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**FACTORS LIMITING TECHNOLOGY ADOPTION: A CASE STUDY OF FEEDING
CONCENTRATE FEEDS TO PIGS AMONG PIG FARMERS IN PANYANGO
SUB COUNTY, PAKWACH DISTRICT.**

BY

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LIST OF ABBREVIATIONS

- | | |
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| 1. NAADS | National Agricultural Advisory Services |
| 2. IFI | Individual Farmer Interviews |
| 3. S/C | Sub County |
| 4. FAO | food and agriculture organization |
| 5. SPSS | Statistical package for social sciences. |
| 6. NGOs | Non-Governmental organizations. |
| 7. FM | fish meal |

CHAPTER ONE: INTRODUCTION.

1.1 Introduction

In Uganda, the past 10 years have been characterized by introduction of new agricultural interventions, some of which have targeted increasing the adoption of agricultural technologies as means of changing the structure of agricultural production in the country and ultimately farmer incomes (Kasirye, 2010). However, a farmer is a rational decision maker who normally strives for a better standard of living and seeks ways of adopting new technologies to accomplish this goal.

Technology can be adopted when it is transferred from the technology generators' such as research laboratories and universities to clients such as farmers (Chi & Yamada, 2002). However, the adoption depend on the farmers' decision whether or not to adopt the innovation.

Swine concentrate feeding has been one of the feeding technology used to improve growth rate hence increasing productivity. Many countries worldwide has been and are using concentrate for feeding the pigs. Africa and Uganda are inclusive in using concentrate for feeding pigs either as a supplementary diet or as a whole feeding resources for the pigs.

A variety of feed stuffs exist to pig producers, ranging from commercial concentrates, agro industrial by products and home grown feeds, despite all these farmers are still involves in keeping pigs on free range system where, pigs scavenging for food around the homestead, village or garbage collection centers. Kitchen wastes and forages make up the bulk of the feed. These feed resources are low in quality to maintain high level of pig growth and reproductive Performance (Maass, Kabirizi, & Zziwa, 2014).

1.2 Background.

Animal agriculture has a specialized significance as it can play an important role in improving the socio-economic status of a sizable section of the weaker and tribal population(Rahman, 2007). Most cases livestock is the source of cash income for the subsistence farmers as well as endurance of family purchasing power in the event of unprofitable agriculture due to unforeseen reasons like drought.

The government of Uganda has set up a detailed strategy of development for the livestock sector. It consists of: carrying out effective animal disease control, formulation and implementation of appropriate animal health standards and regulations, promoting genetic improvement and better

animal nutrition, training and delivery of advisory services, supporting livestock research and improving livestock and livestock products marketing system.(Brief, 2005)

The establishment of the National Agricultural Advisory Services (NAADS) in 2001 for the case of Uganda was a major boost to the agricultural sector. Improved livestock breeding methods like artificial insemination, transfer of embryo technology, and feed formulation are also available. Despite all these developments, there is low level of adoption of these technologies(Kinuthia & Mabaya, 2017)

The technology of swine production is well developed, Concentrate Feeding technology is one of such technologies that have been developed to improve swine productivity by increasing food absorption hence faster growth and high weight gain. The amount of feed that the pig eats in one day must contain enough energy and protein for body maintenance, growth, and production.(“Home Made Animal Feed Concentrates Food and Agriculture Organization of the United Nations,” .)

The basic energy sources for swine are cereal grains: Corn (maize), milo (sorghum), barley, wheat, and their by-products. Cereal grains are high in carbohydrates, as well as palatable and easily digested.(Meyer, Henderson, Pinkston, Snyder, & Speer, 1815)

The increasing effective demand for livestock products such as milk, meat, pork and eggs in Uganda drives farmers to supplement their livestock with concentrates to improve on their productivity. There are abundance of cereal grains and their by- products such as maize and maize bran, sorghum, millet, rice bran and root crops (e.g. cassava) as energy concentrates as well as protein concentrates such as soybean, sunflower cakes, cottonseed cakes, peas and groundnuts (Lukuyu et al., 2013).

Extension and research are well-organized systems that design and disseminate technological innovations to farmers. Despite all the technological innovation transfer, there is a wide gap between levels of production which research contends is attainable and that which farmers achieves (Oladele, 2004).