THE ANALYSIS OF PEANUT FARMING IN CENTRAL BUTON DISTRICT

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ABSTRACT

This study aims to determine the income and feasibility of peanut farming in Central Buton District. The research was conducted in Central Buton District in March - April 2020. The research population was 60 peanut farmers in Central Buton District. The sampling technique used was the census method, which was by taking the entire population as the research sample. Types and sources of research data were primary data and secondary data. Research data collection techniques used were direct interviews and literature studies. Research variables included were costs, fixed costs, total costs, prices, production, and revenues. The data were analyzed using the analysis of income and R/C ratio analysis. The results showed that peanut farming income in Central Buton District was IDR 702,548/season. Meanwhile, the R/C ratio coefficient was 3, which means that the peanut farming in Central Buton District is financially feasible to develop.

Keywords: income; farming feasibility; peanuts

INTRODUCTION

Food crops are one of the commodities that make a real contribution to economic growth, especially in the agricultural sector. Increasing income through the development of food crop commodities is still a priority for some people, especially in Central Buton District. One of the food crop commodities that supports the household economy is peanuts. Peanut is one of the food crops cultivated in Central Buton District and is also a competitor crop for other food crop commodities such as corn, soybeans, and green beans. The average land area used by farmers in cultivating peanuts in Buton District is 1 ha. With the availability of the existing land, it is expected that peanut farming can provide benefits for farmers in Central Buton District and can contribute in improving the regional economy, especially in the food crop sub-sector. The need for peanuts as an annual food crop agricultural product still needs to be increased in line with the increase in income and population (Marzuki, 2007). In the future, the peanut commodity has a good prospect to create optimal profit.

The potential for land availability is quite wide, providing opportunities for farmers in Central Buton District to improve the household economy by optimizing the land use and labor in peanut farming households (Baso et al., 2018). The success or failure of a farm in achieving its objectives depends on how it manages the branches of the farm that it cultivates, where the farmer plays a dual role both as a manager and as an implementer (Rumagat et al., 2011).

The development of peanut farming by increasing production through the use of production factors can increase the production and income of peanut farming (Limi, 2011). However, in general the main problem that causes peanut farming is still facing the risk of failure is due to the existing weaknesses in cultivation techniques such as the use of fertilizers and pesticides which is not in accordance with the recommendations, the availability of production facilities that has not been fulfilled at any time such as superior seeds, fertilizers and pesticides, the availability of inadequate production technology such as land processing machines, planting machines, threshing machines and other supporting equipment, lack of labor due to the change in the function of labor from the agricultural sector to the service sector and non-agricultural industries, the lack of post-harvest handling results in low product quality so that it is less able to compete with similar commodities or
other food crop commodities, both from inside and outside the Central Buton District, then weak market access has resulted in frequent delays in sales and uncertainty of sales. Some of these problems can be related to the lack of mastery of advanced production technology by peanut farmers. The main contributing factor is because peanut farmers are small farmers who grow peanuts using an intercropping system with other food crop commodities such as corn. Based on these conditions, the aim of this study was to analyze the peanut farming in Central Buton District.

MATERIALS AND METHODS

The research was conducted in Central Buton District in March - April 2020. The research population was 60 peanut farmers in Central Buton District. The sampling technique used was census method, which was taking the entire population as the research sample. Types and sources of research data were primary data and secondary data. Research data collection techniques used were direct interviews and literature studies. Research variables included were costs, fixed costs, total costs, prices, production, and revenues. The data were analyzed using the income analysis according to Soekartawi, 2002 with the formula of $\pi = TR - TC$, $\pi$ = Income (IDR), $TR$ = Total Revenue (IDR), $TC$ = Total Cost (IDR) and the R/C ratio analysis according to Soekartawi, 2002 to find out the feasibility of peanut farming which was calculated based on the formula $R/C$ ratio = $TR / TC$ where the criterion $R/C$ ratio > 1 means feasible, $R/C$ ratio = 1, means break-even and $R/C$ ratio <1, means not feasible to be developed.

RESULTS AND DISCUSSION

High income does not always lead to a financially feasible on a farming if it is followed by a large value of production costs (Karyanto & Suwasono, 2008). So that the feasibility of developing peanut farming in Central Buton District as a food crop commodity is also carried out using the R/C ratio value. The discussion regarding the income and feasibility of peanut farming in Central Buton District is explained based on the following sections:

Costs, Revenue, and Income

The use of input costs in peanut farming in Central Buton District consisted of fixed costs, which are costs calculated based on the depreciation cost of tools such as hand sprayer, machetes, and crowbars or costs which are not influenced by the amount of production. Meanwhile, variable cost is the cost whose amount is influenced by the number of products such as seeds and transportation costs for peanut marketing activities. Costs cannot be separated from the production process because costs are input multiplied by the price which is one of the determining factors in farming (Manurung, 2015). The effective and efficient use of input costs is expected to increase the farmers’ income in peanut farming activities in Central Buton District. The revenue obtained by farmers in peanut farming activities is the result of multiplying the amount of production and the selling price of peanuts at the research location, calculated based on the results obtained during one planting season, from December 2019 to March 2020 and the revenue calculated based on the unit area of land used by farmers in Central Buton District which is at the average of 1 ha. The income earned by each peanut farmer in Central Buton District has a different amount. This is due to differences in the land area used for cultivation activities, the use of production costs, the amount of product obtained, and the management of the farm. Peanut farming income in this study was calculated based on the results obtained during one planting season, namely for four months from December 2019 to March 2020, and farm income calculated based on the unit area of land used by farmers in Central Buton District, which is at the average of 1 ha.

Table 1 shows that the average use of input costs in peanut farming in Central Buton District which was spent during one planting season, from December 2019 to March 2020, was the highest by IDR 324,536/season. Meanwhile, the average use of farm input costs based on the land area unit used by farmers, which was 1 ha, was IDR 324,014/ha. In general, the use of input costs in peanut farming in Central Buton District was very low, this is presumably due to the management of peanut farming simultaneously in the same growing season as the competing crops, which was corn so that the use of input was not optimal such as fertilizer, since farmers generally grow peanuts using an intercropping system with corn plants. In general, farmers plant peanuts intercropping with corn or sorghum (Rozi et al., 2016). The adoption of peanut cultivation technology is still relatively low, especially the use of superior varieties, fertilization, and pest control. An overview of the costs, revenues, and income of peanut farming in Central Buton District can be seen in Table 1.
Table 1. Cost, revenue and income of peanut farming in Central Buton District, 2020

| No. | Description | Peanut Farming |
|-----|-------------|---------------|
|     |             | (Rp/Season)   | (Rp/Ha)     |
| 1   | Cost        |               |             |
|     | The highest | 1,225,000     | 942,308     |
|     | Average     | 324,536       | 324,014     |
|     | Lowest      | 170,000       | 85,000      |
| 2   | Reception   |               |             |
|     | The highest | 3,250,000     | 2,500,000   |
|     | Average     | 1,027,083     | 1,005,208   |
|     | Lowest      | 600,000       | 300,000     |
| 3   | Income      |               |             |
|     | The highest | 2,025,000     | 1,557,692   |
|     | Average     | 702,548       | 681,195     |
|     | Lowest      | 320,000       | 215,000     |

Source: Primary data processed, 2020.

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The low use of input costs in peanut farming in Central Buton District was caused by the minimal use of production facilities. The inputs used were production equipment, namely a hand sprayer by IDR 62,500/season, a machete by IDR 33,182/season, and a crowbar by IDR 20,857/season. Furthermore, the means of production only consisted of the use of seeds, namely IDR 232,727/season and transportation costs to market peanuts by IDR 44,545/season. Meanwhile, other production facilities, such as the use of labor for farm management, fertilization, maintenance, pest and disease control as well as other means of production were not implemented in order to minimize the use of farm input costs. In addition, the management of peanut farming in Central Buton District did not utilize production equipment and means, whereas the utilization of these tools and facilities are very useful in increasing the peanut production. The success or failure of a farm in achieving its objectives depends on how it manages the branches of the farm that it cultivates, where the farmer plays a dual role both as a manager and as an implementer (Rumagit et al., 2011).

Table 1 shows that the average revenue from peanut farming activities in Central Buton District which was calculated based on the results obtained during one planting season, which was for four months from December 2019 to March 2020 was IDR 1,027,083/season. Meanwhile, the average revenue calculated based on the land area unit area used by farmers, which was 1 ha, was IDR 1,005,208/ha. Based on these conditions, it can be concluded that in general the revenue obtained by peanut farmers in Central Buton District was very low both based on the planting season and the area of land used. This was due to the low amount of peanut production produced in one planting season, and a crowbar used by farmers, which was only 71 kg, although, in fact, peanuts in Central Buton District have a high selling price of IDR 15,000/kg. This means that the utilization of land area in peanut farming is not optimal, which causes the amount of production was low. The area of land cultivated by farmers certainly affects the level of peanut crop production (Lida et al., 2019).

The decrease in the amount of production in peanut farming in Central Buton District was due to the fact that in their farming activities, farmers did not take advantage of production facilities such as preparation/use of superior seeds, use of labor at each stage of activity, fertilization, control of pests and plant diseases. There were still weaknesses in cultivation techniques. These weaknesses can be attributed to farmers who were not fully mastering the use of advanced production technology. Simultaneously, there was an effect of peanut farming production facilities on total production (Rato, 2019). Then furthermore, the use of production equipment were effectively and efficiently increase production. Production cannot be separated from the production factors owned by farmers and their farming management effectively and efficiently (Mardani et al., 2017).

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Table 1 shows that the average peanut farming income in Central Buton District which was calculated based on the results obtained during one planting season, from December 2019 to March 2020, was IDR 702,548/season. Meanwhile, the average income calculated based on the land area unit was IDR 681,195/ha. If the average income is classified based on the criteria of the Central Statistics Agency (2018), which are very high (> IDR 3,500,000), high (IDR 2,500,000 - IDR 3,500,000), medium (IDR 1,500,000 - IDR 2,500,000) and low (< IDR 1,500,000), it can be concluded that the average income of peanut farming in Central Buton District, both based on the planting season and land area, is in a low category. The results showed that the factor that caused the low income of peanut farmers in Central Buton District was the lack of effective and efficient utilization of peanut farming production equipment and facilities. So, it is necessary to combine the use of production factors in this farm. The use of production facilities such as pesticides, seeds, fertilizers, land rent, and production equipment simultaneously affects peanut farming income (Lida et al., 2019).

R/C Ratio
The R/C ratio coefficient is the result of a comparison between peanut farming revenues and the costs incurred. R/C ratio is used to analyze the feasibility of peanut farming in Central Buton District as an indicator in the process of developing superior agricultural products. Business feasibility is a measure to determine whether a business is feasible to develop. Feasible means in the sense that it can generate benefits for farmers (Soekartawi, 2002). Then, the feasibility of efforts is carried out to identify future problems so as to minimize the possibility of missing results to be achieved in an investment (Kasmir, 2008). This study used financial analysis, which was based on the R/C ratio coefficient to determine the feasibility of peanut farming. An overview of the feasibility of peanut farming in Central Buton District can be seen in Table 2.

Table 2. R/C ratio coefficient obtained by farmers on peanut farming in Central Buton District in 2020

| No. | Description | R/C Ratio |
|-----|-------------|-----------|
| 1   | The highest | 4         |
| 2   | Average     | 3         |
| 3   | Lowest      | 2         |

Source: Primary data processed, 2020.

Table 2 shows that the highest R/C ratio coefficient obtained by farmers in peanut farming activities in Central Buton District was 4, the lowest was 2 and the average was 3. Based on these average results, it can be interpreted that every one rupiah of the costs incurred for peanut farming activities in Central Buton District will generate an income of IDR 3. This shows that the average peanut farming revenue of IDR 1,027,083/season is greater than the costs incurred in farming 1,500,000/season divided by the cost of IDR 324,536/season. So based on these conditions, it can be concluded that peanut farming in Central Buton District was financially feasible to develop. This is in accordance with the results of research which explained that peanut farming is feasible to be developed with an R/C ratio coefficient of 3.28 (Lida et al., 2019). This figure was obtained from the total revenue of IDR 2,625,000/season divided by the cost of IDR 799,218.18/season. The selling price is the same, which was IDR 15,000/kg, but the amount of production was also less than optimal, which was as much as 175 kg.

CONCLUSIONS AND SUGGESTION
Based on the results of the study, it can be concluded that the income of peanut farming in Central Buton District is IDR 702,548/season. Meanwhile, the R/C ratio coefficient is 3, which means that the peanut farming in Central Buton District is financially feasible to develop. Preferably, to increase the income of peanut farming in Central Buton District, it is necessary to provide and utilize production facilities effectively and efficiently.

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