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**FACTORS THAT LIMIT THE ADOPTION OF INDIGENIOUS COWS AS AN  
ALTERNATIVE SOURCE OF DRAFT POWER IN ARAPAI SUB-COUNTY, SOROTI  
DISTRICT**

**BY**



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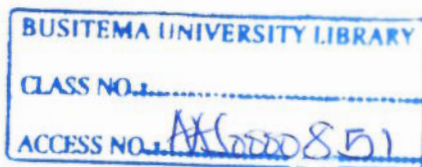
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## DECLARATION

I **OGINGWA EMMANUEL** declare that this dissertation is my own work and it has not been submitted to another university or any other institution of higher learning for any academic award.

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**APPROVAL**

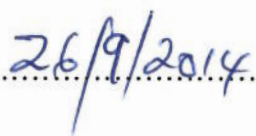
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## DEDICATION

To my parent Ms. Nabwire Jacqueline, brothers, sisters and classmates mostly Ogomu Isaac, Lutwama Abdul, Ngarambe Emmanuel, Kubeketere Isaac and Babula Clement. I owe them my greatest gratitude

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## **LIST OF ABBREVIATION**

**ATNESA**-Animal Traction Network for Eastern and Southern Africa

**DAP**- Drought Animal Power

**MAAIF**-Ministry of Agriculture Animal Industries and Fisheries

**Sqkm**-Square kilometer

**FAO**- Food and Agriculture Organization

**NaLIRRI**- National Livestock Regional Research Institute

**NGOs**- Non-Government Organization

**KW**- Kilo watt

## ABSTRACT

The purpose of the study was to establish the factors that limit the adoption of indigenous cows as an alternative source of draught power. The objective was to determine the technical, cultural and socio-economic factors responsible for the low adoption of cows as an alternative source of draft power. A Cross sectional survey was used to collect data from 100 respondents who were randomly selected and interviewed using questionnaires which were pre-tested before the commencement of data collection. The data collected was analyzed using statistical package of social sciences (SPSS version 16) to find the frequencies and percentages which are presented using tables. The study revealed that 87.5% (70 farmers) were not using cows for draft power and only 12.5% (10 farmers) were using cows for draft power. The major factors which affected the 70 farmers who were not using cows for draft power were economic factors which included; lack of money to buy supplements for cows; 84%(59 farmers), lack of sufficient number of cows; 74% (52 farmers%), lack of money to buy cows for draft power; 67% (47% ) Social factors were; cows are weak;76%(53 farmers), many had never seen anyone using cows for draft power;76% (53 farmers), respondents had never heard anybody using cows for draft power;71% (50 farmers) . Technical factors were; respondents had never used cows for draft power before; 87% (62 farmers), had never been trained on how to use cows; 80% (56 farmers), lacked knowledge on how to use cows; 75% (53 farmers). Cultural factors were; farmers believed that the tribe/cultural norms did not allow use of cows for draft power; 81% (57 farmers), religion (Christianity) did not allow use of cows for draft power 67 % (47 farmers). In conclusion, the economic factors were lack of financial means of buying supplements, cows and implements. While the technical and social-cultural factors were majorly lack of information and knowledge It was recommended that government should introduce agricultural loans at low rates, carry out restocking, establish training centres and create easy access to latest agricultural information through setting up of rural libraries.

## CHAPTER ONE

### 1.1 INTRODUCTION

Agriculture is a strategic sector in Uganda economy; it employs about 19.5 million people which is about 78.0% of the population in Uganda. Uganda has about 197,100 sq km of land of which 123,120 sq km is available for agriculture, which is equivalent to 49.2 ha per 100 people in Uganda but per 100 people involved in agriculture it is 63.1 ha (World bank, 2002; UNDP, 2004). Out of the 123,120 sq km of land for agriculture only 72,000 sq km (58.4%) is arable land (FAO, 2005a), therefore if we are to tackle problems of food insecurity in Teso region and the neighboring areas of Karamoja we need to explore other means in order to cultivate the remaining redundant land of 51,120 sq km.

In late 1980s about 3,021 tractors were imported into the country, 136 of them into Teso (The Country Studies Series, 1988). But this programme failed to last due to; unaffordability of hire costs, lack of technical knowledge in the area of maintenance, the farm holdings which averaged 2.5 ha per family were too small to justify the ownership and use of tractors.

Draft power can also be used in agriculture production, this date back to 1909 at the introduction of the cotton industry, in the traditional cotton growing areas of Teso and northern Uganda (Kagolo, 2012). However, the civil strife in the 1980s, led to the Teso cattle herd population to be reduced to 18,000 from 355,000 (FAO, 2005a), by rebel fighters who raided the homesteads of their co-ethnics for food, medicine, and recruits (Beber and Blattman, 2011). However in Chokwe District in Gaza, Mozambique also due to war there was a decline in cattle population (Faftine *et al*, 1999), which led them to adapt the usage of cows where they could be paired with oxen or paired alone.

The social and cultural problems were solved through training and setting up of demonstration farms. This led to tremendous increase in food production. Therefore the massive loss of cattle in Uganda should be made into a turning point to also fully use cows for draft power if we are to improve on income and food security in Uganda. If it worked in Mozambique then it could as well work in Uganda (Teso region) since there are a lot of common cultural and social aspects.

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