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Review Article

Analysis of Robusta Coffee Development in Way Kanan Regency (Study on Robusta Coffee Production Efficiency)

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Abstract *- This study aims to determine the level of production efficiency of people's coffee plantations in Banjit District, Way Kanan Regency. The method used in this research is a case study. Respondents consisted of red-picked coffee farmers and random-picked coffee farmers. The research was conducted in three villages in Banjit district, namely Juku Batu Village, Menanga Siamang Village and Rantau Temiang Village, Banjit District, Way Kanan Regency. Determination of the location of the study was carried out purposively with the consideration that Banjit district is a district that has the largest commodity-producing potential in Way Kanan Regency. In addition, Banjit district has the production of red-picked and random-picked coffee commodities. The results showed that the production efficiency level of red-picked coffee was on average 0.814 while random-picked coffee was 0.680. Cost Benefit Analysis from the results of the study, namely the efficiency level of red-picked coffee farmers is more profitable than random-picked coffee farmers.*

Keywords *- Efficiency, Random-Picked Coffee, Red-Picked Coffee, Robusta Coffee.*

I. INTRODUCTION

Lampung Province is one of the largest coffee producers in Indonesia, the history and development of Lampung coffee has made Lampung coffee become a major commodity with a distinctive taste, large production (export scale) of 4,011 tons, to several Asian and European countries. Moreover it becomes a livelihood for the community as a whole so it should be maintained and more efficient in its management.

Based on five-year average data (2013-2017), the average people's coffee production in Lampung Province is 109,949 tons or contributes 24.34 percent of all coffee production in Indonesia. The center of the highest coffee production is in the province of South Sumatra, about 121.25 tons per year. While other provinces contribute 26.33 percent to Indonesia's coffee production (Directorate General of Plantations, 2017).

As one of the largest robusta coffee production centers in Indonesia, the average robusta coffee productivity in Lampung Province is 830.62 kg/ha with a land area of 137,875 ha. Meanwhile, South Sumatra Province has an average production of 592.50 kg/ha with a land area of 206.018 ha. This shows that land area is not the only main factor of production, so Lampung Province has the potential to be able to make a major contribution to increasing robusta coffee production in Indonesia.

The distribution points of coffee plantations in Lampung are still dominated by the four main coffee-producing districts. Among them are West Lampung, Tanggamus, North Lampung, and Way Kanan Regencies. From the four main areas in Lampung Province, the authors chose Way Kanan Regency as the research area because this area is one of the potential coffee-producing areas in Lampung but its production level is still relatively lower than other districts. In addition, the possibility of a technology spill offer is greater from the Province of South Sumatra and West Lampung Regency compared to other coffee-producing areas.

Based on the background above, the research question is "Is the development of Way Kanan Robusta Coffee efficient?". This has attracted researchers to raise the issue of coffee in Way Kanan Regency in terms of production efficiency.

II. RESEARCH METHOD

This research uses case study method. The study was conducted in three villages in Banjit District, namely Juku Batu Village, Menanga Siamang Village and Rantau Temiang Village, Banjit District, Way Kanan Regency in 2017. The determination of the location of the study was carried out purposively with the consideration that Banjit district is a district that has the potential to produce the largest commodity in Way Kanan Regency. In addition, Banjit district has the production of red-picked and random-picked coffee commodities. Respondents consist of red-picked coffee farmers and random-picked coffee farmers with a total sample of 208 respondents.

The data collected in this study are primary data and secondary data. Primary data are obtained through interviews and observation. The tools used is in the form of questionnaires. Secondary data is obtained from related institutions or agencies such as the Central Bureau of Statistics for Way Kanan, the Plantation Service of Way

Kanan Regency and others. The data analysis method used in this study is Data Envelopment Analysis (DEA). The Data Development Analysis method is a non-parametric-based frontier method that aims to measure the efficiency level of decision making units (DUMs).

Data Envelopment Analysis measure the efficiency level by employing input variable and output variable used by the company in producing process. Variable input used in this research are fertilizer cost, medicine cost, labor cost, rental cost, machine cost. Variable output used in this research is total revenue.

III. RESULT AND DISCUSSION

Based on the efficiency measurement using DEA with the CRTS model, it was known that not all coffee farmers have perfectly efficient production levels. This can be shown from the DEA efficiency value which is less than 1 or even below 0.5. The results of the calculation of the CRTS model showed there are 7 respondents who become best practices, namely 1,11,12, 17, 18,19 and 22, while the others have enough efficiency and good efficiency. The average efficiency of red-picked coffee farmers was 0.814 and random-picked coffee farmers was 0.680. It can be said that the efficiency of both coffee was at enough efficiency level.

Based on the results of these efficiency calculations, an analysis of the development of coffee obtained can be developed by considering greater revenue. The results of the study as many as 28 respondents of red-picked coffee can be explained that the production input prices include: fertilizer costs, medicine costs and rental costs were relatively the same while labor costs for maintenance and harvesting were higher because the harvest period was different from random-picked coffee. Then from the analysis of the cost benefits of robusta coffee, it was found that the B/C ratio for red-picked coffee > 1 and R/C Ratio > 1 while random-picked coffee had B/C Ratio > 1 and R/C Ratio > 1, this means that the level of profit obtained by coffee farmers was getting higher if processing coffee powder.

Analysis of robusta coffee development in Way Kanan Regency based on the results of the study can be viewed from several aspects, namely: aspects of cultivation, marketing, institutional and policy. To maximize the development of coffee farming, efforts should be made to increase knowledge and skills in coffee cultivation. In its implementation, it takes the role of all parties related to the development of coffee farming, activities can be carried out through training and socialization of cultivation techniques that were carried out regularly, conducting comparative studies to coffee-producing areas, participating in coffee exhibitions. In order to see the benefits of implementing the activities that have been carried out, the government was advised to carry out supervision starting from the initial process of cultivation activities to the marketing stage, so that farmers were expected to be able to harvest red-picked coffee and get the appropriate price. Supervision at the marketing stage was carried out to minimize losses obtained by farmers and obtain information disclosure about coffee prices.

IV. CONCLUSION

The efficiency level of red-picked coffee farmers shows a fairly good level of efficiency, this can be seen from the amount of few business units that achieve perfect efficiency or become best practice. By observing the use of input, it found that labor causes large expenditures so that farmers do not want to take risks in maximizing their output into red-picke processing. However compared to random-picked coffee, red-picked coffee had higher selling price in the market because the quality of coffee greatly affects.

The development of the Way Kanan Robusta coffee commodity requires a big role from all parties related to the development of coffee farming so that the benefits of implementing the activities carried out were seen. The government was also expected to be able to supervise starting from the process of cultivation activities to the marketing stage so that farmers can switch from processing random-picked coffee to red-picked in Way Kanan Regency.

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