

# MAJOR CAUSES OF ORGAN CONDEMNATION AND FINANCIAL LOSSES IN CATTLE SLAUGHTERED AT BUSIA MUNICIPAL ABATTOIR

BY

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# **DECLARATION**

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## **APPROVAL**

This dissertation was written under my supervision and will be submitted to the department of animal production and management for examination with my approval as the supervisor.

Signature

Dr, Etiang Patrick.

Date (1/1/2026)

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## **DEDICATION**

I dedicate this dissertation to the almighty God for the good health and courage he gave me during the time of conducting my research proposal I also dedicate this to my parents for their financial support throughout the process not forgetting my friends who have been with me throughout the process may God bless you all.

### **ACKNOWLEDGMENT**

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#### **ABSTRACT**

Organ condemnation at abattoirs significantly impacts the economic viability of meat processing facilities and compromises meat safety. This study analyzed organ condemnation causes and their financial consequences at the Busia Municipal Abattoir, revealing critical insights into both economic and health dimensions. Initially, a Generalized Linear Model (GLM) with a Poisson family was used, but due to over-dispersion, a Negative Binomial model provided a better fit, as confirmed by a chi-square goodness-of-fit test ( $\chi^2 = 0.07726$ ). The data showed that intestines, kidneys, and lungs had the highest condemnation rates, with blood stains as the primary reason, contributing to substantial economic losses totaling 68,617,879.30 UGX. Tuberculosis, necrosis, and fasciola were other significant causes, further compounding financial losses and emphasizing the need for better disease control.

The study underscores the urgent need for improved disease surveillance, targeted health interventions, and enhanced livestock management practices to reduce condemnation rates and financial losses. Recommendations include regular health screenings for livestock, investing in diagnostic facilities at the abattoir, and fostering closer collaboration between abattoirs and veterinary services. Implementing these measures would not only lower the rates of organ condemnation but also improve meat quality, enhancing the economic sustainability of the meat processing industry. This research offers foundational insights into the link between animal health, meat safety, and economic viability, providing a basis for policies and practices that can support a healthier, more resilient meat production sector.

#### **CHAPTER ONE: INTRODUCTION**

#### 1.1 Background

The global meat production landscape faces numerous challenges, as noted by Liu et al. (2023), whose work sheds light on the intricate dynamics affecting food security and economic stability worldwide. Researchers such as Cadmus and Adesokan (2009) have examined the impact of organ condemnation during cattle slaughter, revealing how health-related organ rejections disrupt food supplies and impose financial strain across different economies. This concern is echoed by Friedmann and McNair (2008), who highlight that the repercussions extend from local abattoirs to a broader global perspective, demonstrating the interconnection between meat production practices and socio-economic stability.

In Africa, the issues surrounding organ condemnations are compounded by unique socioeconomic factors and agricultural practices deeply embedded in local cultures, as explored by Berbersa (2016). Africa's rich agricultural heritage brings forth challenges that are complex and multifaceted, necessitating a deeper understanding to address these concerns effectively. Phillips (2016) underscores the need for tailored solutions that respect the continent's unique practices, while Dermauw et al. (2018) stress the importance of regional cooperation in East Africa to develop unified strategies for addressing meat production challenges. By identifying common practices and formulating regional approaches, African nations can create a more resilient and economically sustainable meat production industry.

At a more localized level, Uganda faces particular challenges related to meat production, as Namugenyi et al. (2019) highlight the delicate balance between meeting domestic demand and participating in global meat markets. Studies within Busia Municipality, like those conducted by Wilkie (2010) and Mdhluli (2022), delve into how local factors influence organ condemnation rates, impacting not only economic outcomes but also the well-being of the community. By integrating global, regional, and local insights, this study aims to promote informed interventions that strengthen both food security and economic stability. This holistic approach calls for collective action and innovative solutions to address the intricate

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