

Epidemiological study on incidence and major causes of pre-weaning kid morbidity and mortality of Abergelle goats in Waghemira zone, Amhara Region, Ethiopia

Ayalew Assefa^{1}, Adane Bahiru² and Abebe Tibebe²*

^{1}International Livestock Research Institute, Addis Ababa, Ethiopia*

²Sekota Dryland Agricultural Research Center, Sekota, Ethiopia

Corresponding Author: abetfek@gmail.com

ABSTRACT

Small ruminants especially goat is very important in the economy and nutrition, and has the potential for using it as a tool for poverty reduction in developing countries. To date, only a very limited number of studies have been conducted on the effect of environmental or flock management factors on morbidity and mortality of kids of goats. To understand the epidemiology of kid mortality, we developed a longitudinal follow-up of kids born in the study area for three years in goat improving model villages of Abergelle (Saziba community goat improvement village) and Sekota (Ayibra site of Sekota Dryland Agricultural Research Center goat multiplication farm) districts. The objectives of the study were to assess the overall incidence of diseases and risk factors and understand and characterize risk factors responsible for pre-weaning kid mortality of Abergelle goats in Waghemira zone. All newborn kids up to weaning age were followed from 2017-2019. Thus, about 1438 kids born in these villages were followed longitudinally in each site by assigning one enumerator to follow the newborn kids. Accordingly, from the total kids, 77.61% were weaned healthy while the rest 21.5% had one or more of diseases. Among diseases, ectoparasites infestations (41%), diarrheal cases (30%), PPR (15%), and physical injury (5%) were diseases frequently encountered. The mortality rates for the total number of kids born were 7.5 percent. It was also found that the risk of being diseased and died was significantly higher among kids who did not receive colostrum within 30 minutes ($P < 0.05$) compared to those who did. Furthermore, the month of birth also played a role in disease occurrence, with higher incidences of diseases in certain months, such as in December, November, July and March than September, October and February. Additionally, the occurrence of kid mortality was more common in kids born to parities two, three, and five ($P < 0.05$). The occurrence of mentioned diseases need attention as higher incidence was noted. Diseases symptoms like diarrhea needs further detailed etiologic identification studies.

Key words: *Abergelle goat, Epidemiological study, Incidence, Kid mortality, Pre weaning, Sekota*

INTRODUCTION

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MATERIALS AND METHODS

Description of the Study Areas

Study Population and Study Design

Data Analysis

RESULT AND DISCUSSION

Descriptive Summary of Diseases Observed

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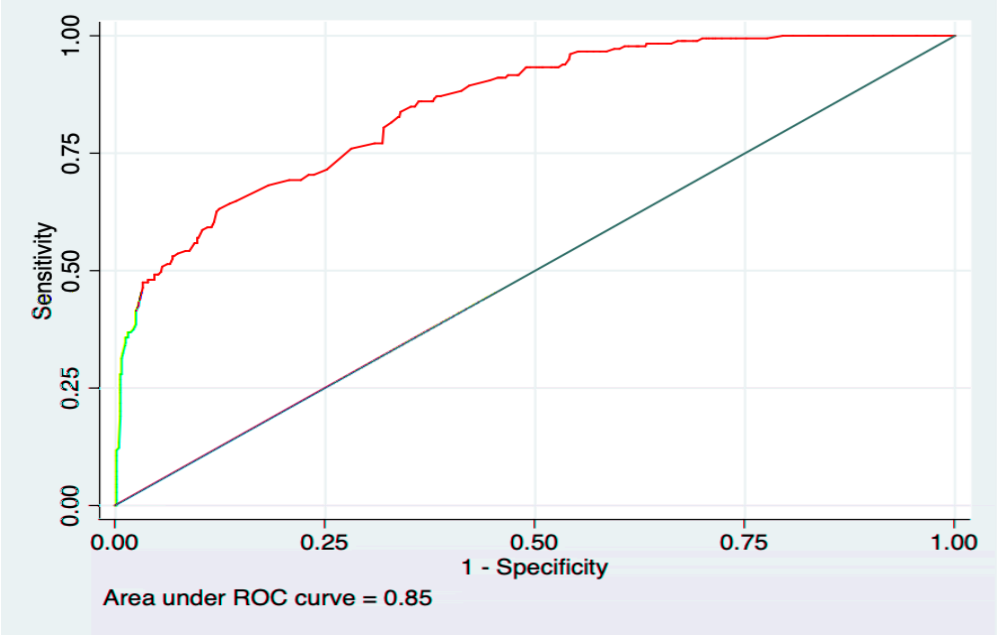
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Factors	Category	AOR (95% CI)		p-value

Risk factors	Category	AOR (95% CI)	χ^2-value	p-value

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CONCLUSION

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