
Outdoor Malaria Transmission Work Stream Progresses

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6th Meeting VCWG (February 2011)

From “Forest malaria” to “Outdoor malaria transmission”

1st phase:

- to focus on the Mekong Region facing artemisin resistance.
- high proportion of early biters and exophilic vectors
- need to supplement large scale use of ITNs (LLINs)
- additional personal protections tools:
 - topical & spatial repellents,
 - treated blankets, clothes, sheets
 - treated hammocks/hammock nets
 - insecticide plastic sheeting/tents
- *evidence based research: entomological, epidemiological and social*
- but keeping in mind that the relative proportion of outdoor transmission increased almost everywhere with scaling up of vector control (ITNs/IRS)

Agreement of August 2011 with Mahidol University: (budget 15,000 USD)

Mekong countries: Cambodia, Myanmar, PR China (Yunnan province) PR Laos, Vietnam, Thailand.

Objectives:

1. To establish the **institutional networks**: identify the researchers as the technical support on outdoor transmission
2. To **review** research and other related activities to control outdoor transmission in these countries
3. Discuss the **strategic direction for research** and development along the lines of entomological and epidemiological efficacy and community acceptability
4. Establish and ongoing network of **communications** and mutual technical support and information exchange

Deliverables

1. Inventory of institutions and researchers (AFRIMs Bangkok)
2. Compilation of regional research (AFRIMs Bangkok)
3. Strategy document - workshop (Mahidol University, TropMed)

Progresses

- **A two day meeting was planned from 23-30 November 2011 but has been postponed to 12-13 March 2012 (flooding in Bangkok)**
- **One day meeting (28 November 2011) in Phnom Penh assembling 25 actors (national, international) active in Cambodia.**

Meeting in Phnom Penh (28 November 2011)

- **Knowledge on outdoor transmission and potential control tools to address residual transmission** (= not covered by ITN or IRS).
- **Review on ongoing research**
 - Measurements of outdoor transmission (ITMA/CNM)
 - Vector distribution and biodiversity (CNM, NIH, NAMRU2)
 - Operational research in vector control (MC)
 - Baseline studies on vector behavior and testing of interventions (personal protection) (LSTM - TRAC)
 - Topical repellent as added control measure to LLINs (randomized cluster based trial) (B&M Gates Foundation) (CNM, IPC, ITMA)
 - Feasibility of the feasibility, acceptability and field efficacy of personal protection among specific at risk groups (PFD, LSHTM)
 - Malaria knowledge and preventive practices among mobile and migrant population (CNM)
 - Evening activities in ethnic minority groups (CNM, IMTA)
- **Institutions involved in outdoor transmission in Cambodia**
 - **CNM: National Center for Malaria Control**
 - **ITMA: Institute of Tropical Medicine of Antwerp**
 - **NAMRU: US Naval Medical Research Unit No. 2**
 - **NIH: National Institutes of Health**
 - **LSTM: Liverpool School of Tropical Medicine**
 - **LSHTM: London School of Hygiene & Tropical Medicine**
 - **IPC: Institut Pasteur du Cambodge**
 - **MC: Malaria Consortium**
 - **TRAC: Tracking Resistance to Artemisinin Collaboration**

Plans for 2012

- **Workshop on 12-13 March 2012 organized by the Faculty of Tropical Medicine, Bangkok. => Mekong countries**
- **Inventory of institutions and researchers in the Mekong region (AFRIMS Bangkok).**
- **Compilation of regional research (AFRIMS Bangkok)**
- **Review of residual transmission in the Mekong Region and elsewhere (ITMA).**
- **Strategies for research and development**

Agenda Wednesday 8th February 2012

Agenda	
<i>13:00-13:10</i>	<i>Overview of expectations and current activities</i>
<i>13:10-13:20</i>	<i>Review of the current situation and magnitude of outdoor transmission of malaria and potential control tools</i>
<i>13:20-13:30</i>	<i>Discussion</i>
<i>13:30-14:00</i>	<i>Approaches to raise the proof of principle, research evidence based control interventions to tackle outdoor transmission (methodological)</i>
<i>14:00-14:30</i>	<i>Discussion</i>
<i>14:30-14:45</i>	<i>Needs for achieving adherence and sustainability of interventions based on individual protection</i>
<i>14:45-15:00</i>	<i>Discussion</i>