

Management- and resource-based factors with potential influence on dromedary camel milk production and health

H. H. Kalla¹, B. Megersa², G. D. Godana³, B. Wakjira², R. Roessler¹

¹ University of Kassel, Animal Husbandry in the Tropics and Subtropics, Germany

² Addis Ababa University, College of Veterinary Medicine and Agriculture, Ethiopia

³ Borana University, Department of Natural Resources Management, Ethiopia

U N I K A S S E L
V E R S I T Ä T



Introduction

For Ethiopia's pastoral and agro-pastoral communities, camels function as a vital economic and ecological resource in arid and semi-arid regions like Borana (BR) and East Shewa (ES) zone.

Though camel milk serves as a crucial source of income (Fig. 1), camels remain one of the least researched domestic animal species, especially in ES.

- Study objective: Examine management and resource-based factors and constraints with potential influence on camel milk production and health.



Fig. 1. Pastoralists milking a camel in Mojo, East Shewa.

Material & Methods

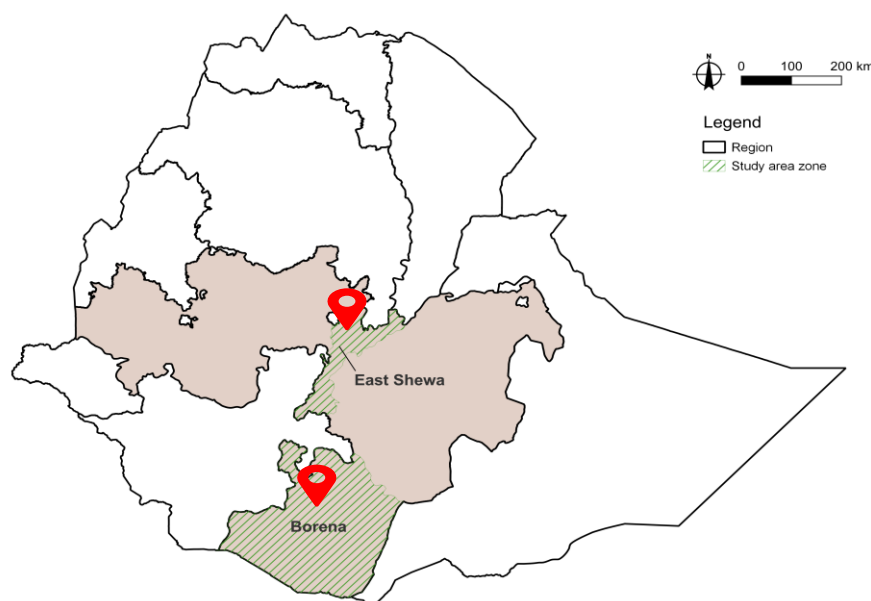


Fig. 2. Study locations in Ethiopia.

Location: BR & ES zones, Oromia Region, Ethiopia (Fig. 2)

Participants: 386 herders, 192 (BR) and 194 (ES)

Duration: July – October 2024

Analysis: Descriptive statistics using R

Conclusions and further research

- Dromedary camels are managed with key resources like foliage and frequent dry-season watering with potential impact on camels' performances and health.
- Further research is ongoing to explore the impact of resource-based factors on she-camel production and reproduction performance, as well as health.

Results & Discussion

Management and resource-based factors

- Breeding:** No bull in nearly two thirds of the herds; uncontrolled breeding predominant; mostly one breed.
- Feeding:** Tree and shrub foliage as the primary feed resource in both, the dry and wet season.
- Watering:** Rivers (ES), wells and run-off water (BR) as most important water sources; 45% of the herders watered frequently (2-3 days) during the dry season.
- Cleaning of houses** by 83.4% of herders.

Constraints of camel milk production

- Main challenges: Prevalence of diseases and parasites, lack of policy support and shortage of grazing land.
- Furthermore, high medication costs and feed shortage undermine camel milk production and health (Fig. 3).

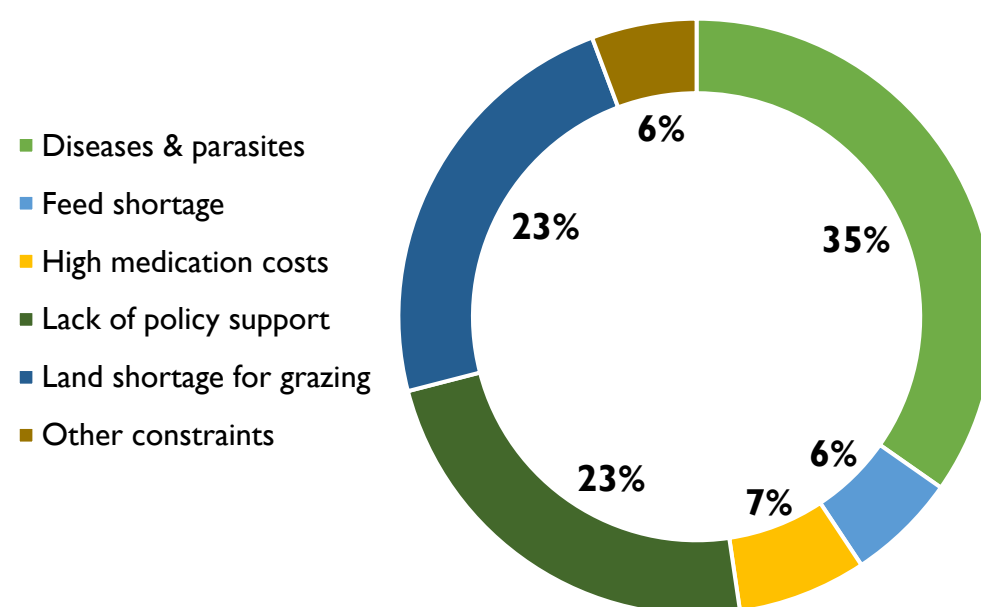


Fig. 3 Major constraints affecting camel milk production and health in the study areas (n=386 herders).

