

## ABSTRACT

This research was conducted on Gambar Island and Tagor Island, Serba Jadi District, Serdang Bedagai Regency. Based on the background, this research was conducted to see the efficiency of using production factors in lowland rice farming on Gambar Island and Tagor Island. This research aims to analyze the influence of land area, fertilizer and labor on lowland rice production and to analyze the technical efficiency of using production factors for lowland rice farming in Serba Jadi District. The data analysis method used is multiple linear regression analysis with the Cobb Douglas model. The types of data in this research are primary and secondary data. The results of this research show that the five factors of farming production in the Versatile District, consisting of land area, fertilizer, labor, pest attacks and irrigation. Of the five factors land area, pest infestation and irrigation have a significant effect on lowland rice production, while the fertilizer and labor variables have no significant effect on lowland rice production. and the five production factors are not yet technically efficient.

**Keywords:** *Cobb Douglas, Farming, Lowland Rice, Production Factor*

