Business Development through Economic Value Evaluation in the Rukun Makmur Tobacco Farmers Group in Jember Regency

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Abstract— This study aims to evaluate the Rukun Makmur tobacco farmer group's business development in terms of costs, income, profits, and efficiency of tobacco farming. The data used in this study are primary and secondary. Primary data is data obtained directly from research respondents, namely tobacco farmers Rukun Makmur Jember. The number of samples of this study consisted of 40 farmers. This study's data were collected using 3 techniques, namely field surveys, interviews, and documentation. The data analysis technique in this study uses the profitability method and efficiency method. The results showed that the average amount of production costs incurred by the Rukun Makmur Farmer Group was 1.41 billion, consisting of direct costs of Rp. 972.9 million and implicit costs of Rp. 437.1 million. Furthermore, the average income earned was IDR 1,869 billion. Thus, the average profit earned during 2018 and 2019 is IDR 459 million, with an R / C ratio of 1.32. Based on these results, it can be said that the farming business has been efficient and feasible to do.

Keywords— B/C ratio, efficiency, profitability

1. Introduction

Tobacco is a type of plantation crop that is widely developed in Indonesia. Tobacco is widely used as a raw material for cigarettes. However, the tobacco plant has many other benefits such as perfume, anesthetic, pesticides, cosmetics, and essential oils. Jember is one of the potential tobacco producers in Indonesia. Data from the Directorate General of Plantation in 2017 that Jember Regency is a producer of N.O. and the largest Kasturi in East Java with a total production of 2,056 and 1,537 tons, respectively.

The amount of tobacco production in Jember Regency has the largest amount because the number of tobacco farmers in Jember Regency is also huge. The Rukun Makmur tobacco farmer group is one of the farmer groups that operate tobacco plant farming in Jember Regency. The Rukun Makmur farmer group is a tobacco farmer group located in Sumbersari Subdistrict, Jember Regency, with the chairman of Mr. Nurkholis.

The Rukun Makmur farmer group consists of 40 tobacco farmers who have started their tobacco plant farming activities 24-25 years. This farmer group conducts N.O. tobacco farming activities. and

VO Kasturi. The Rukun Makmur farmer group is currently selling tobacco plants to several places and companies, namely PT. Mayangsari for NO tobacco.

The Rukun Makmur farming group is able to produce 1.4 tonnes of tobacco for every Hectare of land it manages. However, in 2019, based on an interview conducted with the head of the Rukun Makmur farmer group, it was stated that at this time, the Rukun Makmur farmer group experienced large losses due to the low selling price of the tobacco produced. The selling price of NO tobacco in 2018 reached IDR 68,000 per kilogram, but currently, the selling price is only IDR 21,000 per kilogram. The selling price eventually caused the farmers to suffer losses because the farmers had to pay around Rp. 47,000,000 for each production of 1 hectare of NO tobacco.

Based on the previous explanation, this research was conducted based on the research problem such as (1) what are the production costs, revenues, and profits obtained from the Rukun Makmur tobacco farming business? And (2) what is the efficiency value of the Rukun Makmur tobacco farming business? The purpose of this study was to determine the costs, income, and profits obtained from Rukun Makmur tobacco farming and to find out the efficiency value of Rukun Makmur tobacco farming. Thus, this research can be used as a material for evaluating costs for Rukun Makmur tobacco farming. The novelty of this research is that this study wants to assess the business development of tobacco farmers in Jember.

2. Literature Review

2.1. Tobacco Farming

Farming is a collection of natural resources in a place needed to produce agriculture. Natural resources needed in farming include the body of soil and water, soil improvement, sunlight, and building facilities that are above the ground [1]. Tobacco farming is a business in the agricultural sector that produces tobacco plants. Tobacco is a type of plantation crop with the scientific name Nicotiana Tabacum L. Tobacco has the following characteristics [2]:

- Rooted riding with a length of about 70 cm
- Has an erect stem, hairy and light green
- Has a height of 58-101 cm
- The leaves are single and an average of 18-25 pieces
- Has compound interest.

Tobacco farming will be professional if tobacco intensification has been carried out. The intensification of tobacco includes: a) the seeds used are superior, b) the soil is processed according to tennis standards, c) regulated water and the climate is predicted, d) plants are fertilized, e) plant protection, f) harvest and post-harvest [3].

2.2. Concept of Cost, Income, and Profits

Every business that runs a business must pay for the process of producing a product. Cost is the sacrifice of economic resources measured in units of money, which has occurred or is likely to happen for a specific purpose [4]. Costs incurred by a business are intended to generate income from the products sold. Cost is the cost used to get revenue [5].

Costs have been incurred from the production process. Then, products are sold for income. Income is the gross revenue from all branches during the year, which is calculated from sales, exchange, or reassessment activities [6]. The income earned is then deducted from the costs previously incurred during the production process to determine the amount of profit earned. Profits are the net results obtained from income with all costs incurred during the production process [3]. The size of the profits obtained depends on the amount of income received and the costs incurred. The higher the income and the smaller the production costs, the greater the profits will be.

2.3. Efficiency

Every business wants to create high business efficiency. Efficiency is a maximization of the output produced by allocating input that is not too large [3]. Thus, the more efficient the business is carried out,

the higher the maximum profit. The efficiency level of a business can be determined by calculating the R / C ratio. Return and Cost Ratio is the ratio of total revenue to total cost [1].

2.4. Previous Study

This research is based on the results of previous studies with similar themes. The previous research that became a reference in this study were:

Table 1. Previous Study

Name	Method	Result
Munawaroh (2012)	Descriptive Analysis	The results showed that the costs incurred were IDR 39,854,102 / Ha / MT with a profit of IDR 26,146,822 / Ha / MT and an efficiency of 2.12 so that the tobacco business had a competitive edge.
Setiawan et al. (2018)	Policy Matrix Analysis Method and competitiveness	Tobacco farming has comparative and competitive competitiveness; policies do not have a positive impact on tobacco farmers.
Putri et al. (2018)	Census method	The average value of profitability is 271.33%, which means that BRI's deposit and credit interest rates. This shows that partnering with PT Djarum is feasible to be granted a loan.

2.5. Framework of Thought

This research is based on the mindset that tobacco farming has two kinds of costs, namely, explicit and implicit costs. The costs incurred by the farm are then used as a deduction from the income earned to find out the resulting profit. If a farm costs less than the total revenue, the farm will get a profit. Farming businesses must also experience different levels of efficiency due to differences in production levels produced. Thus, the framework of research is as follows.
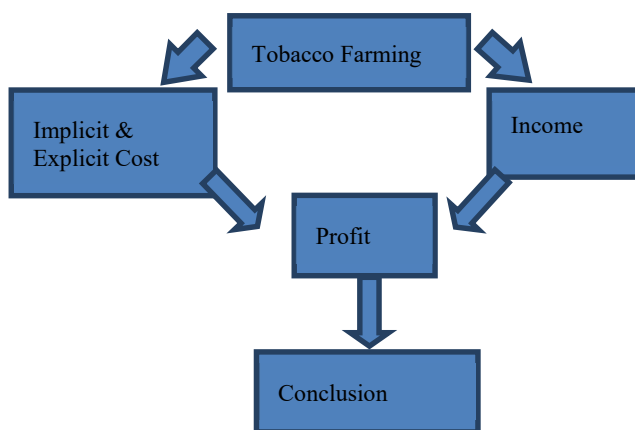

Figure 1. Framework of Thought

3. Research Methodology

3.1. Location

This research will be conducted at the Rukun Makmur tobacco farmer group, Sumbersari District, Jember Regency. This farming group consists of 40 tobacco farmers and produces 1.4 tonnes/ha of tobacco.

3.2. Types and Sources of Data

The data used in this study are primary and secondary data. Primary data is data obtained directly from research respondents, namely tobacco farmers Rukun Makmur Jember. The number of samples of this study consisted of 40 farmers. This is because the minimum number of suitable samples for testing in a study is 30 (Singarimbun and Efendi, 1995). Furthermore, this study's secondary data came from the Department of Agriculture, Plantation, and Forestry of Jember Regency.

3.3. Data Collection Technique

The data used in this study were collected using several techniques. The techniques used to collect research data such as:

- Field Survey Methods. This method is used as an initial form to determine the condition and important information on the research location.
- Interview Method. The purpose of this method is to obtain information and facts as well as increase confidence and clarification of the findings obtained during field surveys.
- Documentation Method. The purpose of this method is to obtain data that can support the primary data. This method has been obtained from the implementation of the previous method.

3.4. Data Analysis

The data analysis technique in this study uses the cost, profitability, and efficiency method. The first method used in this research is the method of calculating the cost of Kasturi tobacco farming. The formula for calculating costs is as follows:

$$TC = EC + IC$$

Information:
TC   = Total Cost (Rp)
EC   = Explicite Cost (Rp)
IC   = Implcite Cost (Rp)

The second method is the calculation of farm profits. Before determining it, it is necessary to calculate the revenue for tobacco farming. There is an equation for determining acceptance, namely:

$$\Pi = TR - TC$$
$$TR = Q \times P$$
$$\Pi = (Q \times P) - TC$$

Information:
Π = Profit (Rp)
TR   = Total Revenue (Rp)
TC   = Total Cost (Rp)
Q   = Quantity (Kg)
P   = Price (Rp)

The next method is to determine the level of farm efficiency. The formula for calculating the efficiency of farming is as follows:

Efficiency = R / C
Information:
R = Revenue
C = Cost

The determination of whether the farming is efficient or not will be determined from the calculated R / C value. The basis for making decisions on whether or not farming is efficient is as follows:

- If R / C > 1, then the farming is efficient.
- If R / C = 1, then the farm is at the break-even point.
- If R / C < 1, then the farming is inefficient

4. Results

The first step of the research results will explain the average amount of profits obtained by farming in 2018 and 2019. The calculation of the profits from farming begins by calculating the number of production costs. The production costs of farming for 2018 and 2019 are the same. Production costs consist of explicit and implicit costs. The following table 2 presents the production costs of Rukun Makmur tobacco farming.

Table 2. Rukun Makmur Production Costs

Cost Type	Cost every Hectare	Total
Explicit Costs		
Fertilizer costs	Rp8.486.931,-	254.607.930
Pesticide costs	Rp441.048,-	13.231.440
Outside labor costs	Rp22.892.337,-	686.770.110
Tax Cost	Rp97.290,-	2.918.700
Transportation Cost	Rp512.394,-	15.371.820
Total	**Rp32.430.000,-**	**972.900.000**
Implicit Cost		
Seeds	Rp1.107.320,-	33.219.600
Land rent	Rp7.043.138,-	211.294.140
Inside Labour	Rp383.191,-	11.495.730
Depreciation of Equipment	Rp1.784.825,-	53.544.750
Capital Interest	Rp4.251.526,-	127.545.780
Total	**Rp14.570.000,-**	**437.100.000**

Table 2 shows that the Rukun Makmur farming group's total production costs are explicit costs added to implicit costs, so the total production cost is IDR 1,410,000,000.

The next step to calculate the average profit of the Rukun Makmur farming group in 2018 and 2019 is to calculate the average income received by the Rukun Makmur farmer group for 30 hectares of managed land as follows:

Year 2018 = 30 x 1.400 x Rp 68.000
                 = Rp 2.856.000.000
Year 2019 = 30 x 1.400 x Rp 21.000
                 = Rp 882.000.000
Average   = (Rp2.856.000.000 + Rp882.000.000): 2
                 = **Rp 1.869.000.000**

The results of the calculations that have been carried out show that in 2019 there has been a very significant decrease in income. The decline in income that occurred was more than 50%. This is because the selling price of tobacco in 2019 has decreased sharply to IDR 21,000 per kilogram. Therefore, the average income of the Rukun Makmur farming group in 2018 and 2019 is IDR 1,869,000,000.

The third step is to calculate profits by reducing the average income and production costs incurred by the Rukun Makmur Farmers Group. The profit calculations are as follows:

Average profit   = Rp 1.869.000.000,-
                           (Rp 1.410.000.000,-)
                              Rp 459.000.000,-

The last step is taken in calculating the efficiency with the R / C ratio. The efficiency calculations are as follows.

R/C   = Rp 1.869.000.000,- : Rp 1.410.000.000,-
        = 1,32

Based on the above calculations, it is known that the R / C ratio of tobacco farming in the Rukun Makmur Farmer Group is 1.32. This figure means that the farm is efficient to do. Efficient means that farming revenue received has been able to cover the amount of cost incurred. In addition, through Rp. 1,00 costs incurred by the rukun Makmur tobacco farmers, they are able to generate revenue of Rp. 1,32. This shows that although tobacco farming has experienced advantages and disadvantages. However, if the two conditions are averaged, it shows that farming is feasible to continue.

5. CONCLUSION

This study aims to determine the level of business feasibility of the Rukun Makmur tobacco group. Based on the results on tobacco farming in the rukun Makmur tobacco farmer group, the following conclusions are obtained :

- The average amount of production costs incurred by the Rukun Makmur Farmer Group was 1.41 billion, consisting of direct costs of Rp. 972.9 million and implicit costs of Rp. 437.1 million.
- The average income earned was IDR 1,869 billion. it was found that the average income in 2018 and 2019 was still greater than the expenses incurred
- Thus, the average profit earned during 2018 and 2019 is IDR 459 million,
- The R / C ratio for tobacco farming is 1.32. It means Rp. 1,00 costs incurred by the Rukun Makmur tobacco farmers, they are able to generate revenue of Rp. 1,32. the B / C ratio in this study is above 1. Based on these results, it can be said that the farming business has been efficient and feasible to do.

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