



**BUSITEMA  
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**KNOWLEDGE AND PRACTICE OF BIOSECURITY IN INTENSIVE POULTRY  
FARMS IN NAMUTUMBA DISTRICT**

**BY**

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FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELORS  
OF ANIMAL PRODUCTION AND MANGEMENT OF BUSITEMA UNIVERSITY**

**MAY, 2015**

**DECLARATION**

I **KASANGO EMMANUEL** hereby declare that this dissertation is out of my original concept and has never been submitted to any University or institute of higher learning for any academic award.

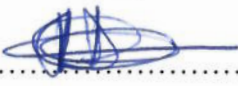
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**APPROVAL**

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## **DEDICATION**

I dedicate this dissertation to my parents Mr. KASANGO PATRICK and Ms. KAGOYA BEATRICE

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I take this opportunity to utter my gratitude to the Almighty God for the gift of life all through.

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## LIST OF ABBREVIATIONS

NAADS- National agriculture advisory services

UBOS- Uganda bureau of standards

ILO- international labour organization

FAO- Food and agriculture organization

MAAIF- Ministry of agriculture animal industry and fisheries

MDGs- millennium development goals

## ABSTRACT

Commercial poultry production is low in Namutumba district and Uganda at large even after the plan to modernise agriculture. The low level of intensive poultry production has persisted long after even government intervene to encourage farmers adopt commercial methods of production. A study was conducted to assess farmer's knowledge and practice of biosecurity in commercial poultry farms Namutumba district. Data was collected using questionnaires and 65 poultry farmers under commercial production were sampled. The collected data was coded and analyzed using the statistical package of social sciences (SPSS Version 16) and was presented by description, then by statistical figures, pie charts and graph. The study revealed that in conceptual biosecurity 69.2% of the respondents separated poultry house from the road of which 12.3% had knowledge, 72.3% separated poultry house from market places of which 44.6% had knowledge, only 33.8% separated poultry houses from nearest farm of which 30.8% had knowledge while 30.8% separated from bush/trees/water source and none of them had knowledge. Under structural biosecurity, 72.3% did not separate poultry houses from family dwellings, 84.6% separated poultry houses from offices, 61.5% did not separate their stores from poultry houses, and 92.3% separated their poultry house from parking yards. Also The study revealed that 86.2% of the respondents did not have a perimeter fence, 89.2% had no gate on their farms, 72.3% did not have footbath and few who had footbath had knowledge, 67.7% had the isolation unit for the sick birds and all of them had knowledge, 67.7% had separation units for separate age and only 3.1% had knowledge, 95.4% had disposal unit separated and 78.5% had knowledge. The study revealed that 13.9%, 66.2%, 66.2% of the respondents who separated the dwelling, offices, stores, parking yard respectively from the poultry unit to prevent diseases. 4.6 % and 3.1% had fence and gates respectively to prevent diseases. Under operational biosecurity, 52.3% kept other birds at home, 95.4% use family labour, all hired labour had birds at their home, 75.4% had no controlled movement in farm, 63.1% did not treat water, 87.7% disinfect equipments after every use, 80% receive visitors and 63.1% did not disinfect them, 92.3% vaccinated their birds and 93.9% control flock interaction. The findings of this study showed that the low level of commercial poultry production Namutumba might be due to the impacts of diseases resulting from poor biosecurity measures undertaken by the farmers. It is recommended that government and NGO should train poultry farmers on biosecurity, disease prevention and the adoption of modern husbandry practices suitable for the smallholder poultry production.

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background

The structural changes that poultry sector has undergone through for the past two decades was due to the introduction of modern intensive production methods, genetic improvements, improved preventive disease control and biosecurity measures, increasing income and human population, and urbanization. These changes provide opportunities for poultry farmers, particularly those on small scale, to improve their farm income (Narrod *et al.*, 2008).

Intensive poultry production involves the total confinement of birds in one place where they are provided with necessary requirements and it is the most practiced method in developed countries. Intensive poultry farming is preferred because it results in High yield. Farmers can easily monitor their enterprise, Farming is more economical due to the smaller spaces needed, Ability to meet the ever-increasing demand for food supplies.

The poultry industry is one of the most important animal production industries and contributes to approximately 10% of all meat and eggs produced in the world each year and the s sector is particularly important in that it is a significant source for the supply of protein in household's nutritional intake, It is an attractive economic activity especially to women and poor population( Delgado *et al.*, 2008).

Despite the tremendous expansion of the commercial poultry sector since the 90s, scavenging poultry still account for more than 90% of the total poultry production in Uganda. (Mukiibi & Kirunda, 2005). The low output from commercial poultry sector has been attributed to the rising cost of feeds, veterinary services and the continuous threats of infectious diseases severely affects the production.

Biosecurity is set of preventive measures designed to reduce the risk of transmission of infectious diseases, quarantined pests, invasive alien species, and living modified organisms (Aila *et al.*, 2011a; 2011b).

For commercially-raised birds, failing to implement bio security can be considerably more expensive than the cost of the bio security actions that could have protected the flocks from infectious disease (Cardona, 2008). Therefore the need to observe bio security in intensive poultry production so as to keep highly contagious diseases out of the poultry farm, However,

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