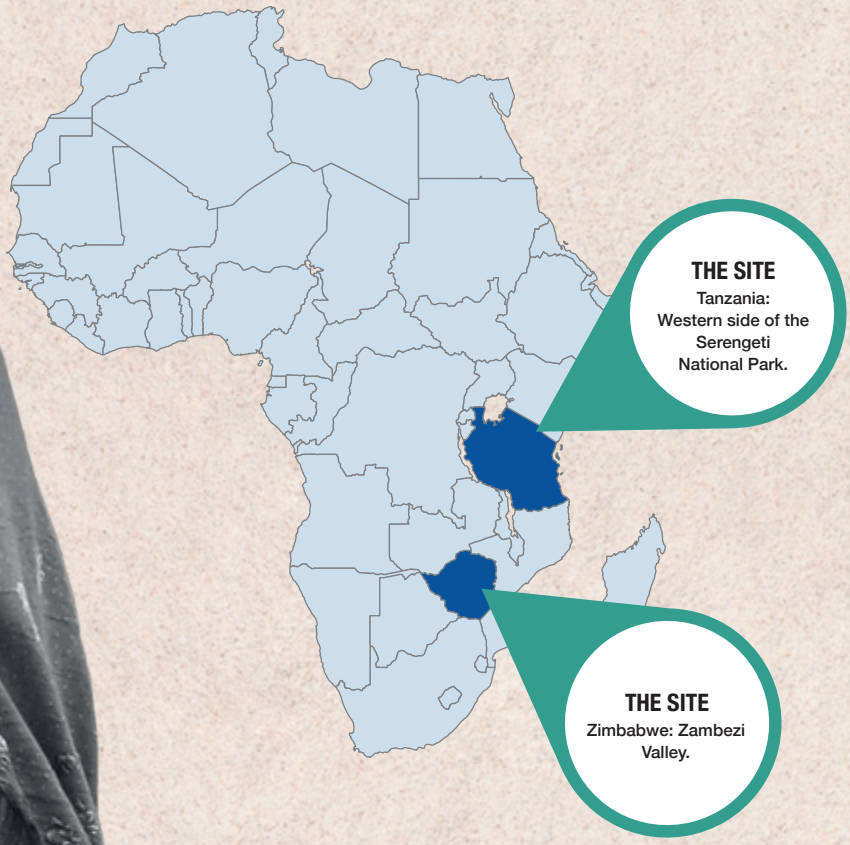
TRYPANOSOMIASIS: ALLEVIATING THE EFFECTS OF CLIMATE CHANGE THROUGH UNDERSTANDING HUMAN-VECTOR-PARASITE INTERACTIONS



PROJECT D

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TRYPANOSOMIASIS: ALLEVIATING THE EFFECTS OF CLIMATE CHANGE THROUGH

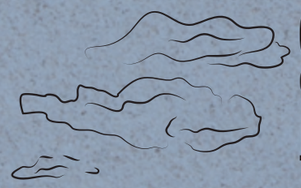
UNDERSTANDING HUMAN-VECTOR-PARASITE INTERACTIONS

THE AIM

To assess risks of trypanosomiasis infection for marginalised communities in Tanzania, to monitor trypanosomiasis in livestock in marginalised communities in Zimbabwe and to find ways of alleviating infection risks in both countries.

THE DISEASE: Trypanosomiasis

SEVERAL FACTORS:



CLIMATIC CONDITIONS SUCH AS **RAINFALL & TEMPERATURE**

POPULATION GROWTH & AGRICULTURAL **ENCROACHMENT**

TSETSE DISTRIBUTION, **BEHAVIOUR** & HOST DENSITY

CAN INFLUENCE

HUMAN-TSETSE INTERACTION AND **VULNERABILITY TO DISEASE** AMONG DRYLAND POPULATIONS

PLANNED

OUTPUTS INCLUDE:

EVIDENCE ON ESTIMATED AND PERCEIVED RISKS IN MARGINALISED COMMUNITIES

MAPPING THE LEVELS OF LIVESTOCK INFECTION AND THE HEALTH IMPLICATIONS

AN UNDERSTANDING OF FUTURE RISKS AND HOW THESE CAN BE AVOIDED OR ALLEVIATED

RESEARCH APPROACHES INCLUDE:

- Questionnaires, interviews and focus group discussions
- A variety of entomological techniques for indoor and outdoor vector research
- Data collection on *T. brucei* infections in cattle
- Experiments to measure man-fly contact under different meteorological conditions
- Climate-driven modeling of vector dynamics

THE INSTITUTIONS INVOLVED IN THE PROJECT ARE:

The South African Centre for Epidemiological Modelling and Analysis (SACEMA)

Stellenbosch, South Africa

www.sacema.org

The Climate System Analysis Group (CSAG), University of Cape Town

Cape Town, South Africa

www.csag.uct.ac.za

The Natural Resources Institute (NRI) of the University of Greenwich

Chatham, UK

www.nri.org

Tsetse Control Division, Ministry of Agriculture, Zimbabwe

Harare, Zimbabwe

www.mao.gov.zw

Vector & Vector-borne Diseases Research Institute (VVBDI)

Tanga, Tanzania

Sokoine University of Agriculture

Morogoro, Tanzania

www.suanet.ac.tz

Liverpool School of Tropical Medicine (LSTM)

Liverpool, UK

www.lstmliverpool.ac.uk

Bindura University of Science Education (BUSE)

Bindura, Zimbabwe

http://buse.ac.zw

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