

# FACULTY OF AGRICULTURE AND ANIMAL SCIENCES

DEPARTMENT OF ANIMAL PRODUCTION AND MANAGEMENT.

# EVALUATING VACCINE USAGE IN MANAGEMENT AND CONTROL OF LIVESTOCK DISEASES IN TORORO MUNICIPALITY EASTERN DIVISION

 $\mathbf{BY}$ 

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A RESEARCH DISSERTATION SUBMITTED TO THE FACULTY OF AGRICULTURE AND ANIMAL SCIENCES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A BACHELORS OF ANIMAL PRODUCTION AND MANAGEMENT OF BUSITEMA UNIVERSITY

#### **ABSTRACT**

Livestock diseases significantly constrain agricultural development in Uganda, particularly in Tororo Municipality, Eastern Division. Despite vaccine availability, disease outbreaks persist, compromising food security and farmers' livelihoods. This dissertation investigates vaccine usage among farmers in cattle, goat, and poultry enterprises in Tororo Municipality This crosssectional study employed a mixed-methods approach, combining a survey of 385 farmers with individual in-depth interviews. The problem which this research addressed was The effectiveness and utilization of vaccines in managing and controlling livestock diseases in Tororo Municipality Eastern Division is limited due to a lack of comprehensive data on vaccine usage .the main research objective was To investigate vaccine usage in livestock production in Tororo municipality eastern division, Tororo District and the specific Research Objectives were; To determine the proportion of farmers use vaccines in cattle, goat and poultry enterprises in Tororo municipality eastern division, Tororo district., To find out what vaccines the farmers are using in cattle, goat and poultry enterprises in Tororo municipality eastern division, Tororo district and To investigate what challenges the farmers are facing in regard to vaccine usage in Tororo municipality eastern division. This research contributes to understanding vaccine adoption and usage patterns among farmers in Tororo Municipality, highlighting challenges and opportunities for improving disease management. The findings inform policy interventions, veterinary services, and agricultural extension strategies to enhance vaccine uptake and promote sustainable livestock production.

#### DECLARATION

I hereby declare that this research work titled "Evaluating vaccine usage in management and control of livestock diseases in Tororo municipality eastern division submitted in partial fulfilment of the requirements

For Bachelor of Animal Production and Management of Busitema University, is entirely my Own work, unless otherwise acknowledged or referenced. This work has not been submitted For any other Degree or examination in any other university or institution.

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APPROVAL

I hereby declare that this research dissertation has been done under my supervision as the Institutional supervisor and is approved for submission to the University

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#### **DEDICATION**

I dedicate this research dessertation to Myself for all the sacrifices I have made to reach this far and not forgetting my supervisor Dr. HELLEN KISAKYE, for her tireless support to me during the research process, DOROTHY OPANY for her tireless support, DEOGRATIUS OPANY for his mentorship, IIKO DOROTHY for her loving support and ONYANGO NESTOR ISDORE for his mental support. There is nothing worthy I can pay you with but only pray that the almighty GOD can rewards you abundantly Amen

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#### **CHAPTER ONE**

#### 1.1 Background of the Study

Livestock farming is a vital component of the economy and livelihoods of communities in Tororo Municipality, Eastern Division, Uganda(Kruse et al., 2017). However, the region faces significant challenges related to the prevalence of infectious diseases in livestock, which can lead to substantial economic losses, hinder agricultural productivity, and threaten food security(Industry, 2008). In response to these challenges, vaccination presents a promising strategy for managing and controlling livestock diseases(Fentie et al., 2017).

Vaccination is a cornerstone of preventive veterinary medicine, offering effective and costefficient means to mitigate the impact of infectious diseases in livestock
populations(Kashyap et al., 2019). Vaccines stimulate the immune system of animals,
providing protection against specific pathogens and reducing the risk of disease
transmission within herds or flocks(Chamorro, 2020). In Tororo Municipality, where
livestock farming is a primary source of income and sustenance for many households, the
effective utilization of vaccines is crucial for safeguarding animal health and enhancing
agricultural productivity(Sushma et al., 2018). Despite the potential benefits of vaccines,
their optimal utilization in Tororo Municipality, Eastern Division, faces various challenges,
These challenges may include limited access to veterinary services, particularly in rural
areas, where veterinary infrastructure and expertise may be scarce(Gouveia et al., 2015).
Additionally, factors such as vaccine affordability, awareness, and logistical constraints
may hinder vaccine uptake among livestock farmers(Niki Whitley et al., 2018).

Understanding these challenges is essential for designing targeted interventions to improve vaccine utilization and enhance disease control efforts. While vaccines play a vital role in livestock disease management, limited research has been conducted on vaccine usage patterns, challenges, and effectiveness in Tororo Municipality, Eastern Division(ZIĘTEK et al., 2022). Therefore, this study aims to address this gap by: Assessing Vaccine Utilization: Investigating the extent to which livestock farmers in Tororo Municipality

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