

MID-BCC – Communications for Change in Infectious
Diseases in Greater Mekong Subregion

Chiang Rai – Trat Corridor Appraisal

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Research parameters

- Size, approximate population and dispersion
- Province sub-divisions
- Major target groups: migrant workers, hill tribes, transport workers, traders and market vendors
- Major stable and mobile target groups and their sizes
- Interactions between migrants, hill tribes and others
- Markets, truck stops and schools
- Health, education, social and NGO services
- Social cultures of migrants, hill tribes and others
- Potential communication interventions
- Communication intervention resources needed

Methodology 1

- Desk research
- Chiang Rai Province
 - 9 In-depth interviews (IDI)
 1. Vice-Governor of Chiang Rai Province
 2. Director of the Department of Social and Preventive Medicine at provincial hospital
 3. Director of the Chiang Rai Special Education System
 4. Health volunteer for malaria and dengue
 5. District hospital director
 6. Border customs' official
 7. Border health official
 8. Border immigration official
 9. Garment factory industrial operator

Methodology 2

- **Chiang Rai Province**
 - **3 Focus group discussions (FGD)**
 1. Transport workers
 2. Laotian migrants
 3. General population

Methodology 3

- **Trat Province**

- **6 In-depth interviews (IDI)**

1. Malaria Services' director
- 2: a school teacher in Trat
3. a vendor/village chief in Hadlek at Thai-Cambodia border
- 4: a restaurant owner in Khlong Yai
- 5: a Malaria Services volunteer in Khlong Yai. \
- 6: a fruit juice businessman and his sister, a lab technician for the Malaria Service in Khlong Yai.

Methodology 4

- **Trat Province**

- **3 focus group interviews (FGD)**

- 1: general population

- 2: shrimp farm workers

- 3: Cambodian lumber yard workers

Chiang Rai – Trat

Chiang Rai

- Northern Thailand
- Borders Burma and Laos/Chiang Mai, Lampang, Pha Yao Provinces
- Major international corridor
- Minority – hill tribes, Burmese
- Malaria not important
- Dengue important

Trat

- Eastern Thailand
- Borders Cambodia/Chantaburi Province
- Minor international corridor
- Minority – Cambodian
- Malaria important
- Dengue important

Chiang Rai Province

- **Size:** 11,678 km.²
- **Population:** 1,259,437
- **Hill tribe population:** 220,000
(registered only included in above number)
- **Burmese, Laotian population:** 90,000
- **Thais in plains**
- **Hill tribes in mountains and plains**
- **More rural than urban**

Trat Province

- **Size:** 2,000 km.²
- **Population:** 220,000
- **Non-Thai population:** 10,000
majority Cambodian, followed by
Burmese and Laotians
- **Populations integrated**
- **More rural than urban**

Districts

Chiang Rai

- **Muang Chiang Rai (capital district), Mae Fa Luang, Mae Chan, Wiang Chiang Rung, Wiang Chai, Thoeng, Pa Daet, Phan, Mae Lao, Mae Suai**

Trat

- **Muang Trat (capital district), Khlong Yai, Khao Saming, Bo Rai, Laem Ngob, Koh Kut, and Koh Chang**

Language situation

Chiang Rai

- **Majority languages: Standard Thai and northern Thai**
- **Minority languages: hill tribe languages, Burmese, Lao**
- **Laotians speak language close to Thai**
- **Many hill tribe people bilingual in Thai**
- **Few Burmese speak Thai**

Trat

- **Majority language: Thai**
- **Minority languages: mostly Khmer, some Burmese, Lao**
- **Cambodians speak language (Khmer) unlike Thai**
- **Laotians speak language like Thai**
- **Few Burmese speak Thai**

Target groups

Malaria Chiang Rai

- **Hill tribes**
- **People from other countries: Burmese, Laotians**
- **Forest workers**

Dengue Chiang Rai

- **Urban lowland population, now also in the countryside**

Malaria Trat

- **Forest workers/foragers**
- **Cambodian border crossers**
- **Migrants without papers**
- **Soldiers posted to forest areas**

Dengue Trat

- **Urban lowland population, now also in the countryside**

Thais/non-Thais

- **Ethnic Thais**
- **Non-Thais**
 - **Hill tribes**
 - **Foreigners: Cambodians, Burmese, Laotians**
 - **Shared vulnerability: marginal work, work in areas exposed to mosquitoes, travel/visits across borders**
- **Many “mobile” populations not truly migrant, in Thailand sometimes for years**

Transport corridor, Chiang Rai

- **Links Bangkok via Chiang Rai via Bokeo (Laos) via Luang Namtha (Laos) with Mengla County (China)**
- **Crosses Mekong River at Chiang Khong to Laos**
- **3,000 vehicles (mostly trucks) cross at Chiang Khong every month**
- **18,000-24,000 persons (mostly tourists) cross at Chiang Khong every month**
- **Conduit for commerce to/from Bangkok/China**
- **Bridge resulting in increased traffic being built to replace ferry**
- **Laotians come to shop, for medical treatment**

Road from Chiang Khong to China



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ตรวจคนเข้าเมืองจังหวัดเชียงราย
กองบังคับการตรวจคนเข้าเมือง 5
สำนักงานตรวจคนเข้าเมือง

Chiang Rai border point at Chiang Khong

CHIANGKHONG IMMIGRATION
ARRIVAL จุดตรวจขาเข้า



Chiang Khong vehicle ferry



Passenger boat landing in Laos



Transport corridor, Trat

- Links Trat to Koh Kong (Cambodia) through Hadlek (Thailand)
- 600 vehicles (mostly trucks) cross at Hadlek every month
- 6,000 persons (Cambodian, Thai) cross at Hadlek every month
- Corridor for commerce to/from Trat and Koh Kong (Cambodia)
- Large fishing/lumber port at Khlong Yai with many Cambodians

Cambodia-Thailand border at Hadlek



Khlong Yai fishing boat



Market ... Khlong Yai



Chiang Rai: 641 primary, 55 secondary, 4 colleges and universities

Trat: 113 primary, 24 secondary, 4 colleges and universities



Chiang Rai: 1 central hospital, 16 district hospitals, 211 health centers
Trat: 9 hospitals, (2 public, 1 private in Muang Trat), 1 in other 6 districts, 60-70 health centers



NGO services

Chiang Rai

Kenan Asia, The Global Fund, the Gates Foundation, IOM, Mekong Basin Disease Surveillance, the SHIELD Project, World Vision: HIV/AIDS

Trat

Kenan Asia, The Global Fund, the Gates Foundation

All work in the field but have offices in Bangkok

Risk groups

Malaria

- **Forest workers**
- **Foragers**
- **Migrant workers**
- **Hill tribes**
- **Border soldiers**

Dengue

- **Urban people, some rural people now too**

Disease risks

- 1. Occupation: forest workers prone to contract malaria**
- 2. Border-crossing: risk of contracting/carrying disease from another country**
- 3. Living style: fewer prevention measures used**
- 4. Lack of health cards: less use of health services**
- 5. Fear of prosecution: avoidance of health services**
- 6. Distance from health services: longer time for seeking treatment**

Rubber plantation, pineapples near Trat



Most people believe that malaria and dengue are transmitted by ...

Anopheles



Aedes



Improving malaria prevention

- 1. Spray outside and inside to eliminate mosquitoes**
- 2. Protect against mosquitoes with bed nets, lotions, creams, fans, screen doors, clothing**
- 3. Improve communication with non-Thais through translation**
- 4. Increase and improve disease-related teaching materials**
- 5. Improve health education curriculum, including outreach methodology and prevention techniques**
- 6. Use village health volunteers or malaria centre agents for prevention**
- 7. Improve surveillance by including teachers**
- 8. Make sure that visitors from high risk areas are tested and treated**

Improving dengue prevention

- 1. ALL of the above, and ...**
- 2. ... In addition to spraying, ALSO**
- 3. Clean still water containers
AND/OR**
- 4. Use temephos (Abate, an organophosphate larvicide) in still water**

Improving malaria/dengue diagnosis

- 1. Encourage people to go to a health facility as soon as possible after symptoms appear**
- 2. Develop rapid response system for diagnosis and treatment**
- 3. Test people from high-risk areas**
- 4. Continue use of screening in outbreak areas**
- 5. Provide teachers with training on how to recognize symptoms**

Improving treatment

- 1. Increase surveillance during outbreaks**
- 2. Encourage those diagnosed with disease to complete the full course of medication**
- 3. Improve health service transportation in remote areas**
- 4. Increase health volunteer communication activities**
- 5. Minimize the time between symptom appearance, testing/diagnosis and treatment**

Communication considerations

- 1. Should follow the lead of established disease containment policy**
- 2. People think malaria is less of a problem, dengue more of a problem now**
- 3. Need to continue existing disease prevention practices**
- 4. Need to give serious thought about how to REALLY “improve,” “increase” prevention, diagnosis, treatment**

Trusted persons

- **Health volunteers**
- **Malaria center agents**
- **Doctors**
- **Parents (younger respondents)**
- **Community members**

Trusted community resources

- **Village meetings**
- **Loudspeakers**
- **Mobile vans (Trat)**
- **Local FM radio**

Desired thoughts, attitudes or behaviors 1

- **Prevent!** (target groups, providers)
- **Get diagnosed!** (target groups)
- **Get treated!** (target groups)
- **Take the medicine!** (target groups)
- **Assure care for all.** (providers)
- **Sleep under a bed net!** (target groups)
- **Put the sand in the water!** (dengue, target groups)
- **Clean up water sources!** (dengue, target groups)
- **Mosquitos cause malaria/dengue!** (limited target groups)
- **This is malaria/dengue!** (target groups)

Desired thoughts, attitudes or behaviors 2

Prevent! (target groups, providers)

Refers to a wide range of preventive behaviors to be encouraged:

- 1) Elimination of mosquitoes through spraying outside and inside
- 2) Protection against mosquitoes through the use of bed nets, lotions, creams, fans, screen doors, clothing which covers the body
- 3) Improvement of communication with non-Thais through translation
- 4) Increase and improvement of malaria-related teaching materials
- 5) Improvement of the health education curriculum, including outreach methodology and prevention techniques
- 6) Use of village health volunteers for prevention
- 7) Improvement of surveillance by inclusion of teachers
- 8) Assurance that visitors from high risk areas are treated.

Desired thoughts, attitudes or behaviors 3

Get diagnosed! (target groups)

Refers to mechanisms for encouraging diagnosis as soon as possible. The idea is that the sooner a case is identified, the quicker the treatment and the lower the likelihood of further spread. (Infectious disease specialists should be consulted on the specific information needed about each disease)

Get treated! (target groups)

Refers to mechanisms to assure treatment as soon as possible after diagnosis.

Take the medicine! (target groups)

Refers to the development of incentives for diagnosed patients to complete the full course of medication prescribed. Less than optimal compliance could result in increase of drug-resistant varieties of a disease.

Desired thoughts, attitudes or behaviors 4

Assure care for all. (providers)

Refers to ways the health care delivery system could be re-structured to insure that everyone, regardless of citizenship status, be provided with appropriate prevention, diagnostic and treatment. (Untreated cases spread disease!)

Sleep under a bed net! (target groups)

Refers to messages encouraging universal bed net use. (Lowering transmission rates)

Put the sand in the water! (dengue, target groups)

Refers to the use of temephos (Abate) to kill dengue mosquito larvae in still water.

Desired thoughts, attitudes or behaviors 5

Clean up water sources! (dengue, target groups)

Refers to messages encouraging people to clean still water sources so that dengue mosquito larvae do not increase and multiply.

Mosquitos cause malaria/dengue! (limited target groups)

Refers to messages and information which would reinforce the point that it is mosquitos which cause malaria and dengue. (Not dirty water or the effects of evil spirits)

This is malaria/dengue! (target groups)

Refers to materials explaining symptoms of malaria/dengue and what to do.

Recommendations

1. Focus on *high risk*.
2. Keep in mind that different diseases occupy *different social*, geographical, temporal and behavioral spaces.
3. See preceding points in this presentation for *communication strategy emphasis* .
4. The *language* spoken by a group plays a major role in communication.
5. Keep an eye on *transportation and population movement corridors*. These are key components in disease transmission.

Resources

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