

Analysis of Industry Management in Salted Fish Processing of Jambal Roti at Small and Medium Enterprises "AR Putra", Pangandaran-Indonesia

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Abstract— The purpose of this research is to analyze the procurement management of raw materials, process technology, and marketing of salted jambal roti fish carried out by "UKM AR Putra". The research method used is a survey method with purposive sampling based on considerations of production scale and business continuity of salted jambal roti fish. The research was conducted from February 25, 2023, to March 25, 2023. The data used are primary and secondary data. Primary data was obtained by observing and conducting direct interviews with the owner of "AR Putra" business. Secondary data was obtained through a literature study that comes from journals related to this research. The data obtained were analyzed descriptively. The conclusions drawn from this research are as follows: 1) The procurement of raw materials for mayung fish carried out by UKM AR Putra is done by cash purchase and obtained from fish suppliers in Pangandaran. 2) The process technology used in making jambal roti fish is conventional (traditional) methods consisting of the main stages of washing, salting, drying, and packaging. 3) The marketing of jambal roti fish carried out by UKM AR Putra is still very conventional by traveling around and offering this jambal fish product to tourists visiting the West Coast with intense competition.

Keywords— Tourists, Traditional, Marketing, Process Technology, Raw Materials.

I. INTRODUCTION

Pangandaran Regency is one of the centers of salted fish production in Indonesia. Salted fish is a processed fish product that is made using the salting and drying process. The processing of fish using the salting and drying method is a traditional method of fish processing that is widely used in Indonesia (Indriastuti et al., 2019).

The name of the salted fish produced in Indonesia varies depending on the type of fish used as raw material. The famous salted Fish in Pangandaran that is in high demand by consumers is jambal roti salted fish (Mutaqin and Natari., 2021). The type of fish used as raw material for jambal roti salted fish is Manyung (*Arius thalassinus*).

Traditional processing of fish plays a very important role in increasing the utilization of fisheries resources in Indonesia. Traditional processing of fish is a method used to process fish using simple technology to add value to a fish product or to accommodate excess harvests (Rakhmawati 2017). The form

of traditional fish processing is mostly carried out by Small and Medium Enterprises (SMEs).

One of the well-known jambal roti salted fish producers in Pangandaran is the SME "AR Putra". The existence of Small and Medium Enterprises (SMEs) such as "AR Putra" salted fish can have a positive effect in introducing Pangandaran to other areas in Indonesia and even abroad. The support of the Pangandaran Regency government is very positive, with the provision of tools to facilitate and improve the results of jambal roti salted fish products. The purpose of this study is to analyze the management of raw material procurement, process technology, and marketing of jambal roti salted fish carried out by "AR Putra" SME.

II. RESEACRH METHOD

The research method used is a survey method with purposive sampling based on considerations of the scale of production and continuity of the salted jambal roti fish business. The research was conducted from February 25, 2023 to March 25, 2023. The data used are primary and secondary data. Primary data was obtained by direct observation and interviews with the owner of the "AR Putra" business. Secondary data was obtained through a literature study from journals related to this research. The obtained data was analyzed descriptively.

III. RESULT AND DISCUSSION

Profile of AR Putra SME

"AR Putra" SME is a producer of jambal roti salted fish located on Jl. Bojong Jati, Wonoharjo Village, Pangandaran District, Pangandaran Regency, West Java-Indonesia. The owner of this industry is Mr. Ikin Sikum. This business has been operating since 1995 and was founded by Mr. Ikin Sikum and his family. Administratively, Wonoharjo Village is located in Pangandaran District, Pangandaran Regency, West Java Province, and the village typology falls into the coastal village category. The village's administrative center is located 2 km from the sub-district office, 91 km from the regent's office, and 218 km from the governor's office. The village has an area of 656 Ha/5.1 km², consisting of 171 Ha of rice fields and 278 Ha of dry land/settlements. In terms of climate, Wonoharjo village has an average rainfall of 19.2 mm/10

years, 6 months of rainy season, a daily average temperature of 28 oC, and an altitude of 7 m above sea level with a flat area.

Analysis of Raw Material Procurement

AR Putra SME obtains Mayung fish raw materials from suppliers located on Pangandaran Beach. The purchasing system used is cash. According to Novriyenni et al (2017), cash purchase is a business transaction carried out to secure goods stocks to prevent production congestion. The procurement or purchase of these raw materials is carried out by the owner's wife of AR Putra SME. The responsibility of the purchasing department is to: 1) determine the exact quantity of goods to be purchased, 2) determine the appropriate time for receiving the goods, and 3) determine the appropriate supplier.

Mayung fish (*Arius thalassinus*) is a demersal fish with high economic value. According to Sekarsari et al (2022), a distinctive feature of the Mayung fish is the presence of an adipose fin, which is an additional fin consisting of fat located on the dorsal fin and not connected. The dorsal, pectoral, and anal fins have hard rays. The complete fins are dorsal, ventral, vectoral, anal, and caudal. The mouth of this fish cannot be protruded, which means it is a terminal mouth. The lateral line of this fish is on the surface of the skin because it has no scales. It has a reddish-brown back and a reddish-maya-maya white underside. The classification of the Mayung fish is as follows:

- Phylum: Chordata
- Class: Pisces
- Order: Ostariophysis
- Family: Ariidae
- Genus: Arius
- Species: *Arius thalassinus*"

Process Technology Analysis

The salted fish processing process carried out at AR Putra begins with preparing the tools and materials that will be used. The fish that has arrived at the industrial site will be processed immediately to avoid a decrease in quality. The tools used include a knife, bucket, container/basket, cutting board, seat/stool, gloves, salt, fish, and water.

Weighing I

This process is carried out to determine the initial weight of the fish to be processed. This also counts the number of fish available. After the fish is weighed, it is placed in a container or basket.

Fish cleaning

The super giant snakehead fish raw material will have its head cut off and the contents of its stomach removed, which will then be filled with salt. As for the ordinary giant snakehead fish raw material, it will have its head cut off and split from the tail to the wall, and the contents of its stomach will be removed.

Rinsing I

The fish that has been cut will then be placed in a container or bucket, which will be rinsed with running water

to remove dirt, especially from the fish's stomach. Next, the fish is stored in a container or basket for the next process.



Salting process

The use of salt is needed to reduce the possibility of the growth of pathogenic bacteria (Karyantina et al. 2021). Super giant snakehead fish are salted by adding salt to the fish's abdominal cavity as needed. Then the fish will be arranged in a salting drum, which was previously given a layer of salt, and the fish will be neatly arranged on top of it. Each layer of fish will be sprinkled with salt until the fish layer is not visible. This salting process takes 4-6 days and will result in a soft fish texture that will fall apart a little when cooked. As for the ordinary giant snakehead fish raw material, the salting process is carried out in a drum or tank, and each layer is sprinkled with salt until the fish is not visible. The topmost layer will be given a thicker layer of salt like the bottom layer. The salting process takes 1-2 days and will result in fish meat with a firm texture. According to Maulid and Abrian (2020), the salt content of Pangandaran's Giant Snakehead fish ranges from 4.76-13.17%.

Cutting

This cutting activity is carried out for raw materials that are salted whole without the head. After that, the fish is removed from the salting tank, and the salt is removed from the fish's abdomen, then it is washed thoroughly to remove any remaining salt. Then the fish is cut with a knife, and the

fish bones are removed from the tail to the top, then stored in a container.

Scraping

This process begins by preparing water in a bucket or container. Then, each fish is scrubbed and placed in water, and the scraping process is carried out until no dirt remains. After that, the fish can be dried under the sun.

Rinsing II

After scraping, ordinary giant snakehead fish will be washed before the drying process. The fish is arranged in a bucket until it is submerged in water. This process is usually carried out for 10-30 minutes. This washing process is known as "gombyang," where the fish is shaken briefly in the water and then lifted.

Drying process

UKM AR Putra dries the fish by arranging them neatly on a bamboo drying rack. Before the process, the Super Jambal Roti fish will be arranged and coated with water underneath to make the outermost layer appear neat and give off a pleasant aroma. The drying process heavily depends on the weather. When the weather is sunny, it takes a day to dry the fish, but if it's cloudy, it takes three days or even more.

Second weighing process

This process is carried out using a weighing scale after the drying process is complete. The fish is transported using containers such as irrigation channels, and weighed for the second time. Weighing is done to determine the fish's shrinkage.

Draining process

This process is done while the fish is still warm and usually takes place on the floor of the inner and outer parts of the warehouse, using a mat as the base, and lasts for 30-60 minutes.

The Jambal Roti fish that have gone through several processes are then stored in the freezer with the meat open and wrapped in wrapping paper to prevent them from sticking together. Freezer storage can last up to ± 6 months, while normal storage can last for 3-4 days.

Packaging process

The packaging process for Jambal Roti fish usually uses 2 kg sized PP plastic bags wrapped in paper to prevent them from sticking together. The tail is tied using a string or rubber band and is ready to be sold in the Pangandaran beach area, either by opening a kiosk or by selling them as street food to visitors. If the Jambal Roti fish is purchased by a distributor, it will be packaged in a cardboard box or sack, then tied with string or tape to prevent the box from opening, and then the product can be transported by vehicle. The Jambal Roti fish product can last up to 6 months in the freezer and 1 month at room temperature.

The packaging of UKM AR Putra is quite good, but it doesn't have a brand name on it to identify the product, and it needs better attractive design for consumers. In addition to using good raw materials, an attractive presentation is also a factor in attracting consumers to the AR Putra Jambal Roti fish product, which can increase brand awareness among consumers. This industry needs a new breakthrough in branding so that the product can have an identity and compete

better with other businesses. The brand label should display more detailed information about the product to attract consumers, while still being flexible and economical in terms of product costs to keep the packaging cost affordable.



Marketing Analysis

The marketing process used by AR Putra SME is still very conventional. The marketing of AR Putra SME is mostly done in the East and West Coast of Pangandaran. This SME can be said to be in the home industry stage, where the husband and wife work together to make and market their jambal product. AR Putra SME has two conventional ways to market its products. The first way is through the husband, who opens a stand in the East Coast of Pangandaran. The second way is through the wife, who sells by going around and offering the jambal product to tourists visiting the West Coast.

Pricing

The selling price of this industry is targeted towards tourists who visit Pangandaran Beach. The selling price is determined by the cost of raw materials used. Super jambal bread is sold for IDR 120,000 per pack containing 4 fish with a weight of approximately 1kg. Ordinary jambal bread is priced at IDR 100,000 per pack containing 4 fish with a weight of approximately 1kg. The price difference is because the process of making super jambal bread is more difficult and time-consuming than making ordinary jambal bread.

Distribution

The jambal fish product is marketed through kiosks opened in the Pangandaran Beach area. In addition, the owner's wife markets the product by peddling to visitors.

Competition

The target market for AR Putra SME is still limited to tourists visiting the West and East Coast of Pangandaran. Meanwhile, competition in this business can be said to be tough. According to the owner of AR Putra SME, there are at least 500 people selling this jambal product on the West and East Coast of Pangandaran.

IV. CONCLUSION

The conclusion obtained from this research are:

1. The procurement of raw materials for mayung fish done by UKM AR Putra is done through cash purchases and obtained from fish supplier traders in Pangandaran.

2. The technology used for the process of making jambal roti fish is a conventional (traditional) method consisting of the main stages of washing, salting, drying, and packaging.
3. The marketing of jambal roti fish carried out by UKM AR Putra is still very conventional by selling door-to-door and offering the product to tourists visiting the west coast with a high level of competition.

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