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FACULTY OF AGRICULTURE AND ANIMAL SCIENCES.

DEPARTMENT OF AGRIBUSINESS AND MANAGEMENT.

ASSESSMENT OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) USAGE BY MAIZE FARMERS IN LIRA CITY.

BY

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A SPECIAL PROJECT REPORT SUBMITTED TO THE DEPARTMENT OF AGRIBUSINESS AND EXTENSION IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF BACHELOR OF ABGRIBUSINESS OF BUSITEMA UNIVERSITY

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DECLARATION

This study is original and has not been published or submitted for any other award to any other University before.

Signature..... Date 22nd March 2024

OCHEN MORRIS

APPROVAL

This Special Project Report has been submitted to the department of Agribusiness and Extension with the approval of the University supervisor.

Signature ..... **Date** 22nd March 2024

MS. IRENE LYNETTE AKIDI

ii

DEDICATION

I dedicate this work to my parents and the entire family of ours.

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I wish to express our deepest appreciation to my supervisor, Ms. Akidi Irene Lynette for the commitment and sacrifices she made in supervising this work. It would have been impossible to complete this work without her expert guidance.

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TABLE OF CONTENTS.

Contents

LIST OF TABLES.

LIST OF FIGURES

LIST OF ACRONYMS

AI	Artificial Intelligence
E.G	for Example
E-COMMERCE	Electronic commerce
FAO	Food and Agriculture Organization
GDP	Gross Domestic Product
GIS	Geographical Information System
GPS	Geographical Positioning System
ICT	Information and Communication Technology
LC1	Local Council One
MAAIF	Ministry Of Agriculture, Animal Industry and Fisheries
NARO	National Agricultural Advisory Services
NGOs	Non-Governmental Organizations
SMS	Short Mail Services.
SPSS	Statistical Package for Social Scientists

ABSTRACT.

This research study was about the assessment of information and communication technology (ICT) usage by maize farmers in lira city east, Lira city. Many economies throughout the world, including that of Lira City East Division in Uganda, depend heavily on the agricultural industry. For a sizeable percentage of the population, it provides food security, money generating, and work opportunities, serving as their main source of support. The majority of agriculture in Lira City East Division is smallholder farming, which is characterized by subsistence farming methods and limited access to advanced agricultural technologies. ICTs encompass a wide range of digital tools and technologies, including mobile phones, internet connectivity, smart phones radios TVs and printed media. These technologies have the potential to revolutionize agriculture by enhancing access to information, improving decision-making processes, and increasing productivity. There is under utilizations and digital divide of these technologies among most of the maize farmers in lira city east. The main objective of this study was to evaluate the effects of information and communication technology experience by farmers in their activities. The specific objectives of the study were to determine the socio economic factors of maize farmers identify and categorize different ICT tools used by maize farmers in the area and to identify challenges maize farmers face in using these ICT tools and systems. Furthermore, a qualitative cross sectional survey designed was used to gather data from 80 respondents. The sampling technique used was simple random sampling where 80 respondents were selected to participate in the study within 6 Wards in lira city east. Data from the respondents were collected by administering a well-structured questionnaire, and the findings from the respondents were analyzed using both Microsoft Excel and SPSS, Presentation of the findings were done using tables, graphs and charts. The results from the study showed that majority of the respondent were female (62.5%), while 37.5% were male, with most of them (40%) falling in the youthful age of 19-35 years. The findings also revealed that majority of the respondents used radio as an effective ICT tool for the activities. In conclusion, the assessment has shed light on the current status of ICT usage by maize farmers and identified opportunities and challenges in leveraging digital technologies for agricultural development. While significant progress has been made in recent years, there is still room for improvement in enhancing access, promoting literacy, and tailoring ICT solutions to the specific needs of maize farmers. Conclusively the study also gave out some recommendations such as policy support, collaborations with other bodies, improvement in the current ICT infrastructure and as well recommendations for further research studies on Information and communication technology utilization in agriculture.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the study

In recent years, the global landscape of agriculture has witnessed a significant transformation driven by Information and Communication Technologies (ICTs). ICTs encompass a wide range of digital tools and technologies, including mobile phones, internet connectivity, smartphones ,radios, televisions and printed media.(Jimenez et al., 2021) These technologies have the potential to revolutionize agriculture by enhancing access to information, improving decision-making processes, and increasing productivity.

Agriculture is the backbone of Uganda's economy, employing the majority of the population and contributing significantly to the country's Gross Domestic Product (GDP). Maize is one of the staple crops, grown by both smallholder and commercial farmers.(Kuzmich, 2021)

Many economies throughout the world, including that of Lira City East Division in Uganda, depend heavily on the agricultural industry. For a sizeable percentage of the population, it provides food security, money generating, and work opportunities, serving as their main source of support. The majority of agriculture in Lira City East Division is smallholder farming, which is characterized by subsistence farming methods and limited access to advanced agricultural technologies.(Singer & Thorbecke, 1971)

In the past ten years, the agriculture industry has seen a significant digital change. New digital tools are changing how consumers and farmers buy and cultivate crops them (Pandey, 2017). With the use of information and communication technology (ICT), the way we farm is changing for the better.

The growth of mobile phones and other digital devices has made it possible to monitor everything remotely, from soil conditions to weather patterns to foster maize production throughout. That has made it easier for farmers to monitor their crops, respond quickly to threats such as disease or pests, and increase yields while using fewer resources.(Mansingh & Abdese, 2016)

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