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Identification of Factors Affecting Technical Efficiency Sugar Cane Farming in East Java

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Abstract : This research aims to identify the factors that affect the production of sugar cane, the level of technical efficiency of farming sugar cane ratooning and factors that affect technical inefficiency. Research carried out in Malang of East Java with sampling in a non random sampling stratified proportioned and obtained 172 household sugar cane farmers who are classified based on the level of ratooning i.e. ratooning I 3-4 times ratoning, ratooning II 5-10 times ratoning as well as ratooning III > 10 times ratoning. The method used is the Stochastic Production Frontier approach MLE (maximum likelihood estimation). From the results obtained by analysis of the factors affecting the production of sugar cane farming land, namely ratooning fertilizer use ZA petroganic, use of fertilizer and seeds of embroidery and labor. While the average level of sugar cane farmers ratooning efficiency of 0.78 and categorized yet efficient technically. For the factors that influence the technical inefficiency i.e. age, number of dependents and the frequency of family ratooning. Though not yet technically efficient but sugar cane farmers cultivate cultivation remains ratooning. But if it is done repeatedly ratooning will result in a decrease in the production of sugar cane. Whereas the results of the analysis of farming level of feasibility or RC ratooning sugar cane ratio of 1.15 so worth trying to accomplish. Thus with increased technology and combining the use of inputs is an attempt to let the technical efficiency can be achieved so that the more worthy to be organised.

Keywords : technical efficiency, production, sugarcane, frontier
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