

Inefficiency Determinants of Vegetables Producers in Integrated Management Practice of Irrigation Schemes in Limpopo Province of South Africa

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ABSTRACT The study sought to investigate and analyse the inefficiency determinants of tomato and spinach farmers at the integrated management practices of the irrigation schemes in the Limpopo Province. Farm level data were used for the estimation of the parameters of Cobb-Douglas Stochastic Frontier Production Function with a sample size of 80 irrigation farmers. The socio-economic variables included were age, education, gender, family size, land size and ethnic group. The results revealed that education level of farmers, age of the farmers and land size were found to be negatively significant toward the technical inefficiency of farmers in the integrated irrigation schemes, which implied that an increase in any of the three variables would reduce the inefficiency and enhance the efficiency. While the family size of the farmer was found to be positively significant, gender and income level of the farmers at different irrigation schemes were found to be insignificant toward the inefficiency of tomatoes and spinach production. Policies designed to educate farmers at integrated management practice of the irrigation schemes through proper agricultural extension services could have a great impact in increasing the level of efficiency of tomato and spinach producers at different irrigation schemes.