

Analysis of amplang business in Babulu Laut Village, Babulu District, North Penajam Paser Regency

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ABSTRACT

Amplang processing in Babulu Laut Village uses milkfish basic ingredients. This study aims at the amount of costs incurred during the production process, receipts and income from the amplang business in Babulu Laut Village, by sampling using the census method, where the population is amplang processors in Babulu Laut Village. Amplang business in Babulu Laut Village, Babulu District Incurred investment costs of Rp. 9,483,000 with depreciation of Rp. 125,051 / month, irregular costs during production of Rp. 931,280 and in a month amounted to Rp. 6,204,490, so as to obtain total costs incurred of Rp. 6,329,541/month. Revenue is Rp. 86,950,000 month with an average of Rp. 12,421,429/month. income of Rp. 42,643,216/month with an average of Rp. 6,091,888/month.

INTRODUCTION

In Babulu Laut Village, processing of fishery products includes the production of 'amplang' a snack made from milkfish. Milkfish is utilized as the raw material because the catch of milkfish itself in Babulu Laut is abundant, due to the village's coastal location.

Fish is a protein source but has a drawback of not lasting long. It is a commodity that quickly deteriorates, necessitating further processing. Fish processing can be done in various ways such as making fish floss, canned fish, salted fish, smoked fish, and others (Howara, D, 2013). Fish processing industry is an agro-industry that utilizes fishery products as raw materials to produce high-value-added products (Ibrahim, B. 2004).

Processing is a technique or art to transform various raw materials. Food processing is a collection of methods and techniques used to transform raw materials into food or into another form for consumption by humans or animals, both at home and in food processing industries (Abriana, 2017). Amplang is a traditional snack made from fish, served grilled. Amplang itself is made from mackerel mixed with tapioca flour and other ingredients, then fried. The fish used in making amplang can be mackerel, flatfish, or snakehead fish, each with its own distinct characteristics from each producer (Rizaldi, M. A. 2020).

Amplang processing is an effort to transform fish into a snack to improve quality, extend shelf life, and create added value. According to research (Haqiqiansyah, G, et al. 2021), amplang processing efforts are still largely at the household scale, using simple technology, self-financed, with business permits, and relying on family labor.

Amplang has been produced in home industries and has developed since the 1970s. This industry has been passed down from generation to generation and has survived economic crises such as in 1997. This success is due to the efforts of all entrepreneurs in Samarinda to improve its quality. Thus, amplang continues to be enjoyed by consumers to this day (Alfisyahrica, 2015). With the growth of this business over the years, research is needed to determine the income and profits of these efforts.

The purpose of this research is to determine the total costs incurred during the production process, as well as the revenue and income generated from the amplang business in Babulu Laut Village, Babulu District, North Penajam Paser Regency.

METHODOLOGY

Time and Location

This research was conducted from October 2022 to June 2023. The location of the study was in Babulu Laut Village, North Penajam Paser Regency.

Sampling Method

In this study, the census method was used for sampling. According to Sugiyono (2012), the census method is a sampling technique where all members of the population are used as samples. The population consists of 7 amplang processors.

Data Analysis Method

The data analysis method used in this study is quantitative analysis. The data analysis techniques applied are:

1) Cost Analysis

Total Cost is the sum of fixed costs and variable costs. According to Soekartawi (1995), total cost is the overall amount of fixed costs (TFC) and variable costs (TVC), with the formula:

$$TC = TFC + TVC$$

Explanation:

<i>TC</i>	: Total Cost (Rp/bulan)
<i>TFC</i>	: Total Fixed Cost (Rp/bulan)
<i>TVC</i>	: Total Variabel Cost (Rp/bulan)

2) Revenue or Total Revenue (TR)

Revenue is the income obtained from the sale of production output. According to Budiono (2002), total revenue is obtained from the output multiplied by the selling price of the output, with the formula:

$$TR = PxQ$$

Explanation:

TR:	Total Revenue (Rp/bulan)
P	: Price (Rp/kg)
Q	: Quantity (Kg)

3) Income

Income is the result received after deducting total expenses from the total revenue. According to Soekartawi (2006), the income calculation can be formulated as follows:

$$\pi = TR - TC$$

Explanation:

π : Income (Rp/bulan)

TR : Total *Revenue* (Rp/bulan)

TC : Total *Cost* (Rp/bulan)

RESULT AND DISCUSSION

General Description of the Research Location

This research was conducted in Babulu Laut Village, Babulu Subdistrict, North Penajam Paser Regency. Babulu Laut Village covers an area of 10,400 hectares, consisting of rice fields, plantation land, dry land, public facilities land, and coastal wetland areas. The boundaries of Babulu Laut Village are as follows:

- North : Labangka Village, Babulu Subdistrict
- East : Makassar Strait
- South : Muara Telake Village, Longkali Subdistrict
- West : Babulu Darat Village, Babulu Subdistrict

Babulu Laut Village has a population of 2,229 males and 2,027 females, with a total population of 4,256 people (PEMDES Babulu Laut, 2022).

Production Costs

The research findings indicate that there are various costs incurred during the production process. These costs include investment costs and operational costs. The details of these costs are as follows:

1. Investment Costs

Investment costs are the expenses incurred at the beginning before the production process of amplang (fish crackers made from milkfish) begins. The investment costs for the amplang fish cracker business are shown in Table 1.

Table 1 shows that the investment equipment used for the production process includes basins, mixers, stoves, large frying pans, and other investment costs. The total investment cost for the amplang fish cracker business is Rp. 9,483,000 per month.

Table 1. Average Investment Costs

No	Investment Description	Unit	Quantity	Price (Rp/unit)	Total Cost (Rp)	Technical Life (Months)
1	Basin	Unit	5	19,571	90,429	41
2	Mixer	Unit	1	452,857	721,429	70
3	Stove	Unit	1	507,143	678,571	82
4	Large Frying Pan	Unit	2	278,571	635,714	70
5	Large Spatula	Unit	2	30,714	70,000	53
6	Knife	Unit	5	22,571	111,571	34
7	Press Machine	Unit	1	1,805,714	2,162,857	79
8	Spoon	Unit	3	4,571	14,714	30
9	Oil Strainer	Unit	2	15,286	37,286	41
10	Large Container	Unit	5	47,857	237,857	57
11	Cutting Board	Unit	2	24,000	36,857	50
12	Freezer	Unit	2	2,728,571	4,685,714	82
Total				9,483,000		

2. Operational Costs

Operational costs are the expenses incurred during the production process of amplang (milkfish crackers). Based on the research results, operational costs are divided into two categories:

a. Fixed Costs

Fixed costs are expenses that remain constant and do not change, even if the production quantity changes. The research found that the fixed costs for amplang milkfish production in Babulu Laut Village, covering equipment such as basins, mixers, stoves, large frying pans, large spatulas, knives, press machines, spoons, oil strainers, large containers, cutting boards, and freezers, amount to Rp. 125,051 per month.

b. Variable Costs

Variable costs are expenses that vary according to the amount of amplang milkfish produced during the production process. In one month, the amplang milkfish processors in Babulu Laut Village produce 3-10 times, with an average of 7 production cycles per month. Detailed calculations can be found in Appendix 3. Based on the research results, the variable costs for the amplang milkfish business in Babulu Laut Village include milkfish meat, tapioca flour, eggs, soda, sugar, flavor enhancers, garlic, pepper, water, LPG gas, oil, labor wages, packaging plastic, and electricity. The average variable cost per production cycle is Rp. 931,280, and the monthly cost is Rp. 6,204,490.

Table 2. Average Fixed Costs

No	Investment Description	Technical Life (Months)	Quantity	Price (Rp/unit)	Total Cost (Rp)	Depreciation (Rp)
1	Basin	41	5	19,571	90,429	2,170
2	Mixer	70	1	452,857	721,429	10,151
3	Stove	82	1	507,143	678,571	7,979
4	Large Frying Pan	70	2	278,571	635,714	9,235
5	Large Spatula	53	2	30,714	70,000	1,315
6	Knife	34	5	22,571	111,571	3,682
7	Press Machine	79	1	1,805,714	2,162,857	26,677
8	Spoon	30	3	4,571	14,714	474
9	Oil Strainer	41	2	15,286	37,286	946
10	Large Container	57	5	47,857	237,857	4,549
11	Cutting Board	50	2	24,000	36,857	788
12	Freezer	82	2	2,728,571	4,685,714	57,086
Total				9,483,000	125,051	

Table 3. Average Variable Costs

No	Description	Unit	Quantity	Price (Rp/unit)	Total Cost (Rp/Production)	Total Cost (Rp/Month)
1	Milkfish Meat	Kg	6.14	30,000	184,286	1,238,571
2	Tapioca Flour	Kg	12.9	14,000	180,000	1,222,000
3	Eggs	Unit	26	2,000	51,429	345,429
4	Soda	Gram	30.7	125	3,839	25,804
5	Sugar	Gram	183.6	14	2,570	17,290
6	Flavor Enhancer	Gram	334.6	56	18,585	125,432
7	Garlic	Gram	1,171.4	30	35,143	239,143
8	Pepper	Gram	24.6	500	12,286	82,571
9	Water	Liter	6.1	250	1,536	10,321
10	LPG Gas	Unit	1	45,000	57,857	385,714
11	Oil	Liter	5.1	24,000	123,429	788,571
12	Labor Wages	Person	3	52,857	137,143	924,286
13	Packaging Plastic	Unit	185	500	92,643	620,786
14	Electricity				30,536	178,571
Total				931,280	6,204,490	

c. Total Costs

Total costs (TC) are the sum of fixed and variable costs. According to Soekartawi (1995), total costs are the overall sum of fixed and variable costs. The total costs for the amplang milkfish processing business in Babulu Laut Village include all fixed and variable costs. The total costs for amplang milkfish production in Babulu Laut Village in one month amount to Rp. 44,306,782, with an average of Rp. 6,329,541 per month. These total costs are the sum of fixed and variable costs. Fixed costs include the equipment used during the production process, which have been calculated for depreciation, while variable costs include raw materials, auxiliary materials, and supporting materials used in the processing of amplang milkfish. Detailed information can be seen in Table 4.

Table 4. Total Costs for Amplang Milkfish Processing Business

Respondent	TFC (Rp)	TVC (Rp)	TC (Rp)
1	122,375	10,324,686	10,447,061
2	95,228	7,754,735	7,849,963
3	94,217	4,213,073	4,307,290
4	189,590	5,335,430	5,525,020
5	144,878	3,307,073	3,451,951
6	82,079	2,481,571	2,563,650
7	146,986	10,014,861	10,161,847
Total	875,353	43,431,429	44,306,782
Average	125,051	6,204,490	6,329,541

Prices and Revenue

Price is the amount of money paid for a product or service (Kotler, et al. 2012). The selling price of milkfish amplang in Babulu Laut Village is Rp. 125,000/kg. It is known that each processor in Babulu Laut Village conducts production processes that vary from 3 times a month to 10 times a month. Details of the price and production of milkfish amplang in Babulu Laut Village can be seen in Table 5.

Table 5. Price and Production of Milkfish Amplang in Babulu Laut Village

Respondent	Production Amount (Kg/month)	Selling Price (Rp/Kg)	Revenue (Rp)
1	192.00	125,000	24,000,000
2	120	125,000	15,000,000
3	52.8	125,000	6,600,000
4	78.4	125,000	9,800,000
5	57.6	125,000	7,200,000
6	38	125,000	4,750,000
7	156.8	125,000	19,600,000
Total	695.60	875,000	86,950,000
Average	99.37	125,000	12,421,429

From the research results, it is known that within a month, the milkfish amplang business can produce 695.60 kg/month with an average of 99.37 kg/month, at a selling price of Rp. 125,000/kg. The revenue from the milkfish amplang processing business is calculated by multiplying the production amount by the price. Based on the research results, the total revenue is Rp. 86,950,000/month with an average of Rp. 12,421,429/month. The income of the milkfish amplang processing business can be seen in Table 6.

Table 6. Income from Milkfish Amplang Processing Business

Respondent	Total Revenue (TR) (Rp/month)	Total Costs (TC) (Rp/month)	Income (Rp/month)
1	24,000,000	10,447,061	13,552,939
2	15,000,000	7,849,963	7,150,037
3	6,600,000	4,307,290	2,292,710
4	9,800,000	5,525,020	4,274,980
5	7,200,000	3,451,951	3,748,049
6	4,750,000	2,563,650	2,186,350
7	19,600,000	10,161,847	9,438,151
Total	86,950,000	44,306,782	42,643,216
Average	12,421,429	6,329,541	6,091,888

The income derived from the milkfish amplang business for one month of production is the result of the difference between revenue and total costs. Based on the research results, the income from the milkfish amplang business in Babulu Laut Village is Rp. 42,643,216/month with an average of Rp. 6,091,888/month.

CONCLUSION

The amplang business in Babulu Laut Village, Babulu District, incurs an investment cost of Rp. 9,483,000 with a depreciation of Rp. 125,051/month, variable costs per production of Rp. 931,280, and monthly costs of Rp. 6,204,490, resulting in a total cost of Rp. 6,329,541/month. The revenue is Rp. 86,950,000/month with an average of Rp. 12,421,429/month. The income is Rp. 42,643,216/month with an average of Rp. 6,091,888/month.

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