ASSESSMENT OF FARMERS KNOWLEDGE PROFILE ON AFRICAN SWINE FEVER IN NYERO SUB-COUNTY, KUMI DISTRICT

BY

ONANYANG MARK

BU/UG/2014/2008

Markonanyang45@gmail.com

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DECLARATION

I **ONANYANG MARK** declare that this dissertation is original and has not previously been submitted to another university or any other higher institution of learning for the award of any degree, diploma and certificate.

Signature ..... Date.....

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

Dr. GERALD ZIRINTUNDA

BVM (MUK), MSC.

LECTURER,

Faculty of Agriculture and animal sciences

Busitema University

Signature ..... Date 28-11-2017

DEDICATION

I dedicate this thesis to my parents Mr. OKALEBO RAYMOND and Mrs. AMODING GRACE and other family members. Your endless love, support and encouragement have always given me the strength to go the extra mile and pursue my dreams even when it seemed too difficult, painful and impossible.

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LIST OF ABBREVIATIONS

FAO:	Food and Agricultural Organization
UBOS:	Uganda Bureau of Statistics
ASFV:	African SwineFever Virus
DNA:	Deoxyribonucleic Acid
IIF:	Indirect Immuno-Flourescence

ABSTRACT

African Swine Fever (ASF) is one of the most contagious and deadly disease that affects domestic pigs. It is a devastating hemorrhagic fever of pigs that causes up to 100 % mortality (Penrith *et al.*, 2004). A study was carried to assess farmers' knowledge on African swine fever in Nyero sub-county Kumi district in July 2017 with the objective of the determining farmer's level of knowledge on the different ways of African swine fever transmission and biosecurity measures. A descriptive cross-sectional study was carried out to collect both quantitative and qualitative data from 80 randomly sampled pig farmers using a structured questionnaire. Data was analyzed using excel spread sheet while knowledge level was assessed by scoring and grading. The results showed that 10%, 50% and 22% of the farmers had excellent, good and poor knowledge on transmission respectively while 13%, 38% and 46% of farmers had excellent, good and poor knowledge on biosecurity respectively. The study showed that the participants had an understanding of specific spread mechanisms and possible preventive measures. Training by extension workers should be organized for swine keepers with biosecurity practices against African swine fever and mechanism of its transmission being part of their livestock packages.

CHAPTER ONE: INTRODUCTION

1:1 Background

African Swine Fever (ASF) is one of the most contagious and deadly disease that affects domestic pigs. It is a devastating hemorrhagic fever of pigs that causes up to 100 % mortality (Penrith *et al.*, 2004). Domestic pigs are most susceptible, with the disease course ranging from peracute, acute, sub-acute, chronic and unapparent and, mortality rates ranging from 100% to as little as 3% (Hess *et al*,.1987).African swine fever is caused by Africa swine fever virus (ASFV) that belongs to *Asfarviridae* family and it is transmitted to swine through three main routes: (1) a sylvatic cycle involving wild swine and *Ornithodoros* ticks; (2) from the sylvatic cycle to domestic pigs; and (3) domestic pig cycle involving domesticated pig to pig transmission (Costard *et al.*, 2013; Plowright *et al.*, 1994; Guinat *et al.*, 2016) concurs with (Plowright *et al.*, 1994. susceptible domestic pigs can become infected by contact with infectious animals, ingestion of contaminated feed, contact with contaminated surfaces and bites from infectious soft ticks.

From the time when ASF was introduced into Georgia in 2007, ASFV has subsequently spread to neighboring countries, including Armenia, Azerbaijan, the western parts of the Russian Federation, Iran (2008), Ukraine (2012) and Belarus (2013) (OIE 2007–2013;Rahimi *et al.*, 2010). In 2014, the virus entered the European Union (EU), with ASF first reported in domestic pigs and wild boar in Lithuania, Poland, Latvia and Estonia (2015) (OIE, 2014–2016).

In Sub Sahara Africa, African swine fever has to some extent promoted poverty since most of the farmers in Sub Sahara Africa rely mostly on pig farming for both domestic use and for sale. It is endemic in most Sub-Saharan African countries where pigs are produced, because of their high reproductive potential and ability to convert low quality feed into high quality protein could play a crucial role in poverty alleviation (Penrith *et al.*, 2004). The virus made an apparently unsustained incursion into Nigeria in 1973, wiping out the infected pig herd and then becoming extinct (Owolodun *et al.*, 2010). The virus spread out to various countries in West Africa such as

Chad, Cameroon including Kenya and Tanzania in East Africa as explained by OIE (2011) Tanzania and Malawi were infected, with huge fatalities in pigs and consequently suffered significant loss of income and employment opportunities.

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