A DAIRY FARM RECORDS MANAGEMENT SYSTEM

CASE STUDY; MUHINDURA DAIRY FARM

BY

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A PROJECT REPORT SUBMITTED TO THE DEPARTMENT OF COMPUTER STUDIES IN PARTIAL FULLFILLMENT OF THE AWARD OF BACHELORS OF SCIENCE IN COMPUTER SCIENCE AT BUSITEMA UNIVERSITY.

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DECLARATION

I hereby declare that this report is my original work. It is being submitted in partial fulfilment of a Bachelors degree of computer science at Busitema University, and has not been submitted before at any University or higher institution of learning for any academic award.

STUDENT

MANIRIHO ARMSTRONG

Signature: .....

Date: 13/02/2023

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APPROVAL

This is to certify that MANIRIHO ARMSTRONG BU/UG/2019/2302 of Busitema University has carried out the final year research project to fulfill the requirements for the award of degree of Bachelor of Science in computer science under my supervision

SUPERVISOR

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Signature: .....

Date: 14/Feb/23

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DEDICATION

I kindly dedicate this dissertation to the Almighty God, my mum, friends, supervisor Mr. Oboth Andrew and classmates of Computer science Busitema University.

ACKNOWLEDGEMENT

The Almighty God has been the strength and pillar of my life, His love, grace, blessings and mercy have seen me through this academic journey. With great honor, I thank my mother Mrs. Jane Kirabirwa and my brothers for the endless support and provision towards my academics.

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ABSTRACT

This project led to creation of a computerized records management system for the dairy farms which solves problems of inaccuracy in records and lack of the very farm records. The system keeps records of all cattle on the farm and monitors their productivity. The records kept include; animal records, milk production and milk sales records. This research aimed at developing a dairy farm records management system to eliminate the manual way of record keeping

The farm manager logs in into the system through providing his username and password thus enabling him to edit the employee details and also manage the milk distribution records. The milk maid also has access to the system through providing his username and password enabling him record milk collected that day from the various lactating cows. The sales officer also uses the system to record the sales details in a particular day.

Rapid Application Development (RAD) approach was used in developing the system.

The data models used were the context diagram, Data Flow Diagram, and Entity Relationship Diagram (ERD)

The system was developed using PHP for server-side scripting, HTML for designing data entry forms, other tools included CSS, JavaScript, Bootstrap, and MySQL for database management system.

The system was tested and validated to ensure that it efficiently and effectively meets the dairy farm records management system

Conclusively, the developed system is an efficient and effective tool which dairy farmers can use for records management.

CHAPTER ONE

1.0 INTRODUCTION

Dairy farming is an agriculture extension that deals with rearing of cattle for the main purpose of milk production.

Dairy farming is widely practiced in the nation as Uganda is a tropical region with plenty of pasture provided by rainfall throughout the year.

Dairy farming is a major activity in the southwestern, central, and northeastern parts of Uganda, with the sector contributing significantly to the economic, nutritional, and employment opportunities of the rural communities in those areas.

Ugandan milk production is largely dominated by small-scale farmers who own over 90 percent of the national cattle population (FAO 2004). In rural areas, where 96 percent of poor Ugandans live (Okidi et al, 2004), up to about 60 percent of the households keep mostly indigenous cattle (NADDS; King 2002).

A **dairy farm record** is a document or a file used to keep account of different activities, events, and materials regarding the farm operations, while record keeping is documenting or writing those activities on a recording materials or machines. Record keeping is a necessary element of good livestock business management. It is kept for assisting in financial planning decisions, providing data for government administrative and extension purposes, assisting in livestock management decisions, and evaluating overall activities of the dairy farm. Common types of records in dairy farm are records of Identification of cattle, financial records, production records, health records, record of agricultural inputs, records of animal feeds, daily farm records, records of farm implements and equipment, Workers and vehicle records. A basic manual (hand) record-keeping and computerized system are the two methods of record keeping in dairy farm. Decision-making in dairy farm can be greatly enhanced by analyzing both production and financial records and their impact on profitability.

The first officially recognized recording system in dairy farm was started when milk recording organizations were formed in Denmark in 1895. The recording movement spread rapidly and now plays an important role in all countries with an advanced dairy industry. Illiteracy and low numeracy levels, lack of time, lack of incentive, and lack of awareness are major constraints faced

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