

Efficiency of Rice Production with Environmental Consideration

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ABSTRACT

The present study attempts to investigate the impact of environmental factors on the efficiency of rice production in Malaysia. The Cobb–Douglas stochastic production frontier function is used to estimate the production frontier ‘with’ and ‘without’ the environmental variables using primary data from the survey on farmers from two states in Malaysia, which are Kedah and Perlis. The findings from the study indicate that average technical efficiency for the sample farmers is 62.9% which implies that on the average, the farmers are able to obtain 62.9% of potential output from a given mix of production inputs as well as environmental consideration.

Keywords: Climate change, Food security, Efficiency, Stochastic frontier, Malaysia.

JEL Classification: C51, Q18, Q54

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