

## ABSTRACT

*Chili is a commodity that has high economic value, so there is many are cultivated in Indonesia. Temanggung is one of the region in Central Java that produce chili. But the production is decrease every year, the farming area is continues to decline, and the average production that tends to fluctuates. Causes of fluctuations the average chili production was made possible due to the inefficiency used of factors of production*

*This study aims to analyze the level of influence of factors of production to total production of chili, also to analyze the level of efficiency by using the factors of production in chili's farming in the District of Bulu, Regency of Temanggung., as well as to analyze the level of benefits that could be gained by farmers.*

*Data used in this study are primary and secondary data. Samples were taken by accidental sampling method. Respondents of this research are chili farmers in the district of Bulu, consist of 92 people Data analysis methods used in this study is the production function with a stochastic frontier approach with Maximum Likelihood Method.*

*Farming chili in the village is still profitable, this is indicated by the value of R/C ratio that reach 1.277. To achieve an efficient condition, chili's farmer needs to add the amount of use of production factors. The farming conditions showed a decreasing returns to scale, that require improvements in chili production process. The used amount of seed and labor are inefficient, and needs additional use of seed and labor to achieve higher level of efficient. In other side, The used amount of fertilizer and pesticide are inefficient, and needs to reduce using them to achieve higher level of efficient*

*Keywords: Efficiency, Production, Chili Farms.*