



ABOUT

The Shire Valley Vector Control Project (Shire-Vec) is a research collaboration to control vector borne diseases (VBDs) in emerging agricultural systems in Malawi.

OBJECTIVE

The objective of Shire-Vec is to offer practical solutions to manage the impact of the Shire Valley Transformation Programme (SVTP) across both public health and agriculture.

HOW

Shire-Vec will investigate how the new SVTP irrigation scheme affects VBDs like malaria and schistosomiasis and their influence on smallholder farming practices.

WHERE

The group will focus its research on the SVTP, a new 40,000-hectare irrigation scheme which began construction in 2020 that is based in the districts of Chikwawa and Nsanje districts in the southern region of Malawi.

BENEFICIARIES

Communities within the SVTP area.

WHEN

September 2021 - August 2025

CORE RESEARCH OUTLINE

- **Entomology (vector surveillance | biobank)**

Monthly collections of snails and mosquitoes in sentinel sites around irrigated farms to monitor any changes to insect and snail populations.

- **Epidemiology (disease abundance | historic case records)**

Identify areas most affected by the newly irrigated farmland.

- **Social Anthropology (lived experience)**

Study of the behavioural practices in the farming communities and how their exposure and contact with snails and mosquitoes might have changed in the aftermath of the irrigation scheme.

- **Vector Control (operational research response)**

Develop and pilot locally tailored interventions to control snails and mosquito populations whilst offering value for money and practical/acceptable solutions to the community.

- **Future Planning (modelled scenarios of disease burden | policy change)**

Inform and provide recommendations through mathematical modelling for mitigation against increase in disease from future expansion of irrigated farmland to guide policy change.

PARTNERS

- Liverpool School of Tropical Medicine (LSTM)
- Kamuzu University of Health Sciences (KUHeS)
- Malawi-Liverpool-Wellcome Clinical Research Programme (MLW)
- African Institute for Development Policy (AFIDEP)

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