

GLOBAL VECTOR CONTROL RESPONSE 2017-2030

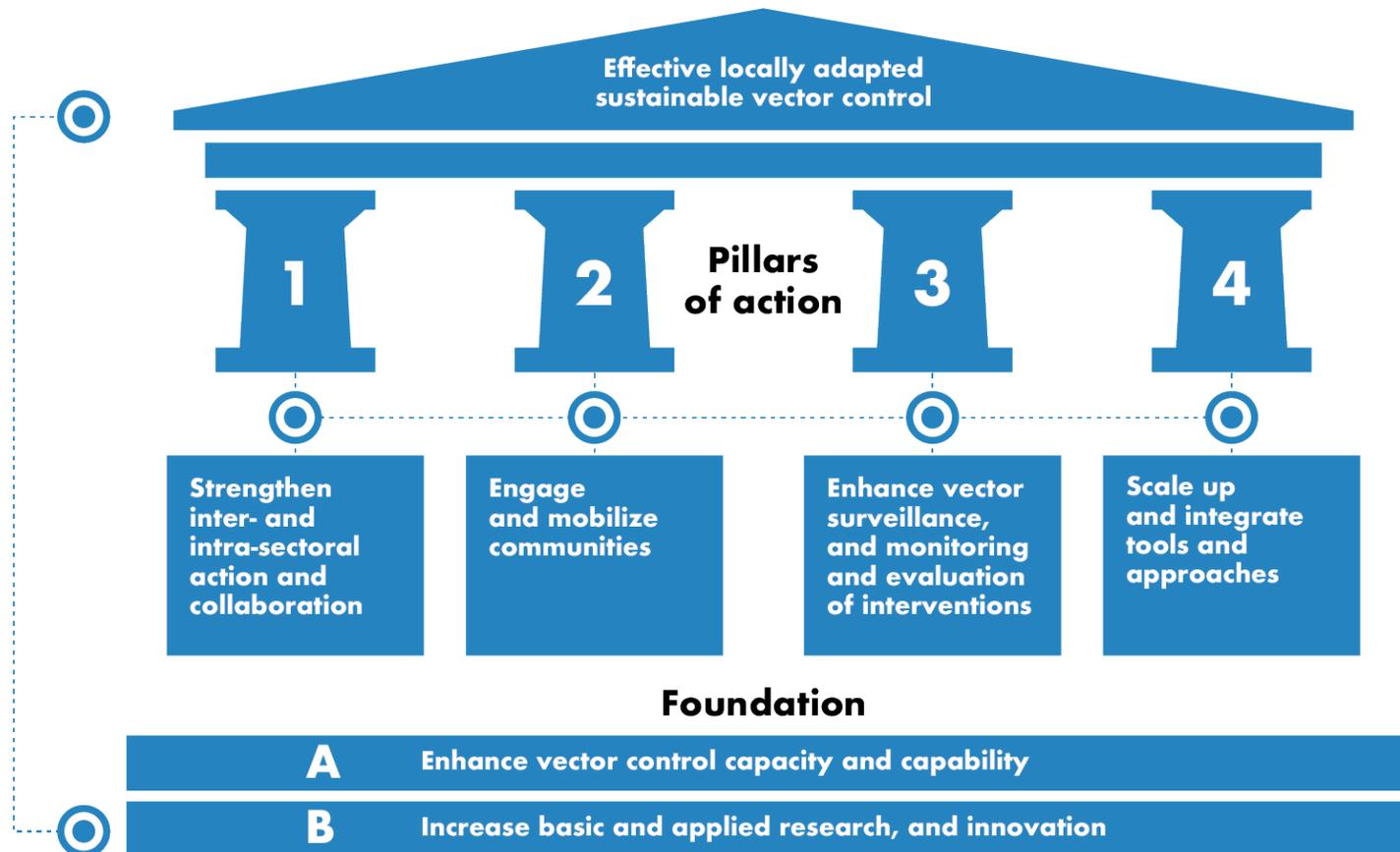
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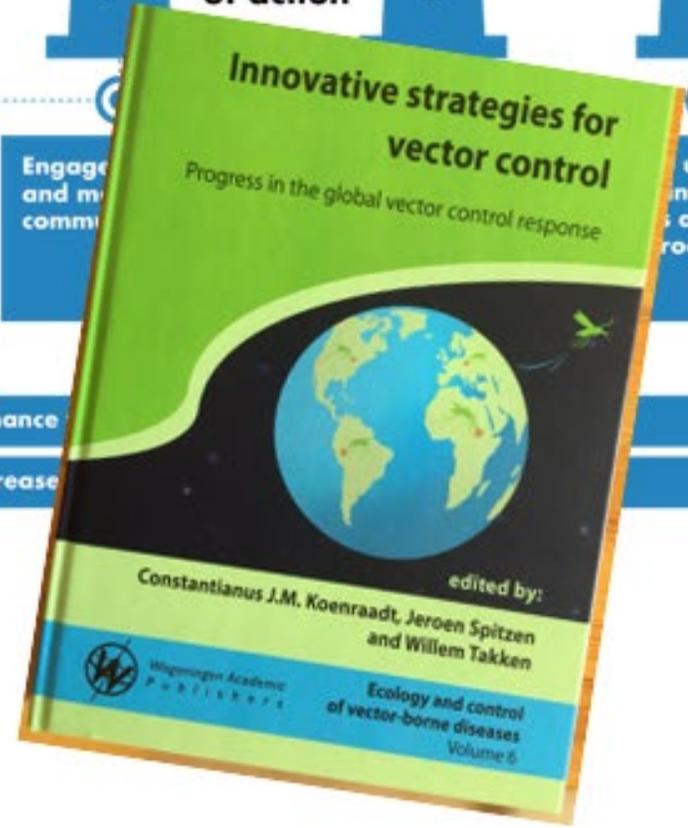
REDUCE THE BURDEN AND THREAT
OF VECTOR-BORNE DISEASES THAT
AFFECT HUMANS

ENABLING FACTORS

Country leadership
Advocacy, resource
mobilization and partner
coordination
Regulatory, policy
and normative support



GLOBAL VECTOR CONTROL RESPONSE 2017-2030



<https://www.wageningenacademic.com/doi/book/10.3920/978-90-8686-895-7>

VECTOR-BORNE DISEASES AND POVERTY

Vector-borne diseases:

thrive in conditions of poverty

exact their heaviest toll on the poorest people.

impede development by interfering with education and the capacity to work

can have a significant impact on economic opportunities eg. tourism

Global vector control response 2017–2030:

outlines a broad approach

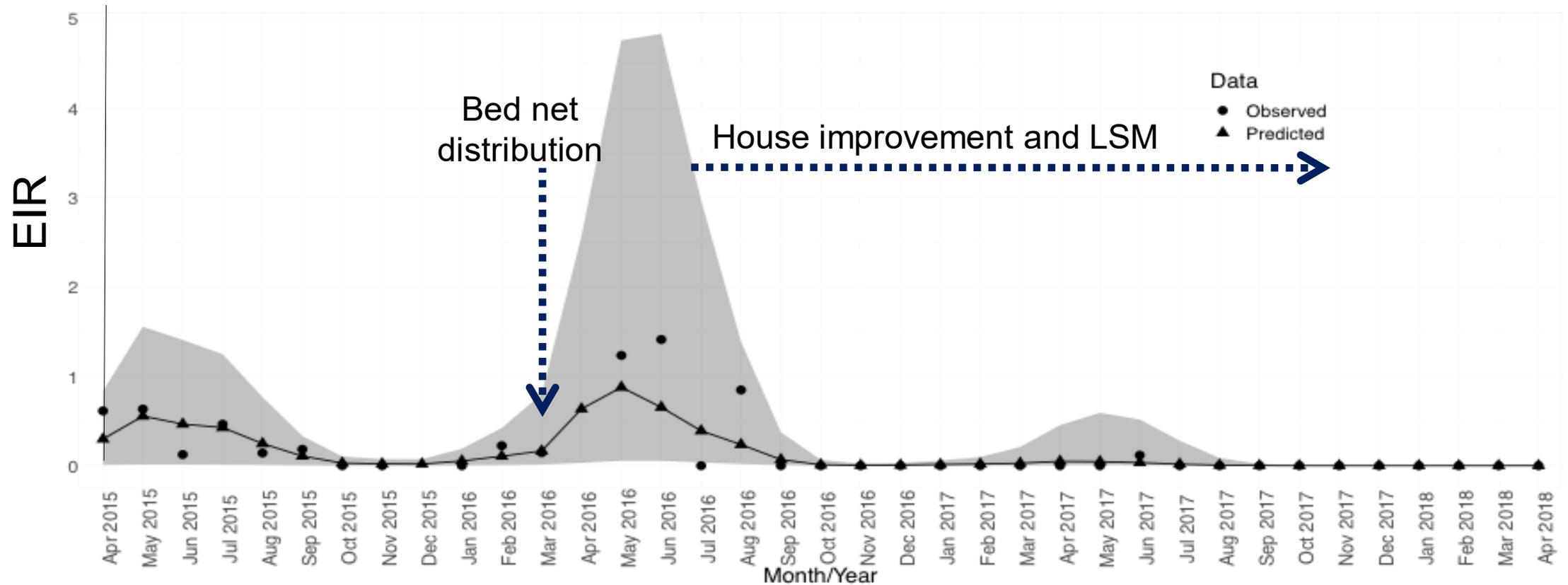
aligns with the **2030 Agenda for Sustainable Development**

will contribute directly to achieving Goals 1, 3, 6, 11, 13 and 17



Goal: interruption of transmission

Example: integrated malaria vector control with LLINs, house improvement and LSM in Malawi



Source: McCann et al. , Malaria J. (in press)

INSECTICIDE-BASED APPROACHES FOR MALARIA CONTROL

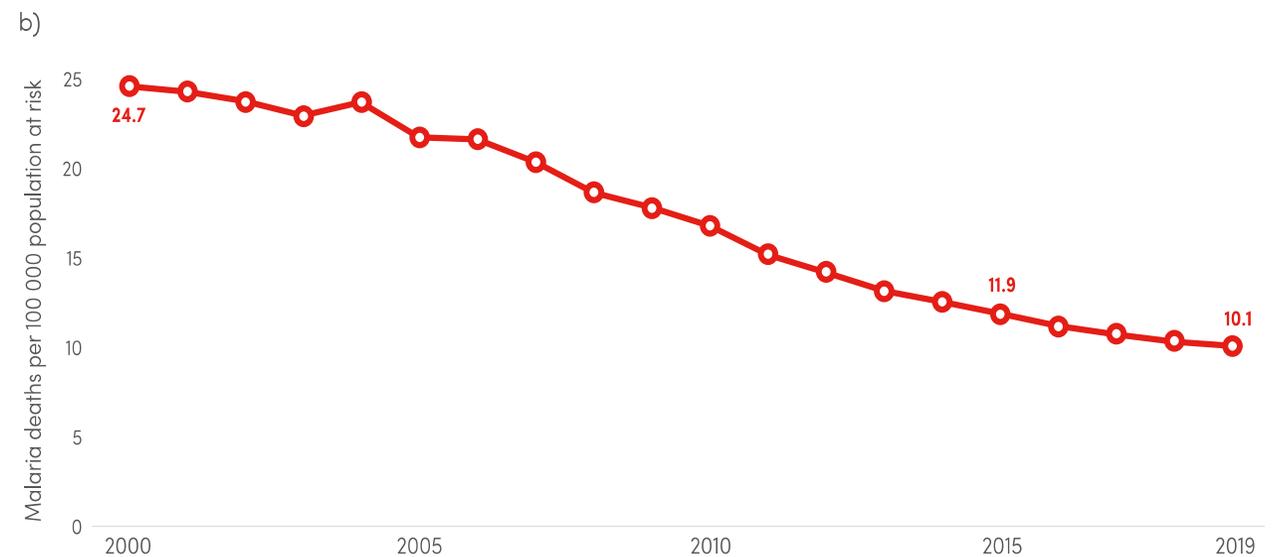
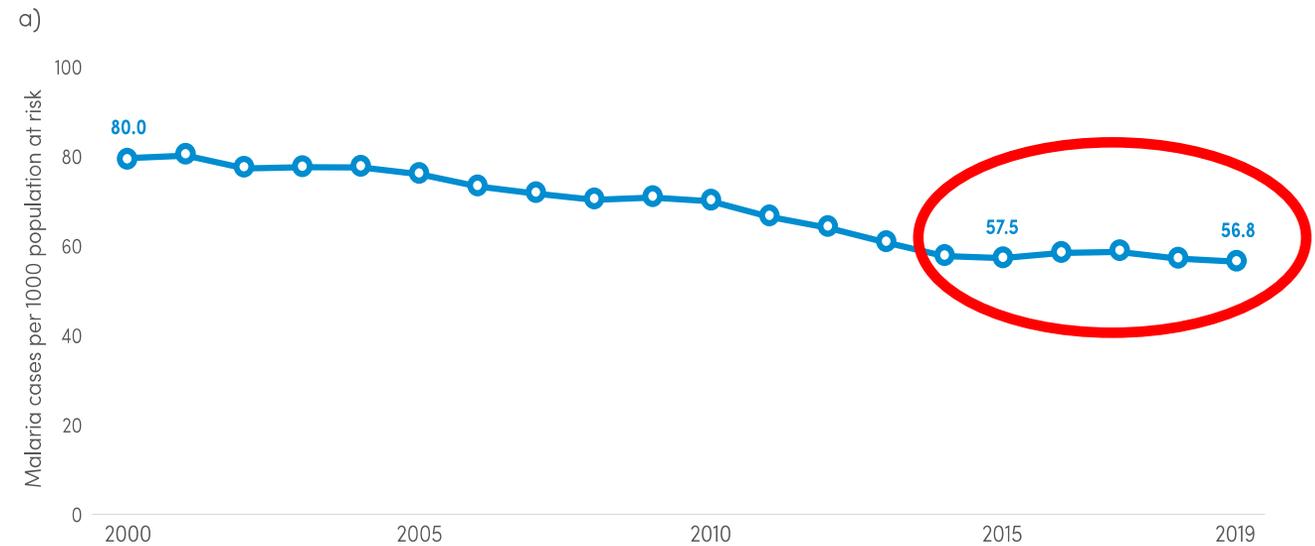
Global trends in a) malaria case incidence rate (cases per 1000 population at risk), b) mortality rate (deaths per 100 000 population at risk), 2000-2019

How was this achieved?

- Mass distribution of Long Lasting Insecticide-treated Nets
- and
- Indoor residual spraying

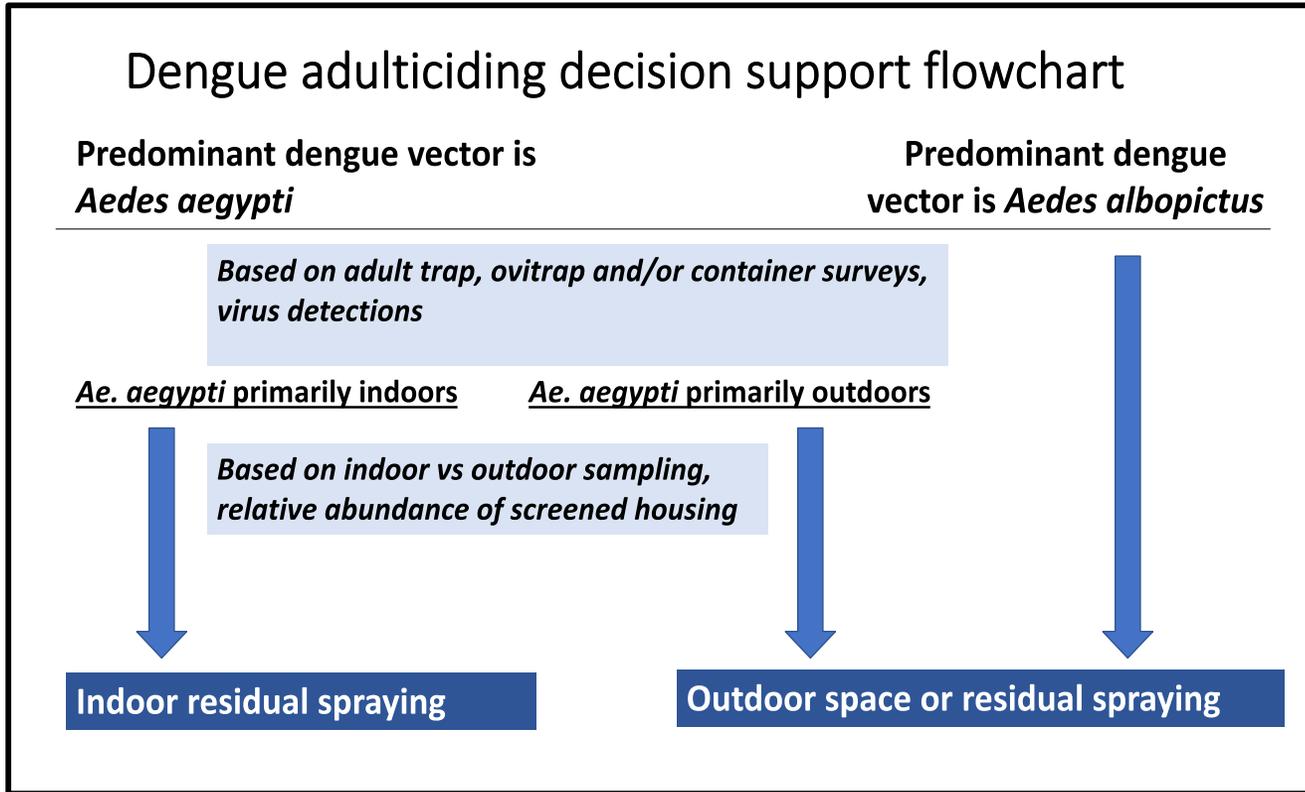
Why is further control stalling?

- Funding uncertainties
- Insufficient staff
- Insecticide resistance
- Drug resistance
- Slow integration and uptake of supplemental vector control tools



Source: World Malaria Report 2020

INSECTICIDE-BASED APPROACHES AGAINST ARBOVIRAL VECTORS



ALTERNATIVE STRATEGIES

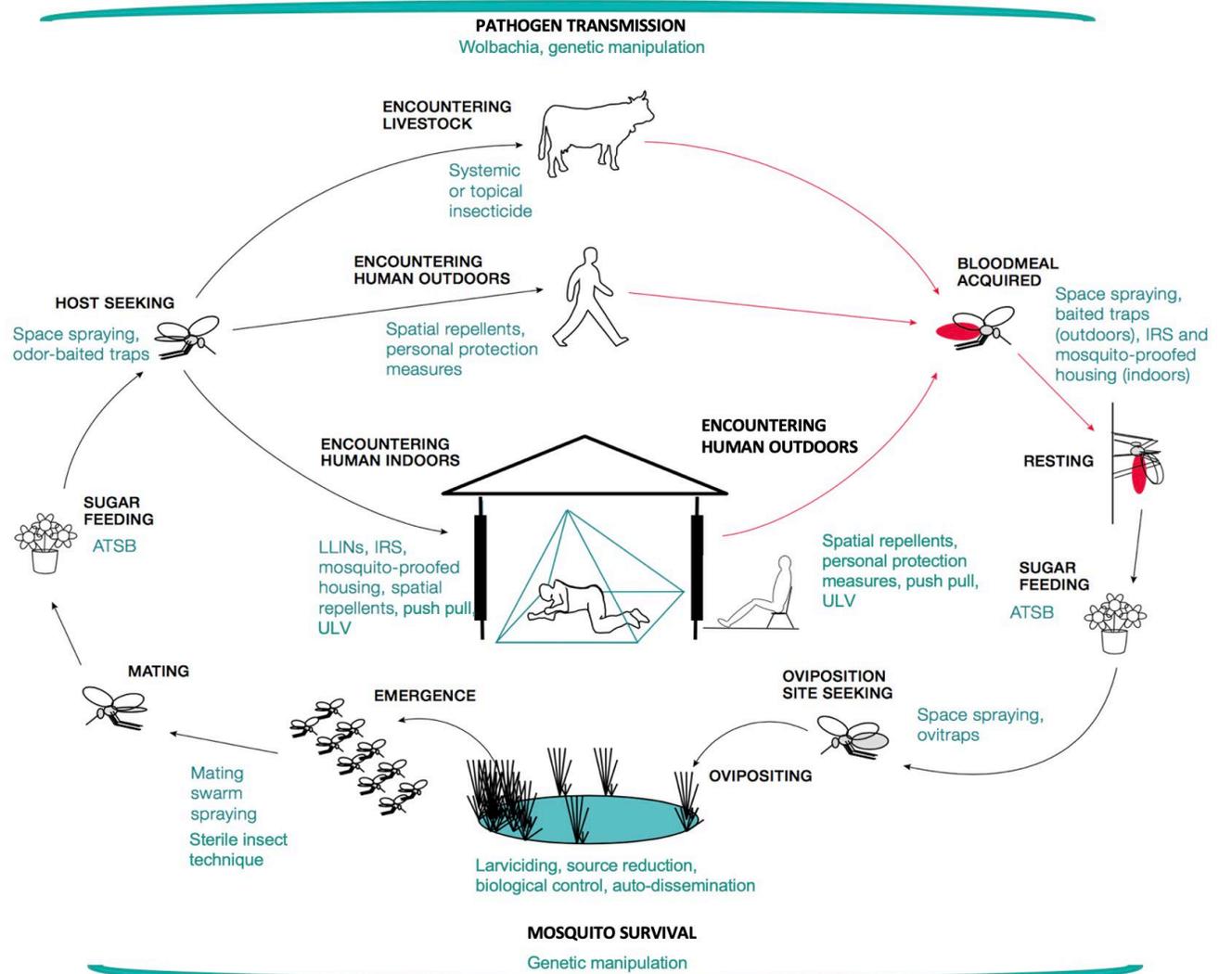
SWITCHING TO INTEGRATED VECTOR MANAGEMENT AND CONTROL

Currently available:

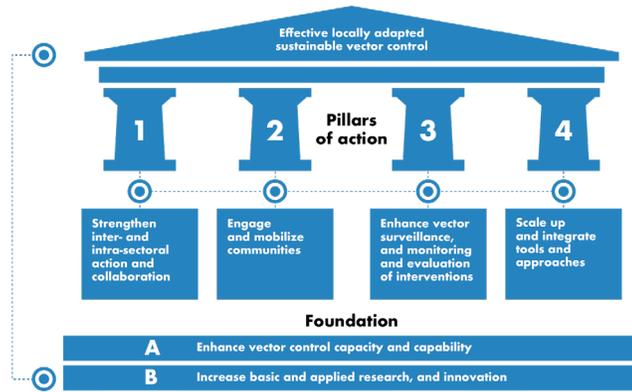
- House improvement
- Larval source management
- Toxic sugar baits
- Removal trapping systems
- Spatial repellents

Innovative tools (under development)

- Push-pull
- Gene-drive systems
- Release of Insect Dominant Lethals (RIDL)



INTERSECTORAL COLLABORATION



Pillar one:

Disease vectors have a multitude of habitats, which for effective control each require the collaborative input from many societal sectors;

Pillar two:

Community engagement

Pillar three:

Surveillance, monitoring and evaluation

Pillar four:

Scaling up and integration of tools and approaches



CONCLUSIONS

Country leadership of vector-borne disease prevention and control efforts is critical

→ **Policies and activities** should not be limited to the health sector and should always be evidence-based

Action within and between countries should be harmonized and strengthened

→ **Emphasis on integrated, community-based approaches** – involvement of municipalities and local governments

→ **Adoption of novel interventions** is strongly encouraged (when validated for operational use by WHO)

Aim is to ensure **all countries can achieve success**, irrespective of their current disease burden/risk, capacities and resources

Innovative strategies for vector control

Progress in the global vector control response



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THANK YOU