

ASSESSING THE PRODUCTION AND USAGE OF SILAGE AMONG SMALL SCALE
DAIRY CATTLE FARMERS IN BUDAKA SUB COUNTY IN BUDAKA DISTRICT

ANYOVI RONALD

BU/UP/2016/320

RESEARCH REPORT SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE
EDUCATION OF BUSITEMAUNIVERSITY

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SUPERVISOR: MR. DRAMADRI GERALD AFAYO

JANUARY, 2021

DECLARATION

I ANYOVI RONALD declare that this research report is my original work and to the best of my knowledge it has not been presented for an award of degree or diploma in any other institution.

Signature..... **Date**.....

APPROVAL

This is to certify that the research report entitled factors assessing the production and usage of silage among small scale dairy cattle farmers in Budaka Sub county Budaka District , submitted in partial fulfillment of the requirement for award of degree of Bachelor of Science Education of Busitema University is authentic record of bonafied research work carried out by Anyovi Ronald (BU/UP/2016/320) under my guidance and supervision. No part of this research report has been submitted for any other degree or diploma.

Signature:.....

Date:.....

Dramadri Gerald Afayo

SUPERVISOR

DEDICATION

I dedicate this work to my lovely parents Mr. Imakuru Martin and Ms. Batio Jane, my brother Onama Luis and all my sisters for supporting me during my pursuit for this Degree.

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Lastly but mostly I want to be appreciative of all my sisters and brother for your ever living love that Injects real and fresh life into my blood and keeps me alive when I felt horrific.

List of Acronym

COMESA Common Market for Eastern and Southern Africa.

DDA Dairy Development Authority.

EAC East Africa Community

EABW East Africa Business Week

EADD East African Dairy Development Project.

GDP Gross Domestic Product.

ILIR The International Research Institute

MAAIF Ministry of Agriculture Animal Industry

NaLIRRI The National Research Institute.

NGOs Non-Governmental organizations

SSA Sub Saharan Africa.

ABSTRACT

The cross-sectional study was carried out in Budaka district to assess the production and usage of among small scale cattle dairy farms in Budaka sub-county. The study aimed at determining the number of farmers that feed their animals on silage, it was also aimed at establishing the technology farmers use during silage making and finding out challenges farmers face during silage making. Quantitative data was collected from 25 randomly selected respondents using questionnaires. The study employed a qualitative data approach and a case study design to collect and analyze data. Data collection methods included; documentary review, in-depth interviews, focused group discussions and interview guides. The study revealed that ten dairy cattle farmers in Budaka sub-county feed their cows on silage especially in dry season when the pastures are scarce in order for them to maintain the milk production. It was revealed that farmers use local means (using panga to chop fodder instead of a chopper and compressing using feet) to produce silage and this has made it hard for them to produce silage in large quantities. Despite some challenges such as inadequate machines used in silage production and less government support, farmers have been able to form cooperatives where they have collected money and bought the equipment's that help them in the process of silage production and through such cooperatives they have been able to get support from Non-Governmental Organizations (NGOs).

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CHAPTER ONE

1.0 INTRODUCTION

1.1 Back ground.

Silage is a preserved fodder or high moisture content fodder made from green crops. Making silage is very important to farmers as it can be fed to animals during times when pasture isn't good or in dry seasons. Silage is made primarily from annual crops that include corn, sorghum, Napier, millet and wheat.

Using technique to process for making green fodder preserved for animals started in parts of Germany since the start of the 19th century. This gained the attention of a French agriculturist, Auguste Goffart of Sologne, near Orléans, who published a book in 1877 which described the experiences of preserving green crops in silos. Goffart's experience attracted considerable attention. The conditions of dairy farming in the USA suited the ensiling of green corn fodder, and was soon adopted by New England farmers. Francis Morris of Maryland prepared the first silage produced in America in 1876. The favourable results obtained in the U.S. led to the introduction of the system in the United Kingdom, where Thomas Kirby first introduced the process for British dairy herds.

The modern silage preserved with acid and by preventing contact with air was invented by a Finnish academic and professor of chemistry Artturi Ilmari Virtanen. Virtanen was awarded 1945 Nobel prize in chemistry "for his research and inventions in agricultural and nutrition chemistry, especially for his fodder preservation method", practically inventing modern silage.

Early silos were made of stone or concrete either above or below ground, but it is recognized that air may be sufficiently excluded in a tightly pressed stack, though in this case a few inches of the fodder round the sides is generally useless owing to mildew. In the U.S. structures were typically constructed of wooden cylinders to 35 or 40 ft. in depth.

In the early days of mechanized agriculture, stalks were cut and collected manually using a knife and horsedrawn wagon, and fed into a stationary machine called a "silo filler" that chopped the stalks and blew them up a narrow tube to the top of a tower silo.

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