

## ABSTRACT

Muchammad Jawahirul Mun'im. 2023. Analysis of Allocative Efficiency in the Use of Production Factors in Corn Farming (Case Study of Pandean Village, Rembang District, Pasuruan Regency). Under the guidance of Desy Cahyaning Utami, SP., MP

In corn farming, the increase in agricultural production results can be done in several ways, including agricultural intensification and extensification. Agricultural intensification is an effort to increase the progress of the agricultural sector in an effort to increase the progress of the agricultural sector by adding the needed factors of production. However, considering the difficulty of finding agricultural land and the narrowing of agricultural land for corn farming, as well as the large population growth rate and also the costs of production factors that must be spent, efforts to increase the productivity of corn farming are carried out by identifying agriculture, namely by optimizing the use of production factors. To then be used effectively and efficiently. This study aims to (1) determine the allocative efficiency of the use of factors of production in corn farming in Pandean Village, Rembang District, Pasuruan Regency. (2) knowing the cost of production in corn farming in Pandean Village, Rembang District, Pasuruan Regency. (3) knowing the production factors that affect the cost of corn farming in Pandean Village, Rembang District, Pasuruan Regency.

The analytical method used in this study is by using a questionnaire through interviews and data tabulation and quantitative analysis methods using the Cobb-Douglas Stochastic Frontier production function approach and also using R/C Ratio analysis.

The results of this study were: The production factors that influence corn farming activities in Pandean Village, Rembang District, Pasuruan Regency are the production factors of seeds and liquid fertilizer. The average total income of corn farmers in the study area is IDR 1,087,570,000, - and an average total cost of Rp.964,091,000, -. So the R/C ratio is 1.128. This shows that the average corn farming in Pandean Village, Rembang District, Pasuruan Regency is already profitable, because the average R/C ratio is more than 1. The results of the allocative efficiency analysis using the Cobb-Douglas Stochastic Frontier production function approach show that The average efficiency value is 1.00. This shows that corn farming in Pandean Village, Rembang District, Pasuruan Regency is already efficient because the average value of efficiency is equal to 1. In this study it can be concluded that corn farming in Pandean Village, Rembang District, Pasuruan Regency is said to be allocatively efficient (costs) and profit, this can be proven by the results of calculating the Cobb-Douglas Stochastic Frontier production function and using the R/C ratio analysis.

Suggestions for this research are that based on the results of the analysis it can be said to be efficient and profitable. Farmers only need to adjust the use of production inputs with existing costs so that it is more optimal, it will minimize the costs incurred by farmers in farming activities

Keywords: Corn, Efficiency, Cost, Farming, Factors of Production