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ASSESSING THE FACTORS AFFECTING SORGHUM PRODUCTION AMONG SMALL-SCALE FARMERS IN ABIM SUB-COUNTY, ABIM DISTRICT.

BY

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A RESEARCH DISSERTATION SUBMITTED TO THE DEPARTMENT OF AGRIBUSINESS AND EXTENSION AS PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A BACHELOR'S DEGREE IN AGRIBUSINESS

MAY, 2023

DECLARATION

I,Ongom Denis,hereby declare that this is my original work ,and where other people's work were been used, it was duly acknowledged. I further declare that this work has not been presented to any university or any other higher institution of learning.

Sign .....Date ..5/5/6/2023.....

APPROVAL

This is to clarify that this research dissertation titled "Assessing the factors affecting sorghum production among small scale farmers in Abim sub – county , Abim district was done under the supervision of

Supervisor ;

Dr . KABBIRI RONALD (PhD)

Sign..... Date 5/6/2022

DEDICATION

This report is dedicated to my dear brother Mr; OKIDI BOB , who has been a constant source of support and encouragement; during the challenges of graduate school and life. I am truly thankful for having you in my life. This report is also dedicated to the memory of my grand parents; PAPA AWANY JACKSON JEREMIAH and MAMA AWILLI JERAH , although they were my inspiration to pursue my education, they are unable to see my graduation

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LIST OF ACROYMNS

FAO	Food and Agricultural Organization
AHO	Assistant Animal Husbandry Officer
CFSAM	Food Assessment For sudan
MOANR	Ministry of Agriculture and National Resource
NaSARI	National Semi arid Resource Research Institute .
SPSS	Statiscal Package for Social Scientists .
SSA	Sub Saharan Africa
USA	United State of America
Kg	Killograms

ABSTRACT

This research study was about assessing the factors affecting sorghum production among small scale farmers in Abim Sub -county, Abim district. The small scale farmers in Abim district have been cultivating sorghum over years for household consumption and some for sale.The production of sorghum had lower yields in the recent years within the study area.Sorghum is regarded as a food security cereal crop and its ability to withstand dry weather conditions.The objectives of this study was to get about the factors affecting sorghum production among small scale farmers in Abim sub county and give recommendation to boost sorghum's production .To answer this , the following research questions were formulated . How can small scale sorghum's farmers in Abim sub county be characterized ? What has been the trend of sorghum production among small scale farmers in Abim sub county? What are the factors affecting sorghum production among small scale farmers in Abim sub county? Furthermore, a qualitative cross sectional survey designed was used to gather data from the 73 respondents .The sampling technique used was simple random sampling where 73 respondents were selected to participate in the study within the six parishes in Abim sub-county .The respondents were given well prepared questionaires,data was analyzed using Microsoft excel and Statistical package for social scientists (SPSS version 20.0) , presentation of results were done on line graphs , tables, bar graphs . According to the findings, it was revealed that majority of the respondents with 68.5% were not registered to any farmer's groups whereas respondents with 31.5% were registered to farmer's groups , it was also established that most of the respondents with 53.4% were identified growing local varieties while respondents with 2.7% were identified growing improved varieties such as SES03 .In addition, the results also indicated that respondents with 60.3% had no access to credits while respondents with 39.7% had access to credit.In addition , the findings also revealed that the main production constraints which have lowered sorghum's yield in Abim sub- county.These production constraints included limited access to good quality seeds where out of the 73 respondents interviewed, 63.0% strongly agreed with the statement while respondents with 15.1% strongly disagreed with the statement .Conclusively ,the study also gave some recommendation such as; there should be extension of agro inputs stores to rural places so that farmers can have easy access to good quality seeds.

1.0 Chapter one ; Introduction

1.1 Background

Sorghum originated in Eastern Africa, in the region bordering Sudan and Ethiopia (Winchell et al., 2018). It is the fifth most important world cereal crop after maize , wheat , rice and barley,the crop is the staple food in the drier parts of Africa, China and India (Rao et al., 2013).The largest world's sorghum producers are USA ,Nigeria, Ethiopia and Sudan (Rapsomanikis, 2015).

In Sub saharan Africa , Nigeria is the leading producer of sorghum followed by Ethiopia in term of total production (Wanga et al., 2022).The crop has also been reported to be African's second most important cereal crop after maize.On the other hand, it is also ranked as the third cereal crop in East Africa after maize and millet (N. Mary A. Mgonja, Ivan Rwomushana, Fina Opio, 2006). Furthermore , sorghum is also a member of the grass family graminea. (Willetts et al., 2016).It also act as an important staple food in East Africa which leds to contribution to national food supply in Sudan, Somalia, south Sudan , Ethiopia and Uganda (FEWSNET, 2022).

In Uganda, sorghum has become the second most important cereal crop grown after maize in terms of production and it is mostly produced in the northern parts followed by eastern , southwestern regions and finally central (Lubadde et al., 2019). Occasionally, sorghum grain is fermented for malting and is used in preparing local brewing products. Industrially, it is predominantly used by companies producing beverages , and small percentages of grain is also used as animal feeds (Ratnavathi& Chavan, 2016) .Inspite of all those importance of sorghum , it has been reported that the production trend of sorghum is still worrying due to both biotic and abiotic constraints including poor soil fertility , water scarcity , crop pests and diseases , weeds and poor agronomic practices hence have lead to decline of sorghum yields (Nyawaro, 2018).In addition ,there are also some strategies which have been put in place to improve on the productivity of sorghum like pest and diseases management , introduction of good quality seeds and used of machines such as tractors (Winchell et al., 2017).

In Karamoja sub region, sorghum occupied 77% of the total area of under production where it is grown in all districts such as Amudat with 97% , Abim with 84% ,Kaabong with 93%, Moroto with 78%, and Nakapiripirit with 79% (food Security assessment , 2018).Furthermore, the crop is also used for both domestic food and commercial purposes while others processesd sorghum

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