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**AN ASSESSMENT OF CAUSES OF POST- HARVEST LOSSES DURING DRYING OF  
RICE AMONGST THE SMALLHOLDER RICE FARMERS IN KIBUKU DISTRICT OF  
UGANDA**

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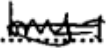
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**RESEARCH REPORT SUBMITTED TO THE DEPARTMENT OF AGRIBUSINESS  
AND EXTENSION IN PARTIAL FULLFILMENT OF THE REQUIREMENTS FOR  
THE AWARD OF BACHELORS DEGREE IN AGRIBUSINESS OF BUSITEMA  
UNIVERSITY**

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**DECLARATION**

I **BANGETE TADEWO** hereby declare that the content of this special project report belongs to me except where it has been stated. This special project report has never been submitted to any higher institution of learning and Busitema University in particular.

Signature..........

Date.....04 JUNE 2023.....

**APPROVAL**

This special project report has been submitted for examination with my approval as the University supervisor.

**Mr. SSemukasa Edward**

Signature.....

Date.....

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*04/06/2023*

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## **DEDICATION**

I dedicate this project report to my beloved Uncle Mr. Magoma James, my mother Mrs. Nantalia Nambirwe, my beloved wife Gertrude Sarah and the entire family for the support and encouragement given to me since I started this special project.

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## **LIST OF ACRONYMS**

|              |   |
|--------------|---|
| <b>FAO</b>   | Food and Agriculture Organization                       |
| <b>HHMI</b>  | Household monthly income                                |
| <b>HHS</b>   | Household size  |
| <b>MAAIF</b> | Ministry of Agriculture Animal Industry and fisheries   |
| <b>MAFAP</b> | Monitoring and Analyzing Food and Agricultural policies |
| <b>MT</b>    | Metric Tons   |
| <b>PHL</b>   | Post-harvest Losses                                     |
| <b>UBOS</b>  | Uganda Bureau of Statistics                             |

## **ABSTRACT**

Rice (*Oryza sativa*) is one of the emerging crops in Uganda that play an important role both as a food crop and cash crop. Many farmers in Kibuku district participate in rice growing. However, less has been documented on the causes of post-harvest losses during rice drying amongst the small holder rice farmers of Nabiswa sub-county, Kibuku district.

The specific objectives of the study were to identify the factors affecting rice drying harvesting, to identify the causes of post-harvest losses during rice drying amongst the smallholder rice farmers of Nabiswa sub-county, Kibuku districts.

The study was carried out in Nampiido parish since it is well known for rice growing. Three villages of Bwibere, Nankabala and Nampiido were selected purposively for the study. A total of 22 respondents were randomly selected from the first two villages of Bwibere, Nankabala and then the 21 respondents were finally randomly selected from Nampiido village making up a total sample size of 65 respondents.

The study used across sectional research design where both qualitative and quantitative data were collected. Data was collected using an open ended questionnaire. Data was analyzed using statistical package for social scientists where descriptive statistics were used for easy interpretation. The study revealed that the major factors affecting rice drying were initial moisture content and size of the grain. The study also revealed that the major causes of post-harvest losses during rice drying include economic and environmental causes.

The study recommends that farmers should stop drying rice from bare grounds because this will improve on the quality of the rice. Farmers should form cooperative groups in order to invest in the purchase of tarpaulins and mechanical dryers. The farmers should buy moisture meters in order to establish the right moisture content during rice drying.

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the study

Rice (*Oryza sativa*) has been cultivated, gathered, and consumed by men and women worldwide for more than 10,000 years (Ntakyo and Van Den Berg, 2022). And it is a staple food in many countries of Africa and other countries around different continents. It is the world's most important cereal considering the area under cultivation and the number of people that actually depend on it globally (Ikuchi et al, 2016).

Approximately 480 million metric tons of milled rice are produced annually where China and India account for 50% of the rice grown and consumed globally (Kiaya V. , 2014). During the past three decades, the crop has increased consistently in demand and its growing importance is evident in the strategic food security planning policies of many countries internationally (Kang H.-J. , 2015). With exception of few countries that have attained self-sufficiency in rice production, rice demand exceeds production and large quantities of rice are imported to meet demand at a huge cost in hard currency because rice grain is consumed as a staple diet by more than 60% of the consumer demand is met through local production and the rest is imported (Kang H.-J. , 2015).

Africa produces averagely 12.7 million tons of rough rice per year. It is currently cultivated in rain fed upland and aquatic ecologies in 40 countries of Africa on nearly 10 million hectares (JOHN F. T., 2012). But, due to out dated production systems, biotic and abiotic constraints as well as low investment in production technologies, only 60% of the consumer demand is met through local production and the rest is imported (Ibrahim S. S., 2018).

#### 1.2 Rice growing in Uganda

Rice is one of the emerging crops in Uganda that plays an important role both as a food and a cash crop (MAFAP., 2023). It is ranked fourth among the cereal crops in an area cultivated, occupying a total of about 80 thousand hectares of land with an estimated annual output of 120,000 metric tons (JOHN F. T., 2012).

Rice is one of the most important cereals to guarantee food security among the people of Uganda. Production of rice in Uganda was introduced way back in 1904 (Kang H.-J. , 2015). However; its role in the country's economy only became noticed in the late 1940s as part

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