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BUSINESS FEASIBILITY ANALYSIS ON FRESH FILLET PRODUCTS GOLDBAND SNAPPER (*Pristimoides multidens*) PT. MATSYARAJA ARNAWA STAMBHAPURA KUPANG, EAST NUSA TENGGARA

Analisis Kelayakan Usaha Pada Produk *Fresh Fillet Goldband Snapper* (*Pristimoides multidens*) PT. Matsyaraja Arnawa Stambhapura Kupang, Nusa Tenggara Timur

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ABSTRACT

Indonesia, as the largest archipelagic country in the world with a vast water area, has great potential in the fisheries industry. One of the leading products that has the potential to compete in the international market is fish fillets. PT. Matsyaraja Arnawa Stambhapura, which has been engaged in the processing of fishery products since 2017, has exported fresh fillet and frozen fillet products to various countries such as Australia, Singapore, Canada, and America. To ensure the sustainability of its business, a business feasibility study is needed that includes market, technical, human resource, environmental, and financial aspects. This study aims to evaluate investment potential and business feasibility to support optimal business decision making. The purpose of this study is to determine the business feasibility of the company PT. Matsyaraja Arnawa Stambhapura. This research was conducted on February 24 - May 09, 2025. This research was conducted by means of a survey with an internship method with quantitative data sources to analyze financial aspects through certain predetermined indicators. Business analysis obtained at the company PT. Matsyaraja Arnawa Stambhapura is a net profit of IDR 389,539,726, with BEP Unit 100 units, BEP price of IDR 2,035,965, Payback Period of 1.76 months and B/C Ratio of 1.91. So this business is feasible to be established.

Keywords: BEP, Business Feasibility Analysis, B/C Ratio, Payback Period, PT. Matsyaraja Arnawa Stambhapura

ABSTRAK

Indonesia, sebagai negara kepulauan terbesar di dunia dengan wilayah perairan yang luas, memiliki potensi besar dalam industri perikanan. Salah satu produk unggulan yang berpotensi bersaing di pasar internasional adalah fillet ikan. PT. Matsyaraja Arnawa Stambhapura, yang bergerak di bidang pengolahan produk perikanan sejak 2017, telah mengekspor produk fresh

fillet dan frozen fillet ke berbagai negara seperti Australia, Singapura, Kanada, dan Amerika. Untuk memastikan keberlanjutan usahanya, diperlukan studi kelayakan usaha yang mencakup aspek pasar, teknis, sumber daya manusia, lingkungan, dan keuangan. Studi ini bertujuan untuk mengevaluasi potensi investasi dan kelayakan usaha guna mendukung pengambilan keputusan bisnis yang optimal. Tujuan penelitian ini adalah untuk mengetahui kelayakan usaha dari perusahaan PT. Matsyaraja Arnawa Stambhapura. Penelitian ini dilakukan pada tanggal 24 Februari – 09 Mei 2025. Penelitian ini dilakukan dengan cara surey dengan metode magang dengan sumber data kuantitatif untuk menganalisis aspek finansial melalui indikator tertentu yang telah ditetapkan. Analisis usaha yang diperoleh pada perusahaan PT. Matsyaraja Arnawa Stambhapura adalah keuntungan bersih senilai Rp 389.539.726, dengan BEP Unit 100 unit, BEP harga Rp 2.035.965, Payback Period 1,76 bulan dan B/C Ratio sejumlah 1,91. Maka usaha ini layak untuk didirikan.

Kata Kunci: Analisis Kelayakan Usaha, BEP, B/C Ratio, Payback Period, PT. Matsyaraja Arnawa Stambhapura

INTRODUCTION

Indonesia is the largest archipelagic country in the world consisting of 17,508 islands. In addition, Indonesia has a vast water area. Indonesia's sea area is more than 2/3 of its land area. Thus, Indonesia's advantage lies in the availability of marine products such as fishery production. Along with the times, Indonesian fishery products have the opportunity to compete in the international market. One of the superior products that can compete in the international market is fish fillet products. According to SNI 2696: 2013, fish fillets are slices of fish meat obtained by cutting the body of the fish parallel to its spine, without the head, guts, and fins.

PT. Matsyaraja Arnawa Stambhapura is one of the companies engaged in the processing of fishery products. This company was founded in 2017 and in 2021 this company began to join the Seafood Savers membership to implement a fishery improvement program. In its daily activities, PT. Matsyaraja Arnawa Stambhapura carries out fishery product production activities, such as processing fresh fillets and frozen fillets. In export activities, this company has several export destination countries, including Australia, Singapore, Canada, and America.

A business feasibility study is a study that aims to determine whether a project is feasible or not by considering various aspects, such as market aspects, technical aspects, human resource aspects, environmental aspects, and financial aspects (Suharyadi & Purwanto, 2020). The business feasibility assessment will take into account things that will interfere with or opportunities for the investment to be carried out (Alfajri, 2023). A business feasibility study is an activity that investigates in depth a business or business that will be run, in order to choose whether or not the business is feasible to run (Kasmir, 2016).

METHODS

The implementation of research activities was carried out at PT. Matsyaraja Arnawa Stambhapura, Tenau Coastal Fisheries Port Complex, Block. Arnawa, Jln Yos Sudarso, Alak, Kupang City, East Nusa Tenggara. This research was conducted from February 24 to May 9, 2025. This research uses a survey method with an internship pattern. This aims to obtain knowledge about the feasibility analysis of the business at PT. Matsyaraja Arnawa Stambhapura. The data sources obtained come from primary data and secondary data, using quantitative analysis that uses numbers in the calculation process and analyzes the research results (Syawal *et al.*, 2020). In the data collection technique itself, it uses observation, interview, and documentation techniques.

RESULTS

In a business feasibility analysis study, there are several aspects that must be examined starting from:

a. Investment costs
b. Fixed costs
c. Variable costs
d. Total production costs
e. Product results and pricing
f. Profit margin
g. Benefit cost ratio (B/C Ratio)
h. Payback period (PP)
i. Break Event Point

1. Investment Costs

Table 1. Investment Costs

Production Equipment	Amount	Unit Cost (IDR)	Total (IDR)
Fillet knife (20 units)	20	500,000	10,000,000
Stainless steel table (3 units)	3	2,000,000	6,000,000
Electronic scales (2 units)	2	3,000,000	6,000,000
Chiller room	1	300,000,000	300,000,000
Vacuum machine	1	120,000,000	120,000,000
Digital thermometer	1	1,500,000	1,500,000
Fiber box	2	5,000,000	10,000,000
Pick-up car (used)	2	120,000,000	240,000,000
Total Investment			687,500,000

2. Depreciation Costs

Table 2. Depreciation Costs

Production Equipment	Unit Cost (IDR)	Usage Age (Months)	Depreciation/month
Fillet knife (20 units)	10,000,000	60	IDR 166,666
Stainless steel table (3 units)	6,000,000	60	IDR 100,000
Electronic scales (2 units)	6,000,000	60	IDR 100,000
Chiller room	300,000,000	120	IDR 2,500,000
Vacuum machine	120,000,000	120	IDR 1,000,000
Digital thermometer	1,500,000	48	IDR 31,250
Fiber box	10,000,000	12	IDR 166,666
Pick-up car (used)	240,000,000	60	IDR 4,000,000
Total Investment	412,500,000	Amount of Depreciation Expense	IDR 7,914,582

3. Fixed Costs

Table 3. Fixed Costs

No	Fixed Costs	Total
1	Equipment Depreciation Cost	IDR 7,914,582
2	Labor Cost/month	IDR 60,000,000
3	Water Cost	IDR 6,000,000
4	Electricity Cost	IDR 40,000,000
	Total Fixed Costs	IDR 113,914,582

4. Variable Costs

Table 4. Variable Costs

No	Variable Costs	Amount	Unit	Price (IDR)	Total (IDR)
1	Anggoli Fish	2.000	kg	44,000	88,000,000
2	Vacuum plastic	1	box	450,000	450,000
3	Gloves	1	box	650,000	650,000
4	Masks	1	box	50,000	50,000
5	Hair nets	1	box	32,000	32,000
6	Sanitary Materials	1	package	500,000	500,000
	Total Variable Costs				89.682.000

5. Sales Results

a) Total Cost

Total Cost (TC) = Fixed Cost + Variable Cost
= Fixed Cost + Variable Cost
= IDR 113,914,582 + IDR 89,682,000
= IDR 203,596,582

b) Calculation of Production Costs

The results of the variable cost of raw materials in 1 month produced 4,400/pcs fillets while for per unit/pack it was 293/pack.

Calculation of COGS Per-piece = Fixed Cost + Variable Cost / Production Quantity
= IDR 113,914,582 + IDR 89,682,000 / 4,400
= IDR 203,596,582 / 4,400
= IDR 46,271/pcs

Calculation of COGS Per-pack = Cost Price Per-piece x contents of 1 pack
= IDR 46,271 x 35
= IDR 1,619,485/pack

The result of the calculation of the cost of production is IDR 46,271/pcs. If calculated per pack containing 35 pcs is IDR 1,619,485

c) Calculation of Selling Price

The expected profit from the sale of per unit of the desired product is 12%. So the desired margin = IDR 1,619,485 x 25%
= IDR 404,871

So the selling price per unit of product with the desired profit

Selling Price = IDR 1,619,485 + 404,871
= IDR 2,024,356

So the selling price of fillet with a profit margin of 25% is IDR 2,024,356

6. Business Feasibility

a) Business Results

Total Revenue (TR) = Price (P) x Quantity (Q)
= Selling Price (IDR) x Production/month (unit)
= IDR 2,024,356 x 293
= IDR 593,136,308

b) Profit

Profit and Loss (P/L) = Total Revenue (TR) – Total Cost (TC)
= Total Revenue – Production Cost
= IDR 593,136,308 – IDR 203,596,582
= IDR 389,539,726

c) BEP (Break Event Point)

Break Event Point is divided into two: units and prices. How to find BEP units and prices can be seen in the formula below:

BEP Unit = Total Production Cost / Unit Business Price
= IDR 203,596,582 / IDR 2,024,356
= 100 units

BEP Price = Total Production Cost / Production Results
= IDR 203,596,582 / 100
= IDR 2,035,965

d) Payback Period

PP = Investment Value / Monthly Profit
= 687,500,000/ 389,539,726
= 1.76 months

e) B/C Ratio

B/C Ratio = Total Income Per Month / Operational Costs
= IDR 389,539,726 / IDR 203,596,582
= 1.91

So the B/C Ratio obtained in the Fillet business is 1.91, so the business is feasible to be established.

DISCUSSION

Investment costs are the amount of costs incurred to start a business and are used to purchase equipment, as well as other facilities and infrastructure used for the production process, which are not used up in one production so that they can be used for a long period of time. According to Mulyani & Wibowo (2023), investment costs are capital expenditures made by investors or companies to procure capital goods that will provide long-term benefits, investment costs as a complex combination of financial capital, human resources, and technology (Ari, 2019).

Depreciation cost is a burden arising from the decline in the value of fixed assets over time (Purnama *et al.*, 2024). This depreciation cost is used to replace types of investments that have been damaged or are no longer suitable for use.

Fixed costs are values with a consistent or unchanging amount depending on the level or scope of activities during a certain period of time (Fahriani, 2020). Fixed costs are costs that must be incurred when they are carried out during the production process. These costs must be incurred according to technical needs even though they are not operating.

Variable costs are financial instruments that describe dynamic resource consumption, where each additional unit of production will result in a predictable increase in costs (Widodo, 2022). Variable costs are costs with total variations that are consistent with changes in the activities of production factors. The unit cost remains within a specific appropriate limit. The appropriate limit is where the unit price does not change (Pratiwi & Marlina, 2022). Financing depends on the level of production to be produced and the level of technology set.

The total cost is the amount of costs required or incurred during production. Total cost is all expenses that must be incurred by the company to produce a product or service consisting of fixed costs and variable costs (Suliyanto, 2020).

Business results are the gross profit obtained after running a business. Business results are the total income obtained from all business units of the company minus operational and non-operational costs. Business results are an indicator to measure the feasibility of a business project (Rudianto, 2020). Business profit (profit) is a company's income which is formed from the difference between total income (revenue) minus costs (expanses) in a certain period (Ramadani *et al.*, 2022). Profit can be said to be the income or business results obtained during the business process. Break Even Point (BEP) is a condition that can occur in a company, namely a condition where the company in its operations does not make a profit and does not suffer a loss (Manuho *et al.*, 2021). BEP is an analytical construct that describes a crucial condition where the absolute amount of income is equal to the total expenditure, providing a quantitative perspective on the threshold of business sustainability (Rahayu, 2018). According to Sari *et al.*, (2023), Payback Period is the time needed to return the initial investment of a project through the cash flow generated. This concept provides an indication of the time period needed to reach the break-even point on an investment. Payback period is a period required to recoup investment expenses using cash inflow. In other words, the payback period is the ratio between initial investment and cash inflow, the result of which is a unit of time (Fahmi, 2022). This B/C Ratio method can determine the feasibility of production that will be planned in the future, whether a production is feasible or not (Trisna *et al.*, 2022). B/C Ratio is a ratio that compares the present value of cash inflow with the present value of cash outflow. This method is used to assess the feasibility of an investment based on a comparison between benefits and costs expressed in present value (Sartono, 2020).

CONCLUSION

The business analysis obtained at PT. Matsyaraja Arnawa Stambhapura is a net profit of IDR 389,539,726, with a BEP Unit of 100 units, a BEP price of IDR 2,035,965, a Payback Period of 1.76 months and a B/C Ratio of 1.91. So this business is feasible to be established.

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