Resource-Use Efficiency among Rice Farmers in Derived Savanna Zone of Oyo State, Nigeria

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ABSTRACT This study investigated the resource use efficiency among rice farmers in derived savanna zone of Oyo State, Nigeria. Multi-stage sampling technique was used to select 150 rice farmers as the sample for the study. Data were collected through structured interview schedule and personal interview. The findings revealed that majority of the rice farmers are middle aged, married males with no formal education. The stochastic frontier production using the Maximum Likelihood Estimation (MLE) procedure was employed in inferential statistical analysis. The Maximum Likelihood Estimation (MLE) results revealed that land, family labor, hired labor and fertilizer are the major factors that influence the output of rice. The effect of land on output is positive and the coefficient found to be statistically significant at1% level. The coefficient of family labor is found to be negative but significant at 1% level. Hired labor and fertilizer have positive effects on output and their coefficients are statistically significant at 5% level. The analysis also indicated that farmer's specific factors such as farming experience, years of formal education, meetings with extension agent per year, crop diversification and animal/mechanical traction have significant influence on level of technical efficiency in rice production.