# ASSESSMENT OF THE FACTORS THAT HAVE LED TO LOW PRODUCTIVITY OF LOCAL BREEDS OF CHICKEN IN WAKISO DISTRICT-A CASE STUDY WAKISO SUB COUNTY

# ASABA GERESOM BU/UP/2017/1799

MR. OGUZU EVANS.
ACADEMIC SUPERVISOR

A RESEARCH REPORT SUBMITTED TO THE DEPARTMENT OF AGRICULTURE IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A BACHELOR'S DEGREE OF SCIENCE AND EDUCATION OF BUSITEMA UNIVERSITY

## **DECLARATION**

I ASABA Geresom, do declare that this is my original research report prepared as part of my requirem	ient
for the award of Bachelors Degree of science education of Busitema University and has never b	een
presented to any university or institution of higher learning for any academic award.	

Signature:
Date:
ASABA GERESOM (STUDENT)

#### **APPROVAL**

I hereby certify that this research report titled "an assessment of the factors that have led to low productivity of local breeds of chicken in Wakiso district" is the original and individual work of Asaba Geresom. It has been done under my supervision and is ready for submission to the board of examiners of the faculty of science and education, Busitema University with my due approval.

Academic supervisor:
SIGNATURE:
Date
MD OCUZUEVANS (LECTUDED)

#### **DEDICATION**

I dedicate this research report to my parents Mr. Kato Johnson mwesigwa and Mrs.cristine Kato and my friend Lydia Nakijoba for their parental love and support they have given me during my course of education up to date and I pray that God rewards them with what they deserve in their life. May the almighty bless them abundantly.

#### **ACKNOWLEDGEMENT**

I thank the almighty God for his grace, wisdom, knowledge strength he granted me to successfully complete my research and also prepare this report and the privilege to attain this level of education.

I am grateful to the entire staff of Busitema University Nagongera campus, for their help and tireless assistance towards the success of my research.

Am grateful to my supervisor MR.OGUZU EVANS (LECTURER) for the timely assistance, without their scholarly guidance, the research could have lost its purpose and quality.

I further extend my thanks to my fellow course mates for the good relationship and guidance on different activities that we did together as a group. I am grateful to my respondents, research assistants and the statistical analyst for their contribution to this dissertation. I acknowledge the moral support and encouragement from family, especially my friend MS. Lydia Nakijoba (technician Busitema university),ms nabatanzi benah for their patience during the period of this study. I appreciate my relations who assisted me in one way or the other, and also my appreciation goes to my father Kato mwesigwa Johnson, my sisters Antugonza Nabukera Lydia, kobusigye Racheal and my brother Esau Gabriel mwebaze and mwesigwa Isaac for his moral and financial support and encouragement. My appreciation goes to all people directly involved in one way or another on this research especially my lecturers and colleagues. Notably among them were Bwabale Samson, Nabatanzi benah, kizito Kennedy, Tumwebaze Kenneth, Mukuba Isaac, Ssewali uthuman and those that I have not mentioned

To my parents, I would like to thank you very much for the love and support towards the entire period of my stay at Busitema University. May Lord reward you abundantly.

.

## Table of content

## **Contents**

DECLARATION	2
APPROVAL	3
DEDICATION	4
ACKNOWLEDGEMENT	5
Table of content	6
LIST OF ACRONYMS	9
LIST OF MAPS	10
List of tables	11
ABSTRACT	12
1.0 introduction	13
1.1. Background to the study	13
1.2. Statement of the problem	14
1.3 Justification.	14
1.4Purpose of the study	14
1.4.1 Specific objectives	14
1.5Hypothesis	14
1.6 Research questions	14
1.7Significance of the study	15
1.8SCOPE	15
1.9CONCEPTUAL FRAMEWORK AND THEORETICAL FRAMEWORK	15
2.0. LITERATURE REVIEW	16
2.1 MEANING OF INDIGENOUS	16
2.2 DOMESTICATION OF CHICKEN	16
2.3 OVER VIEW OF THE POULTRY SECTOR	16
2.3.1POULTRY PRODUCTION SYSTEMS	17
2.3.2CHICKEN FLOCK SIZE AND REGION DISTRIBUTON	17
2.4 PRODUCTIVE AND REPRODUCTIVE PERFFOMANCE OF INDIGENOUS CHICKEN	18
2.4.1 GROWTH PERFOMANCE	18
2.4.2 EGG PRODUCTION	18
2.4.3.HATCHABILITY AND FERTILITY OF EGGS	19
2.5 FACTORS AFFECTING THE PRODUCTIVITY OF INDIGENOUS CHICKEN	19
2.5.1FEEDING AND WATER PROVISION	19
2.5.2PARASITES AND DISEASES	20
2.5.3HOUSING (Management system)	21

2.5.4LACK OF APPROPRIATE PRODUCTION TECHNOLOGY	21
2.5.5LACK OF INFORMATION ABOUT REARING LOCAL BREEDS OF CHICKEN,	21
3.0 Material and methods	22
3.1 Study area	22
3.2 Study design	23
3.2.1Sampling procedure	23
3.3 Data collection	
3.4DATA ANALYSIS	24
CHAPTER FOUR	25
RESULTS	25
4 .0 INTRODUCTION	25
This chapter summarizes the results from the analysis as described in chapter three. The research was on an assessment of the factors that have led to low productivity of local breeds of chicken in Wakis county district in study Wakiso district. It included the analysis of the background and the study object.	so sub
4.1DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS	25
4.1.1GENDER	25
4.1.2AGE OF THE RESPONDENTS	27
4.1.3Farming system	27
4.1.4Ranking of poultry as source of income	28
4.1.5TIME SPENT IN FARMING	29
4.1.6EDUCATIONAL BACKGROUND OF THE RESPONDENTS	
4.1.7 Vaccination schedule	30
4.2THE REPRODUCTIVE AND PRODUCTIVE PARAMETERS	30
4.3 FACTORS THAT HAVE LED TO LOW PRODUCTION OF LOCAL BREEDS OF CHICK	EN31
4.4 SOLUTION TO OVERCOME THE FACTORS THAT LED TO LOW PRODUCTION OF L CHICKEN.	
5.0 DISCUSSION	32
demographic characteristic	32
5.1PRODUCTIVE AND REPRODUCTIVE PERFORMANCE	32
5.2FACTORS THAT LEDS TO LOW PRODUCTIVITY OF LOCAL BREEDS OF CHICKEN .	34
5.2.1Presence of parasite and diseases	34
5.2.2Absence of information services about rearing indigenous chicken	35
5.2.3Reduction in land or space	35
5.2.4Poor and absence of feeds	35
5.2.5Poor health with unreliable vaccines	35
5.3Solution	35
5.3.1General hygiene of chicken shelter.	35

5.3.2Consultation on extension workers and other farmers	36
5.3.2Use of traditional herbs medicine	36
5.3.2Following of vaccination schedule	36
5.3.3Proper feeding	36
6.0 SUMMARY, CONCLUSION AND RECOMMENDATION	37
INTRODUCTION	37
SUMMARY of the results	37
6.1CONCLUSION	37
6.2RECOMMENDATION	38
REFERENCE	39
Appendices	44
7.0APPEDICES	49

### LIST OF ACRONYMS

UBOS Uganda bureau of statistics

MAAIF Ministry of agriculture Animal Industry and fisheries

GDP Growth Domestic Product

FAO Food Agricultural Organization

NCD NEWCASTLE DISEASES

KG Kilogram

NARO National Agriculture Research Organisation

**UFAAS** Uganda Forum for Agricultural Advisory services

## LIST OF MAPS

figure1: showing the conceptual framework
Figure 2 showing productivity performance is affected by various factors21
Figure 3: Map of Wakiso district
Figure 4: map of Wakiso district showing Wakiso sub-county
Figure 5 showing gender of respondents
Figure 6: showing the age of respondents
Figure 7: showing farming systems
Figure 8: pie chart showing poultry as a source of income
Figure 9: showing the time spent in farming
Figure 10: showing the level of education attained by farmers29
Figure 11: egg weighed on a weighing scale
Figure 12: hen scavenging for the chicks
Figure 13: a hen being weighed
Figure 14: birds supplemented with feeds
Figure 15:when I was collecting informzation
Figure 16: showing indigenous chicken attacked by the diseases

#### List of tables

- Table 1: The number and proportions of households by administrative area in Wakiso sub-county
- Table 2: The study found out that most of the farmers were vaccinating irregularly, and others were following the vaccination schedule
- Table 3: showing the productive and reproductive parameters
- Table 4: showing factors that have led to low productivity of local chicken
- Table 5: showing solution to the problem that led to low productivity

#### **ABSTRACT**

A study's main objective was to assess the factors that result to low performance of indigenous breeds of chicken production in farmer's livelihood in Wakiso sub-county, Wakiso district. The data was collected using a semi-structured questionnaire which was administered to 57 respondents, data was analyzed by descriptive statistical methods, were percentages and figures were got. Farmers with chicken flock ranging from 6 to 62 were selected and care was put on the birds of five months and above.

The results indicate that Majority of the respondents were female (70%) and male (30%), and birds were kept for home consumption (89%), commercial and subsistence (11%). Indigenous chicken ranking as source of income was tertiary (94.7%), secondary (5.3%) and primary (0%) and majority had spent above 20 years in farming(38%),5-10 years (30%), less than 5 years (23%) and 11-20 years (9%). the production system was majorly extensive (94%) and intensive (6%). Majority of the chicken was reared with the purpose tertiary (94.7%), secondary (5.3%) and primary (0%).

Most of the chicken reached sexual maturity at mean of 7.4months for male and 6.8months ranging from 6-9months and 5.5-8months for male and female respectively, the average of the first mating for cocks was at 7.8months and the first laying was at 7.4months for hens. The mean clutch size was 10.6eggs per hen with 3 clutches in a year, laying an average of 49.9eggs per year and the average body weight for mature cocks (adult) was 1778.4g and 1265 for adult hen.

The hatchability was high (89.2%) and the chick survival rate was 53.2% well as at the age 6.6 weeks majority of the hens had weaned there chicks, the mean egg weight was 39.7g. the parameters indicate low productivity which is typical of the extensive management of the indigenous chicken production.

The study found out presence of parasite and diseases, lack of information on advisory services, poor health and absence of reliable source of vaccines, poor and absence of feeds that result to low performance of local breeds of chicken, and various ways of improving on productivity such as carrying out proper hygiene in the chicken house, consultation from extension workers and following regular vaccination schedule.

Based on the findings, we suggest some policy recommendations.

We recommend that there should be public information and education programs on indigenous poultry production, there is need to inform indigenous poultry farmers on better method of improving the performance of indigenous chicken.