

## **ABSTRACT**

*This study aims to identify the factors that influence the production of corn crops and to analyze technical efficiency of cultivation of corn crops in Kecamatan Mranggen Kabupaten Demak. This study also aims to identify the returns to scale.*

*The study was held in Kecamatan Mranggen that has been known as one of the best of the producers of corn in Kabupaten Demak. The data used are cross section. The respondents becoming samples in this study consist of 88 farmers as owners and operators. The Cobb-Douglas production function with multiple linear approach was employed to answer the objective posed by study.*

*The estimation results indicate that the factors that affect the production is the area of land, capital, seeds, fertilizer and labor. The value of the land input efficiency of -0.04111; -0.19480 capital; 1.55431 seed; 0.04923 fertilizers; and labor 0.58471. Means the variable land, capital, seeds, fertilizer and labor have efficiency values less than one ( $< 1$ ). This means that for a variable land, capital, fertilizer, labor and inefficient price that must be reduced. The variable seed price efficiency value more than one ( $> 1$ ). It shows that for the variables have not been efficient in the price, advisable for farmers to increase the number of seeds used.*

*The returns to scale, production in research area has been decreasing return to scale (DRS) in the production of 0.9689 but, relatively small or approximately constant. The proportion of addition of production factors have a greater value than the value of production obtained.*

**Key words: corn, production, production factor, return to scale, efficiency.**