Vector Control Working Group :

Brief overview

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The Asia Pacific Malaria Elimination Network (APMEN) is a partnership of 22 Asia Pacific countries that are supporting malaria elimination, together with the member-country National Malaria Control Programmes and also experts from key multilateral and academic institutions. With its membership from governments, public and private sector organizations, the Network's mission is to support the achievement of a malaria-free Asia Pacific.
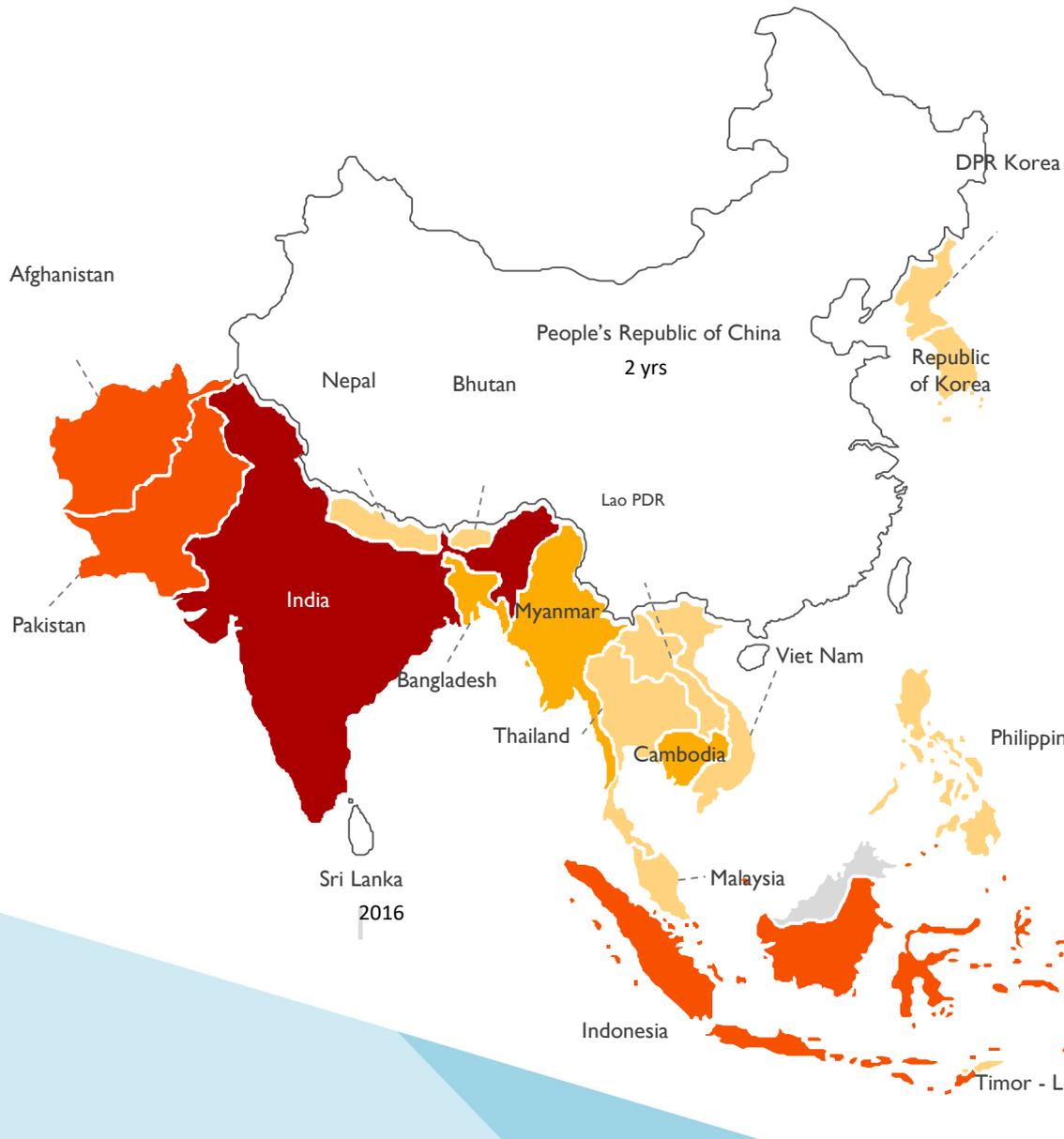
Number of Indigenous Cases

- 0
- 1 – 20,000
- 20,001 – 100,000
- 100,001 – 500,000
- 500,001 – 1,000,000
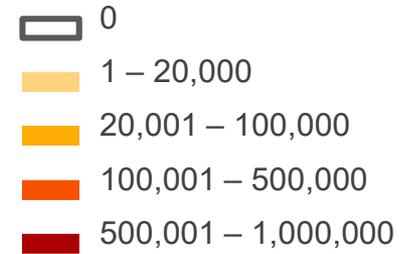
Source: World Malaria Report 2018

2018
SE Asia = 7,9 million;
Western Pacific = 1,98 million
228 million cases global

APMEN
asia pacific malaria elimination network

Afghanistan

Pakistan

People's Republic of China
2 yrs

Nepal

Bhutan

DPR Korea

Republic of Korea

Lao PDR

India

Myanmar

Bangladesh

Thailand

Viet Nam

Cambodia

Sri Lanka
2016

Malaysia

Philippines

Indonesia

Timor - Leste

Papua New Guinea

Solomon Islands

Vanuatu

APMEN achieves its "coal-face" interventions and support largely through the activities of four working groups:

1 – Vector Control Working Group

2 – Surveillance and Response Working Group

3 – Vivax Working Group

4 – Program Management Working Group

APMEN Vector Control Group

OBJECTIVES

- To create platforms for sharing information and joint identification of regional or country vector control bottlenecks and priorities (ORENE, annual multi-nation conference)

- To stimulate, and where necessary coordinate, operational research to support the implementation of solutions to the vector control challenges faced by Asia Pacific countries

- To build capacity for more effective vector control at regional and country level in support of achieving malaria elimination

Key vector control challenges in Asia-Pacific

High vector species diversity in many morphologically indistinguishable species groups/complexes (Diverse habits)

Outdoor biting and animal feeding
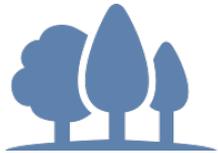
**Forest transmission and cross-border migration**

Shortfalls in **entomological expertise** and **capacity**

Asia-Pacific malaria burden may be relatively low compared to global case numbers, should be seen in context of historic precedents and current threats….

MAP 2.
Number of ACTs failing in the GMS

High ACT failure rate (>10%) to:
- 1 ACT
- 2 ACTs
- 3 ACTs

China (Yunnan)

Myanmar

Viet Nam

Lao PDR

Thailand

Cambodia

Artemisinin refers to artemisinin and its derivatives.
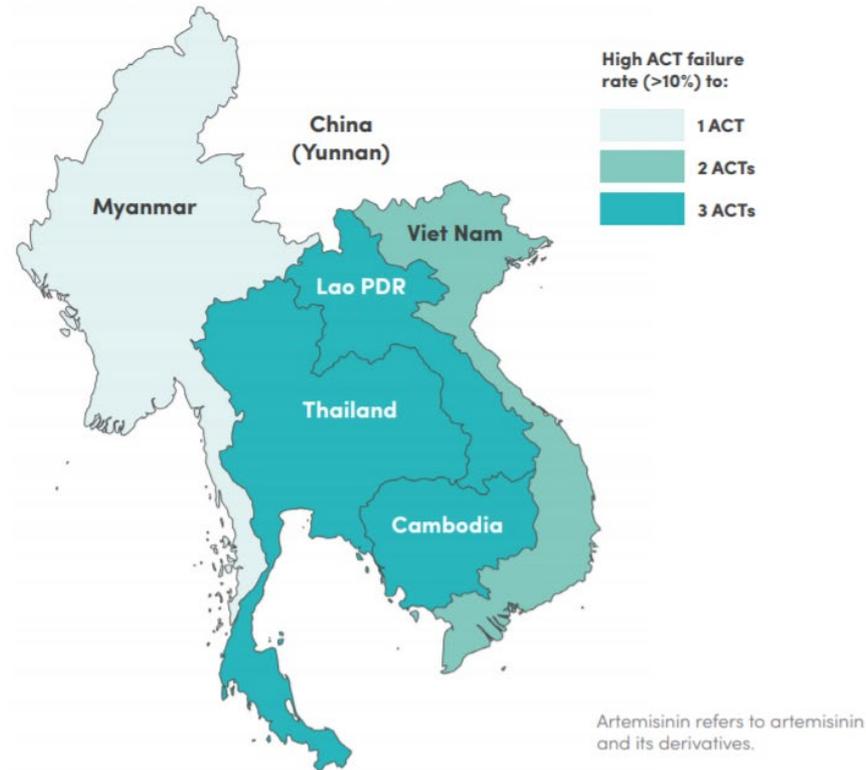
WHO. Countries of the Greater Mekong zero in on falciparum malaria. The Mekong Malaria Elimination Programme. WHO BULLETIN #8. December 2019.

Primary outputs 2019

- **O**nline **R**esource **E**xchange **N**etwork for **E**ntomology (ORENE)

- **Annual VCWG meeting**

- **Alternatives to HLC for outdoor vector collection**
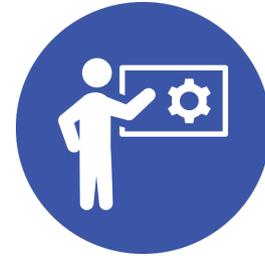
- **Support for course attendance (Pk; DAP&E)**
- **Two-week VSME** training workshop

INFORMATION-SHARING PLATFORMS

Online Resource Exchange Network for Entomologists

https://orene.org
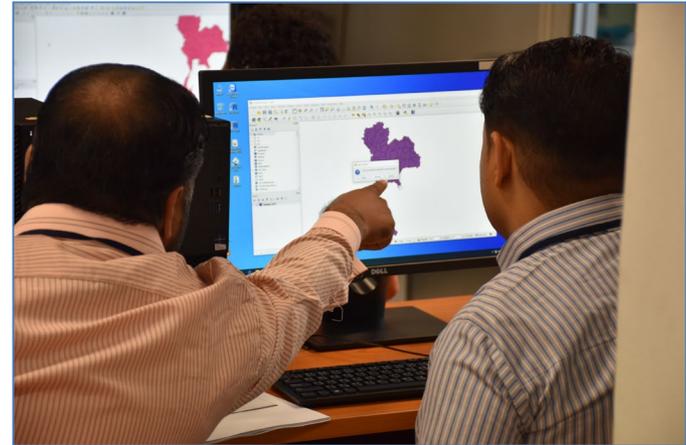
INFORMATION-SHARING PLATFORMS

APMEN Joint VCWG and S&RWG annual conference
23 -26 March Bangkok

Expect about 100 participants from National Malaria Programs, Partner Institutions, WHO, NGOs, Academia

OPERATIONAL RESEARCH SUPPORT

Two-country evaluation of alternatives to HLC for adult vector mosquito surveillance methods in Asia - Pacific

DNT

HLC

HDT

Objective: to test the feasibility of replacing the 'gold standard' human landing catch with human double net trap (HDNT) or human decoy trap (HDT),

Annual International Malaria Vector Surveillance for Elimination course

Annual International Malaria Vector Surveillance for Elimination course

2018 = Malaysia, 2019 = Thailand; 2020 = India?
30 participants from 22 countries,
Intensive two-week course
Sessions cover wide range of topics including vector diversity and behavior, GIS training, intro to arbovirology, lectures and field training in mosquito collection techniques (larvae and adults), processing, strong focus on morphological ID's, PCR, insecticide susceptibility assays, Insectary establishment & maintenance, colony management, etc

Also provide financial and logistic support for opportunistic events such as *Plasmodium knowlesi* course KL and DAP&E 6-month course Malaysia 2019

Thank you!

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