

EPIDEMIOLOGICAL INVESTIGATION OF
CONTAGIOUS BOVINE
PLEURANEUMONIA DISEASE ALONG
TANZANIA – ZAMBIA BORDER

PRESENTER

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INTRODUCTION

Contagious Bovine Pleuropneumonia (CBPP) is a mycoplasmal disease caused by *Mycoplasma mycoides* subsp. *mycoides* Small Colony biotype (*MmmSC*)

It is a disease of economic importance because of the huge financial losses resulting from mortalities

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INTRO' CONTINUES

The disease also affects local and international trade due to animal movement restrictions

CBPP has serious implications on food security and people's livelihoods in affected countries is a major constraint to cattle production in Africa

In Zambia, CBPP is a major contributor to cattle mortalities, especially in Southern and Western provinces

In SADC region, CBPP is prevalent in Angola, Namibia, Tanzania and Zambia

Fifth most widely distributed trans-boundary animal disease in the SADC region

INTRO' CONTINUES

Contagious Bovine Pleuropneumonia was first reported in Zambia, in the then Barotseland, in 1915 and was controlled in 1946

On the northern front of the country, CBPP was detected in 1998 in Nakonde district due to animal movements from Tanzania

INTRO' CONTINUES

The threat of the disease transmission spread from Northern Tanzania to the Central Districts of Ulanga and Kilombero districts in Morogoro Region, into Mbeya region closer to the Zambian border

Contributing factors include breakdown in veterinary services, increased unrestricted animal movement and lack of efficacious vaccine

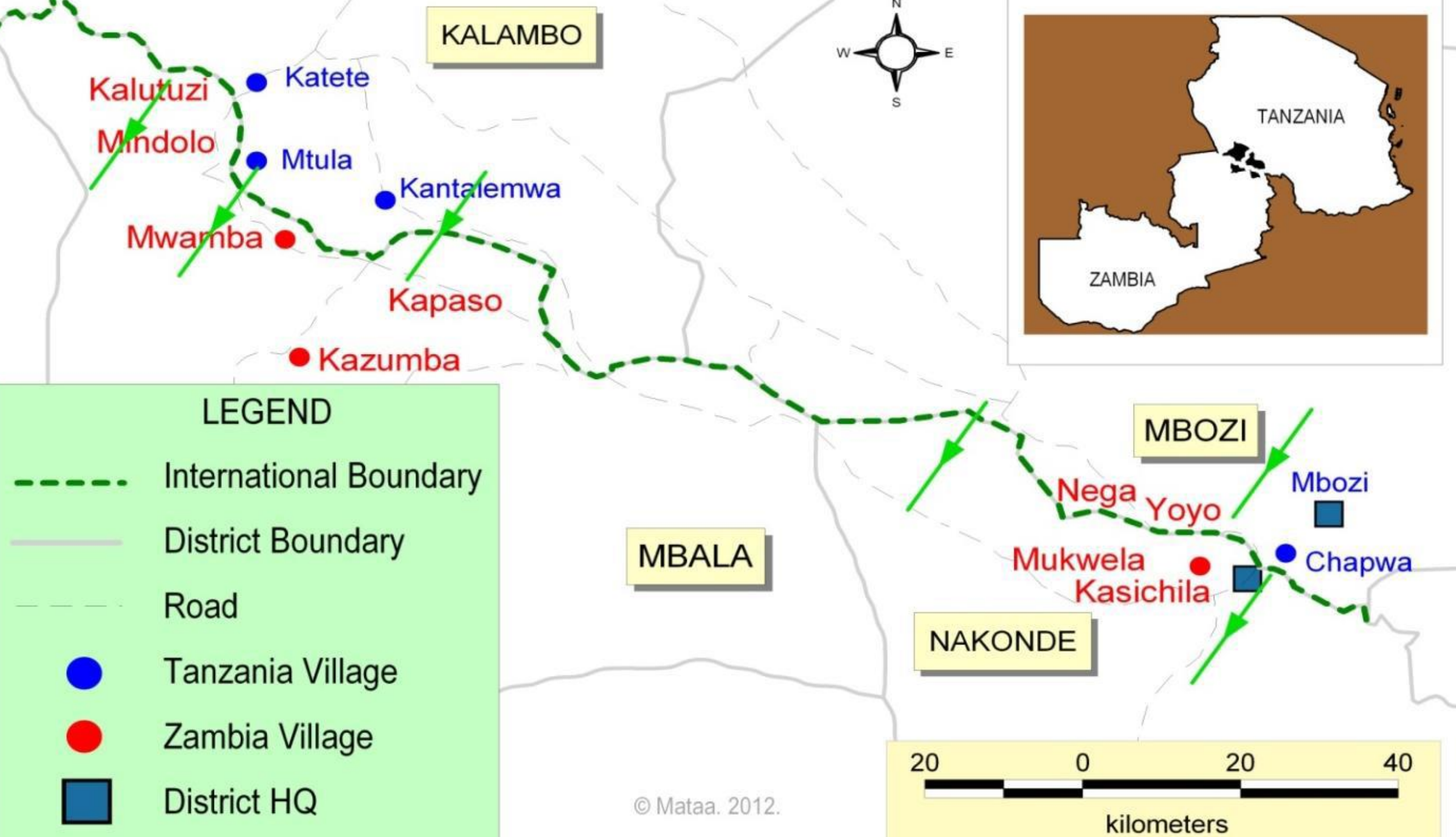
INTRO' CONTINUES

The current status of CBPP is endemic to western and north-western provinces.

Information on the prevalence of the disease in northern provinces and associated risk factors is limited.

AIM

Establish the magnitude of CBPP infection in cattle and the associated risk factors along Tanzania- Zambia border.



STUDY AREA

A total of 13 villages participated in the study which involved collection of serum samples and questionnaire survey in selected households within strip of 50 to 70 km from the borderline

Trans-boundary Animal Disease

RESULTS (SERO-PREVALENCE)

A total of 219 cattle sera were collected and analysed for the presence of specific antibodies against *Mycoplasma mycoides* spp *mycoides* using Complement Fixation Test

9.1% (20) samples were positive for CBPP

RESULTS (SERO-PREVALENCE)

The positive sera were from Mbala 12 (23.5%) and Kalambo 8 (18.2%) districts.

Trans-boundary Disease



QUESTIONNAIRE SURVEY

A total of 135 respondents were interviewed in Tanzania (n=79) and Zambia (n=56) to assess the practices carried out by farmers

Uncontrolled movement of cattle was identified as a major factor in the transmission of CBPP across the border

QUESTIONNAIRE SURVEY

Risk factors implicated

- accessible veterinary facilities and services
- use of common kraals
- common source of watering points

Strong inter-cultural links and other traditional practices influence the presence of sero-prevalence

QUESTIONNAIRE RESULTS

The study established the main direction of cattle movement as being mostly from Tanzania to Zambia.

TADs

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CONCLUSION & RECOMMENDATIONS

These findings demonstrate why the disease is endemic in the region. Unless strict control measures are seriously taken, the social economic effects of the disease will continue to greatly affect the livelihood of farmers whose social-cultural life heavily depends on livestock

- Improved veterinary facilities and health delivery system

CONCLUSION & RECOMMENDATIONS

- Increased field officers
- Increase veterinary check points and screening of animals
- Instituting Tanzania's roll back plan on CBPP

TADS

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COLLABORATIONS

- Central Veterinary Research Institute (CVRI)
- Faculty of Veterinary Sciences (Morogoro – Tanzania)
- Ministry of Fisheries & Livestock (Zambia)

TADS



THANK YOU

