ABSTRACT

Porang farming is one of the food crop commodities that has the potential for high economic value and continues to be developed. Porang commodity is used as one of the leading products in meeting the needs of increasing export demands. However, in carrying out the production of porang farming, it cannot be separated from the existing constraints. This study aims to (1) analyze the factors that influence the production of porang farming in Saradan District, Madiun Regency (2) analyze the technical, allocative and economic efficiency of porang farming in Saradan District, Madiun Regency (3) analyze the income of porang farming in Saradan District.

The method used in this research is Stochastic Frontier Analysis (SFA) for efficiency analysis. The data in this study came from primary data. The sample size in this study was 95 respondents using the multistage sampling method with the proportional random sampling formula. The input variables used were land area, labor, seeds, fertilizers and pesticides. The output variable in this study is the production of porang. While the external variables that affect technical inefficiency are age, education and experience of porang farmers. Meanwhile, in terms of income, it consists of receipts obtained by farmers. Fixed costs consisting of equipment rental and depreciation costs. Variable costs consist of labor costs, seeds, fertilizers and pesticide costs. In the income analysis analyze the difference between revenue and total costs (income), B/C Ratio, R/C Ratio and BEP.

The results showed that porang farming was not efficient in technically, allocatively and economically. Variable land area, seeds, fertilizers and pesticides have a positive and significant effect on porang production. The labor variable has a negative and insignificant effect on porang production in Saradan District, Madiun Regency. Age affects the technical inefficiency of porang farming production in Saradan District, Madiun Regency. Meanwhile, education and experience have no effect on the technical inefficiency of porang farming production. Based on return to scale, it can be concluded that porang farming shows a condition of Increasing Return to Scale, which means that porang farming is feasible to continue to develop. Porang farming income is IDR 21,972,963 per farmer and IDR 11,462,216 per hectare during one growing season. The B/C ratio per farmer is 1.10 and the value of the B/C ratio for farming per hectare is 1.15. While the R/C value per farmer is 2.10 and the farming value per hectare obtained is the R/C ratio of 2.15. The results of the B/C Ratio and R/C Ratio which show results > 1, it means that porang farming in Saradan District can be said to be feasible to cultivate. The BEP value of porang farming production per farmer is 971.3 kg and 500 kg per hectare for 1 growing season so that porang farming avoids losses. The value of the BEP price per farmer is IDR 1,431 and the BEP price per hectare is IDR 1,412. And the BEP of income per porang farmer is IDR 1,500,532 while the BEP of revenue per hectare shows a yield of IDR 2,914,274.

Keywords: Efficiency, Income, Porang Farming