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Feasibility Study on Financing Fish Pepes Farming Based on Financial Management Assistance

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Abstract---This study aims to analyze the feasibility of financing fish pepes farming based on financial management assistance at Pokdakan Dukuh Gangga Sedana in Bunutin Village. The analysis was conducted by calculating production costs, revenue, profits, and financial feasibility ratios using the R/C Ratio and Payback Period. The results show that the total production cost of IDR 10,706,972 with total revenue of IDR 42,000,000 generates a net profit of IDR 31,293,028 per month. The R/C Ratio value of 3.9 indicates that the fish pepes business is very feasible financially. In addition, the Payback Period value of 0.06 years shows that the investment can be recovered in a very short time. Financial management assistance has proven to play a role in strengthening cost efficiency, working capital management, and increasing the capacity of business actors in making financial decisions. Thus, the fish pepes business has strong sustainability potential if supported by appropriate managerial management and marketing strategies.

Keywords---Business feasibility, Fish pepes, financial management, R/C ratio, Fisheries MSMEs.

Introduction

Micro, Small, and Medium Enterprises (MSMEs) are one of the main pillars driving the national economy, proven to be able to withstand economic crises. This resilience is due to MSMEs being rooted in small-scale community economic activities and not monopolized by a handful of parties (Jelusic et al., 2022). MSMEs have several advantages over large-scale businesses, namely: (1) the ability to innovate in technology and product development relatively quickly, (2) a significant contribution to job creation, (3) a high level of flexibility and adaptability to market changes, unlike large companies that tend to be bureaucratic, and (4) managerial dynamics and a strong entrepreneurial spirit. Currently, MSMEs have become the main source of livelihood for most Indonesians (Maharani, 2018).

Small-scale fish processing industries, such as fish *pepes* farming, are an important part of strengthening the economy of coastal and rural communities in Indonesia. Processed products such as fish *pepes* not only have high nutritional value but also great economic potential if managed efficiently. Fish has several advantages, such as a high protein content of 20%, fish meat is easily digested by the body, fish meat contains unsaturated fatty acids with low cholesterol, and fish meat has some minerals such as K, Cl, P, S, Mg, Ca, Fe, Ma, Zn, Cu, Vitamins A and D (Sartika et al., 2022).

However, most micro, small, and medium enterprises (MSMEs) in this sector face serious challenges related to access to financing and low financial management capacity. A financial feasibility study is needed to determine whether a business is eligible for financing support. Feasibility is assessed through indicators such as Net Present Value (NPV), Internal Rate of Return (IRR), Payback Period (PP), and Benefit-Cost Ratio (B/C) (Hidayat et al., 2018; Dadiono, 2022). However, financial feasibility alone is not enough. A lack of understanding of financial management means that many MSMEs are unable to present credible financial reports, causing them to fail to access formal credit even though their businesses have potential (Indriasih et al., 2023).

Financial management assistance plays an important role in improving financial literacy, preparing cash reports, and understanding the optimal use of working capital (Zopounidis, 1999). Simple financial training helps MSMEs significantly improve decision-making and business efficiency. Fish processing businesses often face risks related to raw materials, distribution, and market prices. Feasibility studies integrated with managerial assistance interventions have been proven to strengthen the resilience of these businesses (Dolorosa & Nurliza, 2017). Therefore, this research is important to assess the feasibility of financing fish *pepes* farming businesses by considering the influence of financial management assistance on business sustainability. This approach is expected to contribute to the formulation of more inclusive and sustainable policies for empowering MSMEs in the fisheries sector (Bocken et al., 2022).

Research Method

This research was conducted at Pokdakan Dukuh Gangga Sedana in Bunutin Village, Bangli District, Bangli Regency, which sells processed fish in the form of fish *pepes*. The data analysis method used was:

a. Production costs:

Costs consist of fixed costs and variable costs.

$$TBP = TBT + TBTT$$

Explanation: :

TBP= Total production costs/*Total biaya produksi*

TBT= Total fixed costs/*Total biaya tetap*

TBTT= Total variable costs/*Total biaya tidak tetap*

b. Revenue

Farm revenue can be calculated using the following formula:

$$TR = P_y \times Y$$

Explanation :

TR = Total farm income/*Total penerimaan usahatani*

Py = Price of Y/*Harga Y*

Y = Production obtained from farming (Soekartawi, 1986)/*Produksi yang diperoleh dalam usahatani (Soekartawi, 1986)*

c. Profit

Mathematically, the formula for calculating profit is:

$$\Pi = TR - TC$$

Explanation:

Π = Farming profit

TR = Total Revenue

TC = Total Cost of farming (Soekartawi, 1986)

Criteria: If the profit value is positive, it is profitable. Conversely, if the profit value is negative, it is a loss.

d. According to Suratiyah (2006), the feasibility analysis of farming in terms of profit uses the following formula:

$$\frac{R}{C} \text{ Rasio } \frac{TR}{TC}$$

Explanation:

TR = Total Revenue

TC = Total Cost

With these criteria, if:

R/C Ratio > 1, vermicompost farming is feasible.

R/C Ratio = 1, vermicompost farming is break-even.

R/C Ratio < 1, vermicompost farming is not feasible.

Discussion

According to Kasmir & Jakfar (2012), in Maharani (2018), a business feasibility study is an analytical process conducted to thoroughly assess a business plan in order to determine its feasibility. This study examines various aspects, such as legal, financial, socio-economic and cultural, market and marketing, consumer behaviours, technical and technological, as well as human resources and organizational aspects. Analysis of all these aspects forms the basis for deciding whether a business is feasible, needs to be postponed, or should be canceled. The results of a feasibility study are generally presented in the form of a written report that not only serves as a conclusion regarding the feasibility of the business but also as evaluation material for various interested parties. However, the final decision regarding the implementation of the business may be influenced by other factors or certain interventions, even if the results of the study indicate that the business is feasible.

Financial management, on the other hand, is understood as the process of managing all financial activities in an organization, which includes planning, analysis, and control of financial activities (Thoâ et al., 2020). According to Chandra (2011), in Tho'in (2020), financial management plays a role in regulating various financial activities of the company through the process of planning, analysis, and supervision of financial decisions made by management, especially financial managers. This activity aims to obtain funds at the lowest possible cost and distribute them efficiently to increase the value of the company, which is the value that consumers are willing to pay when the product is offered in the market. Thus, financial management is one of the key aspects in ensuring the sustainability and competitiveness of a business (Susanti & Pratiwi, 2021).

Table 1
Production Costs

A. Investment Costs	Amount	Unit	Price per Unit	Shrinkage (Year)	Total
Stove	1	Unit	300.000		300.000
12 Kg LPG	1	Unit	250.000		250.000
Steaming pot	2	Unit	150.000		300.000
Stainless-steel container	5	Unit	100.000		500.000
Knife	3	Blade	25.000		75.000
Frying pan	1	Unit	100.000		100.000
Spatula	2	Unit	50.000		100.000
Large Strainer	2	Unit	35.000		70.000
Blender	1	Unit	250.000		250.000
Total A					1.945.000
B. Fixed Costs					
Stove	1	Unit	300.000	5	5.000
12 Kg LPG	1	Unit	250.000	5	4.167
Steaming pot	2	Unit	150.000	4	6.250
Stainless-steel container	5	Unit	100.000	4	10.417
Knife	3	Blade	25.000	3	2.083
Frying pan	1	Unit	100.000	3	2.778
Spatula	2	Unit	50.000	2	4.167
Large Strainer	2	Unit	35.000	2	2.917
Blender	1	Unit	250.000	3	6.944
Total B					44.722
C. Variable Costs (Operational)					
Carp fish	5	Kg	75.000		11.250.000
Red onion	1	Kg	48.000		1.440.000
Garlic	1	Kg	50.000		1.500.000
Curly red chili	0,5	kg	90.000		1.350.000
Cayenne pepper	0,5	Kg	50.000		750.000
Candlenut	0,1	kg	46.000		138.000
Turmeric	0,2	kg	15.000		90.000
Ginger	0,3	kg	35.000		315.000
Galangal	0,4	kg	10.000		120.000
Lemongrass	0,5	kg	15.000		225.000
Lime leaves	0,05	kg	83.000		124.500
Bay leaves	0,1	kg	23.000		69.000
Salt	0,25	kg	14.600		109.500
Granulated sugar	0,25	kg	17.500		131.250
Powdered broth	0,1	kg	50.000		150.000
Oil	1	litre	18.000		540.000
Banana leaves	2	bunch	3.500		210.000
Toothpicks	1	set	10.000		300.000
Packaging	35	pcs	2.000		2.100.000
Labor	2	person	500.000		1.000.000
Total C					10.662.250
TOTAL COSTS INCURRED (B + C)					10.706.972
D income					
Fish <i>pepes</i> sales	35	packs	40.000		42.000.000
Total monthly net income					31.293.028

Revenue per Cost

R/C Ratio = Total Revenue/Total Expenses

= 42.000.000/10.706.972

= 3,9

The R/C ratio obtained is 3.9, which means that every Rp 1 spent will generate Rp 3.9 in revenue. An R/C ratio > 1 indicates that this business is financially viable (Deswati & Hikmah, 2016; Harahap et al., 2024; Ubaidillah et al., 2023). This means that for every Rp 1 spent, Rp 1.83 in revenue will be generated. Financially, the fish *pepes* processing business is feasible (Widiah et al., 2024).

Payback Period

PP = Total Investment/Business Profit

= 1,945,000/31,293,028

= 0.06

The payback period value obtained is 0.06, which means that the time required to return the capital is 0.06 years.

Conclusion

The results of the study indicate that the fish *pepes* farming business in Pokdakan Dukuh Gangga Sedana is financially viable. The total production costs incurred of IDR 10,706,972 can generate monthly revenues of IDR 42,000,000, resulting in a net profit of IDR 31,293,028. The R/C Ratio value of 3.9 confirms that every Rp 1 spent generates Rp 3.9 in revenue, indicating a high level of feasibility. In addition, the Payback Period of 0.06 years indicates that the invested capital can be recovered very quickly. Financial management assistance plays an important role in improving the effectiveness of business management, particularly in cost management, financial reporting, and financial decision optimization. With better business management support and broader marketing strategies, the fish *pepes* business has the potential to grow and sustain itself as part of strengthening MSMEs in the fisheries sector.

Suggestion

Based on the results of this study, it is recommended that fish *pepes* businesses manage production costs more efficiently, particularly for key raw materials and equipment, by seeking more competitive suppliers or utilizing equipment optimally for several production cycles. In addition, product diversification and improved marketing strategies, including the use of social media, can help expand the market and increase revenue. Access to formal financing also needs to be pursued to support business expansion.

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