



**UTILIZATION OF DRAUGHT ANIMALS FOR IMPROVING AGRICULTURAL
PRODUCTION IN ARAPAI SUB-COUNTY, SOROTI DISTRICT**



BY
NAKACWA MATOVU JACKLINE
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DECLARATION

I, NAKACWA MATOVU JACKLINE, hereby declare that this dissertation is out of my original concept and has never been submitted to any University or institute of higher learning for any academic award.

Signature.....

Date..... 21st 06: 2014.....

This report has been submitted with the approval of my Supervisor:

Mr. KATENYA GEORGE

Department of Animal Production and Management

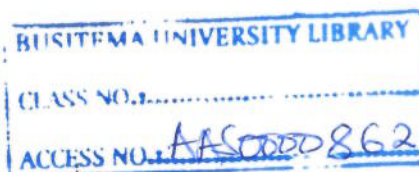
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DEDICATION

I dedicate this dissertation to my Mother Mrs. Matovu Matildah, Father Mr. Matovu Peter, and Mr. Jackhan Herbert, my lovely Brothers and Sisters, and friends.

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I take this opportunity to utter my gratitude to the Almighty God for the gift of life all through.

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LIST OF ABBREVIATIONS

MAAIF	Ministry of Agriculture Animal Industry and Fisheries
Dr.	Doctor
GDP	Growth Domestic Product
E.T.C	And so on
FAO	Food and Agricultural Organization of the United States
SSA	Sub Saharan Africa
NAADs	National Agricultural Advisory Services
NUSAF	Northern Uganda Social Action Fund
NGOs	Non Government Organization
UBOS	Uganda Bureau of Statistics
NARO	National Agricultural Research Organization
EPRC	Economic Policy Research Centre

ABSTRACT

This study was carried out to assess the utilization of draught animal for improving agriculture production in Arapai Sub County in Soroti district from February to May 2014 with the objective of identifying the adoption rate, impacts and challenges to animal traction utilization. A survey design was used during the study in which data was collected at a single point and time with a multi-stage random sampling procedure. A semi-structured questionnaire was used for collecting all relevant information related to animal traction. Data was analyzed using descriptive statistics and presented using tables, pie charts and bar graphs. Findings show that 99% of the respondents are aware of the use of work animals in agriculture, where 1% of respondents are not aware and have never heard about animal traction technology and Majority of the farmers (99%) used oxen for animal traction while 1% used donkeys.

The information from the field shows that 83.3% of the respondents who own cattle use them in agriculture activities. The study revealed that most of the farmers (64.9%) used animal traction for ploughing or tillage only. The research findings indicate that 36% of the farmers have increased production and yields through the use of animal traction technology. About 31% of farmers have got more free time and money for involving in other economic activities. 16% of farmers have expanded the farms, where 8.5% of farmers find it simple to cultivate when using animal traction technology. Most of the respondents (58.5%) used animal traction because it is cheaper and affordable than the tractors, 17% said that they used them because they do not need skills compared to tractors and 24.5% used the technology because it was easier for them to get animals. Despite of all the benefits, the farmers also faced some challenges such as diseases and parasites, poverty, high price of equipment, among others.

This study prevailed that most of the respondents were aware of the use of animal traction and used mostly oxen especially for ploughing or tillage. However, there is need to introduce other types of implements like planters and weeders in the area other than only using oxen and plough.

CHAPTER ONE: INTRODUCTION

1.1 Background

Work animals are being used all over the world to reduce drudgery and also to intensify agriculture production. Animal traction is seen by farmers and policy makers as an appropriate, affordable and sustainable technology (Dirk, 1993). About 400 million draught animals in the world directly or indirectly provide draught power to people, with around 20% of the cattle population in the world employed for work (Starkey, 1997).

Draught animals are used for ploughing, harrowing, planting, ridging, weeding mowing and harvesting (Henriksson and Lindholm, 2000), pulling carts, carrying loads, driving water pumps and pulling water from well, carrying bricks, earth moving, mixing materials, providing power for threshing machines and grain mills (oussou *et al.*, 2013) and (Rafael, 1999) and also used for pulling millions of vehicles (Rawaswamy, 1985).

In many parts of the world, In Europe and South- East Asia draught animals were being used in tillage, harrowing, transporting and threshing rice

Animal traction technology was introduced into Uganda in 1909 in the then districts of Bukedi (now Busia, Pallisa and Tororo Districts) in eastern Uganda. A year later, a farmer school in ox cultivation was opened in Kumi (Wilfred, 2002). In 1920, the current Serere Agricultural and animal production institute was established, and among its functions, it was to be a center for research, testing, demonstration and training of farmers in ox-cultivation techniques (Lubwama, 2001).

Through the extension efforts of the ministry of agriculture, as well as those of related institutions, including NGOs-the use of work animals rapidly spread throughout Eastern and North-eastern parts of the country where ecological and cultural conditions favored its development (Omoding, 2002). The technology made a remarkable impact in increasing the acreage under cultivation. Teso continued to lead in the use of animal traction in Uganda until the 1980s when civil strife set in, resulting in depletion of the working herd and equipment (Awa *et al.*, 1999). Since it was the main method of opening up land, agricultural production decreased. In order boost national production, the government of Uganda recognized the importance of promoting animal traction alongside the revival of cotton production.

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