

Feasibility Analysis of *Purse Seine* Business Units in Sinjai District

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Abstract : *The fishing communities that carry out fishing activities in Sinjai district generally use purse seine which is a relatively high productivity and effectiveness tool when compared to other fishing gear. However, efforts to utilize fish fishery resources have not been maximized when compared to the magnitude of untapped potential due to facilities and infrastructure factors, capture fisheries business that is still lacking and not yet functioning optimally.*

The purpose of this study was to examine the feasibility of a fly fishing business unit in Sinjai district. Data collected in the form of primary data and secondary data with data collection using interviews and observation techniques. The research method used is the survey method.

The results showed that the Feasibility analysis of purse seine business units in Sinjai district was obtained an average R / C Ratio of 2,42. The R / C Ratio value obtained is greater than 1, which means that the floating fishing business unit is feasible to run.

Keywords: *Layang fish, purse seine, business feasibility.*

I. INTRODUCTION

Layang fish is a type of fish that is widely marketed in several regions of South Sulawesi, especially in Sinjai district. This is influenced by the fact that floating fish is the main commodity of community consumption fish and has affordable economic value and is widely available in the market. Layang fishing catches are spread over several regions such as the Makassar Strait, Flores Sea, and Bone Bay. The largest production of layang fish in the Sinjai district in 2018 was 2.900,6 tons (Statistik Perikanan Tangkap, 2018). Catches of fishermen with layang fish commodities in Sinjai district are generally produced by Purse Seine fishermen, with a greater fishing capacity than other fishing gear. But in operation, this purse seine business unit requires a large enough cost, so it requires more capital and labor (Hudring, 2012).

Factors that influence fishermen's income are the level of profit and operational costs incurred. The more catches fishermen have, the bigger the income, to obtain high profits, operational costs must be minimized. In general, purse seine fishermen in Sinjai district are fishing businesses that still rely on their habits such as fishing methods, fishing grounds, and fishing season. This has resulted in fluctuating value of capture fisheries production. Business feasibility analysis is a criterion for investing for a certain period of production. The analysis is needed to determine the development of purse seine business in the future. To support this analysis, it is necessary to calculate economic aspects such as capital, financing, revenue, and profitability within a certain production period (Karningsih, 2014).

The purpose of this study is to calculate the economic aspects of the purse seine business unit so that it can determine the level of feasibility of the purse seine business unit in Sinjai district.

II. RESEARCH METHOD

This research was conducted in Sinjai district, South Sulawesi Province in August - October 2019. Sampling business units were taken by random sampling, which is a method of taking samples by randomizing samples simply, according to Prasetyo (2005), which states that if the number of samples is less than 100, it is better to take all, but if the number of samples is more than 100, it can be taken between 10-15 percent of the population or depending on the ability of researchers, the size of the area and the size of the risk borne by researchers. With the total population of purse seine in Sinjai district as many as 124, so if taken 10 percent, the number of samples that can be taken is 12 samples.

Analysis of the data used in this study is the analysis of business feasibility by looking at several aspects, namely the total cost, revenue and income which will get the business feasibility value.

Total Cost

To explain the total cost in this *purse seine* business using the formula (Bangun 2010):

$$TC = TFC + TVC$$

Information:

- TC = Total Cost
- TFC = Total Fixed Cost
- TVC = Total Variabel Cost

Revenue

To determine the acceptance of a *purse seine* business, using the following analysis (Bangun, 2010):

$$TR = P \cdot Q$$

Information:

- TR = Total Revenue
- P = Price
- Q = Fish sold

Income

To find out the income of a *purse seine* business, using the following analysis (Soekarwati, 2007):

$$\pi = TR - TC$$

Information:

- Π = Income
- TR = Total revenue
- TC = Total cost

Feasibility

Business feasibility can be known by looking at the comparison between total revenue and total costs, which shows the value of revenue obtained from each rupiah issued. The R/C ratio can be formulated as follows (Umar, 2003):

$$R/C = \frac{TR}{TC}$$

Informaion:

- TR = Total revenue
- TC = Total cost

R/C Ratio Assessment Criteria:

- R / C < 1 = business suffered a loss
- R / C > 1 = business makes a profit
- R / C = 1 = attempt to break even

III. RESULTS AND DISCUSSION

Analysis of the economic aspects of the *purse seine* business unit can be seen by calculating the value of investments, costs, revenues, and revenues. After seeing the income, it can be determined whether the feasibility of the business is feasible or not. The following is an analysis of *purse seine* business units in Sinjai district:

Investment

Investment is an investment of money or capital in a business to obtain profits. The investment costs of *purse seine* business units in Sinjai can be seen in the following table:

Table 1. Average value based on the type of investment:

No	Jenis Investasi	Nilai Rata-rata (Rp)
1	Kapal	202,083,333
2	Jaring	100,416,667
3	Sekoci	3,666,667
4	Mesin Utama	63,333,333
5	Mesin Bantu	26,666,667
6	Mesin Roller	4,075,000
7	Mesin Genset	4,400,000
8	Basket	3,866,667
9	Lampu	440,833
Total		408,949,167

Source : *Research Results*, 2019.

Based on table 1, the overall investment value of *purse seine* vessels with their completeness in Sinjai district with an average value of Rp.408,949,167 with the highest investment value in the type of ship investment with an average value of Rp.202,083,333.

Fixed Costs

Fixed costs are costs that are not used up in a single production process, which are included in fixed costs are depreciation costs. The amount of depreciation expense used depends on the length of time the investment is used. The average value of fixed costs used are as follows:

Table 2. *Purse seine* fixed costs

No	Jenis Investasi	Nilai Rata-rata (Rp) Penyusutan
1	Kapal	11.828.704
2	Jaring	20.083.333
3	Sekoci	916.667
4	Mesin Utama	4.222.222
5	Mesin Bantu	2.133.333
6	Mesin Roller	271.667
7	Mesin Genset	440.000
8	Basket	1.288.889
9	Lampu	315.000
Total		41.499.815

Source : Primary data is processed, 2019.

Based on table 2 above, it can be seen that the types of fixed costs used by purse seine business units are ships, nets, lifeboats, boat engines, roller engines, generator engines, basketball, and lights. The average depreciation value of purse seine business units issued each year of the two regencies is not much different at Rp.41,499,815 with the highest depreciation value in the type of net investment of Rp.20,083,333.

Variable Costs

Variable Costs are costs that are used up in one production, costs are not fixed in the amount because it is influenced by the size of the amount of production obtained. The variable cost of the purse seine business unit is Rp. 1,513,680,000 per year with an average of the purse seine vessels in the area the trip time is only 1-4 days per trip.

Total Cost

Total cost (TC) is all costs incurred in business. The average value of the total costs incurred is Rp. 1,553,046,481 per year.

Revenue

Revenue is the multiplication of the products obtained with the selling price. The average value of purse seine fishing revenue in Sinjai district is Rp.3,827,108,333.

Income

Revenue (TR-TC) is the total net income derived from total revenues less than the total costs incurred. The average income of purse seine businesses in Sinjai district is Rp2,197,519,685.

Feasibility

The feasibility analysis of the purse seine business unit with an analysis of the balance of revenues and costs is used to find out how much the costs incurred so that it can provide a number of benefits from the revenue obtained. The average R / C Ratio in the purse seine business unit in Sinjai Regency is 2.42. The R / C Ratio value obtained by the purse seine business unit in Sinjai district is greater than 1, which means that each purse seine business unit is feasible to run.

IV. CONCLUSION

Feasibility Analysis of purse seine business units in Sinjai district, the average R / C ratio value is 2.42, the R / C ratio value is greater than 1, which means that each purse seine business unit is feasible to run.

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