## Adoption and impact of tobacco recommended varieties among smallholder farmers in Tabora region

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## **ABSTRACT**

Objective: Adoption of technology is an imperative factor in economic development. Successful introduction of technology in the developing countries requires an understanding of the priorities and concerns of the smallholder farmers at the grassroots. Distinctively, this research examines the status of adoption of improved tobacco varieties that are recommended among small holder farmers with a view to assessing the impact of tobacco production on household income in the region, identify factors affecting adoption and associated constraints.

Methodology and results: A survey approach was used to collect data from a sample of 160 tobacco farmers selected through multi-stage, purposive and random sampling techniques using structured questionnaires. Collected data was analyzed using



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Proceedings published at http://www.m.elewa.org/econferenceleCAB.php descriptive statistics and logistic regression model which was used to determine the factors affecting the adoption of recommended varieties of tobacco. The results showed that farmers have responded appreciably to intervention programmes that promote the use of the recommended tobacco varieties with an adoption rate of 61.6%. Information flow from various tobacco companies was the significant factor influencing the decision of farmers to adopt the recommended varieties. Constraints in the adoption noted include poor germination of seeds, high demand of inputs (i.e. pesticides and fertilizers), unreliable availability of seeds and inadequate knowledge on tobacco production. The mean household income from tobacco production (4,232,415 Tshs per annum) was significantly higher than the mean income of other income sources cumulatively (211,333Tshs per annum) with an income advantage of 4,021,082Tshs. White gold and K51E were the most demanded tobacco varieties although currently these varieties are not readily available in the study area. With regard to the main constraints to adoption and adoption rate, it is recommended that farmers and local cooperative societies be offered support both internal and external in the form of technical advice and financial assistance, recruitment of more extension staffs with the necessary technical skills on tobacco production, and further research especially in the area of tobacco breeding. This will ensure development of tobacco varieties which are socially acceptable and affordable to the tobacco farming communities.

Application of findings: The study concluded that tobacco production has brought significant improvement in household income in the study area.

Key words: Adoption, Impact, logistic regression, tobacco varieties