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**CONSTRAINTS OF FREE-RANGE POULTRY PRODUCTION IN LABONGO
AKWANG SUB-COUNTY, KITGUM DISTRICT**

BY

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**A DISSERTATION SUBMITTED TO THE FACULTY OF AGRICULTURE AND
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THE AWARD OF THE DEGREE OF BACHELOR OF ANIMAL PRODUCTION AND
MANAGEMENT OF BUSITEMA UNIVERSITY**

JULY, 2014

DECLARATION

I, **Tabu Richard** declare that the information in this research dissertation is my own work and has never been submitted to any university or institution of higher learning for any academic award.

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APPROVAL

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DEDICATION

First of all this dissertation is highly dedicated to my dear parents Mr. Obur Ismail and Mrs. Lakot Mercy, beloved brothers (Okech Obur, Oketa Mike, Nyeko Robert, Odoko-nyero Michael) and sisters (Adule Christine, Oyella Magdalene, Atim Monica, Laker Audrey) for their endless contribution, guidance and financial support rendered to me.

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LIST OF ACRONYMS

B.V.M	Bachelor of Veterinary Medicine
CAO	Chief Administrative Officer
DOCs	day old chicks
<i>et al</i>	and others
FAO	Food and Agriculture Organization of the United Nations
H/Q	headquarter
HHs	households
LC	Local Council
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
mm	millimeter
NAADS	National Agricultural Advisory Services
ND	Newcastle disease
NGOs	Non-Governmental Organizations
PMA	Plan for Modernization of Agriculture
PRDP	Peace, Recovery and Development Program
S/C	Sub-county
Sq km	square kilometer
UBOS	Uganda Bureau of Statistics

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ABSTRACT

A study on free-range poultry production constraints was conducted at six randomly selected villages in Lamit, Lugwar and Pajimo parishes of Labongo Akwang sub-county, Kitgum district. One hundred and two rural households were interviewed using a set of questionnaires as well as self observations for the collection of data. Data was analyzed using Microsoft office excel and presented in the form of pie charts, graphs and tables.

The study indicated that almost all farmers (90%) in Akwang S/C kept nondescript local birds under scavenging system with chickens dominating the population by 94%, followed by 3.6% pigeons, 1.5% ducks, 0.7% turkeys, 0.2% guinea fowls and no other birds were kept. Free-range system was commonly practiced by farmers in all the villages with 90% local breeds of poultry being preferred by the farmers. A family usually keeps a variable number of birds but 22 on average and mainly for their meat and eggs as well as being valued in religious and cultural life. The production system was found to be appropriate because birds make the best use of locally available resources. Females contributed significantly the highest percentage of the farmers, with 61% versus 39% males.

The study results on the major constraints of free-range poultry production revealed that 49% diseases notably Newcastle disease that was the most serious health problem followed by predation 21.8% while, poor feed supplementation, inadequate housing, market constraints, poor breeding stock, rough weather, taboos and prohibition, lack of capital, lack of technical knowledge, poor record keeping were equally important problems.

The study results on educational level revealed that those who failed to study (11%) and those who merely attained primary education (68%) did not practiced good management aspects concerning free-range poultry production if compared to those who studied secondary (18%) and tertiary institutions (3%).

Farmers in Akwang sub-county need to be provided with informal and formal education so as improve their poultry production. The Government and NGOs should introduce improved breeding program, providing credit, health care facilities, establishment of reliable markets, predation control, supplementary feeding, housing, taboos and prohibitions are suggested for the development of poultry production.

CHAPTER ONE: INTRODUCTION

1.1 Background

Poultry industry has been one of the fastest growing animal industries with huge numbers across the world. According to a recent survey carried out by Food and Agriculture Organization (FAO) 2000, it is estimated that world poultry population is 14 billion, among these 75% are from the developing countries.

Poultry population for Uganda was estimated to be 39,843,670 birds as of 2008 by MAAIF and FAO. Chicken comprises of 37,443,880 (94%), ducks 1,458,250 (3.6%), turkeys 348,320 (0.9%), guinea fowl 151,430 (0.4%), geese 48,860 (0.1%) and other birds 392,930 (1%). In Kitgum district chicken composed of 71%, ducks 16%, guinea fowls 1.4%, turkeys 0.6%, geese 0%, and other birds 11% (MAAIF and FAO, 2008). Akwang sub-county comprises of 94% chickens, 1.5% ducks, 0.7% turkeys, 0.2% guinea fowls, 0% geese and 3.6% pigeons. Out of the current poultry population, over 80% are indigenous free-range poultry while 20% are exotic in the S/C (Byarugaba and Matovu, 2011; MAAIF, 2008).

Poultry production is based on free-range scavenging systems, where the birds scavenge around for almost all of their nutritional requirements with little or no supplementary feeding. In the event where supplementary feeding is given it is usually made of household leftovers or farm waste of very low nutritional value, which cannot cater adequately for the needs of the birds (FAO and IAEA, 2006).

Many people depend on poultry as a source of animal protein in their families; income and other socio-economic benefits (Byarugaba and Matovu, 2011). Besides the direct financial benefits derived from poultry production, poultry play several important roles in the livelihoods of the communities in addressing issues of vulnerability, powerlessness, and assets as well as gender equality (Sonaiya, 2000a) but at a less organized way. According to Czech *et al*, 2005, village poultry are known to be taken by women (70%) and children and in some cases its one of assets that women own and are free to dispose of without men's intervention (Scola, 1992). Men tend to look after large animals such as cattle, sheep, goats (Mushi *et al*, 2005). The growth has come along with not only opportunities for feeding millions of people but also challenges related to high intensification and commercialization (Byarugaba and Matovu, 2011). The industry in S/C is mainly based on free-range (scavenging) indigenous poultry which are kept at the subsistence

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