

## **Assessing the Impact of Irrigation Scheme on Smallholder Farming: The Case of Smallholder Maize Farming in Eastern Cape of South Africa**

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**ABSTRACT** The South African government has long been committed to expansion of agricultural production through mechanization and pursued this goal under a series of interventions and reform programs that includes the construction and revitalization of irrigation schemes, subsidization of farm input factors and provision of credit facilities to rural poor farmers, communal and resettlement state land were also encouraged. The objectives of the study were to analyse the socio-economic features of the smallholder maize farmer and further to examine the performance of irrigation schemes located in the former homelands in the Eastern Cape Province. One hundred farmers comprising of thirty (30) homestead gardeners and seventy (70) smallholder irrigators were interviewed using a multistage sampling technique, structured questionnaires were used to collect data on demographic background of these farmers, data on production level, productivity in terms of costs and returns were also collected. Descriptive statistics such as means, percentages, frequency distributions and tables, as well as stochastic frontier model were used in analyzing the objectives. Results from the socio-economic features of the area were discussed with the use of descriptive statistics and were discussed. The Stochastic Frontier Model revealed the significant impact of the program on participating farmers, highlighting the significance of irrigation schemes to these smallholder farmer and other productive factors. While overall production and productivity remain low, triggering a hyperinflationary situation due to supply constraints, practical implications for agribusinesses are not uncommon.