



Control and Prevention of Malaria (URC/CAP-Malaria)

National Conference on Malaria Program 2012

Phnom Penh, 21-22 March 2013





Outline

- Project Profile
- Project Objectives
- Project Key Activities
- Highlight Results and Success Stories
- New Activities in 2013





- USAID 5-year project: Oct 2011 Sep 2016
- Coverage: Cambodia, Thailand, and Myanmar
 - Particularly communities along the border areas
 - For Cambodia, 10 ODs in 7 provinces (6 West & 1 East)

Target Groups:

- Local resident, forest inhabitants and new settlers
- Organized labor: plantation, construction workers
- Temporary migrants and cross-border populations

Goal:

- Reduced malaria burden (Morbidity and Mortality)
- Delayed and contained spread of ARM parasites







Project Objectives

- 1- To develop and scale-up cost effective vector control interventions to prevent the transmission of malaria
- 2- To improve the quality and effectiveness of diagnosis and treatment of malaria at the community and health facility levels
- 3- To reduce management bottlenecks of the NCMPs and local institutions to implement and monitor malaria control activities; and
- 4- To support the establishment and maintenance of strategic information for malaria control



















7 Provinces	10 ODs	Population**	Malaria Zone	CAP-Malaria started in	
1. Pailin	1-Pailin*	68,748	1	2011	
2. Pursat	8-Sampov Meas*	279,927	1	2011	
	2-Battambang*	354,403	1	2011	
3. Battambang	3-Sampov Loun*	120,525	1	2011	
	4-Maung Russey	197,992	2	2011	
4. Banteay Meachey	5-Poipet*	197,361	2	2011	
4. Daniedy Weathey	6-Thmar Puok*	124,581	2	2011	
5. Oddar Meanchey	7-Samrong*	219,028	2	2011	
6. Siem Reap	9-Sotnikum	268,114	2	2011	
7. Mondulkiri	10-Sen Monorum*	64,527	3	2012	

^{*} Areas for cross-border collaboration

^{**} Only permanent resident and yet included the mobile and migrant population (Estimated 15%)







Project key activities (1)

- Malaria Prevention:
- LLIN /LLIHN distribution, LLIN lending scheme and Net re-impregnation
- Behavioral Change Communication (BCC):
 - Mass media (Billboard, Radio/TV)
 - Small Media (Flipchart, Poster, Leaflet, Flyer, Bilingual materials ...)
 - IPC: school health program, Taxi/bus drivers, Health providers
 - Capacity building (Training of health educators)
 - Advocacy and community mobilization (World Malaria Day-Twin city, Malaria Weeks, Mobile Malaria Posts, ...)







Project key activities (2)

- | Malaria Early Diagnosis and Treatment (EDAT):
- Quality Diagnosis and Case Management :
 - RDT and Microscopy (VMW/MMWs, public HFs & PPM)
 - Supply of RDT, labo reagent, materials & consumables
 - Microscopy QA
 - NTGs (VMW/MMWs and public HFs & PPM)
 - Capacity building (Training, Supervision, ...)
- Mobile malaria posts in selected villages along the border and in tourism areas (VMW/MMW)







Project key activities (3)

III- Operational research and supporting activities:

- D3 positive surveillance and Mapping of multidrug resistant parasites
- Entomology study: Pailin & Sotnikum/SiemReap
- Multi-sectoral collaboration:
 - PPM: Pailin and Sampovmeas OD
 - Provincial special working group for malaria elimination
 - Engage private companies (Agriculture, Construction, Bus, Phone, ..)
 - Advocate cross border collaboration







Project key activities (4)

IV- Program Management:

- AOP: Develop and periodically review the implementation
- Technical supervision and monitoring
- Trainings, workshops, meetings
- Mobilization of existing and local resources for effective interventions
- Emergency preparedness and responses
- Align project M&E system with the national program (data collection, data tracking/auditing). Strengthen the existing database/system (MIS, HIS, ...)
- Assessment and evaluation of specific project activities







Highlight results and success stories

- LLIN Distribution: over 886,000 LLINs distributed in target areas. Of this,
 about 180,000 distributed to MMP through mainly lending approach
- Access to 16 private companies for LLIN distribution, IEC/BCC materials,
 setup MMW for malaria EDAT and Health education
- 100 taxi drivers and 13 bus companies promote malaria messages to travelers, mainly MMP
- Expansion of community-health facility surveillance (10 sites = 119 villages)
- Microscopy Quality Assurance (QA)
- Cross border collaboration







Summary of GF LLIN/LLIHN distribution in 10 ODs of URC CAP-Malaria (2011-2012)

No	OD	All Malaria		I/LLIHN fre listributed	•	LLIN distr lend		Total LLINs	Total LLIN distributed
NO	endemic villages		LLIN for Resident	LLIHN for Resident	LLIN for MMP	Lending villages	LLIN for MMP	distributed to MMP	to Resident & MMP
1	Battambang	113	73,208	9,183	8,745	100	24,753	33,498	106,706
2	Sampov Loun	143	129,793	11,439	43,284	22	12,428	55,712	185,505
3	Sampov Meas	123	86,835	91,400	6,751	41	12,231	18,982	105,817
4	Maung Russey	52	29,282	2,227	1,476	45	6,714	8,190	37,472
5	Sotnikum	100	64,779	6,330	3,217	35	2,463	5,680	70,459
6	Pailin	113	41,300	1,974	8,662	35	14,686	23,348	64,648
7	Poipet	78	68,920	10,195	4,720	31	18,053	22,773	91,693
8	Samrong	318	116,380	16,760	1,818	2	2,617	4,435	120,815
9	Thmar Puok	31	22,800	2,600	3,050	-	-	3,050	25,850
10	Sen Monorum	147	73,356	8,245	647	7	3,035	3,682	77,038
	TOTAL	1,218	706,653	160,353	82,370	318	96,980	179,350	<mark>886,003</mark>
				LL	.IN+LLIHN	Ndistributed	1,040	6,356	







Deploy of USAID LLIN/LLIHN in the lending villages

No.	Target	Total Bales			Bales at Villages		Bales at HCs		Bales at OD	
	OD	LLHIN	LLIN	LLHIN	LLIN	LLHIN	LLIN	LLHIN	LLIN	proper net use
1	Pursat	11	24	0	24	5	0	6	0	700
2	M. Russey	6	39	0	38	5	0	1	0	500
3	Battambang	37	99	0	89	8	8	29	2	2,900
4	Pailin	17	65	0	65	12	0	5	0	2,200
5	Sampovloun	10	34	0	34	10	0	0	1	2,300
6	Malai	9	31	0	31	4	0	5	0	1,450
7	SNK	4	5	0	5	4	0	0	0	200
8	SMR	2	1	0	1	2	0	0	0	100
9	SR	2	0	0	0	2	0	0	0	200
	TOTAL	98 (9,800 LLIHNs)	298 (14,900 LLINs)	0	287	52	8	46	3	10,550





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- ត្រូវសំរាន្តក្នុងមុងជ្រលក់ថ្នាំរៀងរាល់យប់គ្រប់ទីកន្លែង
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- សួររកទិញមុងនៅតាមទីផ្សារដែលមានទឹកថ្នាំម៉ាឡាថែប ដោយឥតគិតថ្ងៃ
- មុងជ្រលក់ថ្នាំរបស់អ្នក អាចបោកគក់ជាមធ្យម
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ត្រូវរៀបចំជើងមុងឱ្យបានត្រឹមត្រូវ មុនចូលសំរាន្ត



ត្រូវសំរាន្តក្នុងមុងជ្រលក់ថ្នាំបង្ការជំងឺគ្រុនចាញ់



<mark>កុំប្រើមុងទាំងរហែក និង ចងទុកចោល</mark>



កុំឧស្សាហ៍បោកគក់មុងនឹងសាច្ចិញឹកញាប់









Access to private companies

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No.	Company	Location (HC & District)	LLINs distributed	MMW deployed	BCC Materials
1	Pheapimex	ChheuTom, Krakor	3,605	19	
2	MDS Co., Ltd	Promoy, Vealveng	671	5	
3	Pepper company (Anlong Reap)	Promoy, Vealveng	30	0	
5	Unknown agricultural company (Tang Yor)	Promoy, Vealveng	30	0	
6	Chinese Hydro-electricity Company (Osom)	Promoy, Vealveng	830	2	
7	Chinese rubber plantation (Samlot)	ChamlongKouy, BB	300	0	
8	Rath Sambath rubber plantation	Tasanh, BB	50	1	
9	Samrong Rubber Plantation	Romcheik (ALV)	500	2	Billboards, Posters, Flipcharts,
10	Samnang Rubber Plantation	Okroch (TPS)	450	2	i liperiares,
11	Charcoal Mining Company	Pha Av (TPS)	50	1	
12	TaiNinh Rubber Plantation	Okroch (TPS)	250	2	
13	Dalak Plantation Company	Bousra (SMR OD)	250	0	
14	Sokfin Company	Bousra (SMR OD)	218	0	
15	DTC company (OkgnaLak)	Bousra (SMR OD)	180	0	
16	Kouv Chhovly Company	Bousra (SMR OD) 235 0			
	Total		7,649	34	







PPM

Pailin

Year	Number of	Referral from	Arrival at HFs/VWMs						
Tear	PPs	PPs	Total (%)	Pf	Mix	Pv	Neg		
2010 (Only Phnom Spong HC)	36	45	30 (67%)	3	4	7	16		
2011 (Registered & None)	141	133	94 (71%)	10	11	41	32		
2012 (Only registered)	59	88	70 (79%)	3	6	41	20		
Total		266	194 (72%)	16	21	89	68		

Pursat & Battambang: 12 PPs in Veal Veng District (Zone1) had joined in PPM scheme in late 2012. In early 2013, URC CAP-Malaria will work with PPs in other areas of OD Sampovmeas (110) and OD Maung Russey (32).







100 Taxi drivers in Battambang and Pursat







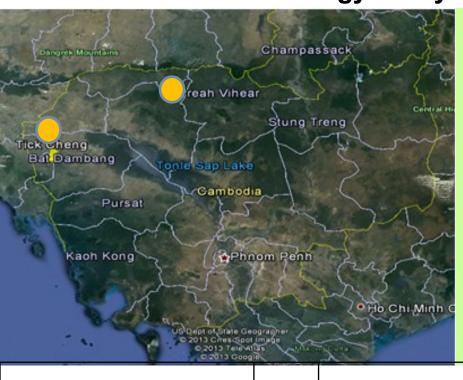








Entomology Study in Pailin and Siem Reap



Pailin (Tek Chenh: N 12 55 19.9 E 102 40 42.7)

Main vectors: An. Minimus (15/man/night) and Maculatus (5/man/night). Only 2 Dirus caught by CDC Light Trap

Biting time: Whole night with a peak before midnight

Siem Reap (Preah Angthom N 13 33 59.2 E 104 06 41.3)

An. Dirus found 3% (18/607)

<u>ELISA</u>: In the proces => Infected vectors

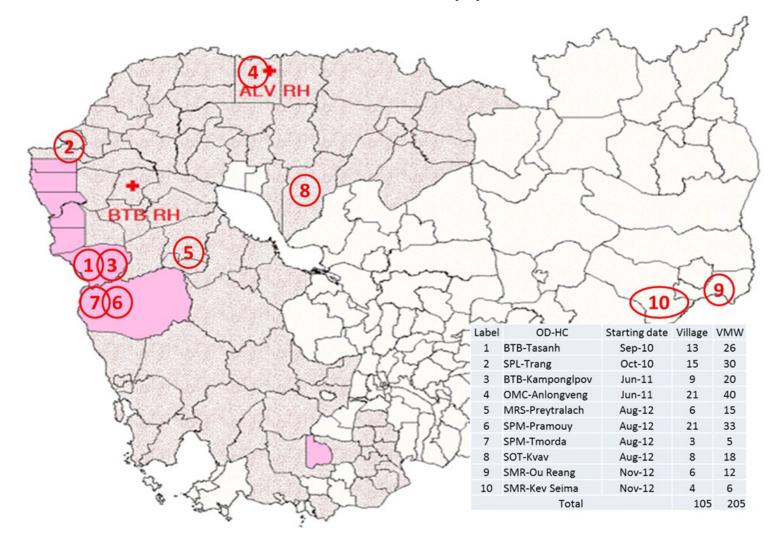
			Timeline for Year 1								
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	End of Y1
Field preparations											
Pailin											May 2013
Siem Reap											May 2013
Mondulkiri											







D3(+) Surveillance









D3(+) Surveillance (2)

6 Surveillance Sites in 2012

110.00	#	# VMWs	RDT Result (D0)		Day-0 Microscopic			Day-3 Microscopic			0/D2/+\	
HC-OD	Villages		Pf	Mix	Total	Pf	Mix	Total	Pf	Mix	Total	%D3(+)
ALV-Sam Rong	20	40	2	5	7	7	0	7	0	0	0	0%
Kg Lpov- Battambang	9	20	5	17	22	12	9	21	0	0	0	0%
Tasanh- Battambang	13	31	146	395	541	469	41	510	21	0	21	4%
Trang- Sampovlun, BB	15	30	2	10	12	5	2	7	0	0	0	0%
Pramoy- Sampovmeas	21	38	17	96	113	90	2	92	2	0	2	2%
Ou Reang- Senmonorom	6	12	7	3	10	9	1	10	1	0	1	10%

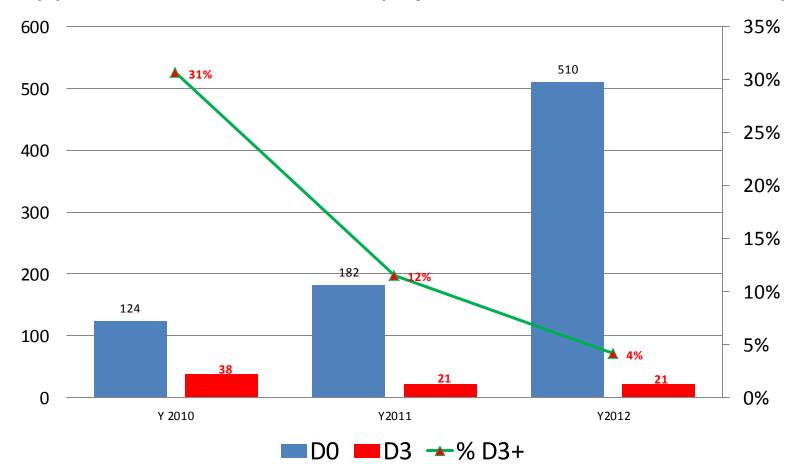






D3(+) Surveillance (3)

D3(+) Surveillance in Tasanh HC (September 2010 to December 2012)



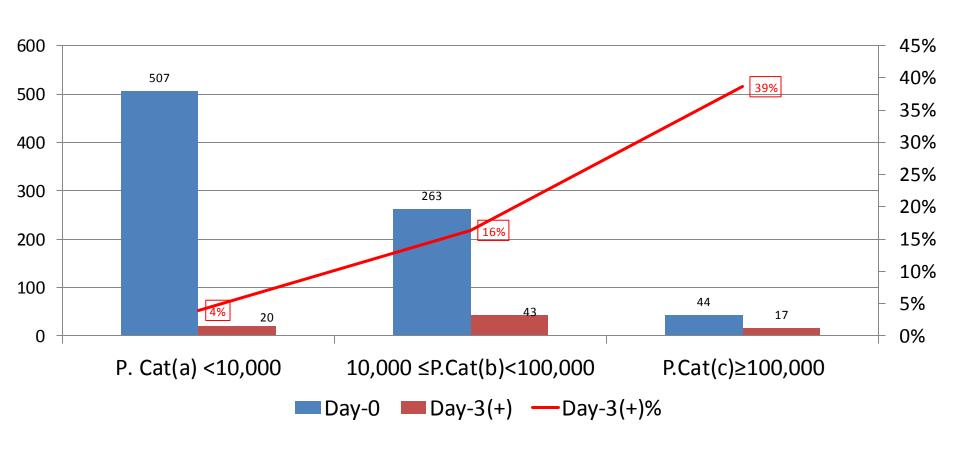






D3(+) Surveillance (4)

Parasite Density and % D3 (+)



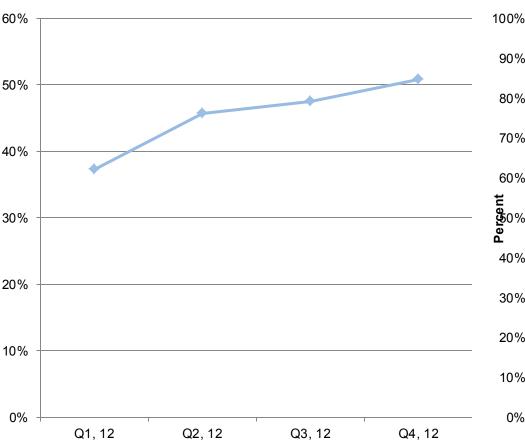




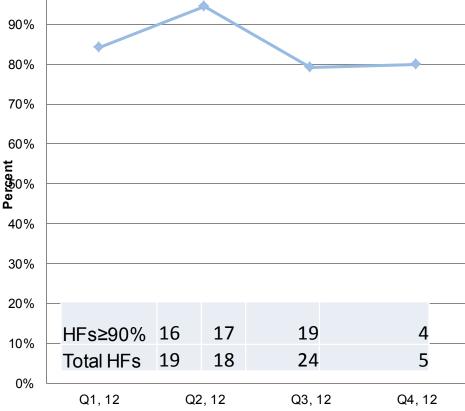


MALARIA MICROSCOPY QA IN 2012





% of HFs with Diagnosis Accuracy ≥ 90%









SLIDES CROSS-CHECKING RESULT BY PROVINCE 2012

Provinces	Slides checked	Sensitivity	Specificity	Accuracy	PPV	NPV
Pailin	275	100%	95%	97%	92%	100%
Battambang	670	97%	97%	97%	95%	98%
Oddar Meanchey	232	96%	92%	93%	91%	97%
Banteay Meanchey	53	100%	100%	100%	100%	100%
Total	1230	98%	96%	97%	95%	99%







Cross Border Collaboration

The purpose is to strengthen collaboration on malaria prevention and control among cities/provinces located along the Thai-Cambodia border.

- Identify partners and focal persons
- Regular meeting
 - Twice a year for national level,
 - Quarterly basis at provincial/district level: Pailin <-> Chanthaburi
- Routine data sharing: website, email, phone/Fax
- Screening cross border population and treatment follow up
- Bi-lingual BCC materials and Bi-lingual malaria patient card
- Joint World Malaria Day at border area
- Surveillance and other research of drug resistance, entomology, etc.





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Working Group Meeting on Cambodia-Thailand-Myanmar Cross-Border Collaborations Angkor Paradise Hotel, Siem Reap, Cambodia 23-24 August 2012

សំរាន្តក្នុងម្មងជ្រលក់ថ្នាំរាល់យប់ ជៀសផុតពីជម្ងឺគ្រុនចាញ់

ทุกคำคืนนอนใน มุ้ง ชุบน้ำยาป้องกันยุง มันใจ ปลอดภัย จากไข้มาลาเรีย



























PATIENT CARD & REPORTING FORM





Last name:	First name:	Sex: Age:
Nationality:	. Civic ID (If any):	
Current address: #:	Village:	Commune:
District:	Province:	
Contact telephone:		
Service deliver point:	Date of malar	ia diagnosis:

Take complete course of medicine. Keep your appointment with health care provider.

Help eliminate malaria to protect your health and your wealth.

Appointment Schedule

No	D/M/Y	Test Result	Medicine	Deliver point	Remarks
D0		Pf □ Pv □ Mix □	Malarone DHA-PIP		
D1			Malarone DHA-PIP		
D2			Malarone DHA-PIP PQ		
D3					
D7					
D14					
D21					
D28					

Help get rid of malaria in the community by keeping every appointment.





Chantaburi Provincial Health Office, Thailand Cross-Border Disease Report between Twin-Cities

Date: 26 / January, 2013 - 25 / February, 2013 THAI

ID	Diseases		Cumulative for Y 2013		/month /_2	Affected Areas	Risk factors / Presumable	Remark
		Cases	Deaths	Cases	Deaths	Villages	causes	
1	HINI/H5NI							
2	APP							
3	SARS							
4	Cholera / Severe Diarrhea							
5	Encephalitis	-						
6	Tetanus							
7	Meningitis							
8	Diphtheria							
9	PSBIC							
10	Leptospirosis	$\overline{}$						
11	Chikungunya							
12	Dengue fever							
13	Typhoid fever							
14	Measles							
15	Malaria total	43		17			Garden worker	
	P. falciparum	0		0				
	Mixed							
	P. vivax	43		17				
	P. Other							
16	Pneumonia							
17	HIV/AIDS							
18	Tuberculosis	$\overline{}$						

Remark: Bold letters are border districts

14 Haan Report Month Report Person Reported by: Ms. Papra Wattanacheep

Date Sent: March 5, 2013

Contact person

Twin-City Coordinator: Ms. Papra Wattanacheep, Communicable Diseases, Chantaburi PHO Contact e-mail and phone number: p_watt2000@hotmail.com and +66(89)7532930











Promoted Activities in 2013

In addition to the current activities CAP-Malaria reinforces:

- Timely investigation and intervention surrounding detected D3(+) cases (Index case) in the areas where HF-Community D3(+) surveillance
 - -Screen all members of 10 HHs (40 villagers) and enroll detected Pf for surveillance
 - -Conduct health education
 - -Assess LLIN in the HHs
 - -IRS
- Screening for malaria among pregnant women coming to ANC visits in public health facilities
- Pilot of malaria treatment and follow up with None ACT (Malarone)
- ...







THANK YOU

Mosquito.mpg Seeking Malaria Treatment.mpg





