

**FACTORS AFFECTING GROUNDNUT PRODUCTIVITY AMONG SMALL SCALE  
FARMERS IN SOROTI DISTRICT**

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**RESEARCH REPORT SUBMITTED TO THE DEPARTMENT OF AGRIBUSINESS  
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THE A WARD OF BACHELORS OF SCIENCE AGRIBUSINESS OF BUSITEMA  
UNIVERSITY**

**FEBRUARY, 2021**

**DECLARATION**

I, the undersigned, declare that this research project in its content is my original work and has not been presented for a ward of a degree in any University.

Signed.....  ..... Date..... 22/02/2021 .....

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**APPROVAL**

This research has been submitted for examination with the approval by the University supervisor.

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## **DEDICATION**

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## ABBREVIATIONS

MAAIF-	Ministry of Agriculture, Animal Industry and Fisheries
NGOs-	Non-government Organizations
SSA-	Sub-Saharan Africa
Gov't-	Government
NARO-	National Agricultural Research Organization
NaSAARI-	National Semi-Arid Agricultural Research Institute
NAADs-	National Agricultural Advisory Services
NDP III-	National Development Plan III
e.g-	For example
i.e-	That is to say
SPSS-	Statistical Package for Social Science
RM-	Regression Model
CRSP-	Collaborative Research Support Program



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## ABSTRACT

The research investigated on factors affecting groundnut productivity among small scale farmers in Arapai sub-county in Soroti district. Despite the economic, social and cultural importance of groundnuts, its productivity is severely constrained by biotic, a biotic and socioeconomic constraints, resulting into depressed yields of about 700kg/ha compared to potential yields of 2000kg/ha. The specific objectives in this case study included: to assess access to extension services by groundnut peasants in Arapai sub-county, to identify the effect of post-harvest handling on groundnut productivity among peasants in Arapai sub-county. The survey employed descriptive survey design of both qualitative and quantitative research approach with the help of a structured questionnaire. A total of 51 households were interviewed in 4 parishes, (Aloet, Odudui, Dakabela and Arapai) in Arapai sub-county. Random sampling technique was used to select households in 4 parishes for interview. The data collected was analyzed using spss v20 and linear regression model was used to generate the significant ( $p < 0.05$ ) relationship between dependent and independent variables. It was found out that, only two variables had effect on groundnut productivity, i.e frequency of drying groundnuts ( $p = 0.045$ ) and method of storage ( $p = 0.039$ ) significantly affects groundnut productivity among peasants in Arapai sub-county. It was observed that the majority of the peasants in the area of study lack awareness about extension services provided by local government at sub-county level. Drying and storage proved to be seriously affecting groundnut productivity. The study recommends government to focus on delivering extension services to local farmers to bridge the gap. Storage of unshelled groundnuts reduces the incidence of damage by insect pests. Other development partners should be involved to cause change in groundnut production.

## CHAPTER ONE

### INTRODUCTION

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#### 1.1 Back ground of the study

Groundnut is one of the dominant leguminous crops grown in sub-Saharan Africa. Its botanical name is *Arachis hypogaea* Linn, derived from two Greek terms; *Arachis* meaning Legume and *Hypogaea* meaning below ground, referring to the formation of pods in the soil (Compendium, n.d.). It is the 13<sup>th</sup> most important food crop, the 4<sup>th</sup> most important oilseed crop and the 3<sup>rd</sup> most important vegetable protein of the world (Taru et al., 2010). Groundnut yields in SSA are generally low (964kg/ha) which is far less than potential yields of up to 3500kg/ha (Abady et al., 2019). The low yields of groundnuts in Sub-Saharan Africa are attributed to various factors that include biotic, abiotic and socioeconomic constraints.

Groundnut is the second most widely grown crop in Uganda and there has been substantial increase in groundnut production both as a food or cash crop (Interface and Simatic, 1998).

The small-scale holder farmers have picked interest in growing groundnuts for cash to enable them access health care, educate children and invest. The groundnut varieties grown were recently introduced through research organizations and institutes such as NARO e.g. Igola- 1, Serenut 1R, Serenut 2T, Serenut 3R and Serenut 4T among others, these are resistant to pests and diseases with better yields and short maturity period (Shiferaw et al., 2010). Further, farmers should adopt these varieties to reduce production and market constraints. These varieties are also high yielding.

The crop is mainly grown by small scale farmers in eastern and northern regions of Uganda and preferred to be beneficial than some cereal and oil crops such as sorghum, millet and simsim. Groundnut seed has been asserted to contain 40-50% fat, 20-50% protein and 10-20% carbohydrate depending on the variety (Okello et al., 2010). Furthermore, with the animal proteins becoming dangerous to human health, groundnut is becoming an even more valuable source of protein in household diets. Groundnut seeds are also nutritional source of vitamins which are essential in strengthening the immune system and reduce diseases associated with deficiencies. Groundnut is consumed raw, roasted, blanched, as groundnut oil, crashed and mixed with some dishes (groundnut paste). Groundnuts being a leguminous crop, therefore improves on soil fertility by fixing nitrogen into the soil by root nodules that