

**HINDERANCES TO OPTIMAL UTILIZATION OF ANIMAL TRACTION  
TECHNOLOGY IN ARAPAI SUB-COUNTY, SOROTI DISTRICT**

**BY**

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

**JUNE, 2015**

**DECLARATION**

I, **NABAASA JOEL**, declare that this dissertation is original and has not been submitted to any institution for any academic award.

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## **DEDICATION**

I dedicate this work to my parents Mr. ELIDARD BEZIIRE & Mrs. KENYONYOZI JANE who endeavoured to sacrifice the little they had to enable me study up to this level.

## ACKNOWLEDGEMENT

I would like to express my sincere thanks to my parents Mr. ELIDARD BEZHIRE & Mrs. KENYONYOZI JANE who endeavoured to sacrifice the little they had and emphasized the role of education and thus enabled me to carry out this research and reach completion.

I wish to thank my supervisor, Ms Akurut Immaculate for her advice, encouragement and guidance she gave me towards the success of this work.

I also thank the lecturers of Busitema University in the Department of Animal Production and Management for their cooperation and technical guidance during this course.

In special way I would like to extend my sincere gratitude to my brothers, sisters, friends Mirembe Monica, Orai Julius, Rukundo Monica, Mulabbi Emmanuel for the support they rendered to me towards this work and during my studies.

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## **LIST OF ABBREVIATIONS**

<b>ATNESA</b>	Animal Traction Network for Eastern and Southern Africa
<b>DAP</b>	Draught Animal Power
<b>FAO:</b>	Food and Agriculture Organization
<b>NAADS</b>	National Agricultural Advisory Services
<b>NGO</b>	Non Governmental organization
<b>SAARI</b>	Serere Agricultural and Animal Production Research Institute
<b>SAIMMCO</b>	Soroti agricultural Implements and Machinery Manufacturing Company
<b>TFS</b>	Teso farming system
<b>UBOS</b>	Uganda Bureau of Statistics

## **ABSTRACT**

The research was conducted in Arapai sub county, Soroti district to assess hindrances to optimal utilization of animal traction technology. One hundred (100) household were randomly sampled. The data collected was based on demographic characteristics, animals used for animal traction technology, implements used and factors hindering optimal utilization of animal traction technology.

The study established that (100%) farmers used animal traction technology to a certain extent for operations like Ploughing (54%), Ridging (29%), Planting (8%), Weeding (4%), and Transportation (5%). And the implements that were common among farmers were; Ox-plough (91%), sledge (8%), Weeders (1%). Lack of implements 40%, training (5%), animals (1%), ignorance about the technology (32%), expensive nature of the implements (22%) were the factors hindering optimal utilization of draught animal power.

The study revealed that hindrances to optimal utilization of animal traction technology in Arapai sub county, Soroti District is due to; lack of implements like ridgers, ox weeders, seed planters and their expensive nature.

The study suggested that other animal draught implements such as planters, weeder, and harvesters should be introduced in to the study area. Training of farmers on animal traction technology should be conducted. Restocking could be one solution to lack of animals for animal traction technology. Further research should be conducted on hindrances on adoption of other species like donkeys, and horses in the area. The government should introduce and facilitate the implementation of training programs on animal traction technology.

## CHAPTER ONE: INTRODUCTION

### Background

Animal traction refers to the use of animals as the main power source for pulling implements and machines with the view to reducing the drudgery of farm work. This therefore means that, employment of domestic animals for tillage or transport in the village is well-known as animal traction. Chisango, (2008), further states that, an animal traction is generally understood to include transport as well as the pulling work of animals.

The use of work animals was introduced in Uganda in 1909 in Bukedea, Tororo district, in the Eastern part of the country (Akou, 1992). Soon after, an animal traction training and demonstration school was opened up in Kumi in 1920, which was later transferred to the current National Agriculture Semi Arid Research Institute (NASARI) as centre for research, testing, demonstration and training of farmers in ox-cultivation through the extension efforts of the Ministry of Agriculture. The use of work animals rapidly spread through the east and the northern part of the country. These were areas where ecological and cultural conditions favoured its development. The technology brought about increase in cropped acreages of land especially for cotton and common traditional cereal crops.

For the 70 years, animal traction and animal powered transport technology depended solely on imported technologies. Besides being expensive, animal traction equipment was heavy, sophisticated and difficult to operate using local work animals. They also lacked reliable sources of spare parts. In 1967, local manufacturing company (SAIMMCO) Uganda limited was established to produce the services and implements.

General progress of animal traction development was hindered by civil strife of the 1970s. This was farmers lose their work animals with devastation of the small holder farming sector. Efforts have since been put in place to revive animal traction development as an important part of the plan for the modernization of agriculture in Uganda. The integrated programmes by the government require meaningful engagement of the input of international knowledge and experience.

To date, the savannah grassland of Soroti district, Kumi and the northern parts of Tororo and Pallisa districts remain centre of animal technology as other districts of Lira, Gulu, Kitgum and some parts of Kapchorwa and Iganga districts are involved in this technology uptake.

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