takalar Regency, which numbers approximately 292,983 people consisting of 67,001 households, to make seaweed farming their main source of income. Seaweed cultivation in Takalar has advantages, one of which is that it can be produced (harvested) throughout the season with an average harvest period of 40–45 days, in the districts of Mangarabombang, Mappakasunggu, and Sanrobone (Anonymous, 2014).

The production of seaweed in South Sulawesi in 2007 was 630,741 tons and continued to increase until 2016, reaching 3,413,800 tons (Sarwanto, 2018). The high amount of seaweed production that is not matched by the amount of seaweed processed causes the seaweed to be sold raw without any prior processing.

Seeing this situation, various community empowerment efforts have been undertaken, including training in processing seaweed into value-added products. Seaweed stick snacks are semi-dry food products that are widely circulated in the community. The form of processing verified for the seaweed type (*Eucheuma cottonii*) is different from the general processing of seaweed. Seaweed sticks with the addition of wheat flour are made to optimize the utilization of seaweed as a high-nutritional food ingredient, making it an attractive, healthy, and economical alternative product or snack. Processed products from seaweed can be several snack options such as snacks, chips, spreads, syrup, candies, dodol, and so on (Cahayani, 2016). Based on this background, this research is conducted to obtain processed seaweed snack products with a savory taste and economic value.

Seaweed, as a leading commodity, has very promising development prospects because it is easy to cultivate, does not require complex technology, and can be done manually at sea. Seaweed, as an abundant marine resource in Indonesia, has great potential to be developed as a primary raw material for the development of micro, small, and medium enterprises (MSMEs) (Sulteng & TALINTI, 2007).

One of the products that has the potential for fortification is stick products. Stick is one of the snacks. (snack) that is well-known, popular, practical, easy to obtain, simple to prepare, and affordable. Sticks are generally long and flat in shape, and have a savory taste. In the midst of the situation with many imported products made from seaweed, it is a challenge for Sinar Dunia Industry to further improve the quality of its products in order to compete with other products.

There are several important reasons why Sinar Dunia Seaweed Sticks should be developed, including:

1. Abundant Raw Material Availability: Takalar Regency has great potential in seaweed production, ensuring a steady supply of raw materials for the Sinar Dunia business.
2. Increase in Income and Community Welfare: By developing the Sinar Dunia business, the income and welfare of the coastal community can improve, thereby helping to reduce poverty and enhance the quality of life for the community.
3. Increasing Competitiveness: By developing the Sinar Dunia business, the company can enhance its competitiveness in the market, allowing it to compete with other products.
4. Increased Product Added Value: By developing the Sinar Dunia business, seaweed stick products can have a higher added value, thereby increasing the company's revenue and profit.

## RESEARCH METHOD

The type of research used by the author employs a qualitative descriptive approach, namely describing the reality of seaweed stick businesses with a focus on development strategies. Qualitative research is a type of research that is descriptive and analytical. Descriptive in qualitative research means depicting and elaborating on the events, phenomena, and social situations being studied. Analysis means interpreting and comparing the data obtained from the research. Qualitative research is also defined as a strategy for seeking meaning, understanding, concepts, characteristics, symptoms, symbols, or descriptions of a phenomenon, focusing on multiple methods, being natural and holistic, prioritizing quality, using various approaches, and presented narratively in scientific research (Charismana et al., 2022). Qualitative research is a research technique that uses narratives or words to explain and elaborate on the meaning of each phenomenon, symptom, and specific social situation. In qualitative research, the researcher is the key instrument for interpreting and making sense of each phenomenon, symptom, and specific social situation. Therefore, researchers need to master theories to analyze the gaps that occur between theoretical concepts and actual facts. The final step then using the AHP approach to determine the weights assigned to each SWOT group. After that, compare each factor of the SWOT group using the AHP method. The SWOT matrix is used in this study to develop strategies, which are then evaluated in pairs with SWOT variables to determine their priorities and levels of importance (Choudhary et al., 2024).

Data collection techniques are methods used by researchers to gather research data from data sources (subjects or research sample). Data collection techniques are a necessity, as these techniques will later be used as the basis for developing research instruments. Research instruments are a set of tools that will be used by researchers to collect research data (Kristanto, 2018). Data collection is a very important stage in research. The correct data collection technique will produce data with high credibility, and vice versa. Therefore, this stage must not be mistaken and must be carried out meticulously according to the procedures and characteristics of qualitative research. Because errors or imperfections in data collection methods will have fatal consequences, resulting in non-credible data, making the research findings unaccountable.

In qualitative research, data collection is conducted in a natural setting, with primary data sources and data collection techniques primarily involving participant observation, in-depth interviews, and documentation (Sugiyono, 2017).

In line with the ongoing research, the researcher conducts data validity tests using four criteria: transferability, credibility, dependability, and objectivity. Therefore, the researcher will ensure that the necessary data is directly used, allowing for the analysis and examination of accuracy and relevance in data collection. In qualitative research, several methods are recognized.

to test the validity of the data. One of the experts, Sugiyono (2012), states that the validity of qualitative research data can be tested with credibility, dependability, confirmability, and transferability tests. The credibility test is conducted by extending observations, increasing research persistence, triangulation (both source triangulation and triangulation of data collection techniques and data collection time), negative case analysis, reviewing related literature, and member checking, which involves rechecking the data that has been provided and agreed upon with the informants. The transferability test is the ability of the research to be applied to other contexts and social situations. The dependability test is how to make the research data reflectable by others through the process. A kind of research audit from start to finish. The confirmability test is conducted by examining the research results in relation to the research process that has been carried out.

## **RESULTS AND DISCUSSION**

### **1. Strengths, Weaknesses, Opportunities, and Threats in Developing the Sinar Dunia Seaweed Stick Business.**

The Seaweed Stick Business Sinar Dunia has strengths such as a strategic location in the coastal area with abundant seaweed resources, a production process that uses easy machines, and skilled local labor. However, its weaknesses lie in the lack of promotion and marketing, as well as the absence of legalities such as NIB, PIRT, BPOM, or halal certification from MUI. Opportunities that can be utilized include the increasing public awareness of a healthy lifestyle, support from the Takalar Regency government and related agencies, and the expanding market opportunities. Meanwhile, the threats faced include the numerous competitors in the area, changes in consumer preferences, and fluctuations in raw material prices that can affect business stability.

This is in line with Porter's competitive advantage theory, which states that abundant natural resources and strategic locations can be key factors in building business competitiveness. In addition, the use of easy-to-operate machines in the production process and skilled local labor demonstrates the application of operations management theory, which emphasizes the importance of production process efficiency and human resource development by Heizer & Render. This strength becomes an important asset for maintaining product quality consistency and high productivity.

However, the weaknesses of this business primarily lie in the aspects of marketing and legality. The lack of effective promotion and marketing creates obstacles in reaching a wider market, which can be analyzed using Kotler's marketing mix theory, particularly the promotion element that has not yet been optimized. Furthermore, the absence of legalities such as the Business Identification Number (NIB), PIRT, BPOM, and halal certification from MUI poses risks to consumer trust and market access, in accordance with the organizational legitimacy theory which emphasizes the importance of regulatory compliance to maintain business sustainability.

Opportunities that can be leveraged by Usaha Stik Rumput Laut Sinar Dunia include the increasing public awareness of healthy lifestyles and support from the local government, which are social capital and external environment that can strengthen the business position. Government

support and market trends towards healthy products align with the market opportunity theory, which emphasizes the importance of identifying and utilizing emerging trends. However, threats from intense competition, changes in consumer preferences, and fluctuations in raw material prices need to be anticipated with adaptation and innovation strategies, in accordance with risk management and market dynamics theory (Grant, 2016), so that the business can survive and thrive in an uncertain market condition.

## **2. The Right Development Strategy as an Alternative Path to Enhance the Competitiveness of Sinar Dunia Seaweed Stick Products.**

The appropriate development strategy to enhance the competitiveness of Sinar Dunia Seaweed Stick products based on SWOT analysis results is to leverage existing strengths and opportunities, such as maximizing the availability of seaweed raw materials and using efficient production machinery, as well as involving skilled local labor through collaboration with relevant agencies to improve product quality (SO strategy). Additionally, it is also important to address weaknesses by leveraging government support in terms of business legality and digital promotion training, as well as actively participating in MSME events to expand the market (WO strategy). On the other hand, strategies to face threats include product innovation and improving production efficiency to remain competitive.

in terms of price, as well as strengthening legality and digital promotion to build consumer trust and maintain raw material supply through cooperation with seaweed farmer groups (ST and WT strategies). This comprehensive approach is expected to be an effective alternative to enhance product competitiveness in the national market.

This approach aligns with Michael Porter's product differentiation theory, which emphasizes the importance of creating unique value that distinguishes the product from competitors to win market competition. By highlighting natural flavors, the product can attract consumers who are increasingly aware of health and food safety, while also building sustainable customer loyalty.

Additionally, the improvement of production and distribution efficiency through the use of simple technology and the selection of strategic locations in accordance with the principles of operations and supply chain management, which prioritize resource effectiveness and cost reduction. Supply chain management theory states that the optimization of production and distribution processes will enhance product competitiveness by reducing lead time and operational costs, allowing products to reach consumers more quickly and at competitive prices.

Furthermore, adapting production to weather conditions, improving packaging quality, as well as support from the government and legal aspects refer to the theories of sustainability and stakeholder management. Adaptation Production is important to maintain the continuity of raw material supply that is vulnerable to weather fluctuations, while quality packaging plays a role in preserving product quality during distribution and enhancing consumer appeal. Government support and legal compliance are part of risk management and business sustainability, ensuring that the business can operate safely and receive protection and incentives that support long-term development.

## **CONCLUSION**

Based on the above presentation, here are the conclusions that can be drawn by the researcher:

1. The development of the Sinar Dunia Grass Stick business has great potential by leveraging existing strengths and opportunities. However, to achieve success in the development of their business, it is important for entrepreneurs to address weaknesses, especially in the aspects of packaging and educating consumers about the health benefits of the product. In addition, anticipating threats such as fluctuations in raw material prices and market competition needs to be addressed through cost efficiency strategies, product innovation, and enhanced marketing. With the right approach, Sinar Dunia Seaweed Sticks have the potential to become one of the leading products in the seaweed-based snack industry, both in the local and international markets.
2. The appropriate development strategy to enhance the competitiveness of Sinar Dunia seaweed stick products includes product innovation, improvement in quality and packaging design, optimization of digital marketing, consistency in product quality, and strengthening cooperation with local raw material suppliers. The synergy of these various strategies is expected to enhance the product's competitiveness in an increasingly competitive market and to sustainably expand the product's market share.

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