

Technical Efficiency of Paddy Production and Factors Affecting the Efficiency in Anuradhapura District, Sri Lanka

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The study examines the technical efficiency of paddy production and factors affecting the technical efficiency of paddy production in Anuradhapura district of Sri Lanka. For this study, 165 farmers cultivated paddy in *Maha* season of 2019/20 were randomly selected. A Cobb-Douglas stochastic frontier production model was developed. The result of this study reveals that average technical efficiency of paddy production in Anuradhapura district is 81.9%. It indicates that there is a potential to increase the paddy production by 18% with currently available technology. The result shows that fertilizer, pesticides and labor have positive significant effect on paddy production. This study also shows that the extension services positively influence technical efficiency of paddy production. Thus, Department of Agriculture should increase the extension services in Anuradhapura district to increase the technical efficiency of paddy production and thereby increase total production.

Keywords: Cobb-Douglas Stochastic Frontier production, Extension Services, Technical Efficiency