IMPACT OF IMPROVED MAIZE VARIETIES ADOPTION ON SMALLHOLDER FARMERS' MARKETED MAIZE SURPLUS IN LWAKHAKHA TOWN COUNCIL, NAMISINDWA DISTRICT

BY

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DECLARATION

I MUKHOLI WILBERFORCE declare that this project report is my own findings and has never been submitted for the award of any degree in this university or any other higher institution of learning in Uganda and the world at large, to the best of my knowledge. All the information given here is based on my own findings and those referred to are well acknowledged.

Sign…… Date……

APPROVAL

This is to certify that this research report titled "**IMPACT OF IMPROVED MAIZE VARIETIES ON SMALL HOLDER FARMERS' MARKETED MAIZE SURPLUS IN LWAKHAKHA TOWN COUNCIL, NAMISINDWA DISTRICT."** submitted in partial fulfillment of the requirements for the award of Bachelor of Science Education degree of Busitema University as an authentic record of bona fide research carried out by Mukholi Wilberforce (BU/UP/2017/1339) under my guidance. No part of this research report has been submitted for the award of any other degree or diploma in any other institution of higher learning.

Sign……. Date…….

Prof. Ochwoh Victor Akangah (Phd)

Supervisor

DEDICATION

I dedicate this work to my beloved Father **Mr. Kutosi Edward** and Mother **Kharono Lonah** for the tireless support that they have rendered to me most especially through this level of learning, I am so humbled to say may the almighty God reward you abundantly for the supporting hearts.

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LIST OF ACRONYMS

MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
UFAAS	Uganda Forum for Agricultural Advisory Services
NARO	National Agricultural Research Organisation
PSNP	Productive Safety Net Program
MT	Meters
HA	Hectare
PMA	Plan for Modernization of Agriculture
CIMMYT	Centro Internacional de Mejoramiento de Maiz y Trigo (International Maize and Wheat Improvement Centre)
ATE	Average Treatment Effect

ABSTRACT

Adoption of improved agricultural varieties in Africa is low. This situation is not different in Uganda. Though increasing yield is a priority, mere increase in production do not motivate farmers to adopt new varieties. When farmers are able to produce more and can sell in the output markets, they will have much more incentive to adopt the new varieties and be productive. This study, therefore, aims at evaluating the impact of adoption of improved maize varieties on farmers' market participation in four parishes of Lwakhakha Town council, Namisindwa district of Uganda. The study utilized cross-sectional household level data collected by CIMMYT in 2012/2013 from 300 randomly selected sample households. Both descriptive and econometric methods have been used to analyze the data. The descriptive analyses results show the existence of significant mean and proportion difference between adopters and non-adopters in terms of age, education, family size, livestock ownership, land holding, distance to main market, accesses to output and input markets, access to extension services, and access to credit in favor of adopters. The results of the logistic model show that adoption of the improved maize varieties among households was found to be positively influenced by adult-literacy, family size, livestock wealth, access to output market and credit access for the new varieties. On the other hand, farmer associations, distance to main markets and fertilizer credit influenced adoption negatively. Moreover, the results of the ATE model show a robust and positive increase in marketed maize grain per household which ranges from around 442kg in the case of kernel-based matching at bandwidth of 0.05 to 483kg in the case of radius matching at a radius of 0.03 at $p<0.01$. The results from this study revealed that the significant impact of adoption on improving the farmers' participation to output markets. Therefore, it is recommended to promote adoption of the improved varieties as it is essential for inducing farmers' market participation that helps them in generating income and in improving their lives.