

ABSTRACK

This research was conducted in Blangpegayon sub district which is a sub district that has higher land area compared to Blangkejeren and Pantan infrastruktur sub districts but tomato productivity is lower.. Tomatoes are plants with fine hairs all over their surface, the roots of tomato plants are fibers that spread in all directions. Tomato is a vegetable plant included in the family solanaceae. The research objective is to analyze the factors affecting tomato production in Blangpegayon district, Gayo Lues Regency. The method used is multiple linear regression method with *Cobb-Dougllass* production function model. The results of the research that has been done, it is known that the variables of land area, chemical fertilizer, and manure can affect the production variable of tomato farmers in Blangpegayon District, simultaneously sig. value of $0.000 < 0.05$ which states that land area, chemical fertilizer, and manure can significantly affect the production of tomato farmers in Blangpegayon District. Then from the results of the t test or partially, all variables have a significant effect on production.

Keywords: Farmers, Production, Tomato