

Determinants of Yam Production and Technical Efficiency among Yam Farmers in Benue State, Nigeria

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ABSTRACT This paper investigates the determinants of yam production and technical efficiency of yam farmers using stochastic frontier production function which incorporates a model of inefficiency effects. Farm-level data were collected from a sample of 100 yam farmers in Benue State using structured questionnaires. The empirical results indicate that land, seed yam, family labour and fertilizer were the major factors that influence changes in yam output. Farmer-specific variables such as education, membership of association and household size were found to have significant effects on the observed variation in technical efficiency among the yam producers. The technical efficiency of farmers varied from 0.67 to 0.99 with a mean of 0.95. The implication of the study is that efficiency in yam production among the farmers could be increased by 5% through better use of land, seed yam, family labour and fertilizer in the short term given the prevailing state of technology. This could be achieved through policy interventions that would contribute to better access to land, improved seed and fertilizer as well as provision of labour saving technologies to ease farm operation. Also, improved farmer's educational levels through adult education and literacy campaign would probably increase efficiency in the long term.