

# ISRG JOURNAL OF ECONOMICS AND FINANCE (ISRGJEF)



**ISRG PUBLISHERS**

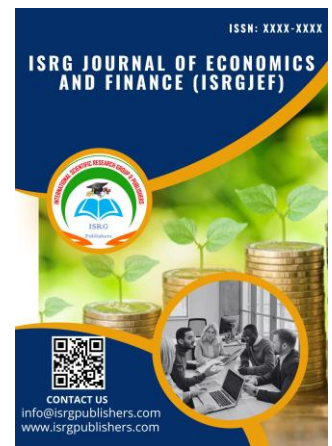
Abbreviated Key Title: ISRG J Econ Fin.

ISSN: 3048-6998 (Online)

Journal homepage: <https://isrgpublishers.com/isrgjef-2/>

Volume – 2 Issue -1 (January- February) 2025

Frequency: Bimonthly



## SURVEY OF LEADING PRODUCTS OF PROCESSED AGROINDUSTRIAL MSMEs MARINE FISH IN AMPENAN DISTRICT

Sujadi<sup>1\*</sup>, Abdul Manan<sup>2</sup>, Eka Agustiani<sup>3</sup>, I Dewa Ketut Yudha S<sup>4</sup>, Endang Astuti<sup>5</sup>

<sup>1,2,3,4,5</sup> Faculty of Economics and Business, University of Mataram

| **Received:** 09.02.2025 | **Accepted:** 15.02.2025 | **Published:** 15.02.2025

**\*Corresponding author:** Sujadi

Faculty of Economics and Business, University of Mataram

### Abstract

*The aim of the survey on superior products of Micro, Small and Medium Enterprises (UMKM) is to determine the level of production and analysis of production costs incurred in one production process as well as the efficiency of the agro-industry business of processed fish into shredded fish in the Ampenan sub-district. The research method used was a survey method, namely by taking 10 respondents randomly from the marine fish processing industry into shredded fish.*

*The research results of the 10 respondents in this study, looking at the efficiency of the sea fish processing agro-industry business in Ampenan sub-district, Mataram city, show that the R/C ratio is  $> 1$ , this shows that the agro-industry business of processing sea fish into shredded fish is worth pursuing, meaning that every additional cost of one unit will increase the respondents' business income.*

**Key Words:** Leading Product Survey, MSMEs, Agro-Industrial Processing

### INTRODUCTION

Agro-industry is a combined or integrated system that connects agricultural resources, science and technology, people, funds and information. Agro-industrial products are the final output that will be consumed by consumers. For this reason, agro-industry is a sub-sector that includes industry from the upstream agricultural sector to downstream industry. Upstream industry is industry that produces agricultural equipment and machinery that is used in

agricultural activities. Meanwhile, downstream industry is an industry that manages agricultural products until they become raw materials ready for consumption, usually in the form of post-harvest industrial activities and management of agricultural products.

Ampenan District is a district where the majority of the population are immigrants. We can see that the settlements in Ampenan sub-district are very close to the coast. Because the area is close to the coast, most of the residents in the Ampenan area make their living as fishermen.

The large number of residents who make their living as fishermen means that residents in the Ampenan area use the fish they catch to process it into processed foods such as shredded sea fish which is currently a leading food in the Ampenan area. Through sea fish, many residents in the Ampenan area have opened micro, small and medium businesses such as sea fish which are processed into fish floss, making this product superior in the Ampenan area because many residents choose sea fish floss as the start of the business they want because of the ease of raw materials required.

The main driver of the economy in the ampenan area so far has basically been the MSME sector. Apart from playing a role in regional economic growth and absorbing labor, MSMEs also play a role in distributing farmers' products and are the driving force behind the growth of regional economic activity.

The main characteristic of MSMEs is their ability to develop flexible business processes while bearing relatively low costs. The presence of MSMEs is not only intended to increase income but also to equalize income. Ampenan Village is one of the sub-districts in the city of Mataram. Most of the residents in Ampenan sub-district earn their livelihood as MSME producers of processed products such as fish floss.

Table 1. Number of MSME Home Industries in Ampenan District in 2021

No	Description	Amount	Percentage
1	Food Processing Industry	18	45%
2	Non Food Processing Industry	12	30%
3	Others	10	25%

Sumber ; Office District Ampenan

From the table above, it can be concluded that the percentage of people who run Micro, Small and Medium Enterprises (MSMEs) in the food processing industry is more dominant than the percentage of people who run Micro, Small and Medium Enterprises (MSMEs) in the non-food and other processed industries, with the percentage of the food processing industry being 37% while the non-food processing industry is 30% and others are 33%.

#### Problem Formulation

1. How much production and product costs are in one production process for a marine fish processing business.
2. What is the level of efficiency of the marine fish processing agroindustry business in Ampenan district

#### 1.2 Goals and Benefits

##### A. Goals

1. To find out how much production and product costs are in one production process for the shredded fish business
2. To analyze the efficiency of marine fish processing agroindustry MSME businesses in Ampenan sub-district, Mataram city.

## THEORETICAL BASIS

### Definition of Featured Tuna Fish Floss Products

Regional superior products are the region's ability to produce, create value, make real use of resources, provide employment opportunities, generate income for the community and government, and have prospects for increasing product productivity and investment. A product is said to be superior if the product has competitiveness so that it is able to ward off competing products in the domestic market and penetrate the export market. This regional superior product is also a product in the form of goods or services produced by cooperatives, small and medium scale businesses which can be developed by utilizing all human resources and local culture.

Tuna fish floss is a product that is very useful and nutritious for the lives of the Ampenan people. Until now, tuna is used very widely, from simple processing to high-level processing on an industrial scale. Utilization in society is generally for household needs with simple processing, while for high-level processing it is used as a medium-sized business product.

### Problem Formulation

1. How much production and product costs are in one production process for a marine fish processing business.
2. What is the level of efficiency of the marine fish processing agroindustry business in Ampenan district

#### 1.2 Goals and Benefits

##### A. Goals

1. To find out how much production and product costs are in one production process for the shredded fish business
2. To analyze the efficiency of marine fish processing agroindustry MSME businesses in Ampenan sub-district, Mataram city.

## THEORETICAL BASIS

### Definition of Featured Tuna Fish Floss Products

Regional superior products are the region's ability to produce, create value, make real use of resources, provide employment opportunities, generate income for the community and government, and have prospects for increasing product productivity and investment. A product is said to be superior if the product has competitiveness so that it is able to ward off competing products in the domestic market and penetrate the export market. This regional superior product is also a product in the form of goods or services produced by cooperatives, small and medium scale businesses which can be developed by utilizing all human resources and local culture.

Tuna fish floss is a product that is very useful and nutritious for the lives of the Ampenan people. Until now, tuna is used very widely, from simple processing to high-level processing on an industrial scale. Utilization in society is generally for household needs with simple processing, while for high-level processing it is used as a medium-sized business product.

Sea fish has many benefits, apart from being fried normally, sea fish can also be processed into shredded meat. Residents of the Ampenan area often process sea fish into fish floss. Because many people often process sea fish into shredded fish, quite a few people process the fish into shredded meat and then sell it to various

regions, making this fish floss a superior product in the Ampenan region.

The sea fish that are often processed into shredded meat are tuna, tuna and so on. However, in the Ampenan area itself, the fish floss that is the superior product is tuna floss. Because apart from its delicious taste, tuna is also easy to obtain in the Ampenan area and its relatively cheap selling price makes residents choose tuna as a superior product.

Tuna fish is a product that is often found in the Ampenan community as shredded tuna, grilled fish, cilok tuna and so on. Shredded cobs are usually found in markets and medium-sized businesses. Shredded cob. Fish floss is usually used as a side dish in the community, apart from being used as a side dish, it can also be used as a snack when it rains.

The amount of production and production costs in one process of the shredded fish business.

The production size of shredded tuna in one process is 15 kg. Next, we calculate how much production costs each month with the price of fresh tuna being IDR. 40,000 in a day we can produce 15 kg to be made into ready-to-eat shredded meat.

- a. 15 kg tuna: Rp. 600,000
- b. Cooking oil: Rp. 100,000
- c. Salt: Rp. 12,000
- d. Chili: IDR 65,000
- e. Shallots: Rp. 50,000
- f. Garlic: Rp. 40,000
- g. Condiments: Rp. 35,000
- h. Brown sugar: Rp. 35,000
- i. Tamarind: Rp. 15,000

### Economic Efficiency

Efficiency is a concept that measures how well resources (such as time, energy, money, or raw materials) are used to achieve desired results.

#### Efficiency Economis

Efficiency focuses on maximizing output by minimizing input or use of resources and is generally defined as the ability to achieve goals with the minimum use of resources.

However, in a business context, efficiency is often measured by the ratio of output to input. For example, in a manufacturing process, efficiency can be measured by the number of products produced per unit of time or cost.

#### Economic Efficiency

Economic efficiency emphasizes achieving the desired results or output with the minimum possible expenditure. This involves controlling costs, looking for ways to reduce expenses, and maximizing the value of each unit of cost incurred.

Examples include purchasing raw materials at lower prices without sacrificing quality, or using more energy-efficient technology to reduce operational costs.

### Efficiency Concept

Efficiency measurements are often done by comparing the output produced to the input used. This ratio provides an idea of how

effectively resources are used to produce certain results. The general formula for measuring efficiency is

Revenue Cost Ratio ( R/C ratio ).

#### Understanding Revenue Cost Ratio

Revenue Cost Ratio is a measure that shows how much costs a company incurs to generate revenue. This ratio is calculated by dividing total costs by total revenue. Revenue Cost Ratio or income to cost ratio is one of the ratios used to measure the efficiency of costs incurred versus income earned.

### Production and Cost Theory

Production theory is a theory that explains the relationship between product quantity and the production factors used. Meanwhile, the production function is expressed in the form:

$$Q = f(K, L, T, N)$$

The output production function is influenced by capital factors (K), labor factors (L), technology (T), and land (N). If production factors other than labor are considered fixed/constant then the output production function is influenced by the labor factor only.

$$Q = f(L)$$

Production factors that are fixed are called fixed inputs, while production factors that change are called variable production factors.

Economic costs are the amount of sacrifice for alternative goods that are lost and cannot be produced. Economic costs are divided into two, namely explicit costs and implicit costs. Explicit costs consist of company payments for hiring labor, machinery, transportation services and purchasing raw materials. Meanwhile, implicit costs are the costs of one's own production factors, such as one's own capital which is used so that one does not need to pay interest on capital.

Production periods are divided into short-term periods and long-term periods. The short-term period is a period where the company does not have enough time to change factory capacity, but can change the level of use of certain inputs. For example, adding or reducing workforce. Meanwhile, in the long term, companies can change all inputs including product capacity in the form of machines and other production equipment.

#### 1. Production Period and Short-Term Costs

Marginal product (marginal product = MP) is the additional output or total product due to an additional unit of labor or an additional variable production factor.

$$MP = d(TP)/d(L)$$

Average product per worker (average product = AP) is the division of total product by the number of workers used to produce.

$$AP = TP/L$$

Total cost (total cost = TC) is the sum of total variable costs (TVC) and total fixed costs (TFC). Total variable costs (TVC) are costs that change as the output produced changes. For example, payment for raw materials, fuel, labor, etc. Meanwhile, total fixed costs (Total Fixed Cost = TFC) are costs that do not change due to changes in output. For example, rent payments, depreciation of buildings and other equipment, insurance premiums, salaries of top managers. Total costs or total costs (TC) are formulated by

$$TC = TVC + TFC$$

Average fixed costs (AFC) are the division of total fixed costs by the quantity of output in question (Q).

$$AFC = TFC/Q$$

Average variable costs (AVC) are the division of total variable costs by the output in question.

$$AVC = TVC/Q$$

The AVC curve is U-shaped. At first the AVC curve falls to a minimum because it only requires fewer additional variable production factors to produce each additional output and then the AVC curve rises because there is a decreasing increase in output which requires the use of more and more variable production factors to produce each additional unit of output.

Average total cost is the division of total costs (TC) by total output (Q). This average total cost can also be obtained by adding average fixed costs (AFC) to average variable costs (AVC).

$$AC = TC/Q = AFC + AVC$$

From this explanation, the size of the AC can be calculated as follows:

$$AC = TC/Q$$

The AC curve is U-shaped which is located above the AVC curve. The vertical distance between the two is the magnitude of the FC at each output level.

Marginal cost is the additional cost required to produce one additional unit of output. The way to calculate marginal costs is:

$$MC = dTC/dQ$$

The relationship between marginal cost and marginal product is that if marginal product increases then marginal cost decreases, and if marginal product decreases then marginal cost increases due to the additional use of labor. The marginal cost curve is U-shaped while the marginal product curve is inverted U-shaped. The marginal cost curve reaches its minimum point when the marginal product curve reaches its maximum.

The relationship between AVC, AC, and MC is that the MC curve intersects the AVC and AC curves at the minimum point. If the marginal cost (MC) is smaller than the average total cost (AC), AC will decrease. If marginal cost (MC) is greater than average total cost (AC), AC will increase.

## RESEARCH METHODS

### Types of research

Here we use quantitative and qualitative research types. Quantitative research is research that carries out systematic investigations to research a phenomenon by collecting data that can be measured and then carrying out quantitative analysis based on the data collected.

This quantitative research has an important objective regarding measurement. In this research, measurement is the center of the research. This is because measurement results can help to see the relationship between empirical observations and the results of the data. Quantitative research also has the aim of helping to find relationships between variables that exist in a population.

### Research Location

We carried out this research in Ampenan sub-district, Ampenan Tengah sub-district, Mataram city for the underlying reason that

the Ampenan area is a coastal area where the majority of coastal residents work as fishermen and fishing workers.

### Sample Population and Sampling Techniques

The population was all communities selling shredded tuna fish around Sukeraja Village and Sintung Village, Ampenan District, totaling 18 samples. In this study, the sample was determined as 10 respondents from the tuna floss business. The sampling technique was carried out randomly by drawing lots.

### Data Collection Methods

The data collection method used is a sample survey, namely by taking a portion of the sample population. Data collection was carried out directly with respondents through interviews guided by the list of questions provided. Apart from that, secondary data was also used, which supports this research, including the general condition of the research location, including data about the general condition of the research area and data obtained from reliable sources such as agencies, namely the Ampenan sub-district office and the Ampenan Tengah village office which refers to information collected from existing sources.

#### 3.4 Data Types and Sources

The type of data used in this research is Quantitative Data, quantitative data itself is data in the form of numbers. Quantitative data can be divided into two, namely discrete data and continuum data. Discrete data is data that is obtained from the results of calculations. Meanwhile, continuum data is data obtained from measurement results.

The data source used is secondary data. Secondary data itself is data that is not directly provided to researchers, for example research must be done through other people or searched through documents. This data was obtained using literature studies conducted on many books, based on notes obtained from the internet related to research.

### Data Analysis Procedures

Data is presented in a descriptive manner which aims to describe, explain and validate the data obtained. The collected data will be analyzed qualitatively and quantitatively with the following procedures:

#### 1. Cost analysis

Production costs are all production factors used, both in the form of goods and services during production. Production costs are compensation received by the owners of production factors or costs incurred by producers in the production process, both in cash and non-cash. Production costs can be calculated using the following formula.

$$TC = FC + VC$$

Where:

TC = Total Cost (Total Cost)

FC = Fixed Costs

VC = Non-Fixed Costs (Variable Cost)

#### 2. Business income

Income is the result of the production business, namely gross (gross) results with production valued in money, then reduced by production and marketing costs to obtain net income from the tuna fish floss production business.

According to Sadono Sukirno in microeconomic theory, income is income that comes from the costs of production factors or



productive services. This understanding shows that income is all income, including rice

Income as an element of welfare. Price and Income are factors that determine the size of demand for goods and services. According to general understanding, income is remuneration received by an individual after carrying out work or the value of goods and services received by an individual exceeds the proceeds from their sale.

Income can be obtained using the formula:

$$I = TR - TC$$

Where

$I$  = Income (Income)

$TR$  = Total Revenue (Total Revenue)

$TC$  = Total Cost (Total Cost)

### 3. Business efficiency

A measurement used to determine whether a business is said to be efficient or inefficient is by looking at the ratio value or R/C ratio of this tuna fish floss production business. It is said that this business is efficient if:  $R/C \text{ ratio} > 1$ . Conversely, if the  $R/C \text{ ratio} < 1$ , then the marine fish processing agroindustry business is said to be inefficient. It can be said to be efficient because the selling value is affordable and the product is long-lasting, making shredded tuna fish a superior product that is enjoyed by many people in the Ampenan area. Apart from that, the production is relatively simple, making this tuna fish floss easy for the public to produce. So the business of producing shredded tuna is very efficient for the community to run.

## RESULTS AND DISCUSSION

This research aims to determine the superior products of shredded tuna in the Ampenan area. The data used in this research are qualitative and quantitative data based on research questionnaires on agro-industry businesses processing tuna into shredded fish in Ampenan sub-district, Mataram city. Making fish floss is an alternative fish processing in the context of diversifying fishery products, to extend shelf life (inhibiting microbial growth and microorganism activity), diversification (change in shape) of processed fishery products and anticipating abundant fish catches at harvest time. Tuna fish is used as floss because it has shorter protein fibers than beef or chicken protein fibers. Apart from that, tuna is a fish that has potentially quite high nutritional value, is easy to obtain and is economical. The manufacturing procedure includes washing the ingredients, shredding, mixing the spices, frying and pressing.

### 1. Production Process

Tuna is an economically important type of fish in Indonesia, because of its role in efforts to improve nutrition in people's diets and can increase people's income. The type of tuna as described above is caught in large numbers in several areas of Indonesian waters such as in the western part of Sumatra Island, the Indian Ocean and in the waters of the South China Sea. In these two areas in certain seasons they are caught in large numbers. The total production of tuna in Indonesian waters is 1,165.36 tons (DKP, 2002). However, this large catch does not automatically increase fishermen's income because prices tend to decrease due to the tuna being not absorbed by the market for fresh consumption. If the tuna that is not absorbed by the market is not handled quickly, the tuna will experience a decline in quality which will lead to spoilage.

To overcome the above problems, it is necessary to diversify product processing into various types of processing. One of them is processing fish floss.

Fish floss is a product that combines fish preservation methods by boiling or steaming, adding certain spices and frying. This product has a soft texture, taste and distinctive aroma. The processing technology for tuna fish floss needs to be researched to be disseminated widely to the public considering that the processing technology for tuna floss is very simple and this fish floss is a food that is liked by the Indonesian people's palate.

### 2. Product Marketing

The respondents, in this case, producers of processed tuna floss market their products by selling them themselves and also entrusting them to kiosks in the Ampenan area and Mataram city, generally by entrusting them to food stalls in the Ampenan area and Mataram city. Apart from that, processed shredded tuna fish products are also purchased by collectors or the respondents also market their products to collectors who will then take the products and then market them to retailers and then buy them by consumers.

### Production cost

Fixed Costs or Depreciation

Fixed costs in this research consist of equipment and equipment depreciation costs, which are costs incurred by the shredded tuna industry which are fixed and do not depend on the size of production. Fixed costs are generally defined as costs that are relatively fixed in amount, and continue to be incurred whether the production obtained is large or small. The size of the fixed costs incurred in the agroindustry business processing marine fish depends on the production equipment used which can be seen in table 1 below.

Table 1. Fixed Costs and Depreciation

No	Name Responden	Fixed Cost (IDR)	Penyusutan
1	Widia astute	Rp690.000	Rp21.750
2	Riki Rianto	Rp835.000	Rp28.611
3	Siti sundry	Rp985.000	Rp61.667
4	Nurhayati	Rp910.000	Rp34.583
5	Salwa nurfa	Rp1.080.000	Rp30.000
6	Saidah Nurma	Rp1.378.000	Rp109.539
7	Huswatun	Rp 930.000	Rp 80.715
8	Rahmatul Alam Ramadha	Rp1.135.500	Rp110.208
9	Dony Rifaldi	Rp1.467.000	Rp120.386
10	Sadarudin	Rp1.015.000	Rp12.083

Source: Attachment data processed

Equipment depreciation costs are fixed costs which are calculated based on the number of units of production equipment used divided by the economic life of the equipment for each respondent, namely as follows:

1. The first respondent on behalf of Widia Astuti produces shredded tuna fish at a fixed cost of Rp. 990,000 and depreciation costs of Rp. 21,750

2. The second respondent, on behalf of Riki Rianto, produces shredded tuna with a fixed cost of Rp. 835,000 and depreciation Rp. 28,611
3. The third respondent, on behalf of Siti Suandri, produces shredded tuna with a fixed cost of Rp. 985,000 and the depreciation is Rp. 61,667
4. The fourth respondent on behalf of Nurhayati produces shredded tuna with a fixed cost of Rp. 910,000 and the depreciation is IDR 34,583
5. The fifth respondent, on behalf of Salwa Nurfa, produces shredded tuna with a fixed cost of Rp. 1,080,000 and depreciation of Rp. 30,000
6. The sixth respondent, on behalf of Saidah Nurma, produces shredded tuna with a fixed cost of Rp. 1,378,000 and depreciation is IDR 109,539
7. The seventh respondent, on behalf of Huswatun, produces shredded tuna with a fixed cost of Rp. 930,000 and the depreciation is Rp. 80,715
8. The eighth respondent, on behalf of Rahmatul Alam Ramadha, produces shredded tuna with a fixed cost of Rp. 1,135,500 and depreciation Rp. 110,208
9. The ninth respondent, on behalf of Dony Rifaldi, produces shredded tuna with a fixed cost of Rp. 1,467,000 and the depreciation is Rp. 120,386
10. The tenth respondent, on behalf of Sadarudin, produces woven bamboo at a fixed cost of Rp. 1,015,000 and depreciation is IDR 12,083

### 3.1.3. Variable costs

Variable costs in research are production costs whose nature changes according to the amount of production so that the size of the variable costs will be determined by the size of the business scale and the production produced. The variable costs incurred by respondents in the tuna floss business in Ampenan sub-district can be seen in table 2 below:

Table 2. Variable Costs

No	Name Respondent	Variable Cost (IDR)
1	Widia astute	2.505.000
2	Riki Rianto	2.310.000
3	Siti sundry	4.470.000
4	Nurhayati	3.360.000
5	Salwa nurfa	10.500.000
6	Saidah Nurma	17.560.461
7	Huswatun	7.920.000
8	Rahmatul Alam Ramadha	10.480.000
9	Dony Rifaldi	18.959.614
10	Sadarudin	7.320.000

Equipment depreciation costs are fixed costs which are calculated based on the number of units of production equipment used divided by the economic life of the equipment for each respondent, namely as follows:

1. The first respondent on behalf of Widia Astuti produces shredded tuna with equipment costs of Rp. 990,000 and depreciation costs of Rp. 21,750

2. The second respondent, on behalf of Riki Rianto, produces shredded tuna with equipment costs of Rp. 835,000 and depreciation Rp. 28,611
3. The third respondent on behalf of Siti Suandri produces shredded tuna with equipment costs of Rp. 985,000 and the depreciation is Rp. 61,667
4. The fourth respondent on behalf of Nurhayati produces shredded tuna with equipment costs of Rp. 910,000 and the depreciation is IDR 34,583
5. The fifth respondent on behalf of Salwa Nurfa produces shredded tuna with equipment costs of IDR 1,080,000 and shrinkage of IDR 30,000
6. The sixth respondent, on behalf of Saidah Nurma, produces shredded tuna with equipment costs of Rp. 1,378,000 and depreciation is IDR 109,539
7. The seventh respondent on behalf of Huswatun produces shredded tuna with equipment costs of Rp. 930,000 and the depreciation is Rp. 80,715
8. The eighth respondent, on behalf of Rahmatul Alam Ramadha, produces shredded tuna with equipment costs of Rp. 1,135,500 and depreciation Rp. 110,208
9. The ninth respondent, on behalf of Dony Rifaldi, produces shredded tuna with equipment costs of Rp. 1,467,000 or depreciation Rp. 120,386
10. The tenth respondent, on behalf of Sadarudin, with equipment costs of Rp. 1,015,000 and depreciation is IDR 12,083

### Variable costs

Variable costs in research are production costs whose nature changes according to the amount of production so that the size of the variable costs will be determined by the size of the business scale and the production produced. The variable costs incurred by respondents in the tuna floss business in Ampenan sub-district can be seen in table 2 below:

Table 2. Variable Costs

No	Nama Responden	Biaya Variabel
1	Widia astute	Rp2.505.000
2	Riki Rianto	Rp2.310.000
3	Siti sundry	Rp4.470.000
4	Nurhayati	Rp3.360.000
5	Salwa nurfa	Rp10.500.000
6	Saidah Nurma	Rp17.560.461
7	Huswatun	Rp7.920.000
8	Rahmatul Alam Ramadha	Rp10.480.000
9	Dony Rifaldi	Rp18.959.614
10	Sadarudin	Rp7.320.000

Source: Attachment data processed

Production costs are costs incurred by agroindustry entrepreneurs processing marine fish, the size of which will affect income. In this case the input costs incurred by each respondent are as follows:

1. To produce fish floss, Widia Astute incurs variable costs of IDR 2,505,000
2. The second respondent on behalf of Riki Rianto uses variable costs of Rp. 2,310,000 in one production
3. The third respondent on behalf of Siti Suandri incurred variable costs of Rp. 4,470,000 in producing

4. The fourth respondent on behalf of Nurhayati uses variable costs of Rp. 3,360,000 in one production
5. The second respondent on behalf of Salwa Nurfa uses variable costs of Rp. 10,500,000 in one production
6. The sixth respondent on behalf of Saidahnurma uses variable costs of Rp. 17,560,461,- in one production
7. The seventh respondent on behalf of Huswatun uses variable costs of Rp. 7,920,000 in one production
8. The eighth respondent on behalf of Rahmatul Alam Ramadha uses variable costs of Rp. 10,480,000 in one production

9. The ninth respondent on behalf of Doni Rifaldi used variable costs of IDR 18,959,614. in one production
10. The tenth respondent on behalf of Sadarudin uses variable costs of Rp. 7,320,000 in one production business income analysis

Income is the difference between total receipts and total costs incurred in carrying out a business. The amount of revenue from the agro-industry business processing sea fish into shredded fish obtained from production results is reduced by the total costs incurred during one month of production. The amount of revenue/revenue from the marine fish floss business in Ampenan Tengah sub-district can be seen in the table below:

Table 3. Sea Fish Processing Agroindustry Business Income

No	Name Respondent	Total Revenue TR = Q x P	Total Cost (TC)	H = TR - TC
1	Widia astuti	Rp5.670.000	Rp 2.526.750	Rp3.143.250
2	Riki Rianto	Rp6.750.000	Rp2.910.000	Rp3.840.000
3	Siti sundry	Rp9.750.000	Rp4.870.000	Rp4.880.000
4	Nurhayati	Rp9.000.000	Rp3.910.000	Rp5.090.000
5	Salwa nurfa	Rp25.200.000	Rp11.000.000	Rp14.200.000
6	Saidah Nurma	Rp49.200.000	Rp17.670.000	Rp30.530.000
7	Huswatun	Rp16.800.000	Rp6.950.000	Rp9.850.000
8	Rahmatul Alam R	Rp20.850.000	Rp10.590.208	Rp10.250.000
9	Dony Rifaldi	Rp57.750.000	Rp19.080.000	Rp37.670.000
10	Sadarudin	Rp18.000.000	Rp7.400.000	Rp10.600.000

Source: Attachment data processed

In table 4, it can be seen that the highest income is for respondent 9 Doni Rifaldi with a business scale whose production value reaches Rp. 57,750,000 minus the total costs until the revenue/income of the marine fish processing industry business reaches Rp. 37,670,000/month, the second business scale for respondent 6, namely Mrs. Saidah Nurma, with a production value of IDR 49,200,000 with a profit level reaching IDR 30,530,000,- after deducting production costs which reached IDR 17,670,000, while the smallest income was for respondent 1 with a production scale of IDR. 5,670,000 minus the total costs of IDR 3,495,000 per month to revenue/business income of IDR. 2,175,000/month.

#### Business efficiency analysis

Business efficiency analysis is sought to see the profits of a business. This is in accordance with the opinion of Hernanto (1993), that business efficiency analysis can be used to see the profits of a business which is tested by how much the rupiah value of the costs used in business activities provides revenue as benefits. Furthermore, the opinion of Bishop and Toussaint (1979) is that if the R/C ratio < 1 then the business is inefficient.

Table 4. Efficiency Analysis of Marine Fish Processing Agroindustry Businesses

No	Name Respondent	Revenue	Total Cost	Efficiency Business
1	Widia astute	Rp5.670.000	Rp2.526.750	2,25
2	Riki Rianto	Rp6.750.000	Rp2.910.000	2,32
3	Siti sundry	Rp9.750.000	Rp4.870.000	2,00
4	Nurhayati	Rp9.000.000	Rp3.910.000	2,30
5	Salwa nurfa	Rp25.200.000	Rp11.000.000	2,29
6	Saidah Nurma	Rp49.200.000	Rp17.670.000	2,78
7	Huswatun	Rp16.800.000	Rp7.950.000	2,11
8	Rahmatul Alam R	Rp20.850.000	Rp10.590.208	1,97
9	Dony Rifaldi	Rp57.750.000	Rp19.080.000	3,03
10	Sadarudin	Rp18.000.000	Rp7.400.000	2,43
Total		Rp218.970.000	Rp80.885.000	2,71

Source: Attachment data processed

The results of the analysis of the efficiency of the agroindustry business processing shredded tuna fish in a month which covers the entire business of the respondents is said to be efficient because it shows that the business efficiency value is greater than 1 ( $R/C$  Ratio  $> 1$ ). This shows that every time there is an additional cost of Rp. then business income will increase by Rp. 3,030,- and for respondent 6, his income will increase by Rp. 2,780,-. Likewise for the other respondents, if the efficiency value ( $R/C$  ratio  $> 1$ ) then the increase in production costs will provide additional/increased income in the marine fish processing agroindustry business.



**Production Process of Sea Fish Processing**

## CONCLUSIONS AND RECOMMENDATIONS

### A. Conclusion

Business efficiency in this research is sought to see the profits of a sea fish processing agroindustry business which is tested by how much the rupiah value of the costs used in business activities provides revenue as benefits. Furthermore, the opinion of Bishop and Toussaint (1979) is that if the  $R/C$  ratio  $< 1$  then the business is inefficient. In this research, the business efficiency of 10 respondents from marine fish processing agroindustry businesses, where the  $R/C$  ratio  $> 1$ , indicates that the processed agroindustry business is worth pursuing or developing.

### B. Suggestions

Based on the research conclusions, suggestions that can be put forward by fish floss processing business owners need to continue to maintain product continuity and be efficient in spending production costs to further increase business profits.

## BIBLIOGRAPHY

1. ....; Mataram City Central Statistics Agency, 2019. Mataram in Numbers. Published by BPS NTB Province.
2. ...BAPPENAS. 2016. Summary of Fisheries Industrialization Strategy Study to Support Regional

Economic Development. (Online).

<http://www.bappenas.go.id>. January 23, 2020.

3. Kartasmita M. 2011. Understanding Agroindustry. Blokspot.com. 2011
4. Mubyarto.1998; Small Industry Cost Concept. Gramedia Jakarta
5. Mar'atishsholikhah, et al. (2013) ; Analysis of the Added Value of the Scaled Tempe Chips Industry Household. Journal of Agricultural Sciences Vol 9 No 2 (2013)
6. Nasir, Mohammad; 1999. Social Research Methods. Graha Indonesia. Jakarta.
7. Nurmedika.A. Marhauati.M. Max Nur Alam. 2013. Income and Value Analysis Add Jackfruit Chips to Tiara Home Industry in Palu City. Agrotechnical Vol. 1 No. 3. 2013
8. Ranatagama, Muhammad Friendly. 2015. Efficiency and Business Marketing Mix Peanut Farming in Darungan Village, Tanggul District, Jember Regency. Agribusiness study program, Faculty of Agriculture, Jember University
9. Suprianto et al. 2019. Analysis of Efficiency and Added Value of the Jackfruit Dodol Processing Agro-Industry Business (Case Study of Home Industries in Narmada District). Economic Journal (Sinta 5-6) Vo. 5. No 2. September 2019
10. Student Y,M. 2009. Analysis of the Eel Chips Agroindustry Business in Klaten Regency, Agribusiness Study Program, Faculty of Agriculture, Sebelas Maret University, Surakarta.
11. Sudiyono. 2004. Agricultural Marketing .UMM.Malang
12. Sukartawi. 2006. Agribusiness. Theory and Applications. PT. Raja Grafindo Persada Jakarta.
13. Soekartawi. 2001. Introduction to Agroindustry. Publisher PT. Raja Grafindo Persada.
14. Suprianto., Agustiani, Eka., Neneng, Sunariyo. The Impact of Covid-19 on MSME Home Industry Activities in Selong District, East Lombok Regency. Journal of Development Economics. Vol 3. No. 1, March 2021, 78-98.