

# ECONOMIC ANALYSIS OF SUPER PHILIP VARIETY RED ONION FARMING IN KEDIRI DISTRICT, WEST LOMBOK REGENCY

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#### **ABSTRAK**

Penelitian dilakukan di Kecamatan Kediri, Kabupaten Lombok Barat dengan tujuan untuk mengetahui besarnya biaya, penerimaan serta pendapatan petani dan kelayakan ekonomi dari usahatani bawang merah varietas Super Philip serta menganalisis kendala-kendala dalam pengembangan usahatani bawang merah varietas Super Philip. Jumlah responden sebanyak 30 petani, adapun analisis data berupa analisis biaya, analisis penerimaan, analisis pendapatan serta analisis kelayakan ekonomi usahatani bawang merah varietas Super Philip. Hasil menunjukkan besarnya biaya produksi usahatani bawang merah varietas Super Philip sebesar Rp. 11.593.136 per luas lahan garapan sedangkan biaya produksi per ha sebesar Rp.40.965.141. total penerimaan sebesar Rp. 17.070.300 per luas lahan garapan sedangkan total penerimaan per ha sebesar Rp. 60.318.000 dan total pendapatan sebesar Rp. 5.477.164 per luas lahan garapan sedangkan total pendapatan per ha sebesar Rp. 19.352.859 dan analisis kelayakan menggunakan BCR dengan hasil 1,47. Sementara itu, kendala yang dihadapi dalam usahatani bawang merah varietas Super Philip terdiri dari ketersediaan benih, keterbatasan modal, hama dan penyakit pada tanaman bawang merah varietas Super Philip.

Kata Kunci: Analisis, Kelayakan, Ekonomi, Varietas Super Philip

#### ABSTRACT

The research was conducted in Kediri District, West Lombok Regency with the aim of finding out the costs, revenues and income of farmers and the economic feasibility of farming the Super Philip variety of shallots as well as analyzing the obstacles in developing the Super Philip variety of shallot farming. The number of respondents was 30 farmers. The data analysis included cost analysis, revenue analysis, income analysis and economic feasibility analysis of Super Philip variety shallot farming. The results show that the production costs of Super Philip variety red onion farming are Rp. 11,593,136 per area of cultivated land while the production cost per ha is IDR 40,965,141. total receipts of Rp. 17,070,300 per area of cultivated land while the total revenue per ha is Rp. 60,318,000 and total income of Rp. 5,477,164 per area of cultivated land while the total income per ha is Rp. 19,352,859 and feasibility analysis using BCR with a result of 1.47. Meanwhile, the obstacles faced in farming the Super Philip variety of shallots consist of seed availability, limited capital, pests and diseases in the Super Philip variety of shallot plants.

Keywords: Analysis, Feasibility, The Economic, Super Philip Variety

#### INTRODUCTION

Indonesia, as an agrarian country, has the potential for the development of horticultural products, supported by the government through its regulations, such as Law No. 12 of 1992 on Agricultural Cultivation, Law No. 13 of 2010 on Horticulture, the Horticulture Development Plan 2011-2025, the Master Strategy for Agricultural Development (SIPP) 2013-2045, biodiversity, agricultural climate, availability of agricultural land, technology, availability of labor, market availability, determination of premium commodities, support for nursery seed systems, and support for plant protection systems (Pitaloka, 2017).

One horticultural plant that is popular among the Indonesian people is the red onion. Red onions are a prime horticultural commodity and have good prospects for meeting national consumption, providing farmers' income, and contributing to foreign exchange (Istina, 2016). Red onions are a seasonal crop as a lowland vegetable commodity with the widest land area and are included in the consolidation of food sovereignty with targets to increase production and stabilize prices, aiming to enhance the welfare of the business operators involved (Sari and Santoso, 2016). The Super Philip variety of red onion is an introduced variety from the Philippines that has a harvest

age of 50-60 days, marked by 60% of stems wilting with a weight loss of bulbs (wet-dry storage) of 22%, and has good adaptability both in lowland and medium altitude areas during the dry season. It has a strong aroma and a flavor that is highly favored with a purplish red bulb color. The weight per bulb ranges from 6-10 grams with 9-18 bulbs per clump, bulb shape is round with a plant height of 36-45 cm, cylindrical cross-section is hollow, leaf color is green, and the number of leaf blades per clump is 40-50. It has a fairly high production, reaching 17.60 tons per hectare of dry bulbs (Suhardi, 2018). According to an interview in 2023 with Mr. Kurniawan, an officer from the Agricultural Extension Agency (BPP), farmers in the Kediri District had never previously cultivated the Super Philip variety of red onions.

The year 2021 marked the beginning of the government working with farmers to trial the planting of the Super Philip variety, which yielded good results with a harvest of 10 tons/ha. Confirmation directly with the farmers confirmed that the cultivation of the Super Philip variety of red onions is still ongoing in Kediri District. Although the cultivation of the Super Philip variety of red onions has been undertaken by some members of the farmers' group, it is not yet known how much additional income and earnings are obtained by farmers through the cultivation of the Super Philip variety of red onions. Therefore, the researcher felt it necessary to perform an economic analysis of the red onion farming business of the Super Philip variety in Kediri District, West Lombok Regency. This is what motivated the author to conduct this research. In line with the background mentioned above, the research questions in this study are:

- 1. What are the costs, receipts, and income from the red onion farming business of the Super Philip variety in Kediri District, West Lombok Regency?
- 2. What is the economic feasibility of the red onion farming business of the Super Philip variety in Kediri District, West Lombok Regency?
- 3. What are the constraints in developing the red onion farming business of the Super Philip variety in Kediri District, West Lombok Regency?

The research aims to determine the costs, receipts, and income of farmers in the red onion farming business of the Super Philip variety and the economic feasibility of the red onion farming business of the Super Philip variety, as well as to identify any constraints faced by farmers in developing the red onion farming business of the Super Philip variety in Kediri District, West Lombok Regency.

The expected benefits of this research are to provide insights and knowledge, serve as a means to develop theoretically learned sciences, as information material for the community and for farmers of the Super Philip variety of red onions, and as a reference for further research to understand the income from the red onion farming business of the Super Philip variety.

#### **METHODS**

This research uses a descriptive method where this method is used to analyze problems that occur by collecting, analyzing, describing, drawing conclusions and interpreting them (Sugiyono, 2015)

Data collection techniques use survey techniques, namely research that involves many samples and data collection uses questionnaires or interviews, but can also be done by observation to strengthen opinions about the results obtained (Islamy, 2019).

The technique used in determining respondents for this research is saturated sampling (census), which is a technique for determining a sample of all members of the population used as samples. Another term for a saturated sample is a census, where all members of the population are used as respondents (Sugiyono, 2019). The sample size of respondents used was 30 people from a total population of 30 people, so all members of the population were used as respondents.

Research usesThe types of data are quantitative data and qualitative data. Quantitative data is data collected using research instruments, measurable can be calculated in the form of numbers including the population and the results of interviews with research respondents, while qualitative data is data that cannot be measured or calculated using numbers but in the form of sentences, narratives, descriptions, written or unwritten documents. written.

In this research, two data sources were used, namely primary data and secondary data. Primary data is data obtained from respondent farmers through direct interviews guided by a list of questions (questionnaire). Primary data includes the characteristics of respondents and

components of costs and income from shallot farming in Kediri District, while secondary data is data obtained from the government which is related to this research. Secondary data consists of data on the condition of the research area, population data and other supporting data related to the research.

The variables measured and analyzed in this research are production costs, production quantity, unit price, production value, net income and BCR.

#### 1. Production cost

Production costs are the total costs incurred during the production process, which consist of fixed costs and variable costs. Fixed costs are costs that do not vary with changes in the quantity of production units, while variable costs are costs that vary with changes in the number of production units.

#### 2. Production quantity

The amount of production is the amount of shallot farming output expressed in units of kg/ha.

#### 3. Unit price

Unit price, namely the average price level received by farmers in the research area, is expressed in units of IDR/kg.

## 4. Production value (receipts/gross income)

Production value is the result of multiplying the amount of production by the unit price received by farmers in the research area expressed in units of IDR/ha.

#### 5. Net farming income

Net farming income is the difference between production value expressed in units of IDR/ha.

#### 6. BCR

BCR (benefit cost ratio) is the ratio between production value and total farming costs.

The data analysis includes cost analysis, revenue analysis and income analysis as well as feasibility analysis of Super Philip variety shallot farming.

To calculate the amount of production costs, revenues and income as well as the feasibility of farming the Super Philip variety of shallots in one planting season, use the following formula:

According to Soekartawi (2002) to calculate costs, the formula is used:

$$TC = FC + VC$$

Information:

TC = Total Cost (Total costs)

FC = Fixed Cost (Fixed Cost)

VC = Variable Cost (Variable Cost)

According to Soekartawi (2002) to calculate total revenue the formula is used:

$$TR = Y. Py$$

Information:

TR = Total Revenue

Y = Production

Py = Price (Rp/kg)

According to Septiadi, et al (2021) to calculate total income, the formula is used:

$$\pi = TR - TC$$

Information:

 $\pi$  = Net income

TR = Total Revenue / Total receipts

TC = Total Cost / Total costs

According to Sari, et al (2014) to analyze feasibility, the formula is used:

#### BCR=TR/TC

Information:

TR = Total Revenue (Total Revenue)

TC = Total Cost (Total costs)

There are three criteria in the calculation, namely:

The BCR value = 1, then the Super Philip variety of red onion farming breaks even. A BCR value of 1 means that Super Philip variety shallot farming is worth developing. > A BCR value of 1 means that Super Philip variety shallot farming is not worth developing.

#### RESULT AND DISCUSSION

## A. Analysis of the Super Philip variety of red onion farming

#### 1). Super Philip Variety Shallot Farming Production Costs

Production costs are costs incurred in the process of cultivating tilapia using floating cages. The costs included in this research include fixed costs and variable costs (Hasyim S, et al. 2022). The production costs referred to in this research are the total costs incurred by farmers during the production process in farming the Super Philip variety of shallots. Production costs in Super Philip variety shallot farming are divided into fixed costs and variable costs.

## a. Fixed cost

These are costs incurred by respondent farmers for production facilities and are used more than once. The components of fixed costs incurred in farming the Super Philip variety of shallots in Kediri District are taxes and depreciation of equipment. The average total fixed costs per area of land cultivated by farmers is IDR. 98,950 while the average total fixed costs per ha is Rp. 349,644.

#### b. Variable cost

The non-fixed costs (variable costs) calculated in this research include seeds, fertilizer, pesticides and labor. The seeds used by each respondent farmer are different, depending on the land area and planting distance used. The average total variable costs per area of land cultivated by farmers is IDR. 11,494,186 while the average total variable costs per ha is Rp. 40,615,497.

After obtaining the total of fixed costs and variable costs, the sum of these costs becomes the total production cost of the Super Philip variety of shallot farming. The total production costs incurred by farmers per area of cultivated land is IDR. 11,593,136 while the total production cost per ha is Rp. 40,965,141 which consists of two types of costs, namely fixed costs and variable costs.

### 2). Production and Revenue from the Super Philip variety of Red Onion Farming

Production is the amount of physical output of shallots produced by farmers who carry out shallot farming for one planting season. The level of production influences the farming income obtained. The physical form of production referred to in this research is wet shallots. Revenue or gross income from shallot farming is the result of multiplying the amount of production and the selling price per unit. The price of the Suer Philip variety of shallots in the research area is IDR. 9,000/kg and the total production is 1,896.7 tons per area of cultivated land while the total production per ha is 6,702.0 tons.

The total income of shallot farmers of the Super Philip variety per area of cultivated land is IDR. 17,070,300 while the total revenue per ha is IDR. 60,318,000 which is the result of multiplying production and unit price.

#### 3). Super Philip Variety Red Onion Farming Income

Farming income referred to in this research is the difference between income and total costs incurred by shallot farmers.

 $Income = Total \; Revenue - Total \; Costs$ 

- = Rp. 17,070,300 Rp. 11,593,136
- = Rp. 5,477,164/ LLG
- = Rp. 60,318,000 Rp. 40,965,141
- = Rp. 19,352,859/ha

The total income of respondent farmers per area of cultivated land is IDR. 5,477,164 while the total income of farmers per ha is Rp. 19,352,859.

# 4). Feasibility Level of Super Philip Variety Shallot Farming

A business can be said to be worth pursuing if the entrepreneur obtains a profit from the business he undertakes. With good management, a business will be able to provide maximum

profits. Likewise, for Super Philip variety red onion farming, good management is needed to carry out business management. To find out whether the red onion farming carried out by farmers in the research area is feasible or not, it can be analyzed using BCR analysis, namely:

BCR = Total Revenue/Total Costs = Rp. 60,318,000/Rp. 40,965,141 = 1.47

It can be assessed that the BCR result is 1.47. The value of 1.47>1 is the result of dividing total revenue and total costs, therefore the result of 1.47 indicates that economically the Super Philip variety of shallot farming in the research area is feasible to cultivate, meaning that if every If the costs incurred by the farmer are IDR 1, the farmer will get an income of IDR 1.47.

# 5). Constraints in the Super Philip Variety Shallot Farming

Some of the obstacles faced by farmers when cultivating trigona are:

- a. Seed availability: The obstacle faced by farmers in farming the Super Philip variety of shallots is the limited availability of seeds on the market. Because the Super Philip variety is a new variety and the price is very high compared to other varieties, this means there is very little stock on the market. To overcome the constraints of seed availability and high prices, farmers use seeds without labels or seeds from yesterday's harvest.
- b. Capital: Apart from the availability of seeds, farmers also have problems with capital, limited capital is still a problem often faced by farmers, including farmers of the Super Philip variety of shallots in Kediri District, West Lombok Regency. Access to capital is an obstacle in managing and developing the Super Philip variety of shallot farming.
- c. Pest: Apart from pest attacks on shallot plants, this is also a problem that is often experienced by farmers, the Super Philip variety of shallots is less resistant to armyworms (Spodoptera exiguna). Even though we have used pesticides to reduce pests, production results have not increased.
- d. Disease: Apart from pests, purple spot disease (Alternaria porii) is also an obstacle in farming the Super Philip variety of shallots in Kediri District, West Lombok Regency, which is caused by the fungus Aternaria porii which is often called Trotol disease. This fungus causes symptoms of curling on the leaves, white or gray in color

#### **CONCLUSION**

The production costs of Super Philip variety red onion farming in one planting season are IDR. 11,593,136 per area of cultivated land, while the production cost per ha is Rp. 40,965,141. The total income generated by shallot farmers of the Super Philip variety is IDR. 17,070,300 per area of cultivated land while the total revenue per hectare is Rp. 60,318,000. And the total income from farming the Super Philip variety of shallots in one planting season is IDR. 5,477,164 per area of cultivated land, while the total income of farmers per hectare is Rp. 19,352,859. With a BCR result of 1.47. This means that if every cost incurred by the farmer is IDR 1, the farmer will generate an income of IDR 1.47. The obstacles faced by Super Philip variety shallot farmers include: 1. Availability of seeds 2. Capital 3. Pests 4. Disease.

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