COMPARATIVE ANALYSIS OF INCOME AND FEASIBILITY OF RICE FARMING JAJAR LEGOWO IN TASUK VILLAGE, SUB DISTRICT GUNUNG TABUR, BERAU REGENCY

ABSTRACT

The research aims to determine productivity, income, feasibility, and break-even price for milled dry unhulled rice in lowland rice farming using the JajarLegowo 5:1 system and the JajarLegowo 6:1 system. The research was carried out from May–August 2022 in Tasuk Village, GunungTabur District, Berau Regency, East Kalimantan Province, Indonesia. The determination of the research location was carried out purposively based on the consideration that this village is one of the potential agricultural areas in lowland rice farming, namely as one of the lowland rice producing centers in Berau Regency. Data collection was carried out by interviewing farmers using questionnaires. The total population in this study was 28 respondents obtained from the "Slovin" calculation consisting of 14 farmers who carried out lowland rice farming using the JajarLegowo 5:1 system and 14 farmers who carried out lowland rice farming using the JajarLegowo 6:1 system. Data analysis methods, namely; statistical analysis of the difference between the means of two independent samples (independent t-test), productivity, break-even price (BEP), and analysis of farming feasibility (R/C ratio). The results of the research show that there is no significant difference between rice farming income from the JajarLegowo 5:1 system and the JajarLegowo 6:1 system, the average productivity of the JajarLegowo 5:1 and 6:1 systems is 4,096.94 Kg ha^{-1} and 2,948.98 $Kg.ha^{-1}$. The average BEP price for the JajarLegowosystem 5:1 and 6:1 are IDR Kg^{-1} 5,268 and IDR Kg^{-1} 5,765. The average R/C ratio values for the JajarLegowo 5:1 and 6:1 systems are 2.06 and 1.84.

Keywords: JajarLegowo, Income, Feasibility, Lowland Rice farming

INTRODUCTION

The potential for land use for food crops in Berau Regency is still not optimal for community use, both dry land and wet land, namely 60,625 Ha of wet land and 32,375 Ha of dry land, of this area farmers have utilized only 10,485 Ha of wet land and 12,230 Ha of dry land. [1]. The harvested area of wetland rice and field rice in Berau Regency reached a total of 11,843.30 Ha, consisting of 3,481.30 Ha of lowland rice and 8,362.00 Ha of field rice. Meanwhile, GunungTabur District itself, which is the research location, has the second largest area for harvesting paddy fields and fields with a harvest area of 1,925.70 Ha after Sambaliung District. The harvest area consists of 615.70 Ha of lowland rice and 1,310.00 Ha of field rice. However, the large area harvested for food, especially paddy fields and fields, is not in line with the increase in productivity [2]. According to online media reports, [3] rice production in Berau Regency often experiences fluctuations. In 2021, the total rice harvest reached 38.7 tonnes and in 2022 it will experience a decline with the total harvest reaching 33.9 tonnes. Many factors are causing this decline, including limited fertilizer availability, pests, and limited extension workers.

The electronic newspaper [4] describes the general problems faced by lowland rice farmers in the Republic of Indonesia, some of which are; Stagnant rice productivity has become a challenge in increasing rice production. This is caused by the decreasing availability of land due to the increasing rate of land conversion. Apart from that, several other things that are challenges for the agricultural sector in East Kalimantan include the lack of public interest in farming, low ability and utilization of farming development technology, suboptimal use of machinery, lack of irrigation, and minimal water availability [5]. The next problems faced by farmers in increasing lowland rice productivity include the fact that there are still many farmers who do not use labeled and quality seeds in farming and rice planting methods that are not suitable.

Increasing lowland rice productivity through rice planting methods or systems and to achieve the target of the national rice production increase program (P2BN), the government, in this case the Ministry of Agriculture, through the development and research agency has issued recommendations to be applied by farmers. This recommendation is the implementation of a correct and good planting system through setting plant distances known as the jajarlegowo planting system. This is also supported by [6] and [7] that the JajarLegowo planting system has the opportunity to produce higher grain or increase rice productivity.

According [8] the jajarlegowo planting system is one of the components of Integrated Crop Management (PTT) in lowland rice which, when compared with other planting systems, has the following

advantages: (a) This row planting system makes it easier for rice farmers to manage their farming such as supplementary fertilization, weeding, controlling plant pests and diseases through spraying and controlling rat pests; (b) there is an opportunity to increase plant productivity by up to 10-15% as a result of an increase in plant population and as a result of the presence of wider open space between two groups of rows of plants which will increase sunlight entering each clump of rice plants thereby increasing photosynthesis; and (c) There are opportunities for the development of rice-fish (mina padi) or parlebek (combination of rice, fish, and duck) production systems.

The jajarlegowo planting system is a method of planting paddy fields with a pattern of several rows of plants interspersed with one empty row which can generally be done in various types, namely: legowo (2:1), (3:1), (4:1), (5:1), (6:1) or other types [9].

The jajarlegowo planting system type 5:1 is a type of planting where every five rows of plants there is an empty aisle or row 40 cm wide with a distance between rows of 20 cm and a distance within rows of 10 cm [10]. Meanwhile, the row legowo planting system type 6:1 is a type of planting where every six planting rows there is a 40 cm wide aisle with a distance between rows of 20 cm and a distance within rows of 10 cm [11].

According to [7], the main principle of the jajarlegowo system is increasing the number of plant populations by regulating plant spacing. The increase in plant population from each row legowo system can be estimated by the equation: (100% x 1)/(1+number of legowo).

The use of the jajarlegowo planting system technology will have an impact on changes in the cost structure, use of labor, and use of production land which will ultimately affect the income and profits obtained by farmers. In farming, farmers are required to coordinate production factors to obtain large profits [12], so this research aims to determine productivity, income, feasibility, and break-even price for milled dry unhulled rice in the JajarLegowo 5 system of lowland rice farming: 1 and the JajarLegowo system 6:1.

METHODS

1. Time and Location of Research

This research was carried out from May to August 2022. This research was conducted in Tasuk Village, GunungTabur District, Berau Regency, East Kalimantan Province, Indonesia. This research location was chosen purposively based on the consideration that this village is one of the potential agricultural areas in lowland rice farming, namely as one of the lowland rice producing centers in Berau Regency. Another consideration apart from this is that Tasuk Village uses more than one planting system in cultivating lowland rice. Some of the planting systems used by farmers at this research location include; the JajarLegowo planting system 5:1, and 6:1, and the conventional planting system, as well as the mina rice planting system.

2. Data Collection Methods

The data collected in this research consisted of (a) primary data obtained from direct interviews with farmers using a list of questions or questionnaires that had been prepared previously including the general identity of the farmer, the amount of use of production factors, production results, and farming income, as well as farming expenses; and (b) secondary data obtained from books, research journals, KampungTasuk monographs, as well as literature that supports this research.

The number of respondents in this research was 28 farmers obtained from the "slovin" calculation method, consisting of 14 farmers who carried out lowland rice farming with the jajarlegowo 5:1 system and 14 farmers who carried out lowland rice farming with the jajarlegowo 6:1 system.

3. Data Analysis Method

a. Productivity of lowland rice farming

According [13] the total productivity of rice farming can be mathematically approximated by the formula:

$$\text{Productivity} = (\text{Amount of Production (Kg)})/(\text{Land Area (ha)})$$

b. Total Income from rice farming

The total income from rice farming in Tasuk Village can be determined by multiplying the amount of farmers' production by the selling price. According to [14], the equation for calculating total revenue is:

$$TR = Q \times P$$

Information:
TR = Total Revenue/Total Receipt (IDR)
Q = Total Production (IDR)
P =Pricet/Selling Price (IDR Kg^{-1})

c. **Total Costs of rice farming**

The total cost that must be incurred by farmers to produce Milled Dry Grain is the sum of the total variable costs and the total fixed costs for each farmer. According to [14] the equation for calculating total costs is:

$$TC = TVC + TFC$$

Information:
TC = Total Cost/Total costs(IDR)
TVC = Total Variable Cost/Total Variable Cost (IDR)
TFC = Total Fixed Cost/Total Fixed Cost (IDR)

d. Rice farming income

The total income of each rice farmer in the research location is the difference between total income and total costs. According to [14] the equation for calculating farming income is:
Mathematically it can be written

$$I = TR - TC$$

Information :
I = Income/Net Income (IDR)
TR = Total Revenue/Total Receipts (IDR)
TC = Total Cost/Total Costs (IDR)

e. Comparison of lowland rice farming income

To compare the income of rice farming from the JajarLegowo 5:1 and 6:1 systems, the t-test (independent sample t-test) or the mean difference test with the one-way test is used with the [15] equation as follows:

$$t_{hit} = \frac{\overline{x_1} - \overline{x_2}}{Spolled\sqrt{\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

$$Spolled = \sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}}$$

Information :
$\overline{x_1}$= Average income from rice farming in the Jajar Legowo system 5:1 (IDR)
$\overline{x_2}$=Average income from rice farming in the Jajar Legowo system 6:1 (IDR)
n_1=Number of samples of rice farmers using the JajarLegowo system 5:1
n_2=Number of samples of rice farmers using the JajarLegowo system 6:1
S_1^2= Variance of rice farming income in the Jajar Legowo system 5:1
S_2^2= Variance of rice farming income in the Jajar Legowo system 6:1

f. Analysis of the break-even point (BEP) of lowland rice farming

Profit analysis of a farming business can be made easier by calculating the break-even point analysis of the farming business. The break-even point is a condition where the total revenue of a business is equal to the total costs or profit is zero. This research only measures 2 types of BEP calculations developed by [12], namely:

(1)BEP Price

The break-even price can be found using the equation:

BEP Price=TC/Q

Information :
TC = Total Cost (IDR)
Q = Total rice production (IDR)

(2) BEP of Production

The break-even point in units (production) can be determined using a mathematical approach:

BEP of production =TFC/(P-AVC)

Information :
TFC = Total Cost (IDR)
P = Selling Price (IDR Kg^{-1})
AVC = Average variable cost (IDR)

(3)Feasibility of lowland rice farming

Whether or not the JajarLegowo 5:1 and 6:1 system of lowland rice farming is feasible can be measured using the R/C ratio approach. According to [14] with the formula:

R/C=TR/TC

Information :
TR = Total Revenue (IDR)
TC = Total Cost (IDR)

According to Ibarahim, (2009) in [16] the formula for determining the B/C ratio is:

B/C=B/TC

Information :
B = Total Income (IDR)
TC = Total Cost (IDR)

RESULTS AND DISCUSSION

1. Analysis of Farming Costs

The farming costs used in lowland rice farming in Tasuk Village, GunungTabur District are the total costs incurred for one planting season to meet lowland rice production needs including variable costs and fixed costs. The use of production factors and production costs for lowland rice farming in Tasuk Village, GunungTabur District can be seen in Table 1 and Table 2.

Table 1. Average Use of Rice Farming Production Factors using the JajarLegowo system 5:1 and 6:1 in Tasuk Village, GunungTabur District, Berau Regency

Description	JajarLegowo Planting Systems	
	5:1	6:1
Variable Costs		
a. Seeds ($Kg.ha^{-1}.mt$)	24,86	21,34
b. Fertilizers ($Kg.ha^{-1}.mt$)	315,99	205,10
c. Pesticides ($L.ha^{-1}.mt$)	2,03	2,11
d. LaborWages ($HOK.ha^{-1}.mt$)	43,94	35,71

Source: Primary data processed in 2022

Based on Table 1 above, shows that the use of production factors such as seeds, fertilizers, and pesticides in the JajarLegowo 5:1 system is greater than in the JajarLegowo 6:1 system. This is because the JajarLegowo 5:1 system has a denser population density compared to the JajarLegowo 6:1 system, so it also requires more production factors.

Table 2. Average Production Costs of Rice Farming with the JajarLegowo system 5:1 and 6:1 in Tasuk Village, GunungTabur District, Berau Regency

No	Description	SistemJajarLegowo	
		5:1	6:1
1	Variable Costs		
	a. Seeds (IDR.ha^{-1}.mt)	124.319,73	106.717,69
	b. Fertilizers (IDR.ha^{-1}.mt)	426.593,11	276.887,76
	c. Pesticides (IDR.ha^{-1}.mt)	248.901,36	183.078,23
	d. Labor Wages (IDR.ha^{-1}.mt)	7.291.173,77	5.526.863,69
2	Fixed Costs		
	a. Land Lease (IDR.thn^{-1}.mt^{-1})	-	-
	b. Equipment Depreciation Costs (IDR.thn^{-1}.mt^{-1})	337.540,48	234.805,95
	c. Land dan Building Tax (IDR.thn^{-1}.mt^{-1}	-	-
Total average production costs		8.428.528,45	6.328.353,32

Source: Primary data processed in 2022

In general, the rice variety used by farmers in Tasuk Village, Tabur District is the Ciherang variety, which is a variety subsidized by the government. The amount of seed used ranges from 15 – 45 Kg.

In terms of the cost structure of lowland rice farming, the JajarLegowo 5:1 planting system has a greater number of uses of production factors compared to lowland rice farming with the 6:1 planting system. This is followed by the use of higher production costs compared to lowland rice farming with a 6:1 planting system.

The tendency to increase the use of seed production factors, fertilizers, pesticides, and labor in lowland rice farming with the JajarLegowo 5:1 planting system as a consequence of increasing the number of plant populations is stated by [7] that an increase in plant populations is expected to also increase production quantities. The consequences of increasing the use of production factors have an impact on increasing the costs of production factors (Suharno, 2017 in [17].

2. Production and Productivity

The production and productivity of lowland rice farming using the jajarlegowo 5:1 system and the 6:1 system are presented in Table 3.

Table 3. Average harvest area, production, and productivity of the JajarLegowo 5: 1 and 6: 1 planting systems

No	Description	JajarLegowo Planting systems	
		5: 1	6: 1
1	Harvested Area (ha)		
2	Production (Kg)	3.178,57	2.892,86
3	Productivity (Kg.ha^{-1})	4.096,94	2.948,98

Source: Primary data processed in 2022

Based on Table 3 above, shows that the average rice production from the JajarLegowo 5:1 planting system is 3,178.57 Kg, while the 6:1 type is only 2,892.86 Kg. The productivity value of lowland rice farming in Tasuk Village can indicate that every one hectare of land production factor cultivated by farmers who plant using the 5:1 type JajarLegowo planting system will produce a total production of

lowland rice of 4,096.94 Kg of Milled Dry Grain for every 1 planting season. Meanwhile, for every hectare of land cultivated by farmers who plant using the JajarLegowo type 6:1 planting system, the amount of lowland rice production will be 2,948.98 kg of dry milled grain for every 1 planting season. This shows that the productivity of lowland rice farming using the JajarLegowo 5:1 planting system is higher productivity than lowland rice farming using the JajarLegowo 6:1 planting system. The results of research [18] that tested various JajarLegowo planting systems for lowland rice for the weight of Milled Dry Grain per hill (g) and the GKG yield per plot for JajarLegowo planting types from type 2:1 to 7 :1, namely that the row legowo planting system from type (2:1) to type (7:1) has a real influence on the weight of GKG per hill, but does not have a real influence on the yield of GKG per plot.

3. Analysis of Farming Revenues

Revenue from lowland rice farming is obtained by multiplying the amount of lowland rice farming production in 1 planting season in the form of ground dry grain multiplied by the selling price agreed with the buyer. The results of the research on calculating income from rice farming are presented in Table 4.

Table 4. Average Income from Rice Farming with the JajarLegowo System 5:1 and 6:1 in Tasuk Village, GunungTabur District, Berau Regency

No	Description	JajarLegowo Planting Systems	
		5: 1	6: 1
1	Production (Kg)	3.178,57	2.892,86
2	Selling Price (IDR.Kg^{-1})	9.807,14	9.928,57
3	Total Income	30.728.571,43	28.785.714,29

Source: Primary Data Processed 2022

Based on Table 4 above, shows that the average rice production of farmers who apply the JajarLegowo 5:1 planting system is 3,178.57 kg with an average selling price of IDR 9,807.14 kg-1, so the total average revenue is IDR 9,807.14 kg-1. is IDR. 30,728,571.43. The average rice production for farmers who apply the JajarLegowo 6:1 planting system is 2,892.86 kg with an average selling price of Rp. 9,928.57 kg-1, so the total average revenue is IDR. 28,785,714.29.

The average production and income from rice farming with the JajarLegowo 5:1 planting system are greater because, in this planting system, the percentage increase in plant population is estimated to reach 16.6% compared to the percentage increase in the 6:1 type planting system which only reaches 14 .29%. This is to what was stated by [7] that an increase in plant population is expected to also increase the amount of production which ultimately increases the average income from lowland rice farming.

4. Analysis of Farming Income

Income from rice farming in Tasuk Village, GunungTabur District is the difference between the average total revenue and the average total production costs which consist of variable costs such as the costs of seeds, fertilizer, pesticides, and labor and fixed costs such as equipment depreciation costs. The results of research regarding the income of rice farming businesses are presented in Table 5.

Table 5. Average revenue, variable costs, farmer income, R/C ratio, and B/C ratio for the JajarLegowo planting system 5: 1 and 6: 1

No	Description	JajarLegowo Planting Systems	
		5: 1	6: 1
1	Total Income (IDR.mt^{-1})	30.728.571,43	28.785.714,29
2	Total Production Costs (IDR.mt^{-1})	6.796.147,91	5.863.095,79
3	Income (IDR.mt^{-1})	23.932.423,51	22.922.618,50
4	Income (IDR.ha^{-1}.mt^{-1})	31.569.388,30	22.853.983,25
5	R/C Rasio	4,43	4,71
6	B/C Rasio	3,90	4,04
7	BEP Price(Rp.Kg^{-1})	2.451,27	2.451
8	BEP $_Q$ (Kg)	132,75	59,79

Source: Primary Data Processed 2023

Based on Table 5, shows that the average income from lowland rice farming in Tasuk Village with the 5:1 jajarlegowo system is IDR. 23,932,423.51 or Rp. 31,120,613.73 for every 1 hectare. Meanwhile, the average income from lowland rice farming with a 6:1 system is IDR. 22,922,618.50 or IDR. 22,853,983.25 for every 1 hectare.

The results of the analysis of the feasibility of farming with the criteria of the ratio of total revenue and total costs or what is known as the Revenue of Cost Ratio as presented in Table 5 show that the R/C ratio value in lowland rice farming with the JajarLegowo 5:1 planting system is 4. 43 while for the JajarLegowo type 6:1 planting system, it is 4.71. The R/C ratio of lowland rice farming from the two JajarLegowo planting systems is > 1, this means that the farming is worth cultivating. The R/C ratio value for lowland rice farming with the JajarLegowo planting system is 5:1 = 4.43, meaning that every 4 rupiah increase will increase revenue by IDR. 4.43 with a profit of Rp. 43. Medium The R/C ratio value for lowland rice farming with the JajarLegowo planting system is 6:1 = 4.71, meaning that every 4 IDR increase will increase revenue by IDR. 4.71 with a profit of IDR 71.

The results of the feasibility analysis of lowland rice farming using the comparison or ratio method of total income and total costs or what is known as the Benefit Cost Ratio (B/C Ratio) as shown in Table 5 shows that the B/C ratio value in lowland rice farming is the 5:1 JajarLegowo planting system is 3.90, while for the 6:1 type JajarLegowo planting system it is 4.04. The B/C ratio of lowland rice farming from the two JajarLegowo planting systems is > 1, this means that the farming is worth cultivating. According to the research results reported by [19] the analysis of lowland rice farming income using the JajarLegowo 6:1 system is included in the profitable category and increases the income of lowland rice farmers, the average yield of lowland rice production is 3,989 kg and the average -average productivity of 7,422.90 kg.ha-1 in one production period with a selling price of IDR 4,500/kg. with a total land area of 0.50 – 1.00 ha as much as 50%, land area <0.50 ha as much as 40.9%, and land with an area >1.00 ha as much as 9.1%. So the average income of farmers is IDR 11,659,828 per harvest period. The development of food crop production, especially lowland rice using the JajarLegowo 6:1 planting system in Salukayu Village, Papalang District, Mamuju Regency, is very feasible to develop, seen from the R/C ratio > 1, namely 2.85, which means that the results received by rice farmers Rice fields in Salukayu village are worthy of development.

The results of the break-even point analysis for production in lowland rice farming with the JajarLegowo 5:1 and 6:1 planting systems are presented in Table 6 showing that the average break-even point for production from lowland rice farming with the JajarLegowo 5:1 planting system is 132.74 Kg. , while for the JajarLegowo 6:1 planting system, it was 59.79 Kg. This means that the break-even point is reached if lowland rice farming produces production of 132.74 Kg for the JajarLegowo 5:1 planting system and 59.79 Kg for the JajarLegowo 6:1 planting system. However, in reality, the actual production volume as shown in Table 5 shows that the average actual production for the 5:1 and 6:1 planting systems is IDR. Kg 3,178.57 and Kg 2,892.86 for each kilogram, this means that lowland rice farming in KampungTasuk, GunungTabur District with the row legowo 5:1 and 6:1 planting system is feasible or has experienced profits.

The results of the break-even analysis for prices in lowland rice farming with the JajarLegowo 5:1 and 6:1 planting systems are presented in Table 5, showing that the average break-even price for lowland rice farming with the JajarLegowo 5:1 planting system is IDR. 2,595.43, while for the JajarLegowo 6:1 planting system, it is IDR. 2,248. This means that the break-even point is reached if the minimum selling price on the market is IDR. 2,595.43 for the 5:1 planting system and IDR. 2,248 for a 6:1 planting system. However, in reality, the actual selling price as shown in Table 5 is that the average actual selling price for the 5:1 and 6:1 planting systems is IDR. 9,807.14 and 9,928.57 for each kilogram, this means that lowland rice farming in Tasuk Village, GunungTabur District with the 5:1 and 6:1 row legowo planting system is feasible or has experienced profits.

The results of the research reported by [20] regarding the comparison of rice productivity and farmer income through the JajarLegowo planting system compared to the tile system in irrigated rice fields in Sri Agung Village, BatangAsam District, West TanjungJabung Regency, Jambi Province shows that: (1) seen from the farming feasibility aspect or based on the R/C ratio value of rice farming using the 4:1 legowo planting system produces a value of 2.42 and the 6:1 legowo planting system produces a value of 2.22, and tile planting system 2.16. This means that rice farming in these three systems is more competitive because the R/C value is more than two. However, the R/C ratio in the Legowo planting system of 4:1 is better than the R/C ratio of the two planting systems; (2) the results of marginal analysis

show that rice planting with the 4:1 legowo planting system obtains additional marginal income of IDR 1,443,000; (3). The results of the analysis of the production break-even point and the price break-even point in the rice farming system or Production Break-Even Point (TIP) for the three planting systems studied were around IDR 1284.2/kg - IDR 1360.7/kg because the price of rice for the three planting systems was the same. Meanwhile, the Breakeven Price Point (TIH) shows a difference, in the 4:1 legowo planting system it reaches IDR 1652.2 kg^{-1}; for the 6:1 legowo system, it reaches IDR 1798.7 kg-1, while the tile planting system is only IDR 1853.2 kg^{-1}. This happens because there is a difference in the amount of production produced, seen from the break-even value of the three rice planting systems which is below the actual production value and price, meaning that rice farming with the 4:1 legowo planting system, 6:1 legowo system, and the tile system provides added value and economically feasible to develop.

5. Analysis of Differences in Rice Farming Income from the JajarLegowo System 5:1 and 6:1

The results of the analysis of the difference in average rice farming income from the JajarLegowo 5:1 system and the JajarLegowo 6:1 system are presented in 6.

Table 6. Analysis of the Average Difference Test for Rice Farming Income in the JajarLegowo System 5:1 and 6:1

No	Description	JajarLegowo Planting Systems	
		5:1	6:1
1	Number of Samples (Farmers)	14	14
2	Income (IDR.mt^{-1})	23.932.423,51	22.922.618,50
3	Average Income (IDR.ha^{-1})	31.569.388,30	22.853.983,25

t-test: 0,251; and t-table (0,05; 27) = 2,055

Source: Primary Data Processed 2023

Based on the results of the t-test calculation on the average income of rice farming in the JajarLegowo planting system of 5:1 to 6:1 (Table 6), it shows that the t-count value is 0.251, while the t-table value is at α = 5% and degrees of freedom = 26 is 2,055. This shows that the t-calculated value is smaller than the t-table value, which means that there is no significant difference in the average income of lowland rice farmers with the 5:1 JajarLegowo planting system and the 6:1 JajarLegowo planting system. Even though lowland rice farming with the JajarLegowo 5:1 planting system has an average use of production factors per hectare and average productivity that is greater than the JajarLegowo 6:1 planting system, the average selling price is only around IDR 9,807.14 Kg 1 to IDR 9,928.57 Kg 1. This small difference in selling price has an impact on the average farming income from the two-row legowo planting systems, there is no significant difference.

CONCLUSIONS AND SUGGESTIONS

A. Conclusion

Based on the results of the research analysis and discussion, the following conclusions can be drawn:

1. The productivity of the 5:1 JajarLegowo planting system is 4,096.94 Kg.ha^{-1}.mt^{-1}, which is higher than the productivity of the 6:1 JajarLegowo planting system, which is 2,948.98 Kg.ha^{-1}.mt^{-1}.
2. The total farming costs, total revenue, and total income from the 5:1 JajarLegowo farming system are greater than the total costs and total revenue from the 6:1 JajarLegowo farming system.
3. The R/C ratio in the 5:1 type JajarLegowo system is 4.43 and in the 6:1 JajarLegowo system is 4.71.
4. BEP production in lowland rice farming with the JajarLegowo 5:1 planting system is 132.74 Kg, while for the JajarLegowo 6:1 planting system, it is 59.79 Kg. The average actual production for the 5:1 and 6:1 planting systems is IDR. Kg 3,178.57 and Kg 2,892.86 for each kilogram, this means that lowland rice farming with the row legowo 5:1 and 6:1 planting system is feasible or has made a profit.
5. BEP The price for lowland rice farming with the JajarLegowo 5:1 planting system is IDR. 2,595.43, while for the JajarLegowo 6:1 planting system, it is Rp. 2,248. The applicable price of 5:1 is IDR.

9,807.14, while for the JajarLegowo 6:1 planting system it is Kg 9,928.57. This shows that lowland rice farming with the JajarLegowo 5:1 and 6:1 planting system is feasible or has experienced profits.

6. Based on the t-test, it shows that there is no significant difference between the average income of rice farming in the JajarLegowo 5:1 planting system and the JajarLegowo 6:1 system.

B. Suggestions

Considering the value of the farming feasibility ratio from the application of the JajarLegowo planting system, then :

1. It is recommended for farmers to try implementing the 5:1 row legowo planting system to increase lowland rice productivity in Tasuk Village.
2. Further research needs to be carried out by implementing the JajarLegowo type 2:1 planting system; 3:1; 4:1 and 5:1 to increase rice productivity in Tasuk Village.

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