

WHO AFRO II DEMO Project: Evaluating the feasibility and impact of community based winter larviciding and house screening on malaria transmission as additional vector control interventions in Southern African countries committed to malaria elimination

INTRODUCTION

Vector control mainly through the use of long-lasting insecticide-treated nets (LLINs) and indoor residual spraying (IRS) is among the key strategies that have contributed to significant reduction in malaria disease burden. However, development of insecticide resistance and increase in outdoor and early evening biting by mosquitoes threatens to reverse the gains achieved so far in malaria control. Integrated Vector Management (IVM), a strategy that emphasizes the use of combinations of interventions with proven efficacy is currently proposed for sustainable control



and push for elimination.

OBJECTIVES

Major Objective

To support 6 southern African countries to implement IVM approaches and demonstrate the effectiveness of diversified, environmentally safe and innovative vector control methods including use of alternative chemicals to DDT for malaria control **Specific Objectives**

- 1. Evaluate the effectiveness and feasibility of winter larviciding using *Bti* and house screening as innovative additional malaria control tools
- 2. Assess the impact of these IVM tactics on communities' health, socio-economic conditions, gender and the environment
- 3. Strengthen advocacy for implementation of evidence based IVM strategies by communities and NMCPs.

HYPOTHESIS

It is hypothesised that screening of houses or larviciding when added to existing vector control interventions will reduce *Anopheles* mosquito densities and malaria incidence in the areas where these IVM tactics are implemented as compared to areas where only the existing control interventions are implemented within the project countries.

STUDY AREA



INTERVENTIONS

Countries	Malaria transmission	Control (non-	Test intervention
	settings	intervention)	added to control
Botswana	Low transmission in	Coverage of all	Winter season
Namibia	elimination setting;	structures in	larviciding with Bti
Swaziland	target 'hot spot' areas.	project area with	combined with IVM
	First line elimination	IRS	community education
	countries in E8.		and mobilization
Mozambique	Persisting high	Coverage of all	House screening
Zambia	transmission settings	households in	combined with IVM
Zimbabwe	where IRS is currently	project area with	community education
	not implemented.	LLINs.	and mobilization
	Second line elimination		
	countries in E8.		

LARVAL SOURCE MANAGEMENT METHODOLOGY



HOUSE SCREENING METHODOLOGY





Adapted from Arnold Mbando et al

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