BUSITEMA UNIVERSITY
Pursuing Excellence

P.O. Box 236, Tororo, Uganda
Gen : +256-454 448842
Dir. +256-454 448864
Fax +256-454 436517
Email ar@acadreg.busitema.ac.ug
Website www.busitema.ac.ug

INFLUENCE OF POSTHARVEST HANDLING TECHNOLOGY ON MARKET PRICE OF MAIZE AMONG SMALLHOLDER FARMERS IN SOROTI SUB COUNTY, SOROTI DISTRICT

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BY

OTEKAT PAUL

REG. NUMBER; BU/UP/2017/297

EMAIL: otekatpaul1@gmail.com

A RESEARCH REPORT SUBMITTED TO THE FACULTY OF AGRICULTURE AND ANIMAL SCIENCES BUSITEMA UNIVERSITY IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR AWARD OF BARCHELOR OF AGRIBUSINESS

DATE; February 2021

SUPERVISED BY;

Ms. NALUNGA ASHA

Declaration

This work is my own original work and has never been submitted to any institution for purposes of learning and examination.

Signature; .....

Date; 16/2/21

OTEKAT PAUL

BU/UP/2017/297

The report has been submitted for examination with approval from the academic supervisor of Busitema University faculty of agriculture and animal sciences.

Signature; .....

Date; 17/02/2021

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Dedication

This work is dedicated to my parents ODUKO JOHN ROBERT and my late mother ANIKO NORAH, my beloved sisters IRIANU SUZAN and ANNET ABWALO and all my family members for the support they all gave to me in all ways right from childhood to the level am in now.

Special dedication also goes to my friends, Eladu Brian, Arou Silver, Opio Eric, Eyou Israel and Engichu Timothy. Not forgetting my girlfriend Auma Sharon that I thank you all for the support and inspiration you gave me in whatever way. God will reward you.

Acknowledgement

First, I want to thank the almighty GOD for his unlimited favors, kindness, health and mercy He gave to me during this project work designing and for all He has done for me.

I would also like to extend my sincere appreciation to my supervisor Ms. NALUNGA ASHA for the diligent guidance, constructive suggestion and useful comments and more so the time that she gave to me towards accomplishment of these project from day one up to the last day of the work.

Special thanks go to the entire staff of Busitema University more so faculty of agriculture and animal science for the support and inspiration they gave to me. Also, all my friends and colleagues of bachelors of agribusiness.

I acknowledge everyone who helped me in various ways while I was in the field to help me get the information that I needed to complete my research.

Finally, my special thanks go to my family members my girlfriend, brothers, sisters and my honored father thanks so much for all the kind of support you have given to me during this time from financial support, kind, prayers or any other support you gave to me, thank you so much.

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LIST OF ACRONYMS

ATAI-	Agricultural Technology Adoption Institute
BUAC -	Busitema University Arapai Campus
HGSE -	Hermetic Grain Storage Equipment
LGB-	Larger Grain Borer
NAADS-	National Agriculture Advisory Services
NGOs-	Non-Government Organizations
P4P-	Purchase for Progress
PHHT-	Post Harvest Handling Technologies
PHL-	Post Harvest Losses
SOCADIDO-	Soroti Catholic Diocese Development Organization
SPSS-	Statistical Package for Social Sciences
SSA -	Sub Saharan Africa
TEDDO-	Teso Diocese Development organization
ToT	Training of Trainers
WFP -	World Food Programme

ABSTRACT

The purpose of this study was to investigate on the effects of postharvest handling technology on maize and how it affects market prices for smallholder farmers in Soroti Sub County. The objectives of this study were; to find out the gap between farmers who have undergone postharvest handling technology training and those that have not been trained, to determine the impact of postharvest handling technology training on maize farmers in Soroti Sub County. The study will be significant to the government, farmers, policy makers development partners and me as a student.

The study was conducted in eastern Uganda, Teso sub region, specifically Soroti Sub County in Soroti district. Soroti being one of the highest producers of maize in Teso sub region and eastern Uganda at large, it also serves as a major marketing area in Teso so it was selected for ease to reach out to different markets of maize. A total population of 55 respondents was picked randomly to help come up with finding of the report. The tools used to gather information were structured questionnaires, interview guide for key informants.

Primary data was gathered from interviews, observation and structured questionnaire, while secondary data was obtained from the archives of various organizations, published and unpublished materials, books, journals and reports. The study involved both quantitative and qualitative analysis, and was analyzed using (SPSS) computer software.

The study showed that the prices of maize is affected by the quality of maize and this proved that most farmers did not use modern post harvest handling technologies for harvesting their maize so there is need for government and NGOs to train farmers on post harvest handling technologies

CHAPTER ONE:

INTRODUCTION

1.1 Background of the study

Maize ranks third next to wheat and rice in cereal production worldwide (Suleiman and Rosentrater, 2015) and is therefore an important crop in terms of food security. It contributes to per capita energy consumption and incomes especially in the developing countries (Muir et al., 2010), considering it as a cash crop as well as food crop. Recently, world maize production recorded about 10.14 billion MT (Suleiman and Rosentrater, 2015). The United States of America is the chief producer of maize, with over 30%; China, 21%; Brazil, 7.9% and Africa contributing about 7% of overall world production of grain maize. Two–thirds of all maize produced in Africa is from Eastern and Southern Africa (Verheye, 2010; Ranum et al., 2014). In Sub–Saharan Africa (SSA), about 1.2 billion people depend highly on maize as major cereal crop and staple food, thus occupies about one third of total land cultivated (Blackie, 1990).

Maize was introduced in Uganda in 1861 and has since become a major part of the farming system, ranking third in importance among the main cereal crops (finger millet and sorghum) grown in the country. Much of the production of maize aims to supply export markets in the region, most especially Kenya and recently Southern Sudan, which are in chronic maize deficits. The maize sub-sector is estimated to provide a livelihood for about 3 million Ugandan farm households, close to 1,000 traders and over 20 exporters.

This justifies the importance of the maize crop as well as farmers" commitment towards its production. Maize accounts for over 30% of the small–holder farmer earnings and contributes up to 60% of dietetic supplement in which protein accounts for 50% (Suleiman and Rosentrater, 2015; Amani, 2004). However, despite this contribution, there is significant postharvest loss ranging from 12-46% of the harvested maize all along its production chain; thus harvesting (4-8%), transportation (2-4%), drying (1-2%), threshing and winnowing (1-3%), storage (2-25%) and marketing (2-4%) (Matthews, 2006; Hodges and Bernard, 2014).