

# The Business Evaluation Analysis Of Milkfish Otak-Otak (Chanos Chanos) At Gresik District, East Java

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**Abstract:** The business evaluation analysis of Milkfish Otak-otak was done in Gresik District. This study was conducted to find the business feasibility of Milkfish Otak-otak. Research methods were observation, interview, and documentation. The study results showed that Milkfish Otak-otak business was feasible and can be developed. The market aspect showed this business can produce 192,000 unit of Milkfish Otak-otak every year. Meanwhile, the short-term and long-term finance of Milkfish Otak-otak showed this business was profitable today and in the next five years. This can be seen from RC Ratio value was 1.6 with the rate of return earned on average every years was IDR 3,320,272,433.33. The Rentability calculation of Milkfish Otak-otak was 57%. Break Event Point value of this business was IDR 820,056,232.04/year. For long-term finance, NPV of this business was IDR 11,154,241,704.00. Net B/C value of this business was 13.03. Payback period value of this business was 0.31 while the IRR value was 358%.

**Index Terms:** Project Evaluation, Milk Fish, Financial, Gresik, ROA, ROE, BEP

## 1 Introduction

This is He who made the earth manageable for you, so travel its regions, and eat of His provisions. To Him is the Resurgence (Q. 67: 15). Indonesia is the largest archipelago country in world with all its territories united by ocean. This can be proven by many large and small islands throughout Indonesia, which were more than 17,000 islands. Indonesia's sea area covers around 6 million km<sup>2</sup> with a coastline of around 81,000 km to make the longest coastline in world after Canada (Samadi, 2008).. The sustainable potential of Indonesia's marine fisheries is estimated at 6.4 million tons per year. It is distributed in Indonesia territory and Exclusive Economic Zone (EEZ) with permitted catches of 5.12 million tons per year or around 80 percent of sustainable potential (Sahri Muhammad. 2011 ). In addition, there are other potential fisheries with high opportunity to be developed, namely (a) fish capture in general fisheries covering an area of 54 million ha with production potential of 0.9 million tons per year; (b) marine aquaculture which includes fish culture, mollusc cultivation and seaweed culture; (c) aquaculture with a land development potential of 913,000 ha; (d) cultivation of freshwater, public waters, fresh water and mina paddy in paddy fields; and (e) marine biotechnology for development of pharmaceutical, cosmetic, food, feed and non-consumption products industry (Ministry of Maritime and Fisheries Affairs, 2005). One way to utilize Indonesian fishery products is to process these fishery products in accordance with milkfish products consumed by wider community. The Milkfish Otak-otak business is one of processing business units in Gresik District to engage milkfish fish processing (Chanos chanos). It is a form of milkfish processed District, Milkfish Otak-otak (Alfanani, H. 2015). Along with business development in fisheries sector in Gresik District, specifically in fishery processing products, many parties have same business of fish

processing with the best seller products are the Milkfish Otak-otak. The business run by this family has a high sales volume of each party, this is important for business research (Widayat and Amirullah. 2002) Based on description above, there is a need to examine the business feasibility expected for future development of Gresik District business. In addition, this effort is useful to take advantage of existing opportunities and to meet ongoing demand. The research purpose is to examine and analyze the business based on non-final aspects, financial feasibility, and business sensitivity of Milkfish Otak-otak. as a typical souvenir of Gresik

## 2 RESEARCH METHODS

### 2.1 Research Location

This research was done at CV. Suwaga Jaya Bu Muzanah. It was located at Jl. Sindujoyo No. 68, Gresik District, East Java.

### 2.2 Research Types

Narbuko and Achmadi (2008) in Primyastanto, M (2016) explained that descriptive research was a research to supports to give solution of existing problems based on data, analysis and interpretation. This study will discuss about the business activities of Milkfish Otak-otak produced by Mrs Muzanah. The business feasibility analyses were short-term and long-term businesses.

### 2.3 Data Types and Sources

Ramang et al. (2012) explained that primary data was obtained through direct research from individuals, such as the results of interviews or questionnaires. The data collection was done by interviews, and observations. Observation. Sugiyono (2013) in Wanda (2015) explained that observations were data collection to write data at research location or ongoing events that called direct observation. Interview. Interview was a technique to collect data to further explores respondents, specifically can be done by face to face or using communication aids (Arikunto, 2006) Documentation. Documentation was a data collection technique to collect data through documents. The benefits were lower cost, more efficient in time and energy. The weakness was that data is taken from old documents and the misprint data can bring researchers to take the wrong data. Secondary data is primary

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data that has been further processed and presented by other parties. Secondary data can be obtained from documents, reports and or directly from competent authority. The secondary data of this study was the general condition of research location.

## 2.4 Data analysis

This study uses qualitative and quantitative data analysis method.

### 2.4.1 Qualitative Data Analysis

Bungin (2001) explained that qualitative analysis was a way to analyze data that consumes a lot of time in field. Qualitative research generally uses a case study format to find a phenomenon in field. Qualitative data analysis was done on technical, management, marketing, legal, social and economic and environmental aspects.

### 2.4.2 Quantitative Data Analysis

Suyanto et al. (2011) explained that quantitative analysis was a way to analyze data by processing the data from research instruments, the data can be seen more simply and easily understood. The data processing stage includes editing, coding, scoring, tabulating and summarizing. Quantitative data analysis was performed on financial aspects of business below.

#### 2.4.2.1 Short-term Financial Analysis

##### 2.4.2.1.1 Capital

Hanum (2012) explained that capital was one most important element to improve the implementation of company activities in addition to human resources, machinery, materials and methods. Corporate capital decisions related with funding sources, both from internal and external companies. Capital was used to finance the procurement of assets and company operations. Working capital was all company's investment into current assets as inventories, receivables, cash, and securities, where all investments are expected to return to company within one year. Capital consists of items in right side of a balance sheet, namely debt, ordinary shares, preferred shares, and retained earnings.

##### 2.4.2.1.2 Cost

Daniel (2012) in Wanda (2015) explained that production costs were all factors of production, both objects and services during production. Production costs were compensation received by owners from production factors or costs incurred during the production process, both cash and non-cash. Fixed cost. Soekartawi (2002a) stated that costs were classified into 2, namely fixed costs and variable costs. The amount of fixed costs does not depend on size of production obtained. Fixed costs are another type of costs that are routinely incurred by company in production activities. The amount of fixed costs does not depend on production capacity. Variable cost. Variable costs were routinely incurred in every production business, the magnitude depends on number of products to be produced (Ardana, 2008). Total Cost. Total costs were the sum of fixed costs and variable costs (Ardana, 2008). The total cost formula was follows:

$$TC = FC + VC$$

Description:  
TC: total cost

FC: fixed costs  
VC: variable costs

##### 2.4.2.1.3 Revenue

Masengi (2014) defined revenue as the amount of money received before deducted by total costs. It was commonly called as monthly gross income and expressed in rupiah (IDR). The formula to calculate revenue was follows:

$$TR = P \times Q$$

Description:  
TR: Total revenue  
Q: Quantity of products produced  
P: Product price

##### 2.4.2.1.4 RC Ratio

RC ratio is an abbreviation of return cost ratio or the ratio between revenue and cost, return is calculated as revenue, while cost is calculated as total production costs. A business was declared feasible or in an efficient level if the RC ratio value was high. The greater the RC ratio value means greater the efficiency level (Ramang et al., 2012).

The RC Ratio formula was follows:

$$RC \text{ RATIO} = \frac{TR}{TC}$$

Description:  
TR: Total revenue  
TC: Total cost used

##### 2.4.2.1.5 Profit

Business profits were the result of total revenues deducted by total production costs to carry out the intended business activities. Business profit shows the net income received by business owner after managing the business for a certain period of time. Zakat (Islamic tax) was performed to create blessings of his business (Primyastanto, M. 2011b).

The formula to calculate profit was follows:  
 $\pi = TR - TC$

Description:  
 $\pi$ : Profit  
TR: Total revenue  
TC: Total cost

The formula to calculate zakat was follows:

$$Z = \pi \times 2.5\%$$

$$EBZ = \pi$$

$$EAZ = EBZ - Z$$

Description:  
 $\Pi$  = Profit  
EBZ = Earning Before Zakat  
EAZ = Earning After Zakat

##### 2.4.2.1.6 Rentability

Sofyan (2007) explained profitability ratios as the ability of a company to make a profit through all its capabilities, and resources available in sales, cash, capital, number of employees, number of branches and so on. This ratio describes the ability of company to generate profits. The formula to calculate profit rentability was follows:

$$\text{Rentability} = \frac{L}{M} \times 100\%$$

Description:

L: Profit earned in a certain period  
M: Capital used to generate profits

#### 2.4.2.1.6 Break Event Point (BEP)

Break Event Point (BEP) was a condition that describes a company that did not make profit and losses. The company will reach a BEP state if the total revenue equals the total cost. Break Event Point (BEP) Analysis, or commonly called breakeven analysis, was an analytical technique to find or plan the company's production amount that did not make profit and losses. BEP analysis can be used to assume the amount of production equals with the number of sales (Wicaksono, 2007). The formula to calculate BEP was follows:  
BEP for Sales

$$\text{BEP Sales} = \frac{FC}{1 - \frac{VC}{S}}$$

Description:  
FC: Fix Cost  
VC: Variable Cost  
S: Sales volume

BEP for Unit

$$\text{BEP Unit} = \frac{FC}{P - V}$$

Description:  
FC: Fix Cost  
P: Price per unit  
v: Variable costs per unit

#### 2.4.2.2 Long-term Financial Analysis

##### 2.4.2.2.1 NPV (Net Present Value)

Riyanto. B (2011) explained NPV or Net Present Value as the difference between benefits and costs in the present value format. NPV value was obtained from:

$$\text{NPV} = \frac{B_t - C_t}{(1+i)^t}$$

Description:  
Bt: Gross benefit in year t (IDR)  
Ct: gross cost in year t (IDR)  
N: Economic age of business (years)  
I: Applicable interest rate (%)  
T: year

##### 2.4.2.1.2 Net B / C

Sulistianto (2014) explained Net B / C as a comparison between net benefits and net costs in present value format. The numerator was positive and denominator was negative. B / C values are obtained from:

$$\text{Net B/C} = \frac{\frac{B_t - C_t}{1+i)^t}}{\frac{B_t - C_t}{1+i)^t}}$$

Description:  
Bt: gross benefit in year t (IDR)  
Ct: gross cost in year t (IDR)  
N: Economic age of business (years)  
I: Applicable interest rate (%)  
T: year

##### 2.4.2.1.3 IRR (Internal Rate of Return)

Primyastanto, M (2015c) explained IRR as an interest rate to makes the NPV value equal to zero. IRR values obtained from:

$$\text{IRR} = i'$$

$$\frac{PV'}{-NPV'} (i'' - i')$$

Description:

NPV': Positive Net Present Value (IDR)  
NPV'': Negative Net Present Value (IDR)  
I': Discount rate to gives a positive NPV value (%)  
I'': Discount rate to gives a negative value (%)

##### 2.4.2.1.4 PP (Payback Period)

Kasmir and Jakfar (2010) mentioned the investments criteria above will also be added to Payback period analysis. Payback period was a certain period of time to shows the flow of revenue (cash inflow), cumulatively equal to amount of investment in present value format. The formula to calculate PP was follows:

$$\text{PP} = T_{p-1} + \frac{I_t - \sum_{t=1}^n B_{tsp-1}}{B_p}$$

Description:

PP: Payback period  
 $T_{p-1}$ : Payback period from previous year  
Ii: The discounted investment  
Biep-1: discounted benefits before the payback period  
Bp: benefits in the payback period.

## 3 RESULTS AND DISCUSSION

### 3.1 Analysis of Financial Aspects

#### 3.1.1. Short term

##### 3.1.1.1 Capital

Capital re-investment was IDR 179,862,230.00. Working capital of CV. Suwaga Jaya Bu Muzanah to produce Milkfish Otak-otak was IDR. 5824,727,566.00. Re-investment for entrepreneurship was sustainable (Primyastanto, M. et al. 2014).

##### 3.1.1.2 Cost

The fixed costs was IDR 325,581,566.00. The variable cost was IDR 5,499,146,000.00 and the FC / was IDR 28,641.00. Total cost to produce Milkfish Otak-otak was IDR. 5,824,727,566.00

##### 3.1.1.3 Revenue

The total revenue of Milkfish Otak-otak business was IDR 9,145,000,000.00. This revenue was obtained from Milkfish Otak-otak sales for one year with a total of 192,000 units sold. This business is included in a feasible business, because the revenue was larger than the capital (Soekartawi, 2002b)

##### 3.1.1.4 RC Ratio

RC ratio value was equal to 1.6. This means that revenue during one year of Milkfish Otak-otak business is 1.6 times the total production costs during one year. In addition, this business was profitable because the RC ratio value is greater than 1 (RC > 1). The higher value of RC ratio will illustrate the higher the level of profits in a business (Primyastanto, M. 2013)

##### 3.1.1.5 Profit

The profit of Milkfish Otak-otak business for one year is IDR 3,320,272,433.33. The zakat payment was IDR 83,006,811.00. The net profit is IDR 3,237,265,622.00. Zakat was a command from God to be able to share with fellow fisheries households (Primyastanto, M. 2015a)

### 3.1.1.6 Rentability

The rentability calculation of CV. Suwaga Jaya Bu Muzanah to produce Milkfish Otak-otak is 57%. It can be stated the business was classified as a profitable and feasible. A value of 57% indicates the ability of capital when compared with profits margin.

### 3.1.1.7 BEP

The value of BEP (Break Event Point) or the breakeven point of this business was IDR 820,056,232.04. It means the business receives a minimum of IDR 820,056,232.04 to reach the Break Event Point. While the BEP units for one year was 17264 units. It can be said the business was profitable. This can be seen from the current production of 192,000 units was above BEP unit with the revenue of IDR 9,120,000,000.00 above the BEP for sales. This is a break-even point for future business projections (Rahardi et al. 2004)

### 3.1.2 Long Term

#### 3.1.2.1 NPV (Net Present Value)

The NPV value of this business was IDR. 11,154,241,704.00. it shows the business is feasible and developed because it has a NPV value above 1 and positive. This shows that fisheries business was worth to continue (Primyastanto, M. 2011a).

#### 3.1.2.2 Net B / C

The calculations results showed that Net B / C value was 13.03. It means the business was feasible and can be continued and developed within next five years because the Net B / C value above 1. Based on Evapro analysis, this business was feasible (Primyastanto, M. 20016 ).

#### 3.1.2.3 IRR (Internal Rate of Return)

The calculation results showed that IRR value of this business was 358%. This showed the business was feasible because the IRR value was more than the interest rate used (12%).

#### 3.1.2.4 PP (Payback Period)

The calculation results show the payback period of this business was 0.31 years or 3 months 72 days. It means this business can return the invested capital within a period of 3 months 72 days.

## 3 CONCLUSIONS AND SUGGESTIONS

### 3.1 Conclusion

Based on this study results, it can be concluded that CV. Suwaga Jaya Bu Muzanah with Milkfish Otak-otak was a feasible business and can be developed. The short-term financial analysis showed the an income of IDR 9,1450,000,000.00 with a total sales of 192,000 units. RC ratio was 1.6, the profit was IDR 3,295,272,433.00, rentability value was 57% with a sales BEP was IDR 820,056,232.00 and unit BEP was 17264. The long-term financial analysis showed that NPV value was IDR 11,154,241,704.00. The Net B / C value was 13.03, IRR value of 358% was above 12% interest rate and payback period was 0.31 years.

### 3.2. Suggestion

The suggestions that can be made from this research were follows.

- Government related to this business, especially the local government of Gresik District should make policies regarding trade business, especially in fisheries field.
- Business owners should separate the business locations between logistics, production and marketing to shorten the service. Consumers must wait and queue within 15 to 30 minutes. It can reduce consumer interest. Therefore, it need special handling for future improvement.
- Future researchers should examine the business project evaluation more thorough to know the standard Project Evaluation of a business from various aspects (technical, market, management, legal, social, environmental, and feasibility of financial aspects of business). It can provide knowledge for other researchers in future.
- Academics should learn more about Project Evaluation of business both in financial business or non-financial aspects of to be used as study material for further researchers, especially those related to business feasibility and business sensitivity.
- Efforts should be done to develop a policy for implementation of Milkfish Fisheries Business with Mina Model to integrate various Mina related businesses, such as: Milkfish Production, Milkfish Cultivation, Milkfish Processing to Milkfish Marketing. It will have a positive impact to increase the income of SMEs, also absorb more labours. It can become a strategy to develop the milkfish fishery business in context of coastal communities empowerment in Gresik District as an effort to maintain food security

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