Mekong Malaria Elimination Programme

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Coordinator, MME

April 2018

Global **Malaria** Programme

World Health Organization

GMS Strategy Targets

World Health Organization

By 2020 or earlier

Transmission of *P. falciparum* malaria interrupted in all areas of multidrug resistance, including ACT resistance

By 2020

P. falciparum malaria eliminated in Cambodia

All species of human malaria eliminated in Yunnan Province, China

By 2025

P. falciparum malaria eliminated in all countries of the GMS

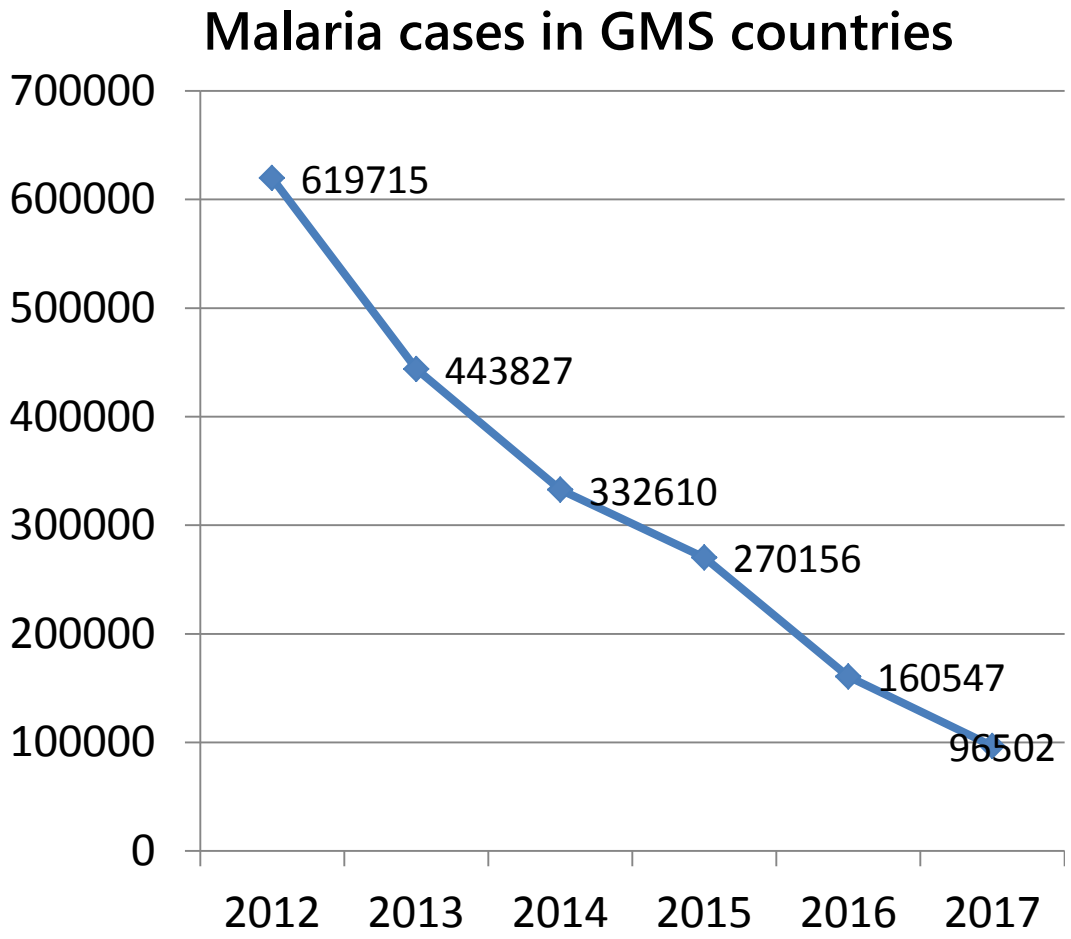
All species of human malaria eliminated in Cambodia and Thailand

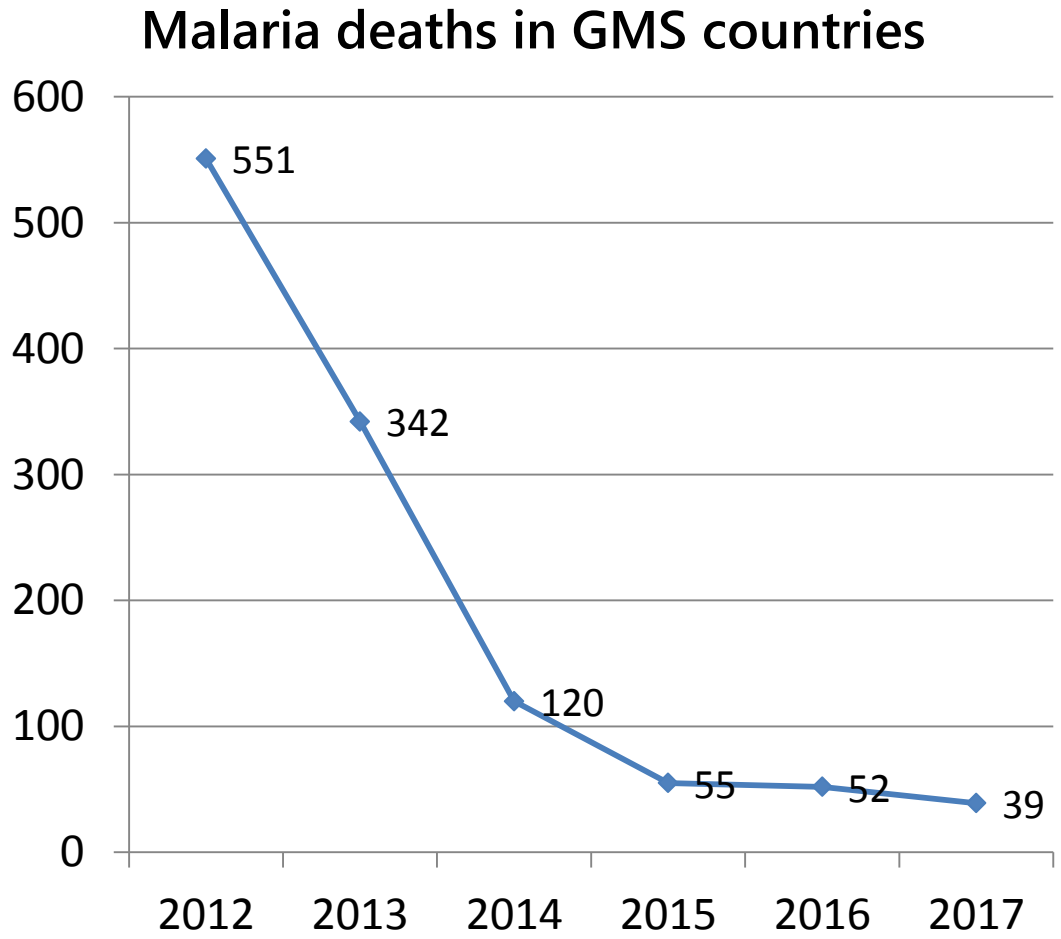
By 2030

All species of human malaria eliminated in all countries of the GMS

Progress in Malaria Elimination in GMS

World Health Organization



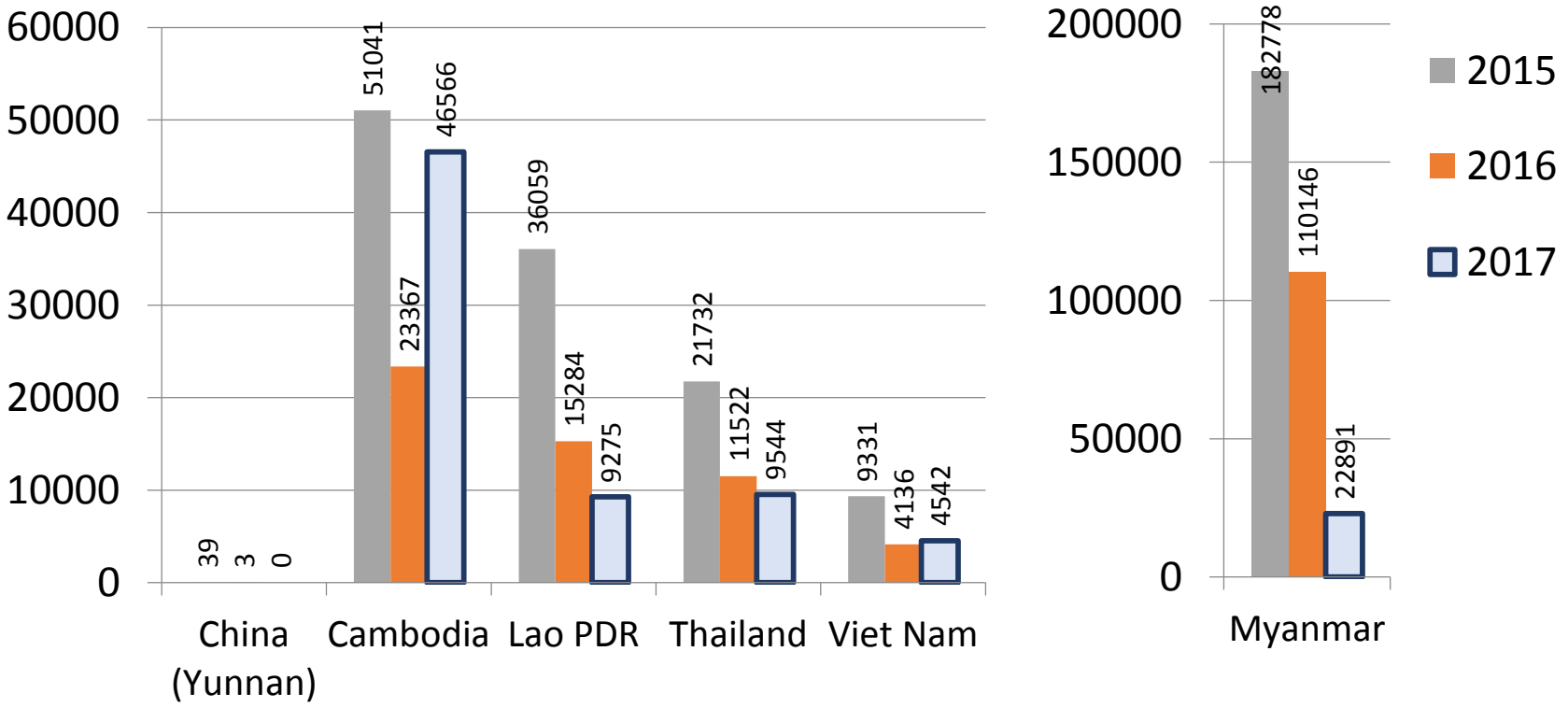


* Cases from some partners in Myanmar are not included

Countries Faced Challenges in 2017

World Health Organization

Changes in number of malaria cases in GMS countries*



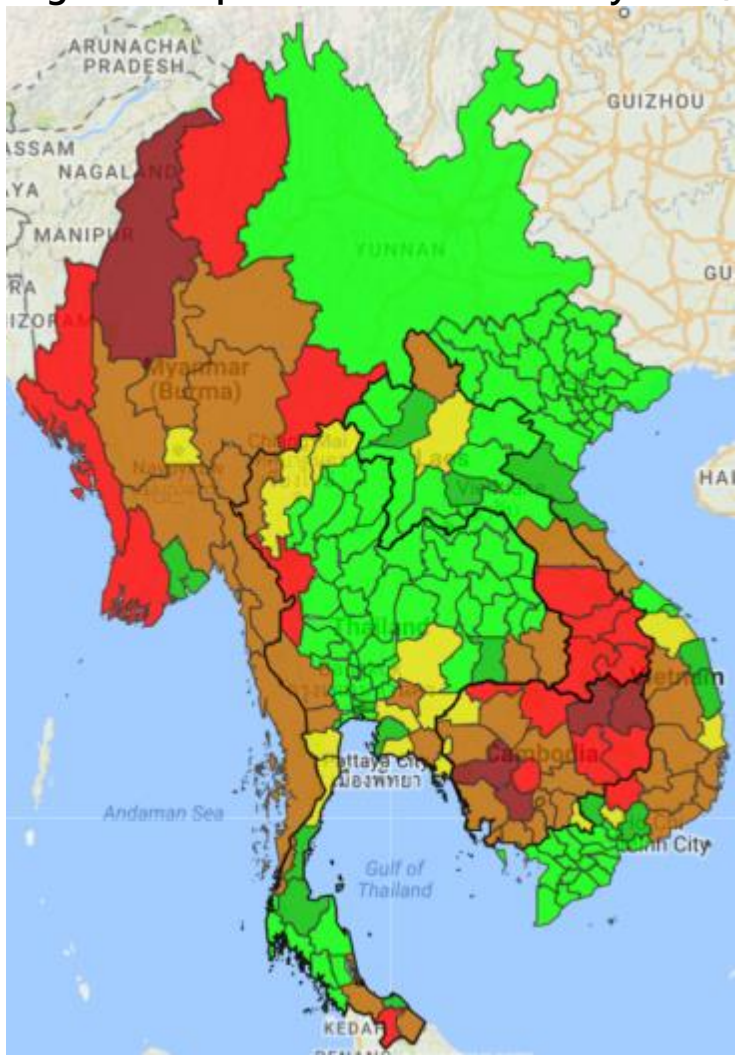
- The total number of cases in GMS has declined in 2017
- However, the number of cases is **higher** in 2017, compared to 2016, in Cambodia and Viet Nam
- Number of cases is **higher** in second half of 2017, compared to 2H 2016, in Lao PDR

* Cases from some partners in Myanmar are not included

Epidemiology of Malaria in GMS (2017)

World Health Organization

Regional Map of Confirmed Cases by State/Province

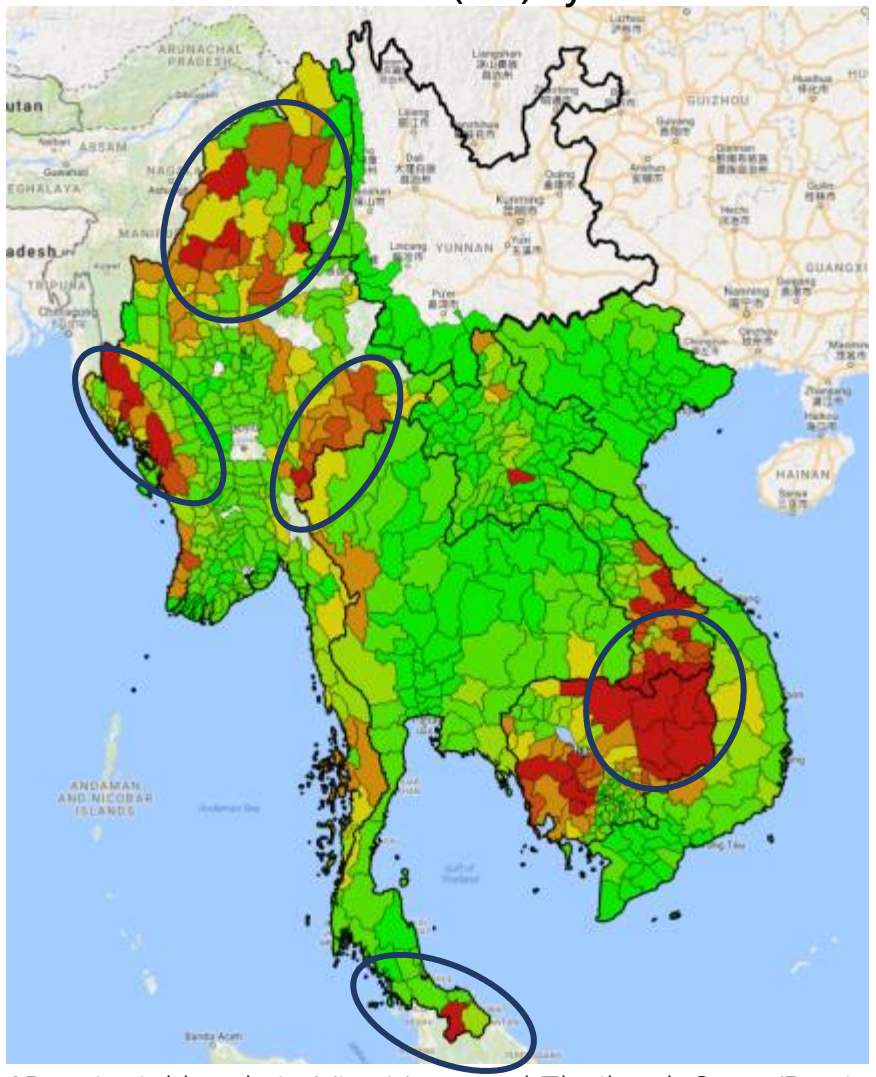


Confirmed Cases

- **Low** 0 - 20 (101)
- **Medium** 20 - 50 (16)
- **Fair** 50 - 100 (17)
- **High** 100 - 1000 (43)
- **Very High** 1000 - 5000 (17)
- **Extremely High** 5000 - 10000 (5)

Source: WHO subregional database

Annual Parasite Incidence (API) by District*



API/1000

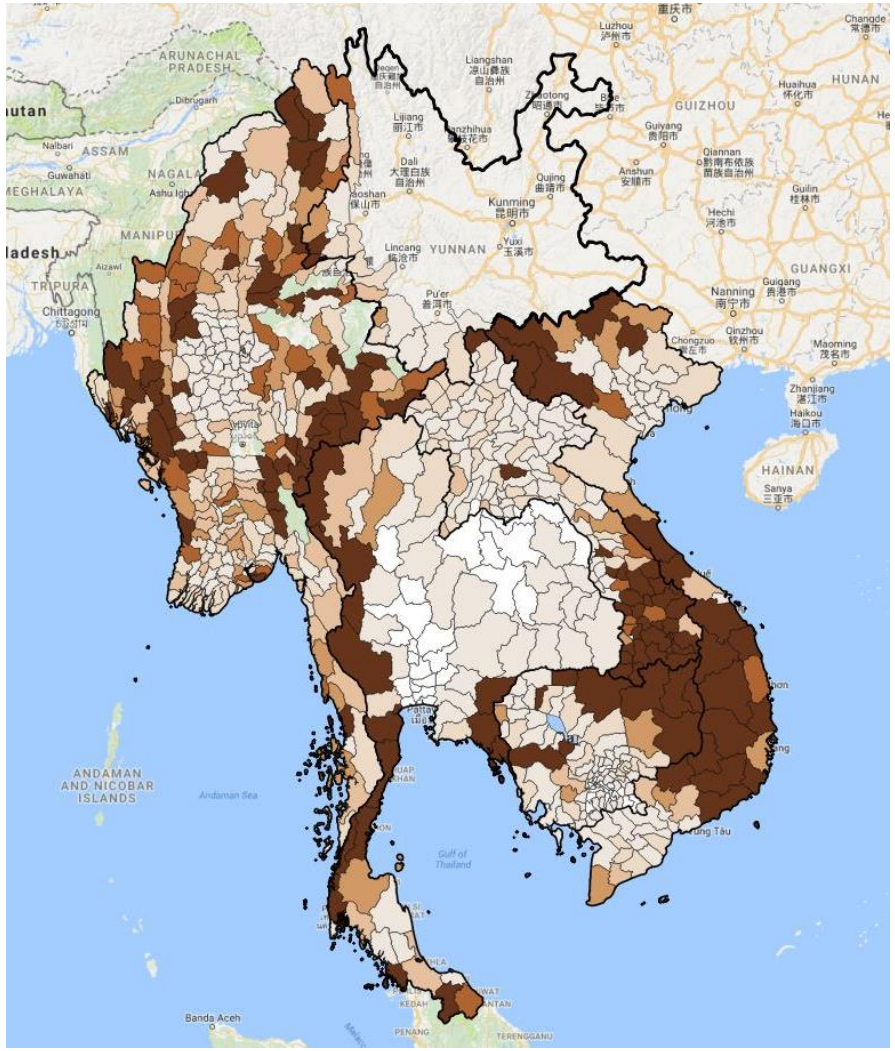
- 0 - 0
- 0 - 0.2
- 0.2 - 0.5
- 0.5 - 1
- 1 - 3
- 3 - 5
- > 5

*Provincial levels in Viet Nam and Thailand; State/Region level in Myanmar

Epidemiology of Malaria in GMS (Continued)

World Health Organization

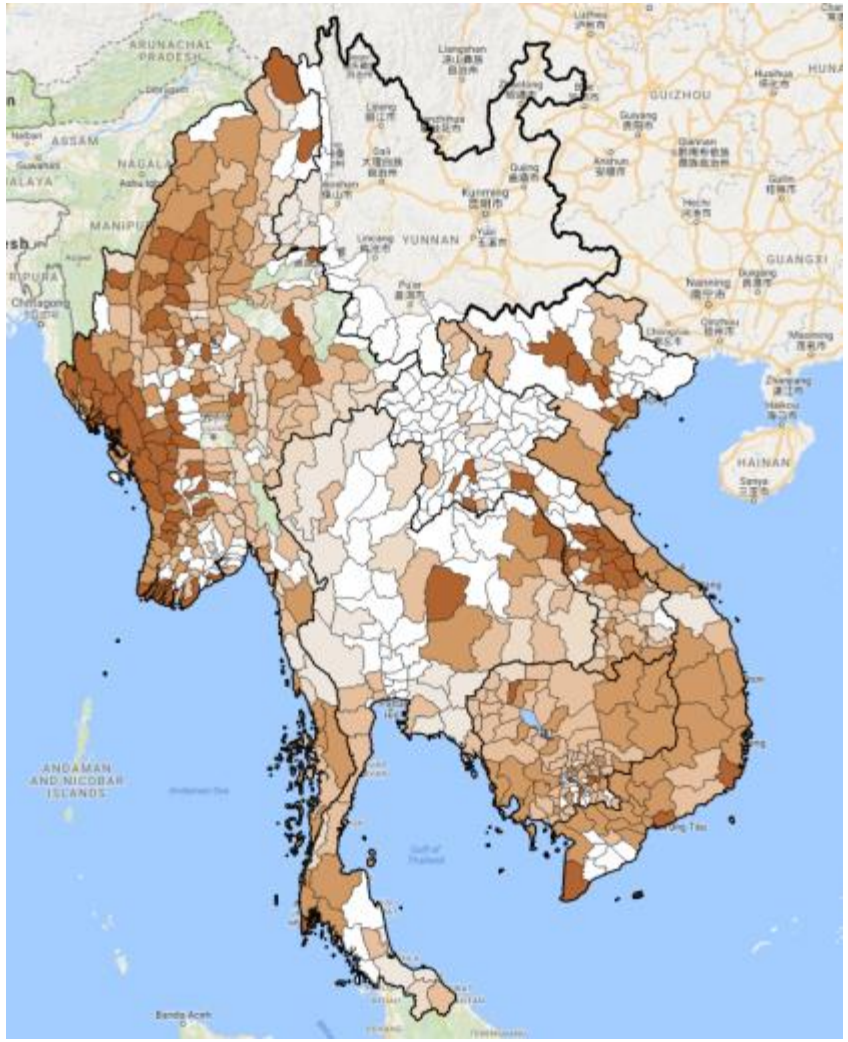
Annual Blood Examination Rate (ABER) in 2017



ABER/100

- 0 - 0
- 0 - 1
- 1 - 2
- 2 - 3
- 3 - 4
- 4 - 5
- > 5

% of *P. falciparum* cases in 2017

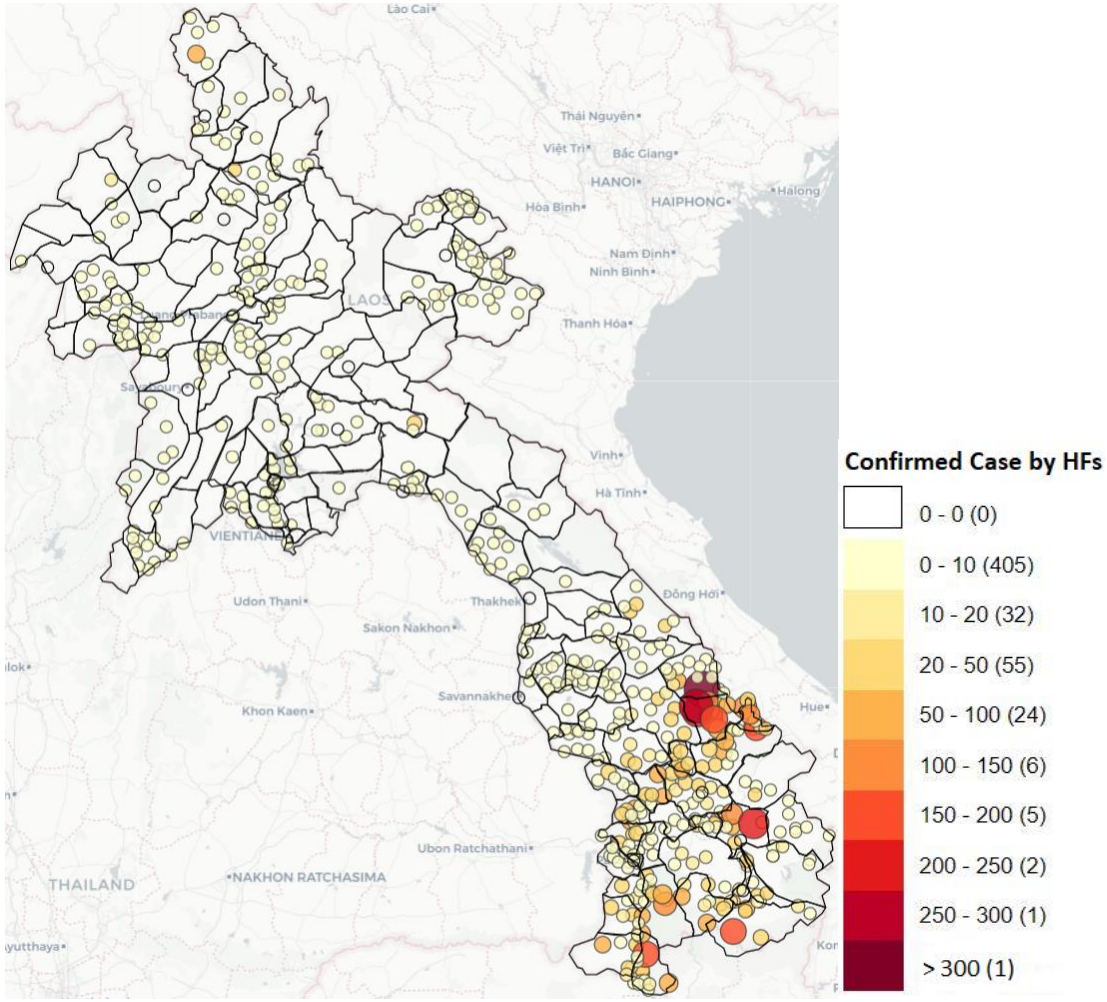


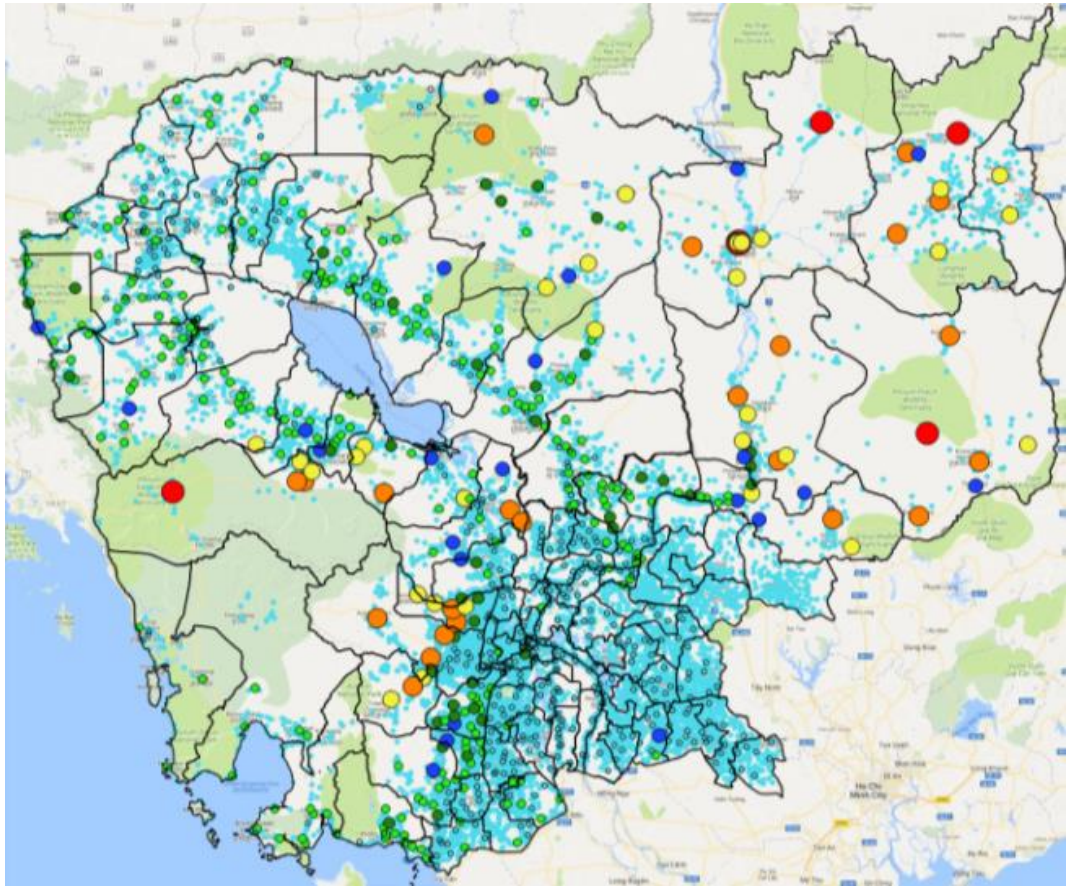
% P. falciparum

- 0 - 0
- 0 - 10
- 10 - 20
- 20 - 50
- 50 - 80
- 80 - 100

Source: WHO subregional database

Examples of Case Distributions in GMS
Lao PDR and Cambodia (2017)



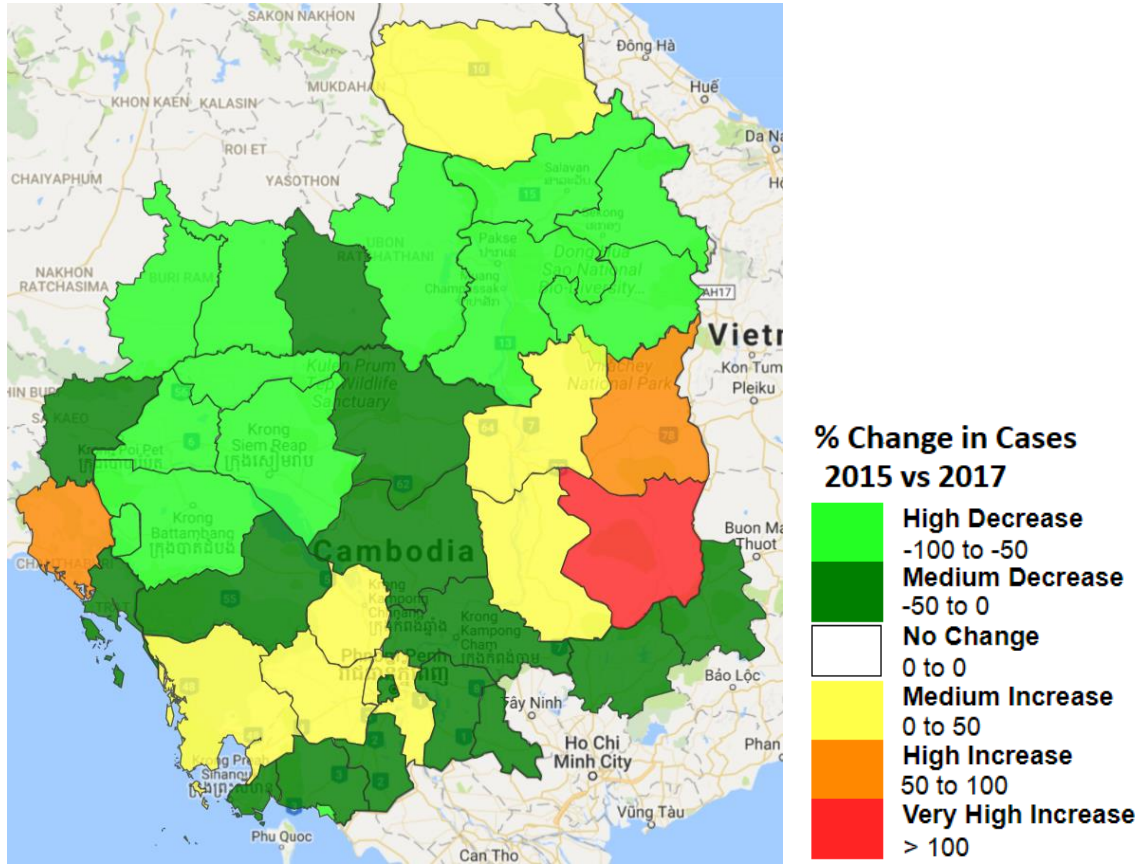


Source: WHO subregional database

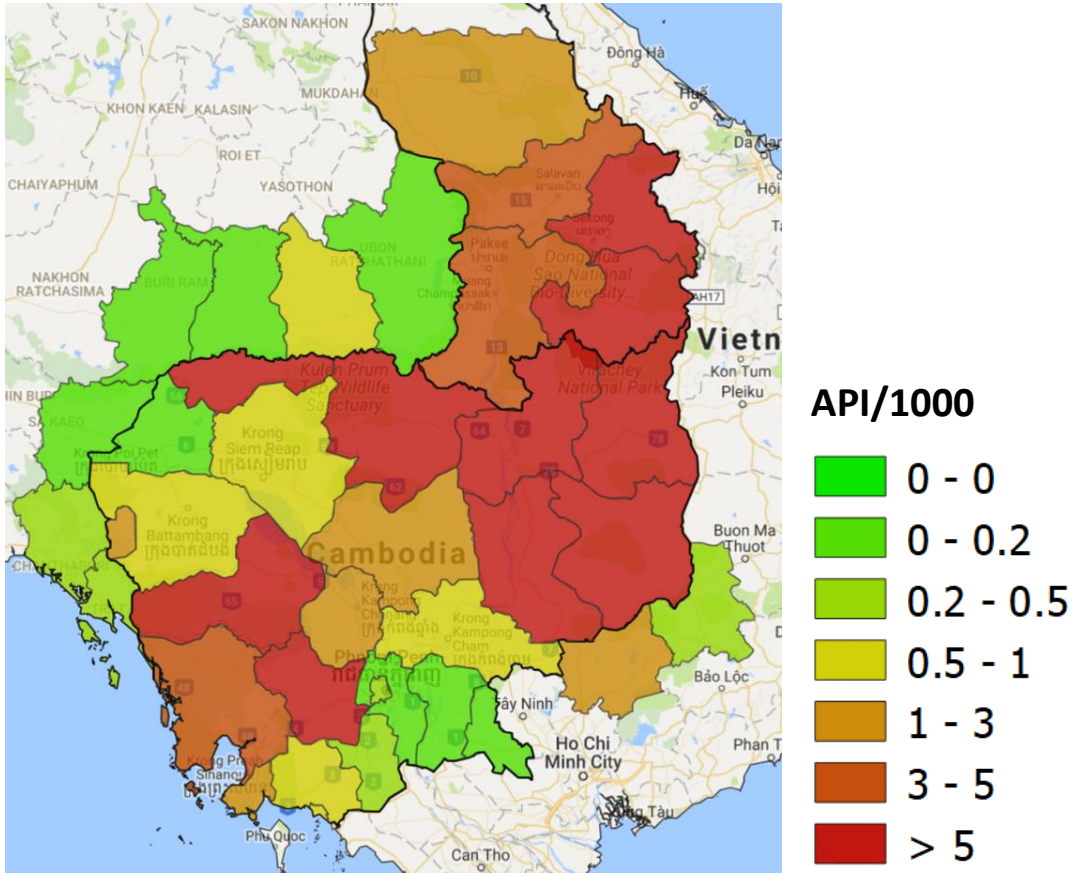
Progress in Areas with Multidrug Resistance (Targeted for *P. Falciparum* Elimination by 2020)

World Health Organization

% Change in Cases (2015 vs. 2017)



Annual Parasite Incidence (2017)



Source: WHO subregional database

Major Issues in MME

World Health Organization

A. Ensuring sustainable funding

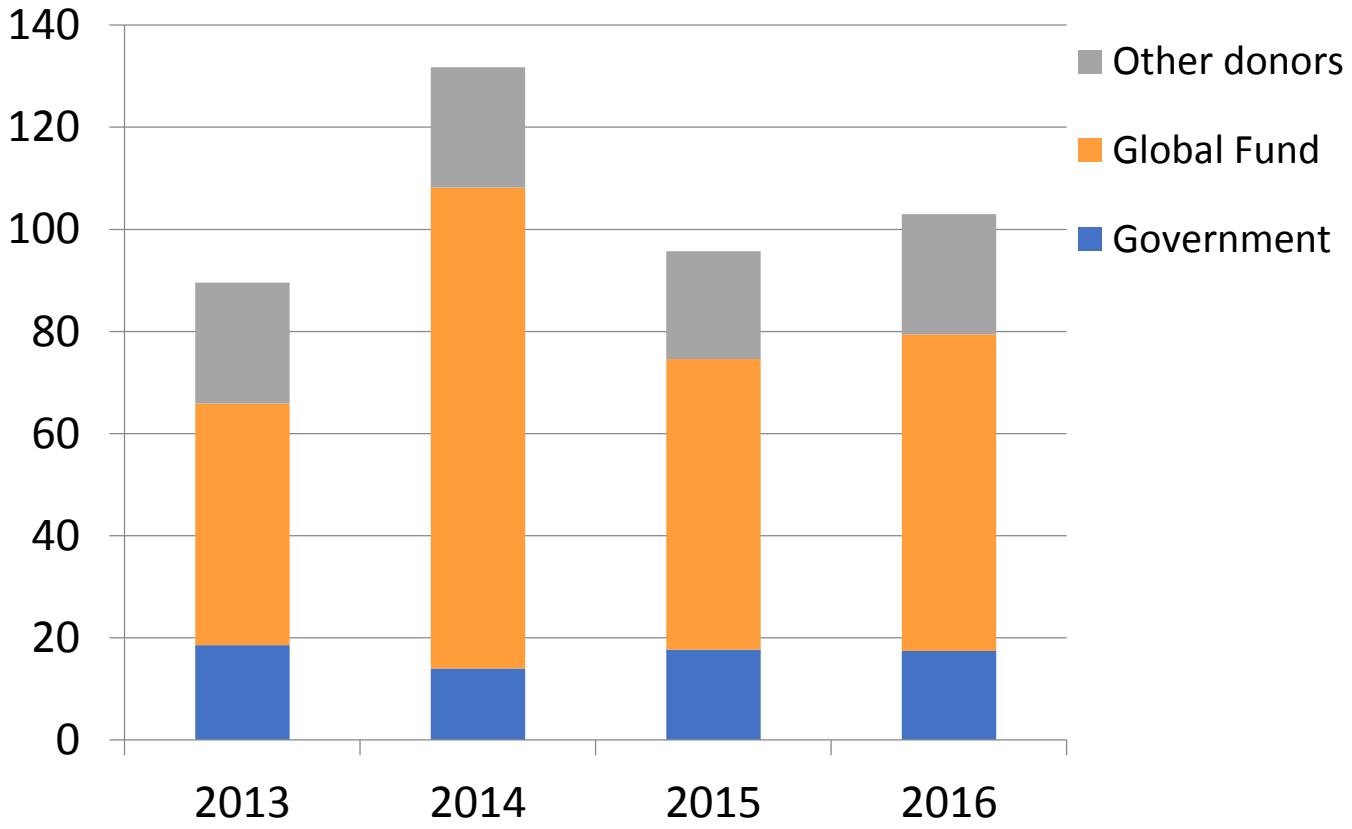
B. Project implementation

C. Monitoring and addressing multidrug resistance

D. Improving surveillance

A. Sustainable Funding

Funding contributions to malaria programme
(Million USD, 5 GMS countries, excluding China)



- Significant investment is made in GMS countries but primarily with external sources (esp. GF)
- Domestic funding is **less than 20%** of total funding and declining in Cambodia and Viet Nam
- In addition, some countries have issues implementing all budget (such as Global Fund grant)

Data Source: World Malaria Report (2017). Contributions reported by countries.
Government spending includes both national malaria control programmes (NMCPs) and passive case detection (PCD).

B. Project Implementation

Targeting High-Risk Populations

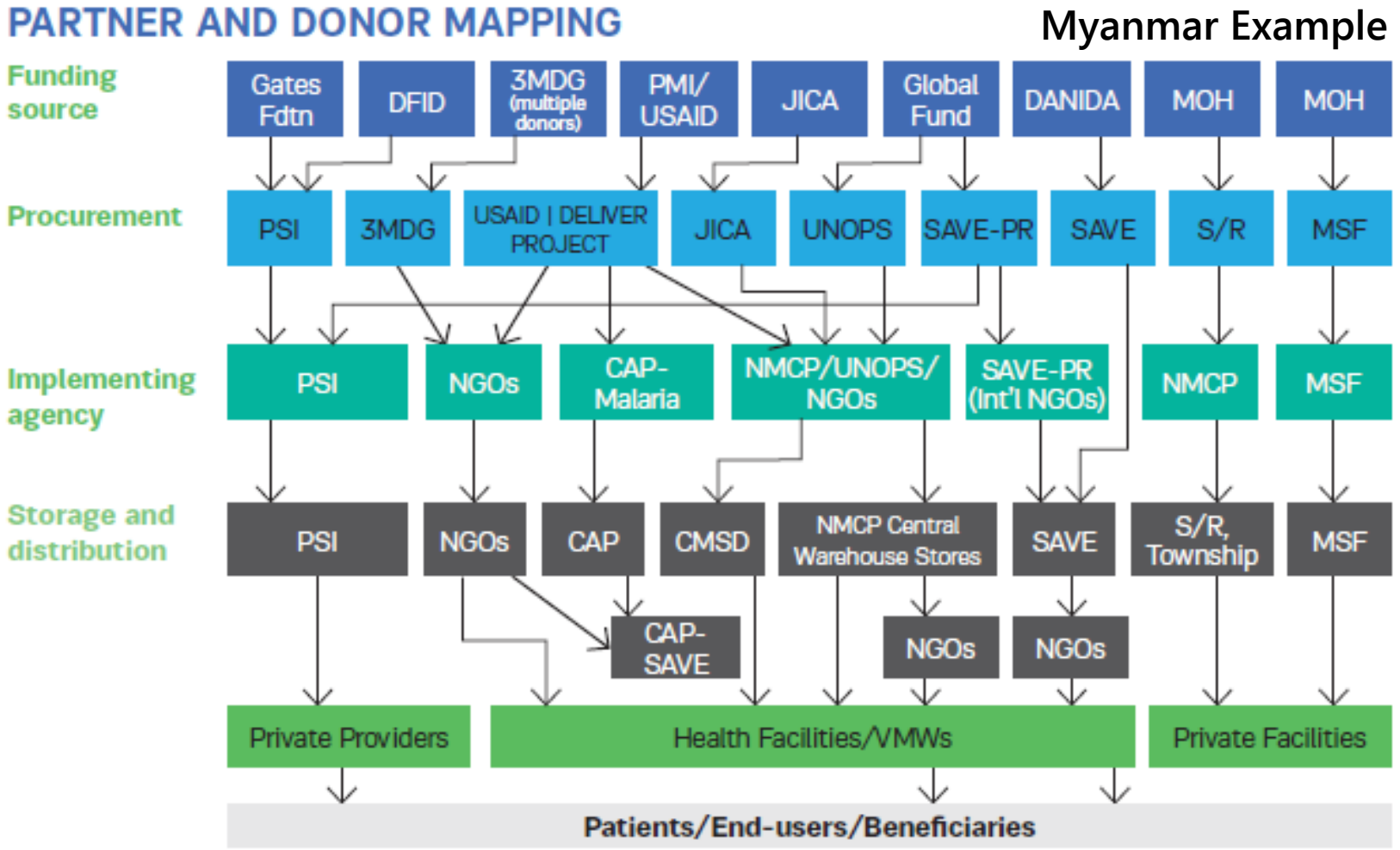
Results from UNOPS survey in areas with Global Fund Grant

% of mobile people that used an ITN the last time they slept in transmission areas				
Country	**2014**	**2015**	**2016**	**2017**
Cambodia	NA	NA	51%	NA
Lao PDR	16%	NA	NA	Ongoing
Myanmar	43%	NA	50%	NA
Thailand	NA	NA	NA	NA
Viet Nam	NA	85%	89%	95.6%

% of mobile population with fever in the last three months that accessed parasite-based diagnosis				
Country	**2014**	**2015**	**2016**	**2017**
Cambodia	NA	NA	29%	NA
Lao PDR	77%	NA	NA	Ongoing
Myanmar	44%	NA	39%	NA
Thailand	NA	NA	NA	NA
Viet Nam	NA	84%	87%	90.5%

Source: UNOPS presentation at RSC (March 2018)

B. Project Implementation
Partnership Coordination



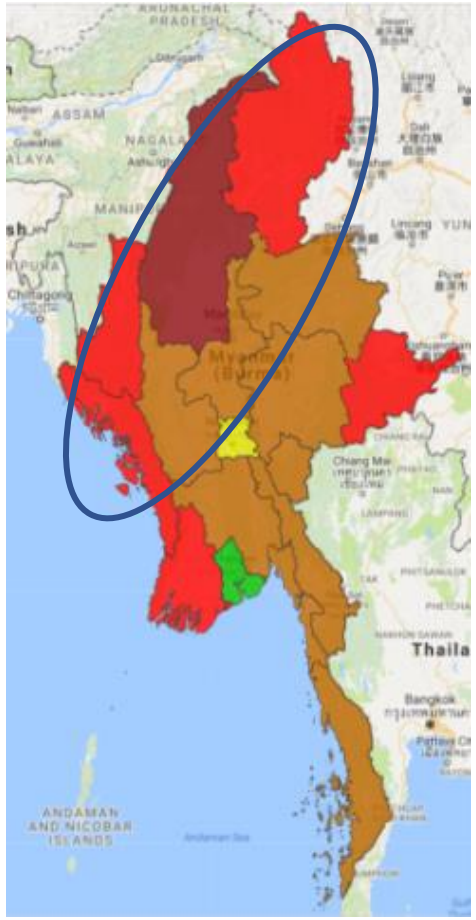
- The partnership landscape is highly complicated, as in this example from Myanmar
- More complex landscapes require **significant coordination** by the government

Source: Malaria supply chain in the GMS, WHO (2017)

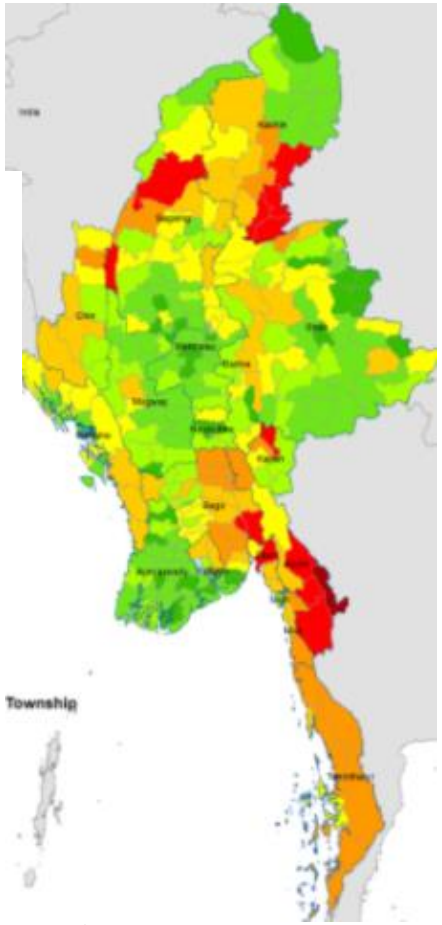
B. Project Implementation

Distribution of Partners in Endemic Areas

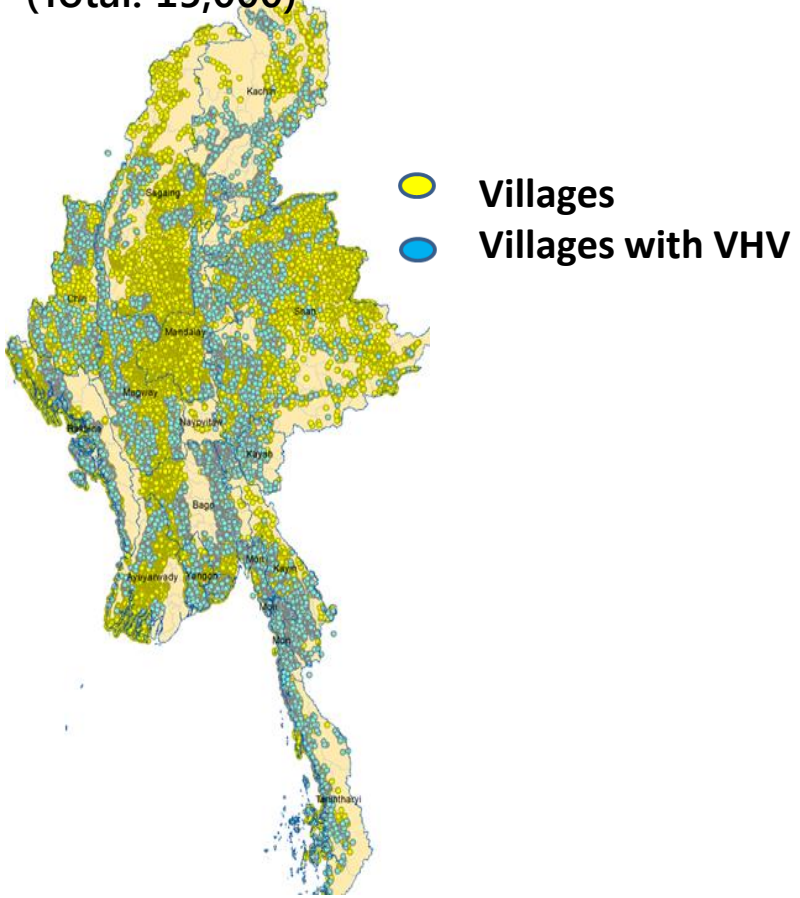
Malaria Cases by Province in Myanmar in 2017 (Jan-Dec)



Distribution of Implementing Partners in Myanmar (2016)

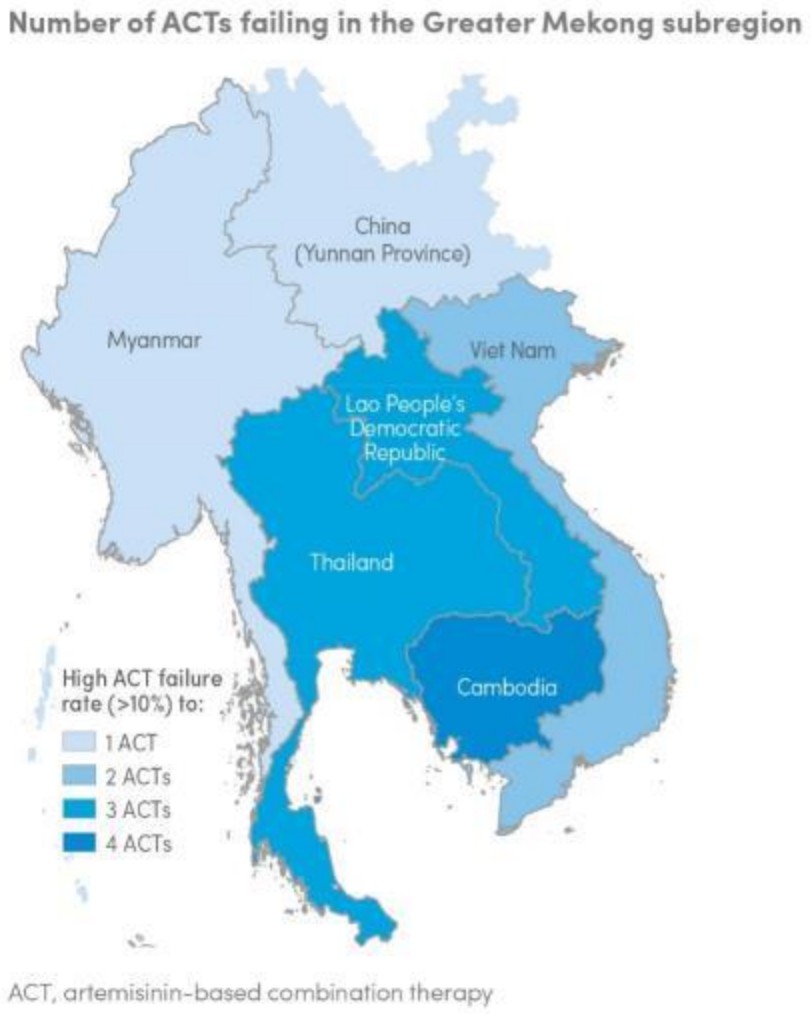


Distribution of Village Health Volunteers in Myanmar (2016) (Total: 15,000)



Source: WHO subregional database and the Government of Myanmar

C. Monitoring & Addressing Multidrug Resistance

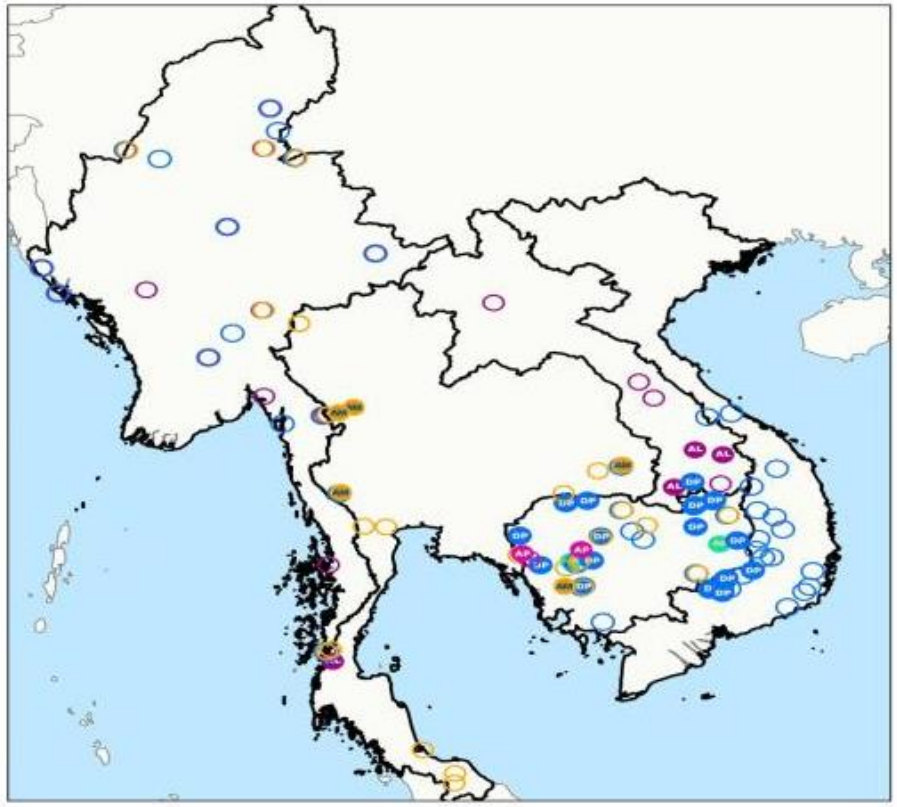


- GMS countries are considered to be the epicenter of antimalarial drug resistance
- Recent studies demonstrate **high ACT failure rates**
- 3 to 4 ACTs failing in Cambodia, Lao PDR and Thailand
- WHO supports 1) increasing number of drugs tested in Therapeutic Efficacy Studies (TES) and 2) integrated drug efficacy surveillance (iDES) in select areas of low malaria transmission

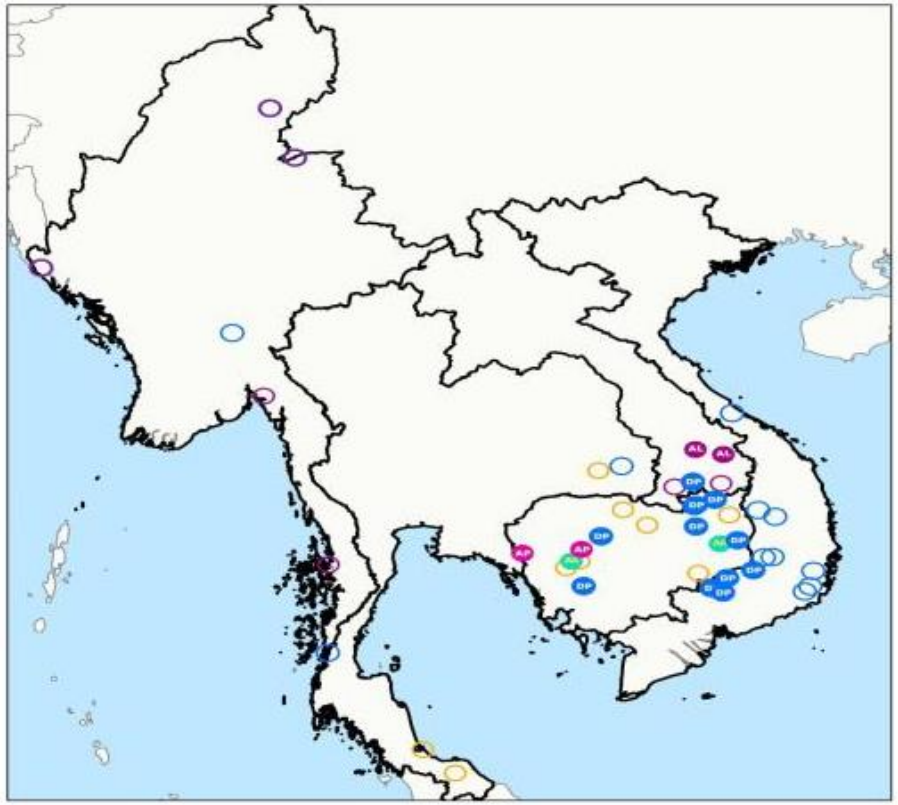
C. Monitoring & Addressing Multidrug Resistance

Distribution of Drug Efficacy in GMS

2010



2015



	TF > 10%	TF < 10%
Artesunate-amodiaquine	AA	
Artemether-lumefantrine	AL	
Artesunate-mefloquine	AM	
Artesunate-pyronaridine	AP	
DHA-piperaquine	DP	

- Areas with MDR did not expand in 2015, with MDR strains limited in Cambodia, Lao PDR and Viet Nam
- Mefloquine combination (first line in Cambodia) is still effective although triple mutants are reported

C. Monitoring & Addressing Multidrug Resistance

Drug Quality Assurance and Management

World Health Organization

Major Issues

- **Supply management** (e.g. procurement and distribution)
- **National regulatory authority capacity** to accelerate introduction of appropriate antimalarial drugs (e.g. new ACTs in resistant foci, second-line treatment)
- Timely **updates and implementation of national guidelines** (e.g. use of low-dose primaquine)
- **Quality assurance** throughout the lifecycle (e.g. pre-shipment testing and post-marketing surveillance)

Proposed support from WHO

- Support NMCPs to **update and operationalize national treatment guidelines** based on recent TES data
- Support timely, need-based access to Global Fund's **Rapid Supply Mechanism** (RSM)
- Support **procurement and supply chain** management (based on surveillance data)
- Strengthen **regulatory systems** in conjunction with other partners to ensure access to all available and new antimalarials and to expand pharmacovigilance and quality assurance

D. Improving Surveillance in GMS

World Health Organization

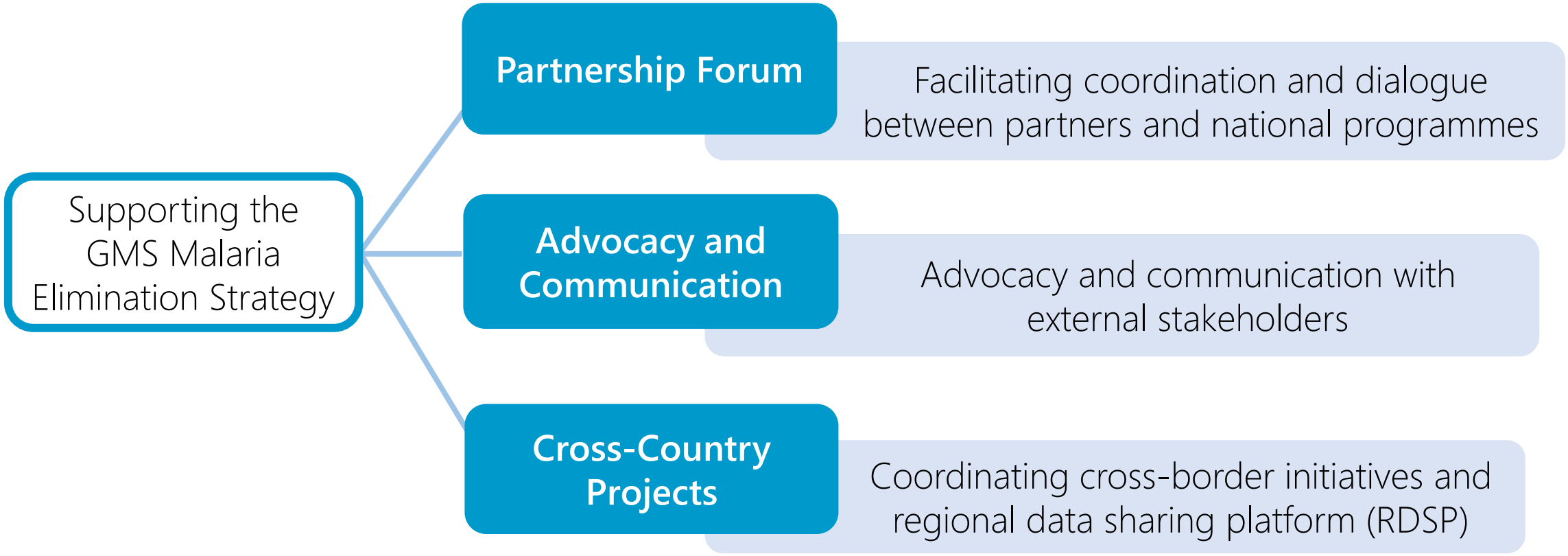
Key Areas of Work	Challenges
Data Collection and Reporting	• Build a cost-effective and sustainable surveillance system, especially in remote areas • Include surveillance data from partners and private sector • Timely reporting to the national database • Implement case-based surveillance
Data Use	• Analyse & share surveillance data • Take timely programmatic actions
Validation	• Regular validation of surveillance data • Surveillance assessment

MME Programme

Subregional team based in Phnom Penh, Cambodia

World Health Organization

Key Areas of Work



Proposed Activities for Partnership Coordination

World Health Organization

Objectives

To strengthen partnership coordination:

- Exchanging information (inc. activities & results) and best practices across partners
- Discussing major challenges/gaps for malaria elimination
- Discussing ways to strengthen collaboration and coordination of activities at country and regional levels to best meet country and subregional needs

Proposed activities

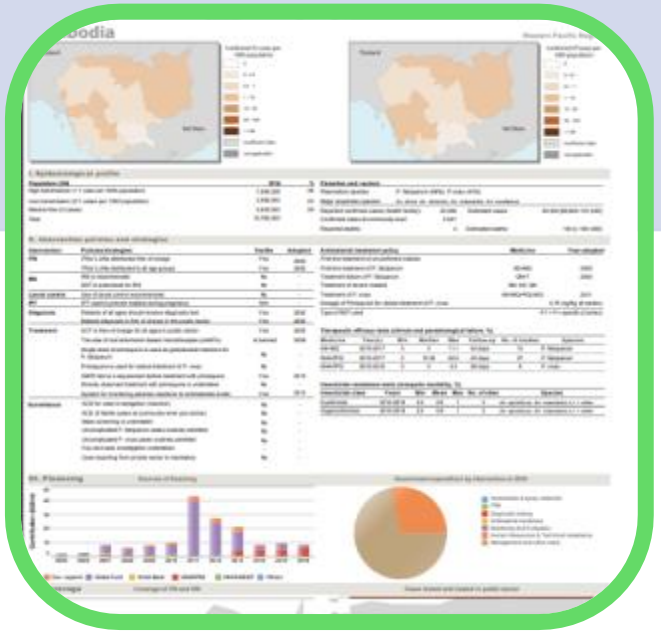
- Establish partners' mailing list
- Partners' activity summary
- Organize quarterly call
- Organize annual face-to-face meeting

MME Communications

World Health Organization

MME Bulletin

Epidemiology Summary

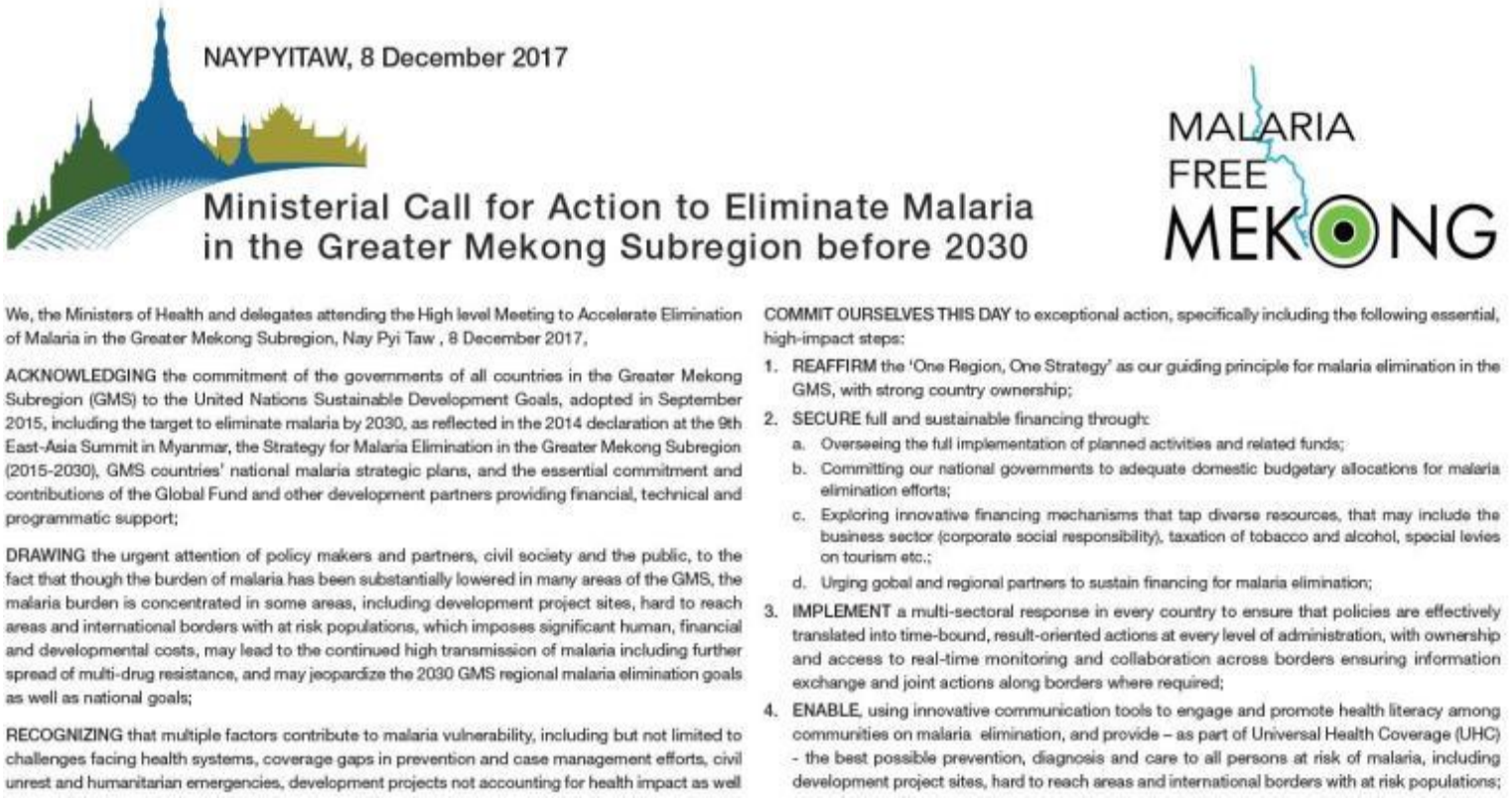


MME Website

Proposed Call for Action to Eliminate Malaria

Nay Pyi Taw, December 2017

- High-level meeting to accelerate elimination of malaria in the GMS before 2030
- Acknowledging the commitment of all GMS countries, including **"One Region, One Strategy"** as a guiding principle
- It is proposed that GMS Ministers will sign the call at the side event of WHA in May 2018



NAYPYITAW, 8 December 2017

Ministerial Call for Action to Eliminate Malaria in the Greater Mekong Subregion before 2030

MALARIA FREE MEKONG

We, the Ministers of Health and delegates attending the High level Meeting to Accelerate Elimination of Malaria in the Greater Mekong Subregion, Nay Pyi Taw , 8 December 2017,

ACKNOWLEDGING the commitment of the governments of all countries in the Greater Mekong Subregion (GMS) to the United Nations Sustainable Development Goals, adopted in September 2015, including the target to eliminate malaria by 2030, as reflected in the 2014 declaration at the 9th East-Asia Summit in Myanmar, the Strategy for Malaria Elimination in the Greater Mekong Subregion (2015-2030), GMS countries' national malaria strategic plans, and the essential commitment and contributions of the Global Fund and other development partners providing financial, technical and programmatic support;

DRAWING the urgent attention of policy makers and partners, civil society and the public, to the fact that though the burden of malaria has been substantially lowered in many areas of the GMS, the malaria burden is concentrated in some areas, including development project sites, hard to reach areas and international borders with at risk populations, which imposes significant human, financial and developmental costs, may lead to the continued high transmission of malaria including further spread of multi-drug resistance, and may jeopardize the 2030 GMS regional malaria elimination goals as well as national goals;

RECOGNIZING that multiple factors contribute to malaria vulnerability, including but not limited to challenges facing health systems, coverage gaps in prevention and case management efforts, civil unrest and humanitarian emergencies, development projects not accounting for health impact as well

COMMIT OURSELVES THIS DAY to exceptional action, specifically including the following essential, high-impact steps:

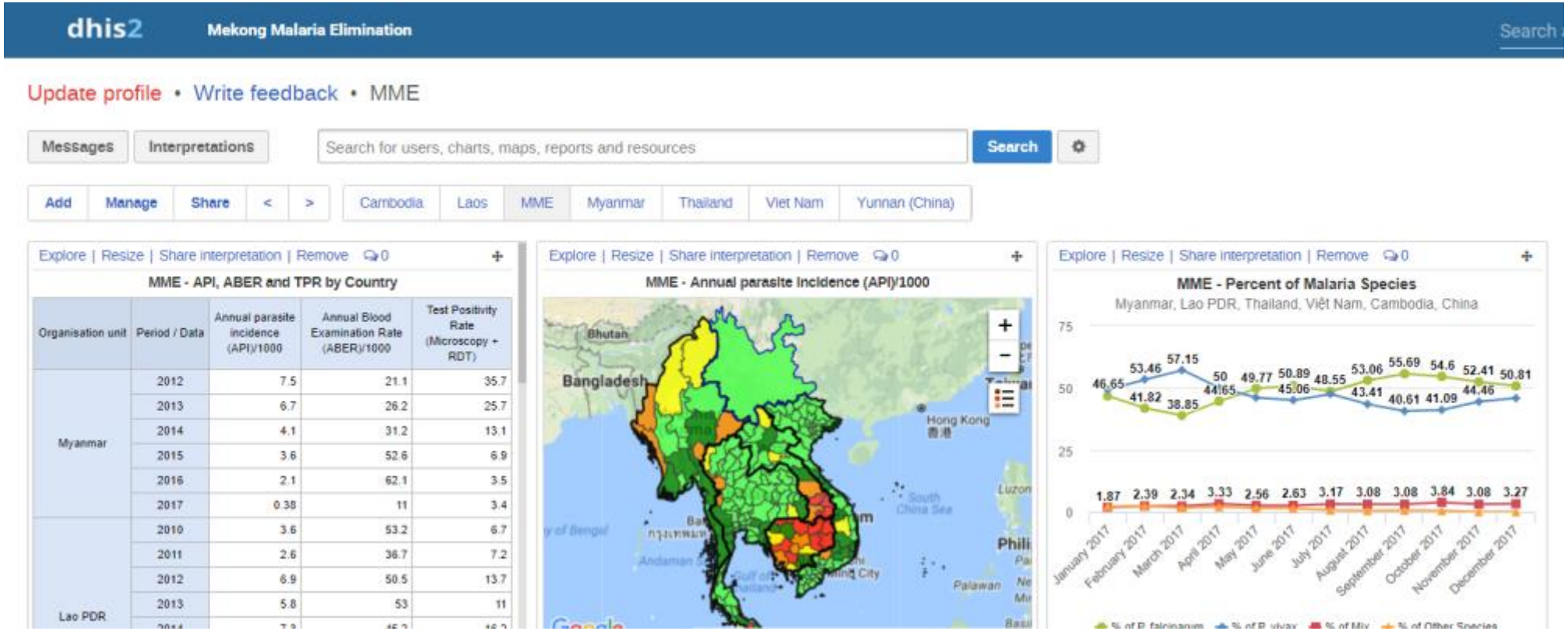
1. REAFFIRM the 'One Region, One Strategy' as our guiding principle for malaria elimination in the GMS, with strong country ownership;
2. SECURE full and sustainable financing through:
   a. Overseeing the full implementation of planned activities and related funds;
   b. Committing our national governments to adequate domestic budgetary allocations for malaria elimination efforts;
   c. Exploring innovative financing mechanisms that tap diverse resources, that may include the business sector (corporate social responsibility), taxation of tobacco and alcohol, special levies on tourism etc.;
   d. Urging gobal and regional partners to sustain financing for malaria elimination;
3. IMPLEMENT a multi-sectoral response in every country to ensure that policies are effectively translated into time-bound, result-oriented actions at every level of administration, with ownership and access to real-time monitoring and collaboration across borders ensuring information exchange and joint actions along borders where required;
4. ENABLE, using innovative communication tools to engage and promote health literacy among communities on malaria elimination, and provide – as part of Universal Health Coverage (UHC) - the best possible prevention, diagnosis and care to all persons at risk of malaria, including development project sites, hard to reach areas and international borders with at risk populations;

Regional Data Sharing Platform (RDSP)

World Health Organization

Under the Global Fund's Regional Artemisinin Resistance Initiative (RAI), WHO established the RDSP to:

- Collect & store malaria surveillance data
- Facilitate data sharing and analysis by countries

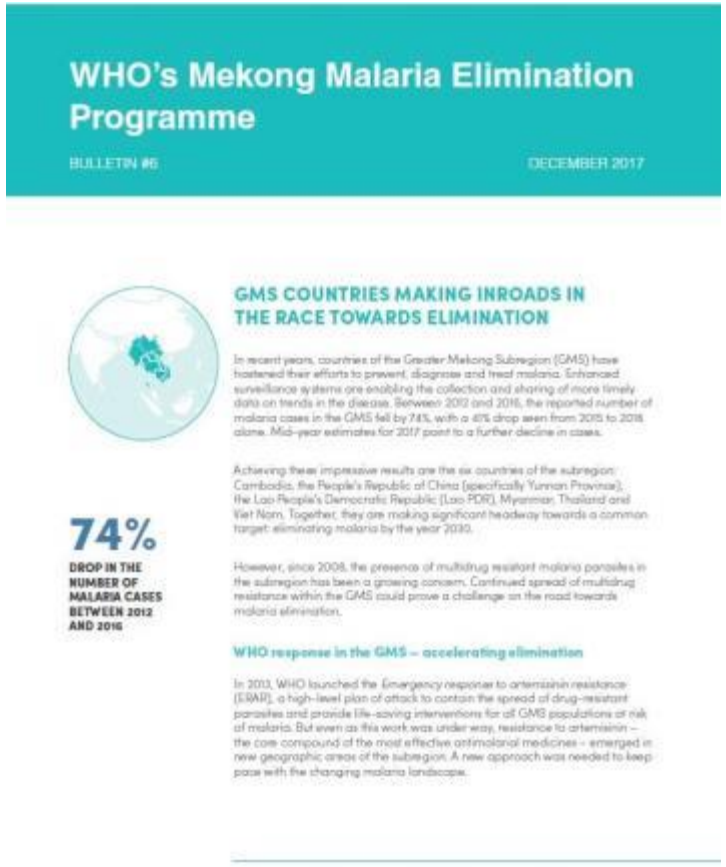


Summary

- GMS countries significantly reduced the number of malaria cases from 2012-2016. As a result, malaria cases are concentrated in small geographical areas, requiring the strong focus of programmatic activities and the strengthening of technical and operational support in these places.
- Studies have confirmed the continued presence of parasites with antimalarial drug resistance, reaffirming the need for urgent elimination of malaria and continuous monitoring. At the same time, epidemiological data suggest that first-line drugs are still effective and that elimination is feasible despite resistance.
- Major common challenges include: Sustainable funding; project implementation (in hard to reach population, such as mobile and migratory population) ; addressing multidrug resistance; and improving surveillance.
- The Mekong Malaria Elimination (MME) team in WHO Cambodia supports malaria elimination in the GMS through partnership coordination; advocacy and communication; and cross-country projects.

Thank you


World Health Organization
WHO'S MEKONG MALARIA ELIMINATION PROGRAMME
Greater Mekong Subregion countries making inroads in the race towards elimination
BULLETIN #6
DECEMBER 2017


WHO's Mekong Malaria Elimination Programme
BULLETIN #6
DECEMBER 2017
GMS COUNTRIES MAKING INROADS IN THE RACE TOWARDS ELIMINATION
74%
DROP IN THE NUMBER OF MALARIA CASES BETWEEN 2012 AND 2016
WHO response in the GMS – accelerating elimination