## **ABSTRACT**

In Temanggung Regency, tobacco is one of the characteristics of farmers. This study aims to determine the effect and level of efficiency of the production factors of smallholder tobacco farming, such as the number of seeds, the amount of manure, the amount of urea fertilizer, the amount of pesticides, and the amount of labor used in the production of smallholder tobacco farming in Temanggung Regency.

This study uses primary data and obtains a total of 100 farmers as respondents by means of interviews and questionnaires. The method used in explaining this research uses multiple regression analysis, while the method used to explain the efficiency of production factors in smallholder tobacco farming uses the frontier stoochastic production function with the form of the production function being the Cobb-Douglass production function.

The production factors of tobacco farming in Temanggung Regency in this study indicate that the variables of seeds, manure, urea fertilizer, and pesticides have a positive and significant effect on the results of smallholder tobacco production in Temanggung Regency. The labor variable has a negative and insignificant effect on the production of smallholder tobacco farming. The production factors of smallholder tobacco farming in Temanggung Regency have not reached the level of efficiency either in terms of technical efficiency, price efficiency or economic efficiency. It is hoped that the intensity of agricultural extension activities should be increased so that farmers are more skilled in cultivating their tobacco.

**Keywords:** seed, manure, urea fertilizer, pesticides, labour, tobacco production, efficiency, cross-section