Shire Vec
Controlling vector-borne diseases in Malawi

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Strengthening Irrigation Systems with Integrated Disease Control

Key Facts

Irrigation is essential for food security and economic growth, supporting millions of farmers in sub-Saharan Africa.

Irrigable area in sub-Saharan Africa can be expanded by 40 million hectares, particularly in countries like Malawi, Ethiopia, Zambia, and Swaziland.

irrigation schemes have raised concerns about the steady transmission, and amplification, or introduction of new vector-borne infectious diseases in the areas involved

How Irrigation Can Create Conditions for Vector-Borne Diseases

Stagnant water in irrigation canals, reservoirs, and rice paddies creates ideal breeding sites for vectors

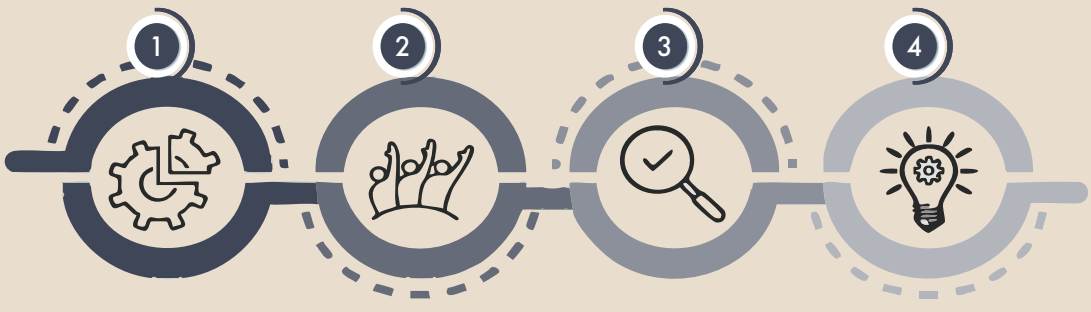
Expanding irrigation increases exposure—farmers, labourers, and rural communities face a higher risk of malaria, schistosomiasis, and other waterborne diseases.

Factors That Worsen the Vector-Borne Disease Burden

Lack of integrated health policies in irrigation projects means VBD control is often overlooked in agricultural planning.

Climate change can worsen the problem, altering rainfall patterns and expanding the geographic range of vector-borne diseases into new irrigation zones.

Policy Recommendations



1. Integrate disease control into irrigation planning by coordinating efforts between Ministries of Health, Agriculture, and Water.
2. Encourage community participation in disease prevention and hygiene practices around irrigation schemes.
3. Invest in research and innovation to identify sustainable VBD control solutions that complement agricultural development.
4. Develop policies that promote region-specific vector control strategies tailored to different climatic and geographical conditions.

ABOUT

The Shire Valley Vector Control Project (Shire-Vec) is a is a research collaboration investigating vector borne diseases (VBDs) in emerging agricultural systems in Malawi. Communities within the Shire Valley Transformative Project (SVTP) area are the primary beneficiaries.

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KAMUZU UNIVERSITY OF HEALTH SCIENCES
MAC Communicable Diseases Action Centre
Malawi Liverpool Wellcome Programme
AFIDEP African Institute for Development Policy
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