INTEGRATION OF ICT TOOLS IN THE DISSEMINATION OF AGRICULTURE INFORMATION AND THEIR IMPLICATIONS AMONG RURAL FARMERS IN BUYINJA SUB COUNTY IN NAMAYINGO DISTRICT INEASTERN UGANDA

 $\mathbf{BY}$ 

**ODONGO ANDREW** 

**REG NO: BU/UP/2019/3239** 

A RESEARCH REPORT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR OF SCIENCE EDUCATION OF BUSITEMA UNIVERSITY

FEBRUARY 2023

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SUPERVISOR: MR. DRAMADRI GERALD AFAYO

**FEBRUARY 2023** 

## DECLARATION

I ODONGO ANDREW declare that all the work in this report was carried out in accordance with the regulations of Busitema university, and that this work is original except where indicated in the text and no part of this research has been submitted to any other university for examination and degree award. Any views expressed in this research are those of the author and in no way represent those of Busitema University

Signature 28th | FER | 2023.

### APPROVAL

This is to certify that the research work entitled "integration of ICT tools in the dissemination of agriculture information and their implications among rural farmers in Buyinja sub county in Namayingo district in eastern Uganda" is submitted in partial fulfilment of therequirements for the award of degree of Bachelor of Science Education of E-sitema University is Authentic record of bonafied research work carried out by Odongo Andrew Registration No: BU/UP/2019/3239 under the guidance and supervision. No part of this research report has been submitted for any other degree or diploma award.

ACADEMIC SUPERV	/ISOR	BUSITEMA	UNIVERSITY
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Signature:

Date: 28/02/2023

MR. DRAMADRI GERALD AFAYO

(SUPERVISOR)

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### **DEDICATION**

I thank God for the gift of life and for enabling me to complete my research project successfully. This report is dedicated to my beloved supervisor; Mr. Dramadri Gerald Afayo, my dear father Mze. Opio James, Mother, Ms. Aguttu Jane Opio, and, my Headteacher Mr. Ojiambo James Somanyanga. My, daughters and son, brothers and sisters, and friends, and all my course mates, and my dear lecturers for their maximum support that they offered to me morally, technically and financially, materially and in all circumstances that I went through in carrying out my course and this research report. You have been so fundamental in pursuit of my course.

May the good and merciful lord reward you abundantly.

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Further, I register my sincere appreciations to Mr Ojiambo james Somanyanga my headteacher who acted as my God father and parent and gave me a lee way to carry on my undergraduate course undisturbed despite the hardships.

God bless you.

### **ABSTRACT**

The purpose of this research was to find out whether the integration of ICT tools in disseminating agriculture programs, policies and innovations, can help to improve service delivery and also shoot the livelihood of the rural farmers of Buyinja Sub County. The study employed a qualitative research design, and the methods of data collection were un structured interview, questionnaires, observation and recording. The data analysis tool was Microsoft word Excel 2019 to generate statistical tables and figures. The study was carried out in Buyinja sub county in Busoga sub region in Namayingo district, and a total of 80 respondents were sampled for interview in rural communities. The results of the study indicated that majority of the farmers are still ignorant of the existence of extension workers and their services, many farmers have not also benefitted from the services provided by the extension workers and that Most farmers went to school briefly and stopped in primary and secondary, while Radios, cinemas and mobile phones and group extension methods have been widely used in extension. It was therefore concluded that ICT tools especially radios, mobile phones, and cinemas, should be adopted and integrated in disseminating agriculture information among rural farmers. The recommendations included; need to create awareness among farmers, recruiting more extension staff and need to increase funding to the agriculture extension workers, use of radios, mobile phones and cinemas to disseminate agriculture information alongside other methods such as home and farm visit, group methods to increase effectiveness of extension workers.

**Key words**: extension, innovations, dissemination, rural farmers, social media

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### LIST OF ABREVIATIONS/ACRONYMS

**AFRRI** -African farm radio research initiative

**CDO** -Community development officer

**CIGs** -Common interest groups

**FAO** -Food and agricultural organization

**FSH** -The farm field school

**ICT** -Information communication technology

**IPM** -Integrated pest management

LC -Local council

**NAADS** -National agricultural advisory services

NALEP -National agriculture and livestock extension program

**NARO** -National agriculture research organization

**SFDPS** -Small farmer development program

**SIDA** Swedish international development cooperation agency

**TV** Television

### **CHAPTER ONE**

## 1.0 INTRODUCTION

This chapter consists of the background, statement of the problem, justification of the study, objectives, research hypothesis, research questions, and significance of the study, the research scope, and the conceptual frame work.

### 1.1. Background

The Agriculture extension system bridges the gap between research labs and a farmer's field. Agricultural research, education and extension are said to be the most critical for promoting farm productivity and enhancing farmer's income. The public sector is the major extension service provider and the reach of the public extension is limited in developing countries like Uganda. However, it is burdened with non-extension responsibilities such as the distribution of subsidies and inputs, with little time left to attend to core extension activities (Nedumaran, 2019)

The significance of agricultural extension in the transformation of agriculture, especially in agrarian economies, has been widely acknowledged. Several studies have highlighted the contribution of agricultural extension towards improving agricultural productivity, ensuring food security, increasing farm incomes, alleviating poverty and thus accelerating development. However, in many developing countries, agricultural extension services still face the challenge of lack of a well-managed, established and effective system of information flow to grassroot farmers (Angella Namyenya, 2021)

Globally the adoption of Information and Communication Technology (ICT) tools has become a center of rotation in many activities of global economy including the agriculture sector especially in research, and the delivery of agriculture extension services among farmers

Traditionally, Agricultural extension means the work of a professional body of agricultural experts, who are usually government employees who teach improved methods of farming, facilitate the demonstration of innovations, and Helping farmers to unite and solve their problems.

Agriculture extension is also based on the principle "helping farmers to help themselves" Serve as a link between farmers to transfer the "best practices" of one farmer to another. Also, a channel to introduce and sometimes enforce agricultural policies and ensure proper flow of

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