

# FACULTY OF AGRICULTURE AND ANIMAL SCIENCES

## DEPARTMENT OF ANIMAL PRODUCTION AND MANAGEMENT

## DETERMINING THE PREVALENCE AND CAUSES OF SCOURS IN SUCKLING KIDS IN SOROTI DISTRICT

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Research dissertation to be submitted to the Faculty of Agriculture and Animal sciences in partial fulfillment of requirements for award of the degree of bachelor of animal production and management of Busitema University

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#### **ABSTRACT**

Goat farming plays a crucial role in rural livelihoods, providing meat, milk and income to farmers. However, diseases such as scours pose a significant challenge to productivity, impacting both animal health and profitability. This study aimed to assess the prevalence of scours, identify associated microbial and helminthic agents, and examine the management practices employed by farmers. A total of 300 respondents participated in the study, providing insights into scours occurrences, parasite infections, and management challenges. The data were analyzed using descriptive and inferential statistics, including chi-square tests, to determine patterns and associations in the findings.

The results showed that 51% of the respondents had experienced scours in their suckling kids, while 49% had not, with no significant difference from a random distribution ( $\chi^2 = 0.06$ , p = 0.80). The most prevalent helminthic agents identified were *Trichostrongylus* (25.7%) and *Haemonchus* (20%), though 45% of farmers reported no helminthic infections, suggesting effective deworming practices among some farmers. *Staphylococcus* (31.3%) and *E. coli* (27.3%) were the leading microbial agents associated with scours. Most farmers observed scours quarterly (70.4%), with diarrhea (96.3%), lethargy (70.4%), and loss of appetite (85.2%) being the most common symptoms. However, limited access to veterinary services compelled many farmers to rely on traditional remedies, revealing gaps in disease management practices.

Based on these findings, the study recommends improved access to veterinary services, increased outreach, and enhanced farmer education on disease control. Regular deworming schedules and hygiene practices are essential to managing helminthic infections and bacterial diseases effectively. Encouraging farmers to adopt modern treatment protocols and forming cooperatives to access affordable veterinary supplies will further strengthen disease prevention efforts. This study provides a foundation for developing targeted interventions to promote healthier goat herds and improve productivity in the study area.

### **DECLARATION**

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I Opio Moses, declare that this piece of work is original, developed as my research proposal for an award of a degree in animal production and management of Busitema University and has not been submitted to any other institution for any similar award.

Signature 07 11 20 24

### APROVAL

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This research dissertation is submitted with the approval of my research supervisor,

Dr. Hellen Kisakye

Signature...

Date. 07/11/2024

#### **DEDICATION**

I dedicate this piece of work to my family especially my brother Omara Denis Elvis for his tireless support throughout my university education. To my supervisor, Dr Hellen Kisakye for her selfless efforts in ensuring optimum support and guidance in the development of this proposal.

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

#### 1.1 Background

Goat farming, also known as caprine husbandry, has been practiced for centuries and plays a significant role in agriculture worldwide. Goats are valued for their versatility, as they provide meat, milk, fiber and other by-products, making them an important source of livelihood for millions of people, especially in developing countries(Byaruhanga, Oluka and Olinga, 2015).

The health and well-being of goats, particularly kids (young goats) are paramount to the sustainability and profitability of goat farming enterprises. Kids represent the future of the herd, and their health status directly influences productivity, reproduction and overall herd performance(Sargison, 2020).

Kids are particularly vulnerable to various health challenges due to their immature immune systems and susceptibility to infectious diseases (Ahmed, 2011). One of the most common health issues affecting kids is scours, or diarrhea which can have significant economic and welfare implications for goat farmers(Esmaeili *et al.*, 2024)In Soroti District, the prevalence of scours in suckling kids has emerged as a concerning issue among livestock farmers(Debele and Duguma, 2013). Scours characterized by diarrhea in young goats, poses significant challenges to the health and productivity of these animals, leading to economic losses for farmers and potential food security concerns in the region(MUHAMMAD MOHSEN RAHIMOON *et al.*, 2023).

The causes of scours in suckling kids are multifaceted and often interconnected. One primary factor is poor sanitation and hygiene practices in goat-rearing environments(Engering, Hogerwerf and Slingenbergh, 2013). Inadequate housing conditions, contaminated water sources, and improper waste management contribute to the proliferation of pathogens such as bacteria, viruses, and parasites, which can trigger diarrheal illnesses in young goats(Esmaeili *et al.*, 2024). Additionally, nutritional deficiencies and imbalances play a crucial role in the development of scours(Sharif, Obeidat and Al-Ani, 2005). Inadequate access to quality feed especially during critical stages of growth and development, can weaken the immune system of suckling kids making them more susceptible to gastrointestinal infections(Esmaeili *et al.*, 2024).

Furthermore, the lack of proper veterinary care and disease management strategies exacerbates the problem(Sharif, Obeidat and Al-Ani, 2005). Limited access to veterinary services, diagnostic tools

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