



# ELIMINATION 8

ANGOLA • BOTSWANA • ESWATINI • MOZAMBIQUE  
NAMIBIA • SOUTH AFRICA • ZAMBIA • ZIMBABWE

## **A novel entomological capacity building program in the SADC elimination eight countries: meeting programmatic needs and early lessons from a review of the program**

RBM Vector Control Working Group  
15<sup>th</sup> Annual Meeting, February 3 – 5<sup>th</sup> 2020

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# Presentation outline



★ Background and Approach

★ In-residence weeks

★ Overview of research projects

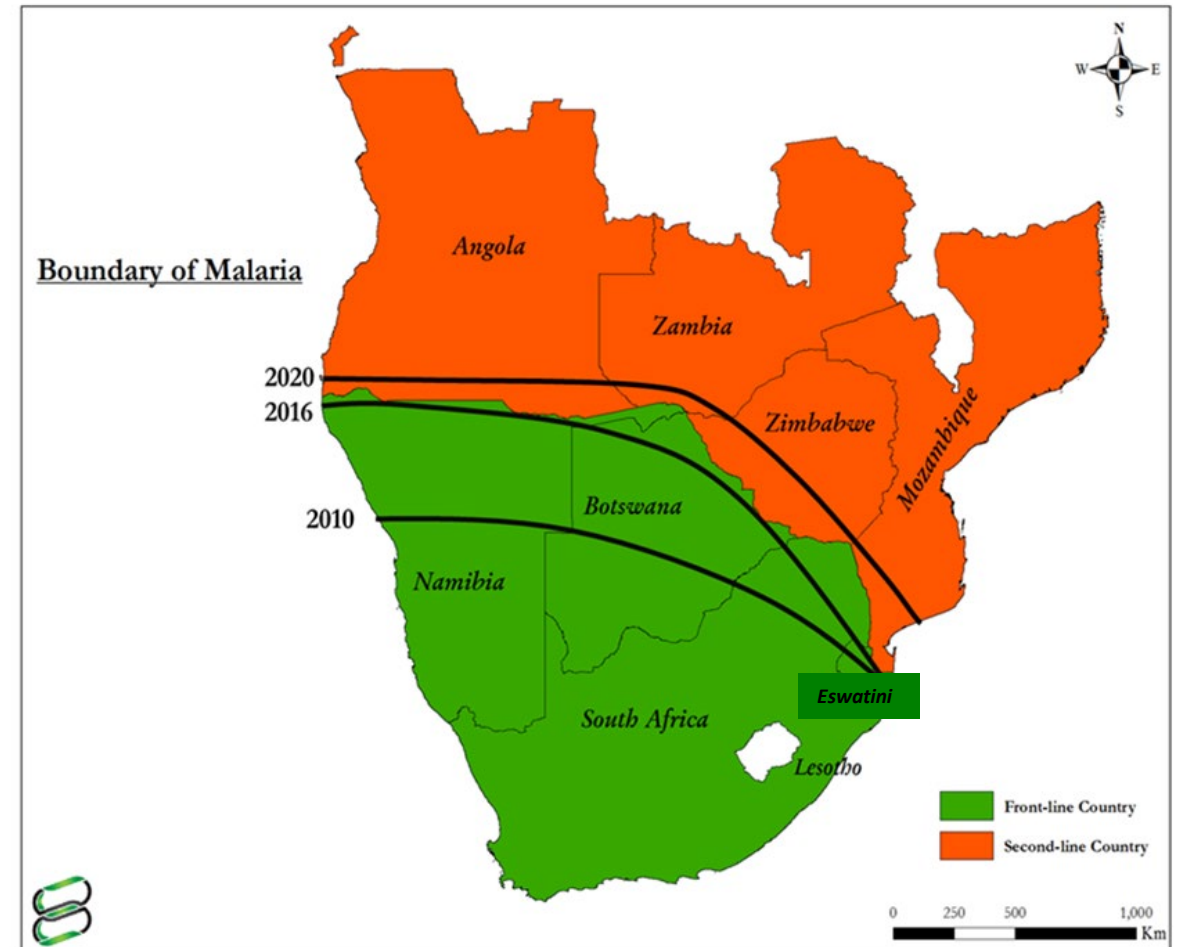
★ Summary of Evaluation of the fellowship

★ Key lessons learnt



# Background

- Eight countries with common borders collaborate in their efforts to eliminate malaria
- Strengthening Entomological Capacity of the NMCPs
- Bridging the divide between entomological operational research and programmatic decision making to achieve optimal implementation of vector control.



# Approach

## KEY ACTIVITIES FLOW SCHEMA

Identifying , curricula development with research and academic institutions



Selection of participants



Residential Weeks



Capstone Project Implementation

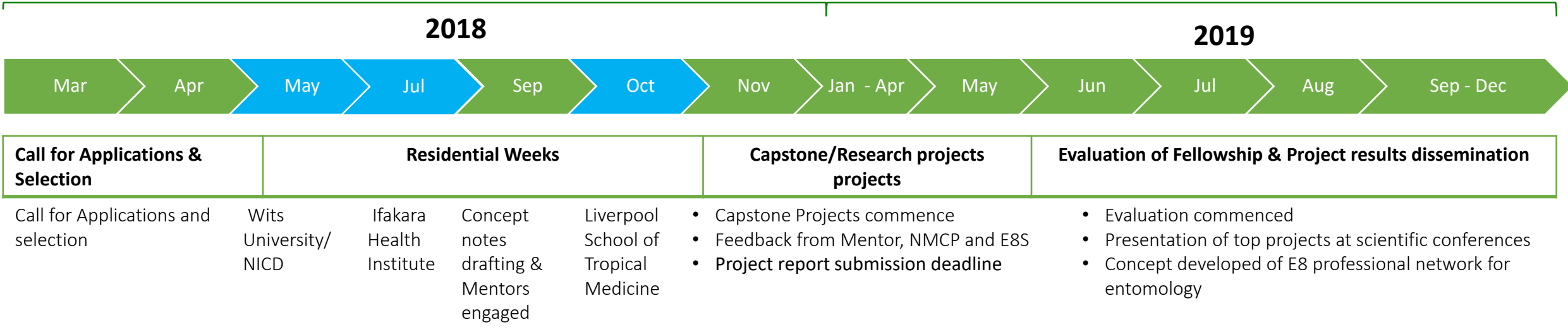


Evaluation of Program

- Relevance and availability for the selected period
- Endorsement by the NMCPs
- Selected institutions
- Addressing NMCPs needs/Mentorship
- Results dissemination (Regional & International Conferences)
- Relevancy, effectiveness, efficiency, impact and sustainability.



# General Overview : Learning Framework Timelines



# Entomological Surveillance Fellowship: Residential Weeks

## Week One: Wits University

Practicum Sessions on insectary management and morphological identification of mosquitoes



### Key learning elements:

- Basic Insectary Management skills, including mosquito rearing
- Morphological identification of vectors
- WHO susceptibility testing and interpretation of the results

## Week Two: Ifakara Health Institute



### Practicum Sessions on mosquito trapping methods

### Key learning elements:

- Prioritizing entomological surveillance indicators
- Principles of malaria vector surveillance & applications
- Innovative tools, analysis and interpretation of geo-referenced data
- Monitoring coverage and performance of VC interventions

## Week Three: Liverpool School of Tropical Medicine

Data analysis and GIS for decision making for optimal vector control application classroom sessions



### Key learning elements

- Tailored insecticide resistance course (incl. IVM)
- Applying vector control field data to influence policy – decision making
- Geographical Information for Vector Surveillance (GIVeS) training
- Networking opportunities at LSTM Vector Biology Seminar and with PIIVeC Fellows





# Research projects field work



Efficacy of clay pots and plastic buckets for sampling mosquitos in Moambo District, Mozambique.

*Dulcisaria Marrenjo*



Insecticide susceptibility of malaria vectors in Cuvelai Municipality, Angola.

*André José Domingos*



Evaluation of IRS in Zambezi Region, Namibia.

*Michael Lifasi*



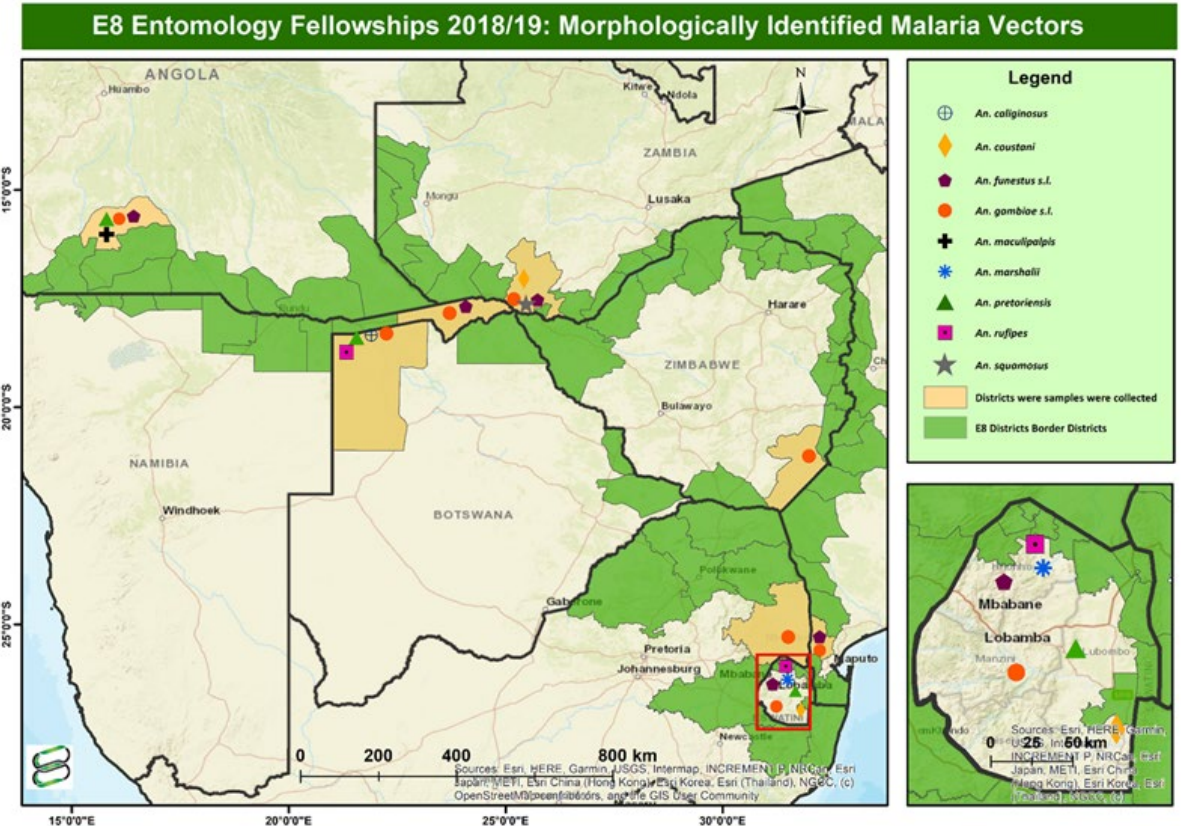
Feasibility of decentralized entomological surveillance system in Okavango, Botswana.

*Mooketsi Segaletsho*



# Overview of Research Projects

- Projects mainly entailed vector Profiling, Evaluation of IRS, IR monitoring and community-based entomological surveillance platforms
- Data collected across the 8 countries
- 6 months of project completion
- Projects highlight:
  - importance of sustaining entomological surveillance for policy decision-making
  - Operational Research Strengthening at national and regional levels
  - Innovative alternatives strategies to centralized surveillance systems



Map of morphologically identified vectors across the common borders





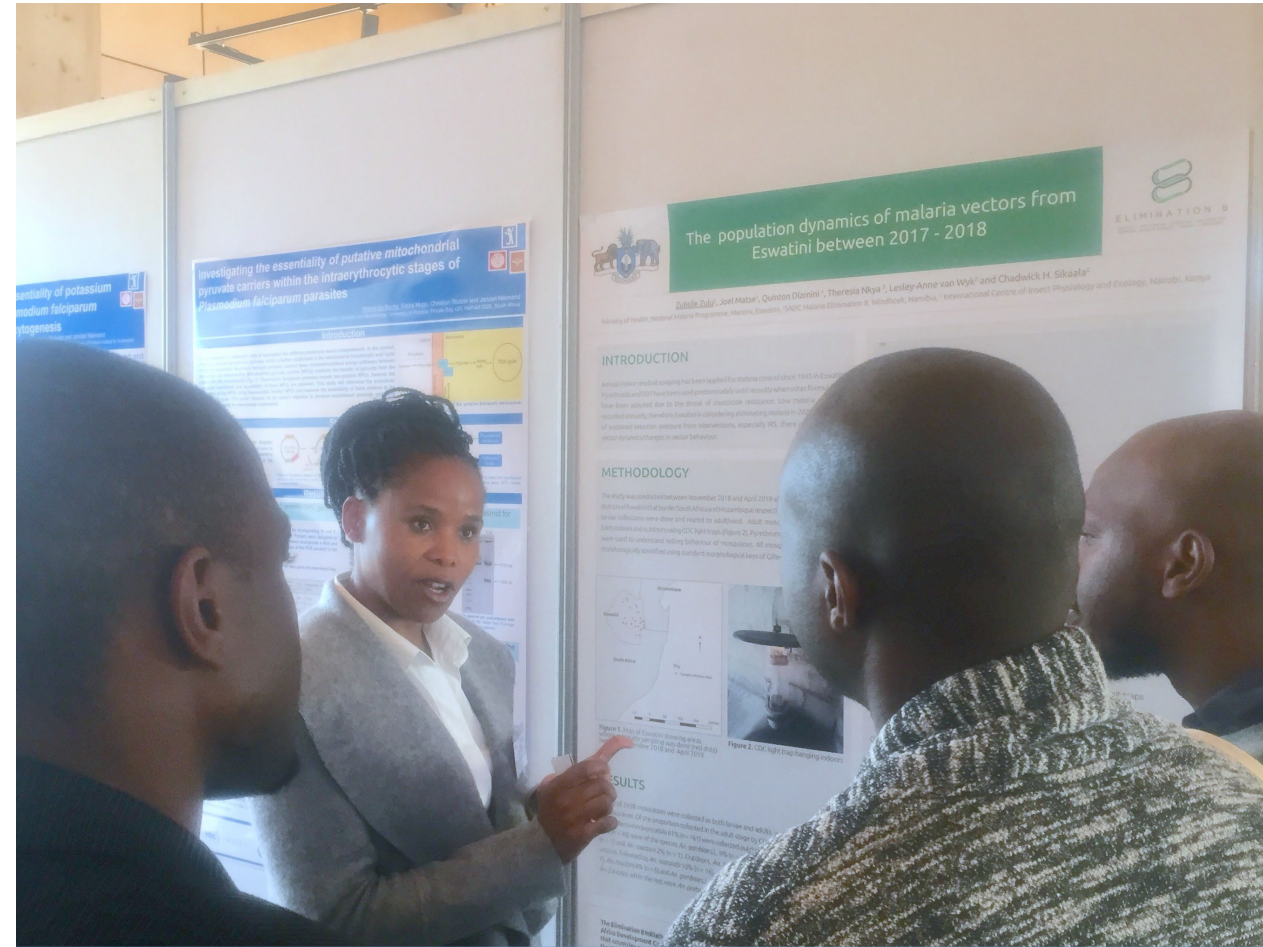
# Fellows Exposure

## Regional Meetings and Conferences

- Annual E8 VC TWG meeting
- SAMRC
- PAMCA
- ASTMH

“I am especially grateful to my mentor and the E8 because I can now stand up on my own and do entomological surveillance work as a VC technician.”

- Silindile Shabangu, South Africa



Poster presentation by Zulisile Zulu from Eswatini during the 5<sup>th</sup> Annual South Africa Medical Research Council (SAMRC) South Africa.



# Summary Evaluation Results

Evaluation results suggested that:

- The program was relevant to the E8 region
- The program was effective enough to meet its objective.
- Each capstone project costed \$6,500. This was perceived to be an efficient way of resource utilization.
- NMCPs were satisfied, the program will add value - impact - to the implementation of interventions.
- Sustainability of the program was likely to succeed with stronger partnerships engagement .

Evaluation criteria	Description	Score
Relevance	Highly satisfactory	100%
Effectiveness	Satisfactory to highly Satisfactory	75%
Efficiency	Satisfactory to highly Satisfactory	75%
Impact	Satisfactory	50%
Sustainability	Likely to highly likely	75%
Overall	Satisfactory to highly satisfactory	75%

- DAC Principles for the Evaluation of Development Assistance, OECD (1991), Glossary of Terms Used in Evaluation, in 'Methods and Procedures in Aid Evaluation', OECD (1986),
- Glossary of Evaluation and Results Based Management (RBM) Terms, OECD (2000).



# Key Lessons learnt

- The NMCPs perceptions of the role of entomological surveillance for malaria elimination was elevated: beneficial and impactful
- Support Career progression
- Data collection, handling and analyzing improvement
- Mentorship and networking are long-term outcomes of the program
- Time limitation - suggested a stepped learning beyond in-residence training for expanded learning outcomes
- High value achieved with limited resources

**Key Recommendation:** Future design to incorporate review results




Thank you!

BILL & MELINDA  
GATES *foundation*


UCSF Institute for  
Global Health  
Sciences  
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# Acknowledgement



E8 NMCPs

