



**DAIRY FARMING IN BUSIA DISTRICT: PRODUCTIVITY, GRAZING SYSTEMS
AND MANAGEMENT PRACTICES**

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DECLARATION

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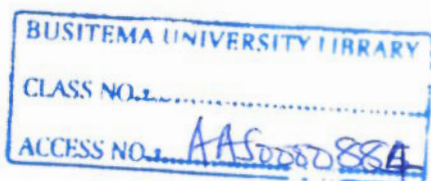
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LIST OF ABBREVIATIONS

DVO	District Veterinary Officer
SPSS	Statistical Package for Social Scientists software
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
DF	Degrees of Freedom
P	Pearson Chi- square
GDP	Gross Domestic Product
NUSAF	Northern Uganda Social Action Fund
NAADS	National Agricultural Advisory Services

ABSTRACT

Since increased milk production is viewed as a means to alleviate poverty, particularly for smallholders, it is important to develop other approaches in order to effectively capture the limiting factors of the domestic milk sub-sector. The major objective of the study was to assess the productivity and management practices used by dairy cattle farmers in Dabani Sub County, Busia district.

During the survey, 15 standardized questionnaires were administered to farmers in order to collect information on family structure, herd structure, milk productivity and management practices. Data was coded and analysed using Statistical Package for Social Scientists software (SPSS) version 20.

This survey revealed that 33 percent of the farmers practiced intensive farming while 67 percent of them practiced semi intensive farming. High milk production was recorded in farms practicing intensive management (60 percent of the farms) while semi intensive management accounted for 10 percent of the farms. On daily basis, animal management activities involved feeding, cleaning, giving water to animals, milking, cutting grass such as Napier and sometimes treatment. Most farmers (40%) were spraying their animals fortnightly and monthly (33.3%) with few 6.7% spraying erratically. High milk production (11-15 liters per cow per day on average) was recorded in farms where farmers sprayed their animals fortnightly (66.7 percent) whilst those who sprayed their animals monthly, bi-monthly and erratically had low milk production (5-10 liters per cow per day on average).

Most of the dairy farms in Dabani Sub County had low milk production (5-10 liters) from each cow per day, the dairy management systems practiced on dairy farms were mainly two namely; intensive and semi intensive management system. Intensive farming system is the best for dairy production. Farmers who sprayed their animals fortnightly recorded the highest milk production. Dairy cattle farmers should embrace intensive system of dairy production to realize high milk yields and farmers should spray their animals fortnightly for effective tick control and increased milk productivity.

CHAPTER ONE

INTRODUCTION

1.1 Background

More than three quarters of the Ugandan population are extremely poor, live in rural areas and partly or wholly depend on agriculture for their livelihoods; almost half of them also partly depend on livestock (Torsten and Joachim, 2010).

Livestock have a number of characteristics that contribute to sustainable rural development: among other things, livestock provide marketable products that can be produced by small-scale, household production systems. Judicious development of the livestock sector could thus improve the lives of rural people, contributing to growth of the world economy and achieving the Millennium Development Goal of eradicating extreme poverty and hunger (Torsten and Joachim, 2010).

Dairy farming contributes significantly to Uganda's GDP accounting for approximately 9 percent of total agriculture GDP and about 3 percent of total GDP (Staal and Kaguongo, 2003).

Since increased milk production is viewed as a means to alleviate poverty, particularly for smallholders, it is important to develop other approaches in order to effectively capture the limiting factors of the domestic milk sub-sector (Somda *et al.*, 2003). Although exotic breeds and cross breed cattle constitute less than 20 percent of the animal population in Uganda, in 2007 these breeds produced around approximately 60 percent of all milk in Uganda (East Africa Dairy Development, 2008).

It is known that milk production in Uganda is characterized by a 'low input-low output' approach, for most households, (Leng, 1992). Ugandan dairy stakeholders have been looking for and capitalizing on opportunities to diversify on dairy production so as to increase their returns to land and labour (Otto *et al.*, 2005).

The best management system for dairy farming is 'zero grazing', and is increasingly used in North America and parts of the UK for large and high yielding herds (Thomas, 2011). Supplemental feeding with pasture-based systems is difficult to manage compared to

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