



**BUSITEMA  
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*Pursuing Excellence*

**STRATEGIES FOR COPING WITH FEED SCARCITY AMONG PIG FARMERS IN  
ARAPAI SUB COUNTY, SOROTI DISTRICT**

**BY**

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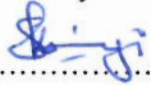


**A DISSERTATION SUBMITTED TO THE FACULTY OF AGRICULTURE AND  
ANIMAL SCIENCES IN PARTIAL FULFILLMENT FOR THE AWARD OF A  
BACHELOR'S DEGREE OF ANIMAL PRODUCTION AND MANAGEMENT OF  
BUSITEMA UNIVERSITY**

**MAY, 2014**

**DECLARATION**

I, **KIMENYI JULIUS**, hereby declare that the work submitted in this dissertation is original and a result of my own study. This dissertation has not been submitted and presented for any academic award to any University or institution of higher learning.

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**APPROVAL**


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

**Mr. OLUPOT JULIUS**

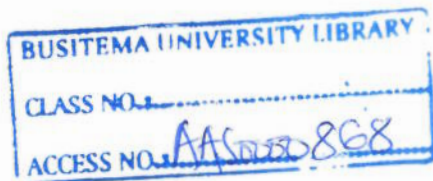
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## DEDICATION

I dedicate this critique to my Daddy Late Mzee Francis S Kashumba who emphasized the magnitude of education and hard work at my early age which has helped me to hustle with studies despite the thorns of rose.

More still to my wife to be Madam Nabimanya Janepher (*Mukazi*) for her time & courage during tough times of this course

## ACKNOWLEDGEMENT

In a special way I would like to extend my sincere gratitude to the following people, Uncle Ndahendekire Richard, Mr.Ndyamanya Francis Tr Ssemujju and the wife without whom my studies would have come to a standstill, my brothers, sisters and friends like Ojakol James, Orai, Turyagyenda, Itiakorit; Barnabas, Ewaju Emmanuel, Naboth and Elias for making my life so much richer.

I wish to thank my supervisor, MR.OLUPOT JULIUS for his advice, encouragement and guidance he 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 especially Mr Kauta Moses whose input has been valuable to me.

May the almighty reward you on my behalf.

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## **LIST OF ABBREVIATIONS**

NGOs	Non Governmental Organizations
UCC	Uganda Communication Commission
GDP	Gross Domestic Product
FAO	Food and Agriculture Organization
UBOS	Uganda Bureau of Statistics
SPSS	Statistical package for socio- sciences

## ABSTRACT

A cross-sectional study was carried out in Arapai Sub County, Soroti district in four Parishes to identify strategies used by small scale pig farmers in response to feed scarcity. Scarcity of feeds has posed a lot of challenges that necessitated the identification and exploitation of available safety nets. The data was collected from 120 respondents using structured questionnaires, analyzed using SPSS version 20 and presented in tables, pie charts and graphs.

The study revealed that, the main source of feeds during wet season was weeds (53%) followed by food leftovers (24%) while the main feed sources during dry season were cassava (46%), maize bran (27%) and the main feed sources during post harvest was crop residues (58%) and food leftover's (20%). Of the 120 respondents interviewed, 84% often experienced feed scarcity during dry season and 2% experienced feed shortages during wet seasons while 14% experienced feed shortages during post harvest season. To cope up with feed scarcity 33% of the respondents used crop residues followed by 21% harvesting natural forages while 19%, changed feed resources based on availability and cost, others reduced herd size (18%) and only 9% purchased feeds in bulk to overcome shortages. The findings also showed that, 72% of the farmers gave supplements to their pigs while 28% never supplemented diets of their pigs. Various unconventional feed resources included food leftovers, banana peelings, sweet potato vines, cassava peelings, jackfruit wastes, bone meal and brewers spent grain or waste.

In conclusion, the study established that, the majority of farmers used crop residues, reduced herd size, used leftovers and harvested natural forages as strategies to cope up with feed scarcity. The study recommended that, Local government should liaise with government laboratories and nutritionists to analyze these feed resources for nutritive values and formulate rations for pig production and streamline extension service system to extend services to these farmers.

## CHAPTER ONE: INTRODUCTION

### 1.1 Background

Livestock and their products play an important role in income generation and are a source of high quality protein to many households. Specifically, livestock contributes about 15% of the agricultural GDP (FAO, 2005). Pig production has increasingly become an important activity in Uganda with pig population rising in the last three decades from 0.19 million to 3.2 million pigs (Uganda Bureau of Statistics, 2009).

Uganda has the highest per capita consumption of pork in Sub-Saharan Africa with a 2011 estimate of 3.4 kg/person/year representing a ten-fold increase in the last 30 years. More than 1.1 million families, about 18% of total households in Uganda own pigs (Uganda Bureau of Statistic, 2009). The majority of pigs are kept by smallholder farmers under extensive systems with small numbers of peri-urban small scale, semi-intensive farms and a few large modern intensive farms producing for commercial purposes (Tatwangire, 2012)

In Arapai Sub County, the most preferred management practice for pigs is tethering and free range during the dry season, Most of the pig farmers in Arapai Sub County feed their pigs on kitchen leftovers, homemade feeds and pasture with little or no supplementation.

Households reared pigs because they grew fast, there was a ready market and proven demand and were highly prolific which resulted in quick generation of cash (Mutua *et al.*, 2010). In these systems pigs were mainly fed on kitchen food wastes, crop residues, especially sweet potato vines, cassava leaves and peelings, banana peelings and by-products of crops such as maize and cocoyam (Katongole *et al.*, 2012).

Feed shortage was the major constraint to smallholder pig production in African countries like Uganda (Chikwanha, 2006). This arose from insufficient knowledge about the nutritive value of the available feed resources and the inability or failure to conserve feeds for dry season feeding (Adesehinwa *et al.*, 2003). In the smallholder farms, availability of local feed resources used for pigs was unstable and unbalanced throughout the year (Hai & Pryor, 1996). Ishagi *et al.*, (2002) added that agro-industrial by-products and concentrate feeds were also expensive and therefore not an option for small scale pig farmers. Even the crop/food wastes generated in the various

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