



**THE CONTRIBUTION OF BOER GOAT PRODUCTION TO THE LIVELIHOODS OF
NAADS FARMERS IN IKI-IKI SUB COUNTY BUDAKA DISTRICT**

BY

BABULA CLEMENT

BU/UG/2011/160

babulaclement@gmail.com




**A RESEARCH DISSERTATION SUBMITTED TO THE FACULTY OF AGRICULTURE
AND ANIMAL SCIENCES IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR
THE AWARD OF DEGREE OF BACHELOR OF ANIMAL PRODUCTION AND
MANAGEMENT OF BUSITEMA UNIVERSITY**

MAY, 2014.

DECLARATION

I **BABULA CLEMENT**, declare that this dissertation is my work and has not been submitted to another university or any other institution of learning for any award.

Signature..........

Date.....31st July 2014.....

APPROVAL

This dissertation has been submitted for examination with the approval of my supervisor;

Mr. KAUTA MOSES

BAPTM; Msc LDPM

Lecturer

Department of Animal Production and Management,

Busitema University.

Signature..........

Date.....31st 07 - 2014.....



DEDICATION

To my parents, Ms. Wairagala Joyce and Mr. Wairagala John, brothers, sisters, my friends and my classmates. I owe them my greatest gratitude.

ACKNOWLEDGEMENT

I would like to extend my profound gratitude to my supervisor Mr. Kauta Moses for the generous help he has given me in various aspects and guidance offered in supervising this work.

I also thank Busitema University for the financial support and the staff for their guidance throughout the research.

Sincere thanks go to my parents Ms. Wairagala Joyce and Mr. Wairagala John and also my elder brother Walusansa Sam for the financial support offered to me during the entire course of my studies.

My sincere gratitude goes to Iki Iki sub county staff for the desirable information and assistance given to me.

My classmates and my friends, Ngarambe, Kubeketerya, Lutwama, Ongom and others for assistance rendered to me during my project.

TABLE OF CONTENT

DECLARATION	i
DEDICATION	ii
ACKNOWLEDGEMENT	iii
TABLE OF CONTENT	iv
LIST OF TABLES	vi
LIST OF FIGURES	vi
LIST OF ABBREVIATIONS	vii
ABSTRACT	vii
CHAPTER ONE	1
1.1 INTRODUCTION	1
1.2 Background	1
1.3 Problem Statement	3
1.4 General objective	3
1.5 Specific objectives	3
1.6 Hypothesis	3
1.7 Significance of the study	4
1.8 Justification	4
1.9 Scope	4
CHAPTER TWO: LITERATURE REVIEW	5
2.1 Origin and distribution of Boer goats	5
2.2 Goat Production Systems	5
2.2.1 Extensive system	5
2.2.2 Intensive system	5
2.2.3 Semi intensive system	5
2.3 Role of Boer goat production in improving the household incomes	6

2.4 Role of Boer goat to improving of livelihoods in east Africa.....	6
2.5 Role of Boer goat production in Uganda.	7
2.6 Role of Boer goat to household nutrition.....	8
2.7 Gender roles in goat production.	8
CHAPTER THREE: MATERIALS AND METHODS	10
3.1 Area of study	10
3.2 Research Approach.	10
3.3 Sampling design.....	10
3.4 Operational design.	11
3.5 Observational design.....	11
3.6 Data Analysis	11
3.7.Data presentation.....	11
3.8 Ethical consideration.....	11
3.9 Environmental concern.....	12
CHAPTER FOUR: RESULTS.....	13
CHAPTER FIVE: DISCUSSION.....	22
CHAPTER SIX: CONCLUSION AND RECOMMEDATIONS	25
6.0. CONCLUSIONS.....	25
6.1. RECOMMENDATIONS.....	25
REFERENCES.....	26
APPENDICES.....	30

LIST OF TABLES

Table 1 Show the household characteristics of Boer goats and non Boer goat farmers.....	13
Table 2 Show land size owned by the respondents	15
Table 3 shows the purposes for keeping Boer goats.....	15
Table 4 Show meat consumption frequency	16
Table 5 Show source of protein meals.....	17
Table 6 Show major source of protein.....	17
Table 7 Showing the annual income of respondents	18
Table 8 Showing the proportion of the annual income from goats	18
Table 9 Showing the respondents with off farm activities and common off farm activities	19
Table 10 Showing income got from off farm activity	20
Table 11 Show Proportion of income.....	21

LIST OF FIGURES

Figure 1 showing the land size owned by the respondents.....	15
Figure 2 Showing sources of protein meals.....	16
Figure 3 Showing major sources of protein.....	17
Figure 4 Showing the Respondents with Off farm activities.....	19
Figure 5 Showing the common off farm activities	20
Figure 6 Showing comparison of income from different sectors	21
Figure 7 Sketch map of Budaka District showing 7 sub counties	30

LIST OF ABBREVIATIONS

MAAIF	MINISTRY OF AGRICULTURE ANIMAL INDUSTRY AND FISHERIES
GDP	GROSS DOMESTIC PRODUCT
NAADS	NATIONAL AGRICULTURAL ADVISORY SERVICES
FAO	FOOD AND AGRICULTURAL ORGANISATION
NUSAF	NORTHERN UGANDA SOCIAL ACTION FUND
CIA	CENTRAL INTELIGENCY AGENCY
NGOs	NON GOVERNMENTAL ORGANISATIONS
ILRI	INTERNATIONAL LIVESTOCK RESEARCH INSTITUTE
UPPAP	UGANDA PARTICIPATORY POVERTY ASSESSMENT PROCESS.
UCC	UGANDA COMMUNICATION COMMISSION.
UNFFE	UGANDA NATIONAL FARMERS FEDERATION
STAT	STATISTICS
CBO	COMMUNITY BASED ORGANISATION
UCC	UGANDA COMMUNICATION COMMISSION

ABSTRACT

Boer goat production is considered to be one of the best enterprises known to boost household nutrition and income. In Uganda Boer goats were introduced in the early 1990s by the NGOs, CBOs, Religious organizations and government programs like NAADs and NUSAF. The study was conducted in Iki Iki Sub County, Budaka district to assess the contribution of Boer goat production to the livelihood of farmers under NAADs program.

A total of 100 respondents were interviewed and 60 were Boer goats farmers while 40 were non Boer goat farmers. The respondents were selected randomly from the 10 randomly selected villages. Semi structured questionnaires were administered to the farmers through the face to face interviews and the responses were recorded. The questionnaire captured the information on the socio economic characteristics of farmers. The data collected was analyzed using SPSS version 16 and the results presented using table, pie charts and tables.

The farmers revealed that they were keeping the Boer goats majorly for income (58%) and most of them (67%) consumed meat monthly. The study further indicate that most of the respondents (70%) had the total annual income less than 5 million and 45% and 40% obtained 1/8 and 1/4 of the annual income from goats while the few 2% who had specialized in goat rearing had over 2/3 of their total income(20Million) from goats. The result further shows that 41% of respondents said that Boer goats farming contributed greatly to the total house hold annual income in flow and nutrition as compared to the other enterprises.

However it can be recommended that extension services to farmers should focus on attitude change, the local government through NAADs should sensitize farmers on good enterprise selection and mix for commodity specialization and also higher level commodity production and marketing organization should be established where Boer goat farmers could access market services at affordable terms to benefit from economies of scale.

CHAPTER ONE INTRODUCTION

1.1 INTRODUCTION

This research was carried out in Iki-Iki Sub County, Budaka district on the contribution of Boer goat production to the livelihoods of farmers under NAADS program.

Crop agriculture is the main economic activity in the District, occupying 86% of the population according to 2002 national census. Cassava, millet sorghum, cotton, maize, and beans are the major crops grown in the region. Also Budaka district has a variety of livestock ranging from cattle, goats, and poultry boosted by the fact that it is within the cattle corridor which has attracted re-stocking initiatives from Government.

Common Breeds of Goats found in Budaka District.

Small East African goats; These goats are found almost in all corners of Uganda consisting of varying colors like, red, white, grey, which is predominant with Short fine hair. Mature weight of small east African goats for Buck is 25kg and 22kg for doe. They are generally small but not dwarfed, Small light horns and beards common for males, Ear are short, prick and horizontal. Daily weight gain is 25g. There are high incidences of twinning and they breed all year round.

Mubende Goats: These goats are widely distributed throughout Uganda and have the following characteristics; Coat color; predominantly black with shades of white, gray and spotted. Mature weight for Mubende goats include; Males: 30-35kg. Female: 25-30kg Medium to long head. Males have mane but commonly polled. Horns are curved and short, facing backwards. Ears are medium and laterally orientated. Daily weight gain; 0-6month:62g. 6-12month: 35g. 12-18month: 32g. 18-24month: 35g. The hide is highly rated in quality internationally.

1.2 Background

National Agricultural Advisory Services NAADS was established in 2001 aimed at overcoming institutional constraints that were perceived to be undermining farmers' access to quality knowledge and productivity enhancing technologies. The key objective was transformation of public delivery of agricultural extension services into a largely private sector-led delivery system under a client or farmer controlled arrangement (UNFFE, 2011).

Boer goat is considered to be one of the most desirable goat breeds for meat production. It has gained worldwide recognition for excellent body conformation, fast growing rate and good carcass quality. It has been demonstrated that Boer goats can improve productive performance of many indigenous breeds through cross breeding. It has a strong impact on the meat goat industry globally (Christopher, 2002).

REFERENCES

- Adeleke, Salami, Abdul B. Kamara and Zuzana Brixiova.**(2010). Smallholder Agriculture in East Africa: Trends, Constraints and Opportunities. African development Bank group.
- Arinaitwe I and Ndyomugenyi E K .**(2013).Boer goat production in Kikatsi Sub County, Kuruhura District,Uganda.livestock Research for Rural Development.
- Ayantoye, K, Yusuf S.A, Omonona B.T and Amao J.O.**(2011).Food Insecurity Dynamics and its Correlates among Rural Households in South Western Nigeria. International Journal of Agricultural Economics and Rural Development.
- Baumont R Prache S Meuret M and Morand Fehr P.**(2000).How forage characteristics influence behavior and intake in small ruminant: a review livestock production science
- Bille PG, Taapopi** (2008). Effects of two commercial meat tenderizers on different cuts's meat Namibia. African journal of Food, Agriculture, Nutrition and Development; vol 8, No 4
- Burger.A, Hoffman L.C, Cloete J.J.E, Muller. Cloete. S.W.P,** (2013).Carcass composition of Namaqua Afrikaner, Dorper and SA Mutton Merino ram lambs reared under extensive conditions. South African Journal of Animal Science.ISSN 0375-1589.Vol.43.
- Bwire Joseph.**(2008).Factors affecting Adoption of Improved Meat goats (Boer) Production in Rangelands of Sembabule District.
- Casey N.H and Van Niekerk W.A** (1988). The Boer goat origin, adaptability, performance testing, reproduction and milk production. Small ruminant research 1(3)291-302.
- Central Intelligence Agency (CIA) world fact book** (2012).
- Devendra C.**(1999).Challenges for increased productivity and improved livelihoods. International livestock Research Institute, Nairobi.
- Drekayawellington N.**(2003).The nutritional value of Zizyphus spina-christi for goats production among the Pastoralists of Kalu district, South Wello, Ethiopia.African journal of range and forage science, 20(3):265-270.
- Eik.L.O, Kifaro.G.C, Kiango.SM,Nordhagen.M, Safari ,J and Mtenga L.A** (2008).Productivity of Goats and Their Contribution to household Food Security In High Potential Areas Of East Africa;

African Journal of Food, Agriculture, Nutrition and Development Rural Outreach Program. ISSN:1684-5358 EISSN:1684-5374

Erasmus JA.(2000).Adaptation to various environments and resistance to diseases of the improved Boer goats. Small Ruminant Research. 36, 179-187.

FAO.(2004). Food and Agriculture Organization of United Nations.

Galie, (2013).Intergration gender equity and empowerment in dairy goats and root crop production projection: presented at the workshop on integrated dairy goats and root crop production, ILRI Nairobi.

Gonzalez, Escareno, Iniguez, etal.(2012).Dairy goat production systems. Tropical Animal health and production. Volume 45, issue 1, pp17-34.

Kato HW, Kabi F and Mutetikka.(2013).Effect of supplementary protein source on the performance of indigenous Meat goats fed on Guinea grass hay. Livestock research for rural Development

Kayamandi, (2007). Goat meat production feasibility study

Kifaro, Mosh,Minga (2009).Effect of Subclinical Mastitis on milk yields and composition of Dairy goats in Tanzania. African journal of Food, Agriculture, Nutrition and Development: vol 9, No 1.

MAAIF (2010) Statistical Abstract, Ministry of Agriculture, Animal Industry and Fisheries, Entebbe, Uganda.

MAAIF (2011) Statistical Abstract, Ministry of Agriculture, Animal Industry and Fisheries, Entebbe, Uganda

Mahmoud Abdel Aziz.(2010). Present status of the world goat populations and their productivity. King Faisal University, Al-Ahsa, Saudi Arabia

Mwenkemwa A S A.(2004). Performance of saving and credit co-operative societies and their impact on rural livelihoods: A case study of Morongoro rural and Myomero District, Tanzania. Msc.Dissertation, Sokoine University of Agriculture, Morongoro, Tanzania 132pp

Nakimbugwe Hellen.(2003).National Animal Genetic Resources Centre and Data Bank (NAGRC&DB) Entebbe, Uganda.

Ngambi J W.(2012). Role of goats in food supply, poverty alleviation and prosperity in sub-Saharan Africa University of Limpopo, South Africa.

Nguluma.A, ML Leite-Browning and Browing R Jr.(2013).Comparison of Boer cross and foundation breeds for meat goat sub tropics. Institute of Agricultural and Environmental Research, Tennessee State University. Nashville, TN 37209-1561.USA.

Peacock, C. P. (2005): Goats - A pathway out of poverty. *Small Ruminant Research*, 60(1): 179-186.

Place F,Roothaert R, Maina L, Franzel S, Sinja J and Wanjiku J .(2009).The impact of fodder trees on milk production and income among smallholder dairy farmers in East Africa and the role of research. World Agro forestry Centr.ISBN:978-92-9059-275-4.NAIROBI

Safari.j,kifaro G.C ,Mushi D.E, Mtenga L.A, Adnoy.T and Eik L.O.(2012).Influence of flushing and season of kidding on reproductive characteristics of small east African goats(does) and growth performance of their kids I a semi-arid areas of Tanzania; *African journal of Agricultural Research* vol.7(35) ISSN 1991-637.

Semakula.J, Mutetika.D, Kuyonza D.R, and Mpairwe D.(2010).Comparision of breeding systems by smallholder Goats keepers in Humid, Sub-Humid and Semi-Arid Ecological Zones of Uganda. *Agricultural Journal*.DOI:10.3923.Vol 5.

Siefert and Opuda-Asibo. Intensification of goat production in Uganda and associated health risks.

Simpson J and Evangelou P.(1984). *Livestock development in Sub-Saharan Africa*.Westview Press, Boulder, Colorado.

Smith, Godfrey, S.H, Buttery, Ssewannyana E. and Owen.(2005) small stock in development. Proceeding of a workshop on enhancing the contribution of small livestock to the livelihoods of resource poor communities. Natural resources International Ltd, Aylesford, Kent, UK ISBN: 0-9546452-5-1.

Stephanie Duku, Akke J van Zijpp and Howard (2010).Small ruminants feed systems: perception and practices in the transitional zone of Ghana. *Journal of Ethno biology and Ethno medicine*.

Taylor-Powell E (1998) Sampling program development and evaluation, Texas agricultural extension service, the Texas A and G University System College, Texas.

Thornton and Philip K.(2010).Livestock Production: recent trends, future prospects. Philosophical Transactions of The Royal Society.Doi:10.1098.Vol.355 no.15542853-2867.

Uganda Bureau of Statistics . (2009). National livestock census

Uganda Communication Commission,(2010)

Vatta, A.F, Harrison, L.J.S., Krecsek, R.C., Pearson, R.A.(2002).Improving the livelihood of the resource-poor goat farmers in southern Africa through strategic drug and nutritional interventions against gastro-intestinal nematode infections. Proceedings of the second DFID Livestock production programme Link Project (R7798).

Vatta, A.F., Krecsek, R.C., Letty, B.A., Harrison, L.J.S. and Pearson, R.A.(2003).Roundworm in goats: getting the message across. Proceedings of the third DFID Livestock production programme link project (R7798) Meeting.

Webb E.C and Mamabolo M.J.(2004) Production and reproduction characteristics of South African indigenous goats in communal farming systems South African Journal of Animal Science 2004, 34 (Supplement 1)