

## **A Stochastic Frontier Approach to Technical Efficiency and Marketing of Orange Fleshed Sweet Potato (OFSP) at Farm Level: A Case Study of Kwazulu-Natal Province, South Africa**

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**ABSTRACT** This paper examines the economic viability of orange-fleshed sweet potato (OFSP) in North KwaZulu-Natal, South Africa. The main objectives of the paper were to quantify the technical efficiency and marketing opportunities of OFSP farmers. Primary data was randomly collected from 32 selected OFSP farmers, 15 hawkers and three food processors. The stochastic frontier production function was used to analyze the data. The results indicated that the mean technical efficiency of OFSP farmers was twenty-one percent, suggesting that there is potential to increase production output by seventy-nine percent with the same input level. The paper found no solid evidence to substantiate that socio-economic factors influence the technical efficiency score. The findings of the paper also found that farmers only explored two marketing channels. The first channel was from the farmer straight to the consumer and the second channel from the farmer to the hawker and then to the consumer. It was then discovered that higher producer margins were attained from the latter channel. Main marketing challenges were found to be lack of transportation, lack of pricing decision and marketing skills. The paper recommends that there is a need for significant amount of investment towards the promotion of OFSP especially to consumers and retailers in order to increase awareness of the benefits attained from this variety.