

ANALYSIS OF TECHNICAL EFFICIENCY OF PEPPER GROWERS IN KANDY DISTRICT

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ABSTRACT

This research was carried out to analyze the performance of pepper farms in Kandy District by estimating the level of technical efficiency and to identify the determinants of technical efficiency of pepper farms. The research was also attempt to determine some socio-economic characteristics and management practices which influence technical efficiency in pepper production. Technical efficiency is defined as the ratio of the observed output to the corresponding frontier and is estimated from the composed error term.

A sample of 100 pepper farmers was selected through a multi-stage sampling procedure for this study through field survey that was conducted in six Extension Office ranges. Data were analyzed using the Stochastic frontier approach. The stochastic frontier production model was used in the analysis to determine the relationship between output and the level of input used in the study area. Using a cross sectional data obtained through a multistage sampling technique and this study estimated the technical efficiency of pepper crop production in Kandy and further examined the factors that determined the differential in efficiency index. The result revealed average technical efficiency of the farmers is 0.73. Age has the significant effect of technical inefficiency.

Key words: Pepper, Technical efficiency, Kandy district, Stochastic frontier function