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FACULTY OF AGRICULTURE AND ANIMAL SCIENCES ARAPAI CAMPUS

ASSESSING THE ADOPTION OF MODERN MAIZE STORAGE TECHNOLOGIES AMONG FARMERS IN BUNGOKHO SUB-COUNTY, MBALE DISTRICT

BY

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

MARCH, 2024

DECLARATION

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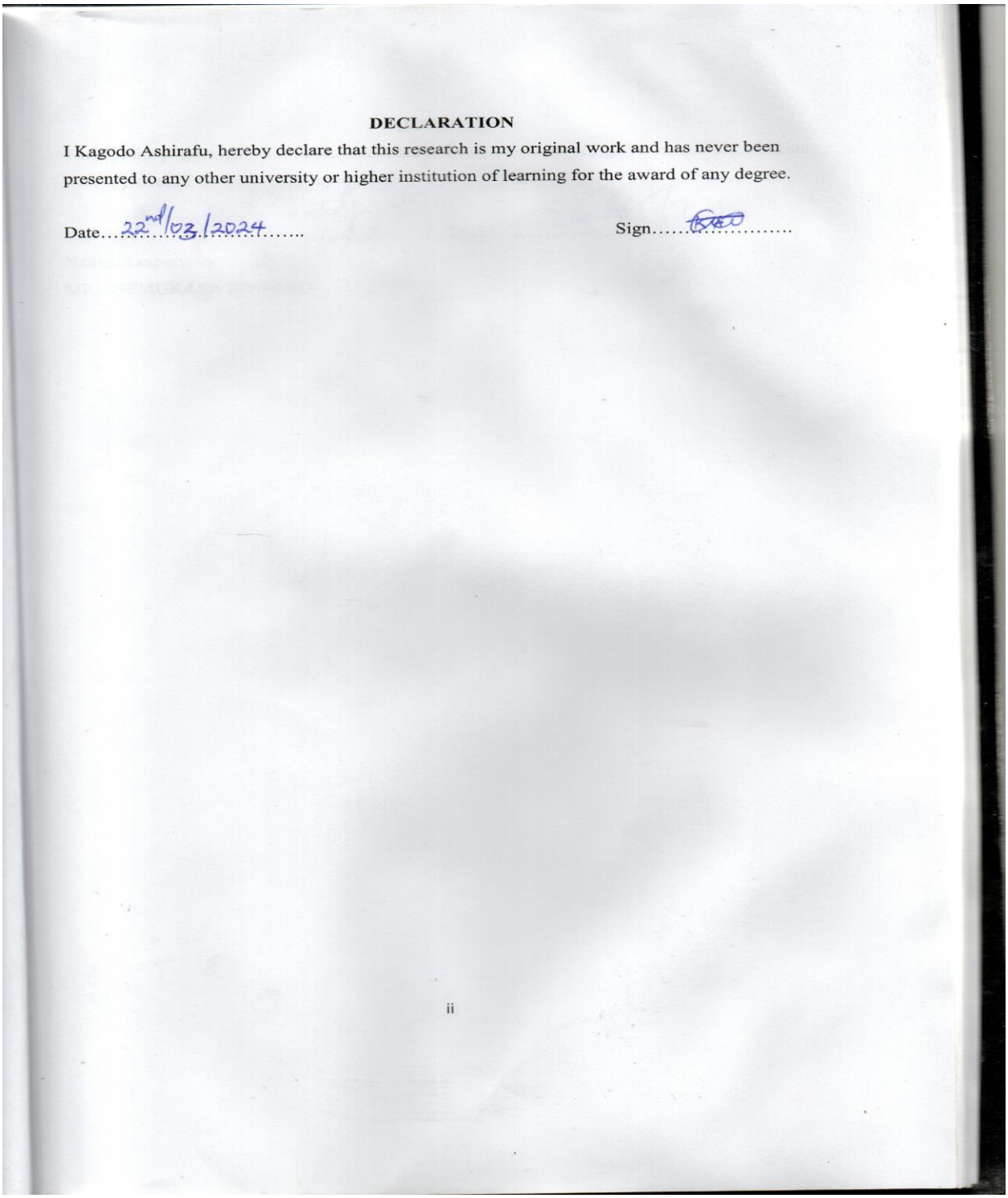

DECLARATION

I Kagodo Ashirafu, hereby declare that this research is my original work and has never been presented to any other university or higher institution of learning for the award of any degree.

Date.....22nd/03/2024..... Sign.....

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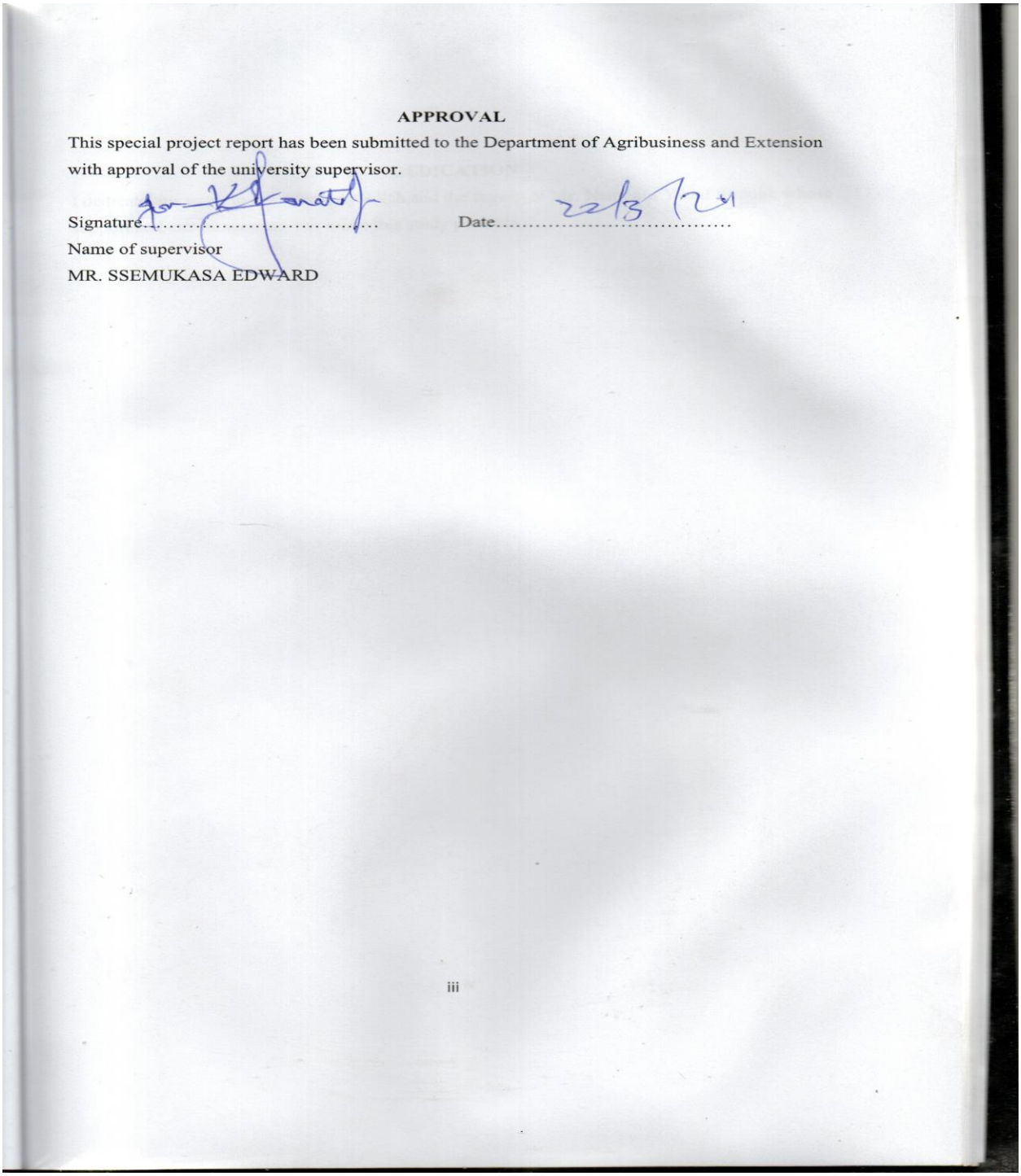
APPROVAL



APPROVAL

This special project report has been submitted to the Department of Agribusiness and Extension with approval of the university supervisor.

Signature..... Date.....22/3/24

Name of supervisor

MR. SSEMUKASA EDWARD

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DEDICATION

I dedicate this work to the Almighty Allah and the family of Mr. Nambafu Yusuf through whose support and encouragement has made this study possible.

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LIST OF ABBREVIATIONS AND ACRONYMS

%	Percentage
BUAC	Busitema university arapai campus
FAAS	Faculty of agriculture and animal sciences
FAO	Food and agricultural organization
Kgs	Kilograms
MAAIF	Ministry of agriculture, Animal industry and fisheries
Mr./Mrs	Master/miss
SPSS	Statistical package for social scientists
UBOS	Uganda bureau of statistics
Yrs	Years

ABSTRACT

This study sought to assess the adoption of modern maize storage technologies among farmers in Bungokho Sub County. A total of 70 respondents were randomly selected, a multivariable binary logistic regression model was used. About eighty two (81.4%) of the respondents used sacks, 11.4% use pics bags and 7.2% use both sacks and pics bags for maize storage. A semi structured questionnaire was used to collect data. SPSS was used in analyzing descriptive statistic which was used for creating tables, pie-charts and bar graphs by presenting their frequencies and percentages on the different objectives. The results revealed that majority of the farmers were females who are married and are generally involved in agricultural activities to earn food and income for sustaining their families. The results also revealed that gender has a significant impact on the factors influencing the adoption of modern maize storage technologies among farmers. The results also reveals that majority of the farmers have a very good perception towards the use of hermetic bags compared to other modern maize storage technologies.

CHAPTER ONE

1.0 INTRODUCTION

1.1Background.

Maize (Zea mays L) also commonly known as corn belongs to the tribe maydae, family poaceae and was tamed over 9,000 years ago in southern Mexico from a wild grass called teosinte (Erenstein et al., 2022). Maize grows well in several agro ecologies and is unmatched to any other crop due to its capability to adjust in various environments (Hossain et al., 2016) .

Globally Maize is annually cultivated on an estimated land of 197 million hectares making it the second most widely grown crop in the world after wheat (Erenstein et al., 2022).The total world production of maize was (875,226,630 tons), with the United States, China, and Brazil harvesting 31%, 24%, and 8% of the total production of maize, respectively (Ranum et al, 2014). The top maize net-exporting countries include the USA, Brazil, Argentina, Ukraine, and Romania, each exporting (5–54 million tons) per year and the top net-importers include Japan, Mexico, Korea, Vietnam and Spain; each importing(9–15 million tons) per year (Erenstein et al., 2022).

In Africa, Maize is one of the important agricultural products which has played a significant role in reducing poverty and food insecurity (Chune, 2022). However, Grain color is an important selection criterion for users in Africa, where white is generally preferred over yellow. Although 90% of globally produced maize is yellow, white maize predominates in Africa with over 90% of the total maize crop which accounts for more than 30% of global white maize production (Ekpa et al., 2018). In East Africa domestic maize production plays an important role in maize supply as it produces an average of (1 million metric tons) tradable surplus as a region (FEWS NET, 2023). In Sub-Saharan Africa (SSA), maize is the most important cereal crop and staple food for about(1.2 billion) people (Suleiman & Rosentrater, 2015).

In Uganda Smallholders dominate the production process of maize between (2.5-3 million) farmers and three-quarters of maize is grown on plots of less than 0.5 hectares (Daly et al., 2016). Although the country's eastern region accounted for the highest share (47%) of the roughly(2.3 million tons) harvested in 2009-2014 production is fairly dispersed, with the western (21%), central (19%), and northern (13%) regions all having significant outputs(Daly et

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