

# Beyond the market:

# Understanding herd off-take dynamics among Himba pastoralists

Lilli Scheiterle<sup>1</sup>, Kateuru Tjiuana<sup>2</sup>, Mwala Lubinda<sup>2</sup>, Brigitte Kaufmann<sup>1</sup>

<sup>1</sup> German Institute for Tropical and Subtropical Agriculture (DITSL), Germany <sup>2</sup> Namibia University of Science and Technology, Dept. of Agricultural Sciences and Agribusiness, Namibia

## Introduction

- Livestock husbandry sustains Himba semi-nomadic livelihoods in Northern Kunene
- Low commercial off-take often misinterpreted as irrational
- Intended off-take: cattle removed for commercial means (sales) or non-commercial means (e.g., rituals, gifts, loans, sacrifices)
- Unintended off-take: cattle **losses** (e.g., disease, predation, theft or injury)
- Non-commercial off-take and herd losses largely overlooked in research
- Aim is to identify the determinants of commercial cattle off-take

# Results

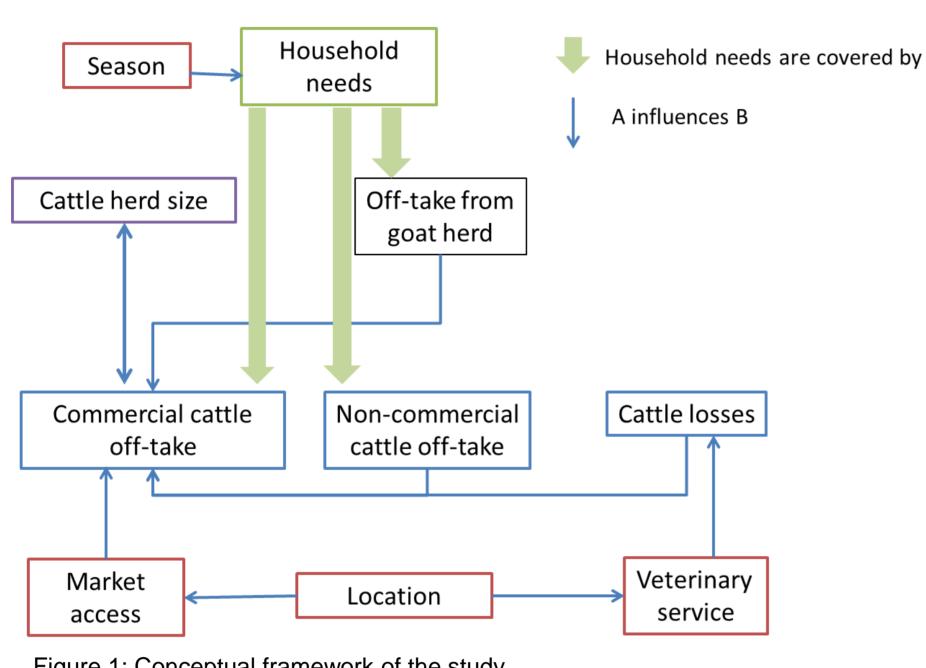


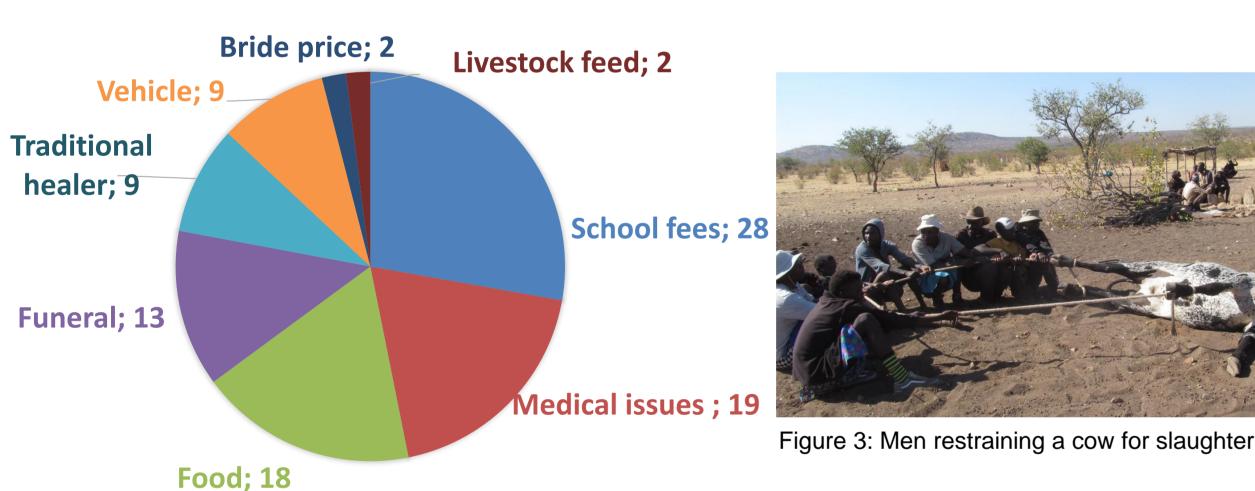
Figure 1: Conceptual framework of the study

Between the 12-month period (2023 – 2024) 77% households (n=46) reported commercial cattle off-take 55% (n=33) engaged in non-commercial off-take

### 68% (n=41) experienced cattle losses

Reasons for commercial off-take

# Reasons for commercial and non-commercial off-take



- Off-take driven by urgent cash needs; livestock serve as a capital asset
- Funeral costs (cash) reflect the importance of social obligations

### Reasons for non-commercial off-take

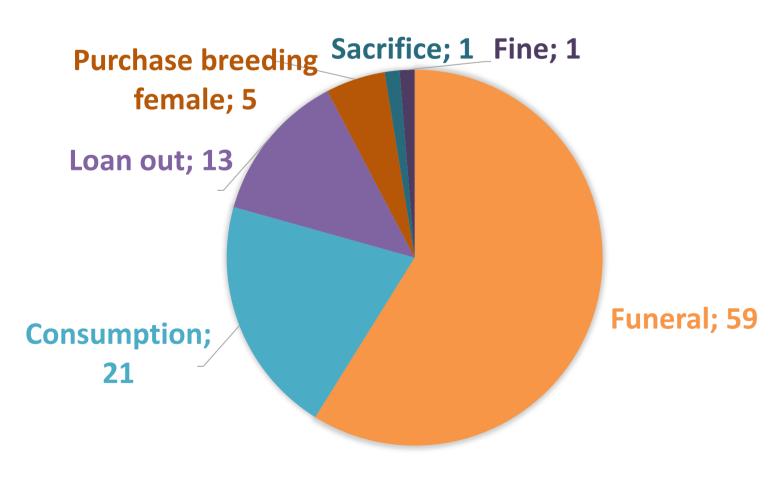




Figure 4: Himba graveyard: cattle skulls as symbols of power, respect, and wealth

- Funeral rituals: cattle slaughtered, sometimes consumed, but often left for scavengers as part of ritual observance
- Cattle loans: offspring (and milk) kept by borrower (e.g., initiation rites, hardship, support to young herders), original animal later returned

# Conclusions

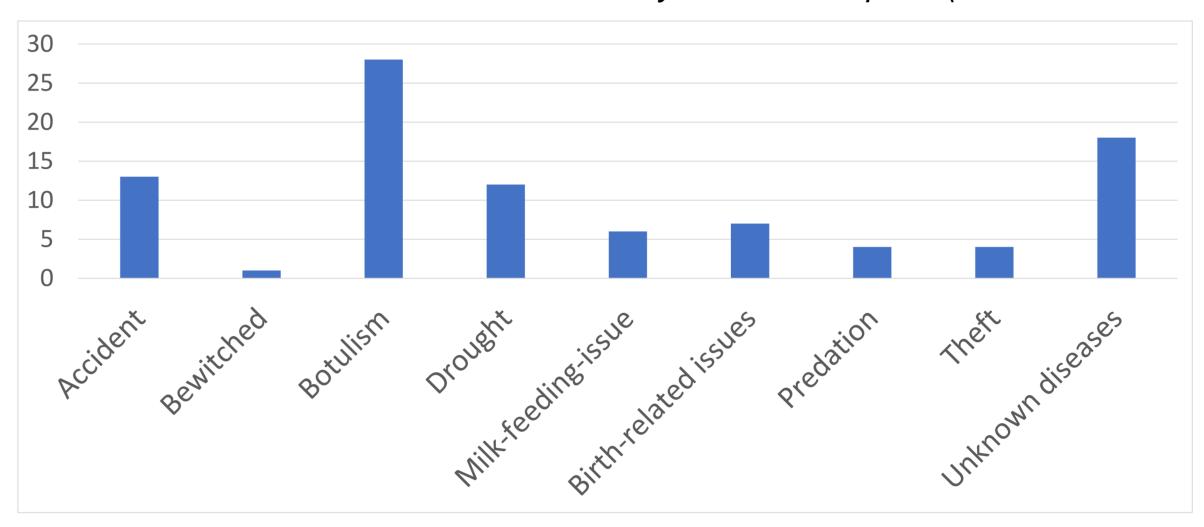
- Commercial off-take is shaped by:
  - Economic distress (not price)
  - Social obligations, cultural norms, and ceremonial needs: practices reinforce kinship ties and resource sharing
  - Infrastructure: access to markets, other than traders, and veterinary services

#### Recommendations

- Veterinary: services need to be realigned with actual disease burdens
- Integrated policies needed: improve infrastructure while recognizing cultural dimensions

#### Causes of cattle losses

Table 1: Causes of cattle losses mentioned by livestock keepers (n= 94 cattle losses)



- Health-related causes (≈54%)—driven by weak veterinary infrastructure, and lack of timely animal health support
- Botulism is the most common cause of cattle mortality

#### Factors affecting commercial off-take

Table 2: Coefficient estimates from OLS regression determining commercial off-take (n=60)

Adj R-squared	0.4393
Variables	Coef. (SD)
Age household head	0.006 (0.005)
Ln_N goats sold	0.154* (0.083)
Ln_N cattle non-commercial off-take	0.040 (0.115)
Ln_N cattle losses	0.080 (0.127)
Price dissatisfaction (dummy)	0.473*** (0.089)
Otjakati – Site 1	0.507** (0.251)
Etanga – Site 2	0.028 (0.245)
Etoto – Site 3	0.000
Omuhonga – Site 4	0.255 (0.218)
Epupa –Site 5	0.205 (0.258)

### Note: \*\*\*, \*\*, \* indicate significance at the 1%, 5%, and 10% levels, respectively

### Market:

"I was not happy at all. I sold them because there wasn't anything I could do" (ID5S1)

### **Veterinary service:**

"We buried many animals without knowing the cause; it is painful because we cannot prevent it next time" (ID5S3)

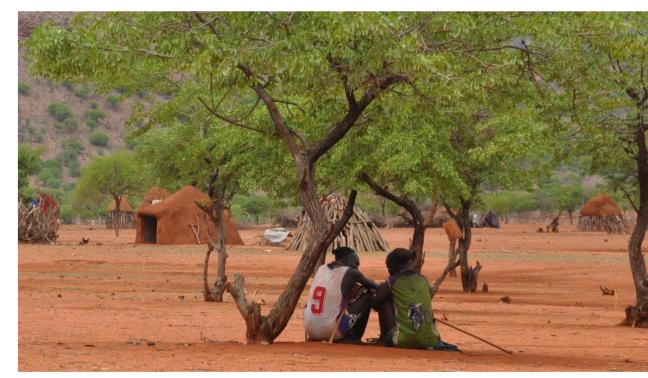


Figure 5: Himba herders

- Households dissatisfied with prices had ~47% higher commercial off-take, reflecting distress sales, indicating that economic urgency overrides price satisfaction
- Location effect: Otjakati had ~50% higher off-take than Etoto; proximity to markets (35 km) improves access to sales and veterinary support
- Non-commercial off-take and losses do not influence sales; households still sell to recover income



Figure 6: Young herder with cattle herd at the homestead

# Study Area

- Epupa Constituency, Kunene North Region, Namibia
- Annual rainfall: 50 to 400 mm
- Unimodal rainfall pattern, typically, January to March
- Home to Himba pastoralists
- Livelihood and economy are based on cattle



Figure 2: Study region

## Methods

Longitudinal study with interviews conducted between Jan 2023 – May 2024

- Participant observations
- 60 structured questionnaires (12 households/site  $\times$  5 sites)
- 42 key informant interviews with experienced herders
- 230 fact-sheets administered every 3 months over 1 year to the 12 households
- coverage varied due to pastoralist mobility -





