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**FACULTY OF AGRICULTURE AND ANIMAL SCIENCES, ARAPAI CAMPUS**

**ASSESSMENT OF MUSHROOM FARMING IN SOROTI DISTRICT IN EASTERN  
UGANDA**

**BY**

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**A RESEARCH REPORT SUBMITTED TO THE DEPARTMENT OF AGRIBUSINESS  
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THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF  
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**DECLARATION**

I, **OPOLOT CALVIN** do hereby declare that this report, which I submit to the department of agribusiness and extension for examination in consideration of the award of a bachelor degree of agribusiness, is my original work and personal effort.

No part of this work has been submitted in support of an application for a degree or any other qualifications from any other university or institutions of higher learning.

I present it without any reservations for examination considerations.

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## **DEDICATION**

I dedicate this Report to the Almighty God , God of peace , wisdom and knowledge who enabled me have the great idea of implementing this idea, I also dedicate to my only mother Achom Edidah for the great financial support and my uncle Moses malinga , my sister Achom patience ,my friends , course mates Majeme Nasif Wamoka, Sebakaki Ashiraf, Lutomya Joan ,my inspirational leader Mr. Onyu souce peter thank you very much for your effort towards mentorship and encouraging attitude, not forgetting wonderful friends from BSA Benjamin, jimmy, Herbert to encourage me though it required quite a lot and a managed to bring it in to completion and success

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## **ABSTRACT**

The study conducted in Soroti district Eastern Uganda that focused on assessment of mushroom farming with objectives to determine factors affecting mushroom farming , to evaluate the economic performance of smallholder mushroom enterprises and targeting farming communities, 60 respondents were interviewed face to face using pretested questionnaire, the gross margins was used to establish the performance of smallholder mushroom farmers and the study revealed average gross profit of 21,081.64Ushillings per garden and Gross profit margin of 84.3% per the production time of three months with an estimated output levels provided by farmers, mushroom productivity stands at 2.5kgs per garden per production time and sold their output to direct consumers, Retailers and wholesalers at average price of the output was 10,000Ugshillings per kg of the fresh mushrooms and 50,000Ushillings for the kg of dry mushrooms. The study also revealed Attitude, knowledge gap and High prices of mushroom raw materials were the main problems affecting the enterprise growth and development and in conclusion majority of mushroom smallholder farmers were in the average age of 43.43 which is middle age with energy to carry out production with average household size of 7.73 of the mushroom farmers indicating high population density within the households requiring more food while women were occupying the highest percentage in mushroom production of 18% contributing to their Economic empowerment and Recommended The government to increase awareness in communities through sensitization on benefits of mushroom production and Subsidization of mushroom raw materials and re allocation of extension workers to the area to promote and extend more information on mushroom production to the community



## CHAPTER ONE

### INTRODUCTION

#### 1.1 Importance of mushrooms

Mushroom is fungi, belonging to family Agaricaceae, considered a delicacy in several parts of Uganda because of their scarcity and unique flavors (Malakar et al., 2014). Various communities consume mushrooms because of their nutritive and health benefits which include among others easy digestibility and an excellent source of proteins, vitamins, and minerals. Increased production and consumption of mushrooms can therefore help raise the nutritional status of Ugandans by providing an extra source of protein, valuable minerals and vitamins, especially to children, pregnant women, and people infected with HIV/AIDS. Mushroom production for commercial purposes provides a means for improving household income in both peri-urban and rural areas where access to land significantly constrain agricultural production. This has been observed by Ferchak and Croucher (2002) who reported that the mushroom industry is providing full or part-time employment to rural and urban poor and marginalized people in many developing countries. In addition, mushroom farming has great potential for women who due to various reasons have access to small pieces of land (Mayanja & Tipi, 2017a).

#### 1.2 Global mushroom production

Previously, mushrooms were mainly picked from the wild in forests, grass, and woodlands as well as termite mounds especially *Termitomyces giganticus* (Imaruk), *Termitomyces Microcapus* (Eswei) where conditions favored their growth (Opige, 2006). This used to happen seasonally, and a large mushroom supply gap was experienced during off-seasons. However, with the advancement of research and technological innovations, mushroom production was domesticated.

Cultivation of mushrooms began in France in the 17<sup>th</sup> century during the Napoleonic era. This constituted a thriving industry that mainly occupied the abandoned tunnels of quarries in the neighborhood of Paris ( Brouk, 1975). China is the main producer of mushroom with over 30 billion kgs produced in 2013, compared to 1.3 billion kgs in the rest of Asia and 3.1 billion kgs produced by Europe, America and other countries (Daniel J.Royse et al., 2017), Africa constitutes at least 25% of the total mushroom biodiversity worldwide but contributes only about 0.4% of total mushroom sales and new mushroom products on the market. It is customary to

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