

Production Efficiency among Rice Farmers in North-Eastern Nigeria

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Keywords

Efficiency, Small-scale rice farmers, Stochastic Frontier, Tobit regression

Abstract

This paper investigates production efficiency in rice production in North-Eastern Nigeria. Farm-level data was collected from a sample of 270 rice farmers during 2010/2011 cropping season using interview schedule. Stochastic frontier production function and two-limit tobit regression was used as analytical tools. The empirical result indicates that mean technical, allocative and economic efficiencies of the farmers were 69.1%, 66.1% and 37.6% respectively suggesting that there is still room for improvement. Family size, extension contact, access to credit and system of land ownership significantly were the determinants of production efficiency.

The study concluded that the rice producers were not fully efficient in the use of productive resources. It is recommended that policies that would enhance access to credit should be pursued. Also, the agricultural extension programme should be strengthened for increased service delivery and efficiency of farmers.

Future research should make use of panel data in order to explore the trend of efficiency levels. This is crucial for increased productivity in the rice production in particular and food security in general. The use of cross sectional may be inadequate in understanding the gains or otherwise in efficiency.
