

The impact of the International Potato Center's research interventions on potato productivity, technical efficiency and market participation of smallholder farmers in Malawi

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Abstract

Potato is an important food and cash crop in Malawi. It provides farmers with more income than any other crop in the main growing areas. The crop has been at the fore front of Malawi Government effort on crop diversification. It is produced two to three times a year especially during the food-lean months from November ó February when staple food, maize, is not yet ready for harvest. The crop offers opportunities for improvement of food security and wealth creation. Although the country offers good climatic condition for potato production, the sector is still faced by myriad of challenges. Due to the challenges faced in potato subsector for instance poor quality planting material as well as pests and diseases, leading to low potato productivity. This has eventually led to high levels of food insecurity in the country. It is against the aforementioned background that CIP implemented a project with an aim of strengthening root and tuber crops contribution to food security. This was done through provision of quality planting materials and training. Despite these interventions it is not known whether the production levels improved, if farmers are becoming more technically efficient and whether they are more commercially oriented. To address this gap, this study aims to analyze the impact of CIP intervention on smallholder farmers' productivity, Technical efficiency (TE) and market participation in Malawi. This study will use panel data from two surveys implemented by CIP, Malawi in 2010 and 2017. Stochastic frontier with Tobit model, Heckman's two step model will be used to analyze TE with its determinants and market participation, respectively.

Keywords: Productivity, technical efficiency, Tobit model, market participation, Malawi