Oversight Site Visit Report

1. Background Information	
Organization Name	VBDC 5.2 Phetchaburi (2VBDUs) PHO Phetchaburi
Address (City, Province)	Phetchaburi Province: Kaeng Krachan and Nong Ya Plong Districts.
Core program	☐ HIV ☐ TB ☐// Malaria
Name of grant	RAI3E
Role in Grant	☐ PR ☐ SR ☐ //Sub-SR ☐ Other, specify
Work under PR/SR	☐ PR-DDC ☐ PR-RTF ☐ //SR, specify **SR- Division of Vector Borne Disease - DVBD** (Former name: Bureau of Vector Borne Disease -BVBD) 2 SSRs: VBDC 5.2 Phetchaburi Provincial Health Office Phetchaburi 2 VBDUs (VBDU 5.2.1 Nong Ya Plong and VBDU 5.2.2 Kaeng Krachan) ODPC 5 Ratchaburi
Grant start date	1 January 2021
Grant end date	31 December 2023

1.Overview of Malaria situation in Phetchaburi province

Malaria incidence in Phetchaburi Province declined during FY 2015-2018, which is in line with the country situation. In 2019, malaria outbreak was reported in Phetchaburi with reported cases of approximately 3 times higher of those in 2018 and the increase was in both *P. falciparum* and *P. vivax* cases. This corresponded with an increase number of active transmission foci from 7 in 2018 to 19 and 13 in 2019 and 2020, respectively. Malaria incidence remains high but show slow declining trend. At present, the incidence and transmission foci remain higher than the baseline in 2018 (Annex 4). However, as of mid-2022, the situation in Phetchaburi continues to improve, unlike the country situation that epidemics have been observed in other areas in Thai-Myanmar border provinces (Tak, Mae Hong Son and Kanchanaburi provinces). While, total number of cases in Phetchaburi is declining, incidence of *P. falciparum* remains relatively static or is even increasing.

Kaeng Krachan and Nong Ya Plong districts contributed some 79% and 20% of total cases in Phetchaburi province. Faciparum active foci have been reported in Kaeng Krachan district. The OC team visited VBDUs of these 2 districts.

The geographical terrains of these 2 districts, especially Kaeng Krachan National Reserve Park are forest, forest fringe, cleared forest in mountainous range with presence of vectors-*Anophleles minimus* and *Anopheles dirus* . Movement of people within and outside of the main villages have been observed, as the main cause of outdoor transmission. Local population in VBDU 5.2.2, Kaeng Krachan are ethnic groups (Karen, etc.) and their occupation (highly mobile, forest goers, hunters) are very vulnerable to malaria infection. In addition, there are military base and border patrol police base camps with high turnover of staff, thus, bringing non-immune population to malaria transmission foci. Besides, more than hundred of workers of national reserve park, who regularly patrol in the national park, are high risk of malaria infection. Most of the areas in Nong Ya Plong are cleared forest with

forest fringe for seasonal agricultural cultivation. Movement from main village to farm land is normal practice among people in these areas.

2. Financial performance

2.1 Program budget

ODPC RAI3E budget in 2022= 420,000 baht whereas government budget for overall communicable disease is only 20,000 baht (for all diseases except malaria)

2.2 Program expenditures

1) Out of 420,000-baht ODPC received, only 103,640 baht is spent.

3. Program management

3.1 Personnel

VBDC 5.2 Phetchaburi: There are approximately 20 staff in office of VBDC 5.2 Phetchaburi. The head of VBDC is a newly recruited public heath technical officer. No senior and well-trained staff. Beside the head who is civil servant officer, there are 2 more civil servant officers -i.e., 2 entomologists (agricultural and not medical) and both are young staff. There are 2 RAI3E project staff – one data entry clerk (or Information Technology - IT) and one assistant project coordinator (PA) who are based in VBDC 5.2 Phetchaburi. The IT staff has 10 year-experience working in VBDC and is skilled personnel.

There are 3 VBDUs and 2 of which were visited by OC, i.e., VBDU 5.2.1 Nong Ya Plong and VBDU 5.2.2 Kaeng Krachan.

VBDU 5.2.2 Kaeng Krachan:

There are only 3 staff in the Unit office, among these are one Head of the Unit, his position is vector control operator and he is a permanent government employee. His duty and assignment are much higher than his post description and qualification. The other 2 staff include one vector control worker and one laboratory assistant. All 3 staff will be retired within the next 3 years. According to the Government policy, all 3 posts will be abolished with no replacement resulted in closing down of this Unit,

There are 2 malaria clinic workers who work at Malaria Clinic Pongluk, both are temporary employees, hired by daily-wage. As they are local people, they own houses nearby malaria clinics but do not receive any pay for welfare. We were told that the Government is strict in hiring daily-wage employees, thus, both cannot leave the job as the position will also be abandoned.

Besides, the above-mentioned staff of VBDU 5.2.2, there are 8 malaria post workers (MP) who report to DHO Kaeng Krachan and PHO Phetchaburi. The OC team met one Karen who has many responsibilities (many heads/responsibilities), one is MP works in the same village, MC Pongluk but in different hamlet on the other side of Phetchaburi River, Village Health Volunteer (VHV) and the last one is Assistant Village Headman of Bang Kloi hamlet.

VBDU 5.2.1 Nong Ya Plong

There is only one staff who is a government permanent employee, Head of the unit, basically a malaria clinic staff works at the MC attached to VBDU office. Like other VBDUs he works with very high responsibility more than his official duty. He will retire next year and the post position will be abolished. There are 5 MP workers who report to DHO Nong Ya Plong under GF support.

General observation, there is critical problem of health man power in malaria problem areas, especially in high malarious areas, remote and hard to reach with very difficult terrains. Most of health staff assigned to these areas are not qualified, limited capacity and insufficient experiences to manage and implement malaria elimination strategy. Both Chief of the Units are about to retire. There will be serious shortage of skilled personnel in VBDC/VBDU in the next few years, especially in the high malarious areas.

As Phetchaburi province is in post-epidemics period and active malaria transmission and Pf. foci are still remaining in the forest and mountainous areas. Since, there is no clear information on the plan on health staff to replace in these problem areas. Moreover, shortage of operating fund was observed. The OC team do not foresee elimination malaria be achieved within the near future. It is anticipated that the burden will go to PHO/DHO. Malaria Post network may continue functioning as long as GF fund available, and diagnosis will have to rely on RDT without microscopy diagnosis. Case investigation and other field work will be managed by PHO/DHO.

Further, it has been found that health work forces is critical problem at VBDC/VBDU in all malaria problem areas, especially provinces along border with neighboring countries.

Integration of malaria work with the general health services and decentralization to local administration organization (LAO)

The representative from ODPC and VBDC expressed their concern that since malaria burden is on declining trend and human resources would be reduced at VBDC and VBDUs. It is anticipated that VBDUs will soon be abolished by shortage of fund and health staff. On the other hand, integration of malaria elimination in malaria free provinces is in progress to transfer responsibility to general health services.

There was major concern about recent discussion on decentralization of work of Health Promotion Hospital (HPH) to Local Administrative Organization (LAO). HPHs have been decentralized to work under Subdistrict Administration Organization (SAO) in some provinces. Furthermore, Ratchaburi, which is nearby province with Phetchaburi, will transfer all HPHs to LAO in the next FY. Malaria Posts (MP) will also be eventually transferred with HPH to SAO. However, other health volunteers will not be affected, as they are independent to HPH but required support, coordination and monitoring from HPHs which will be under SAO.

It is anticipated that funding structure of GF-RAI project will be affected due to transferring of HPH to LAO since commodities, supplies and equipment of GF-RAI, such as RDT, laboratory supplies, drugs and mobile tablets, managed by HPH. So far, no information about decentralized process from Phetchaburi province.

3.2 Stock

1) RDT, Drugs and G6PD tests.

Based on stock reports of ODPC and PHO, there is no stock out of any laboratory supplies and medicines.

There is one biosensor equipment for detecting G6PD deficiency prior to treatment with Primaquine at Malaria Clinic Pongluk. But test strips expired and await new lot from PR, therefore so far G6PD test has not been conducted.

2) LLINs:

There was no complaint on inadequate LLINs. Generally, coverage of LLINs is high. See section 4

3) LLIHNs:

LLIHNs were distributed through PHO system.

3.3 Procurement

No observation

3.4 Report submission to PR

No complaint on late report submission.

4. Program implementation

4.1 Program implementation

LLINs -high coverage with low utilization.

Phetchaburi LLIN Coverage: 78%, 96% and 104% in FY 2019,2020 and 2022, respectively. Total LLINs distributed in the last 4 years is 3123 nets.

Kaeng Krachan LLIN coverage: 100%, 124%, 153% and 106% in FY 2019, 2020,2021 and 2022, respectively. Total LLINs distributed in the last 4 years is 1979 nets.

Nong Ya Plong LLIN coverage: 40%, 71%, 127% and 100% in FY 2019, 2020, 2021 and 2022, respectively. Total LLINs distributed in the last 3 years is 1144 nets and no distribution in 2022.

(*Source: Malaria Online*)

Though LLIN coverage is high but based on observation by MC staff and MP workers, the community do not actually use LLINs as they complained of poor ventilation.

Requirement for 2023-2024. There is need replace LLIN in most areas.

LLIHNS – underutilization.

Phetchaburi province distributed some 2700 LLIHNs over the past 3-4 years. LLIHNs were distributed to population, who work in forest. But it was observed that they also like to sleep in the hammock but not the hammock net.

LLIHNs for military, police and national park.

LLIHNs from RAI projects were not distributed to military at base camp in Pongluk and border patrol police. They were not aware of this malaria control measure. Military head reported that they had hammock and repellents for use while on duty but it was not clear

whether it is LLIHN. It was found that there was limited coordination between malaria staff with military and border patrol police. This might be due to high turnover of military (reshuffle every year) and border patrol police (reshuffle every 4 months). Capacity of local malaria staff may be very limited to coordinate with other government offices,

We were informed by Head of Kaeng Krachan National Park Central Office (Department of National Parks, Wildlife and Conservation) that out of 100 national park patrol workers, 6 contracted with malaria reported in 2022 (6% incidence). These national park staff/workers have been using nylon nets to cover hammocks while patrolling on duty in the forest. These HNs were donated by the Wildlife Conservation Society (WCS) of Thailand. The WCS distributed hammocks with nets, food and other essential things for the national park staff of approximately 150 national parks throughout the country. The hammock and net sets are light and suitable for patrol duty, unlike LLIHNs distributed in GF- RAI3E project. However, these are untreated nets. He was not aware about availability of LLIHN due to lack of coordination among malaria and the Kaeng Krachan Park office. It was suggested to share information of LLIHN to concern central authority through the Department of National Parks, Wildlife and Conservation, which is a member of the Malaria Elimination Executive Committee.

PHO has completely established, and trained Malaria Posts (MPs) as planned - 8 in Kaeng Krachan District and 5 in Nong Ya Plong District. However, PHO requested to establish more MPs in RAI4E proposal in order to cove with high malaria reported cases predicted.

Case detection and laboratory services:

Generally, limited to passive case detection due to limited field staff.

At Malaria clinic Pongluk, there are some 20 patients attended to this clinic.

Electricity is available for microscopy.

G6PD testing is available only at the MC, but at the time OC visited, test strips are all expired and new lot awaited.

Microscopy quality control:

All blood slides of MC Pongluk sent for rechecking at VBDU 5.2.2 office.

Post treatment follow-up:

Improving performance of FU activities was in both VBDC and the 2 VBDUs (see statistics below). However, the FU rates remain low for both species due to limitation of field staff, which might affect treatment outcomes in these remote areas.

Petchaburi Province: complete FU rates in FY 2022 =49% (60% for Pf and 46% of Pv) as compared with those in FY 2019 = 28% (12% for Pf and 32% for Pv).

(Total No. cases to be followed in FY 2019 =182; 33 Pf and 145 Pv.)

(Total No. cases to be followed in FY 2022 up to July22 = 86; 15 Pf and 71 Pv.)

Kaeng Krachan District: complete FU rates in FY 2022 =53% (64% for Pf and 51% of Pv) as compared with those in FY 2019 = 32% (% for Pf and 40% for Pv).

(Total No. cases to be followed in FY 2019 =119; 23 Pf and 95 Pv.)

(Total No. cases to be followed in FY 2022 up to July22 = 79; 14 Pf and 65 Pv.)

Nong Ya Plong District: complete FU rates in FY 2022 = No data as no cases so far.

But complete FU rates in FY 2019 = 30% (80% for Pf and 25% for Pv).

(Total No. cases to be followed in FY 2019 =43; 5 Pf and 36 Pv.)

(Source: Malaria Online)

Implementation of 1-3-7 strategy. It was generally good for both FY 2021 and 2022 for VBDC and the 2 VBDUs (except case notification in Nong Ya Plong FY 2022 that is below 90%).

Petchaburi Province: Performance of 1-3-7 strategy = 93%,97% and 91% in FY 2021, 93%,100% and 95% in FY 2022 (up to July2022)

Kaeng Krachan District: Performance of 1-3-7 strategy = 92%,96% and 91% in FY 2021, 95%,100% and 96% in FY 2022 (up to July2022)

Nong Ya Plong District: Performance of 1-3-7 strategy = 93%,100% and 71% in FY 2021, 82%,100% and 91% in FY 2022 (up to July2022).

Although implementation of 1-3-7 reported were high but malaria situation was still high in these areas. It is imperative necessary to review on sight of actual work in the next season.

4.2 National integration

Good collaborative efforts of national malaria elimination of RAI3E project was observed in this province. The operational cost of government budget was very low with 34,000 THB Bahts allocated annually for the entire VBDC including 2 VBDUs. Moreover, representative of ODPC 5 informed that regular fund will be further reduced by half in FY 2023. However, operational cost of RAI2E was much higher but it was not as flexible since all allotments were specified to the RAI3E work plan. The regular budget was generally more flexible and could be utilized for unplanned activities to solve problem of malaria.

4.3 Stakeholder collaboration and community involvement

From direct observation of the OC team, there was a good collaboration among health staff of VBDC and PHO including DHO, HPH and Village Health Volunteer network. Although, there was some limited collaboration between VBDUs and local government stake holders (i.e. forestry workers of Kaeng Krachan National Park, border patrol police, military and LAO system. Collaboration could be further strengthened to local non-health sectors. PHO, DSO and ODPC are requested to initiate formal collaboration with local government offices, local non-government groups and CSOs.

Since, there is no information about local CSOs in the areas,there was Rak Thai Foundation (RTF) worked in Phetchaburi Province during RAI2E period (2018-2020) and it was withdrawn from Phetchaburi during RAI3E period (2021-2023) following the declining of malaria in previous years... It is worth to mention that LAO found to be strong in the 2 districts visited. Visit was not made to any LAO office (Sub-district Administration Organization-SDO) but Head LAO in Pong Luk Bang Kloy expressed positive attitude in supporting malaria control activities.

5. Program achievements

5.1 Overall program achievements

Overall, RAI3E project performance during the past year and focusing the last two quarters was generally good. There were some areas that required improvement as follows:

- Post treatment follow-up for both Pf and Pv (up to Days 42 and 90, respectively)
- IEC to ensure LLIN and LLIHN utilization.

5.2 Key grant performance information

Generally, results of key activities met the targets.

Coverage of LLINs exceeded 100% in the current year. But the existing LLINs will need be replaced in 2023 and 2024. Staff need to ensure adequate allocation of LLINs from PR. However, there were still some complaints on inadequate of LLINs distribution in Kaeng Krachan despite high coverage reported in Malaria Online.

6. Challenges

6.1 Financial performance

Relatively slow absorption rate of RAI3E fund in FY 2022. The OC team did not have opportunity to explore this issue.

6.2 Program management

- Critical reduction of health work forces at VBDU where burden of malaria still exists. Lack of human resources is major concern requires urgent attention and action
- Integration of malaria elimination activities work to general health services (DSO and PHO) requires systematic approach with clear plan, guidelines, SOP, orientation and training.
- Decentralization of malaria elimination activities of HPH to work under LAO will require readiness of concerned parties with practical plan, guidelines, SOPs and training.

6.3 Program implementation

- Although number of malaria cases, after peak of outbreak in 2019, showed declining trend over the past few years, but the areas are still highly vulnerable and high receptive to malaria transmission with abundant of primary vectors.
- Increasing trends of Pf (in FY 2022 especially in VBDU 5.2.2 Kaeng Krachan) indicates that transmission is not well controlled.
- Population at risk are Karen ethnic groups who are forest goers related to migration and outdoor transmission. Preventive and available control measures may not effective in these remote forest settlings.
- There is major concern that malaria transmission may increase and VBDC/VBDUs have limited qualified and capable field staff to cove with malaria problem.
- During rainy season there will be limited malaria elimination activity in these malaria problem areas, especially in Pong Luk and other areas of Kaeng Krachan

National Park. Local government offices, stake holders, CSOs should be explored for collaboration to implement malaria control /elimination measures

6.4 Program achievements

Overall, program achievements were good, but some activities should be improved, i.e., post-treatment follow-up, LLINs and LLIHN actual utilization.

6.5 Others -none

7. Feedback from non CCM/ local staff/key populations

none

8. Recommendations

❖ **For the site**

OC team appreciated efforts of ODPC 5 Ratchaburi, PHO Phetchaburi and VBDC 5.2 Phetchaburi, and VBDU 5.2.1 and 5.2.2 for their works in difficult situation despite with limitation of financial and human resources support. Major administrative problem found is due to lack of qualified malaria field staff in both VBDUs. Further, these health personals were assigned to take responsibility very much beyond their qualification, experiences and capacity. Most of them will be retired soon and post will be abolished. However, apart from malaria clinics with only one temporary lab technician, there are many local government offices, such as border patrol police and army camps, workers of national reserve park, public health volunteers, and others. In addition, there are several community action groups established by different partners and CSOs working in these problem areas. Since, there are very limited health personnel, research for model development to explore possibility to engage community and local CSOs to supplement malaria elimination activities in these remote and in accessible areas. Therefore, is proposed to explore possibility to engage community, local stakeholders both local government offices and non-government organizations and other CSOs to implement malaria elimination measures with support of local/Tambon (Sub-district) Health Promotion Hospital and PHO.

8.2 For PR/SR and the national program

For PR/SR-DBVD:

1) To closely collaborate between VBDC, PHO and local Government Offices on LLIN and LLIHN requirement to avoid inadequate LLIN and LLIHN

2) To seek support from RAI4E for LLIN and LLIHN to replace the old ones.

National Program:

Highly malarious areas in Phetchaburi are still mainly in hard to reach and remote areas which involve ethnic population, occupational migration from main villages to farm land in forest and forest fringe. Outdoor transmission is considered as the main cause of malaria infection in these areas. Since, there are very limited effective vector control measures,

new innovative control measures require to be explored. Furthermore, treatment of malaria cases is also troublesome among migrants due to inter-border migration and mobile population. Methods of treatment should be reviewed and expedited to eliminate malaria reservoir among these mobile populations. It is recommended for short term action as follows. 1) increase technical support to VBDC/VBDU through field supervision, especially VBDU Kaeng Krachan 2) Policy and guidelines including SOP should be orientated among VBDC, DPCO, DSO and PHO 3) Discuss and share in formation of LLIN and LLIHN with Kaeng Krachan Park, army and police camps

ANNEX 1

OC Team members

1.	Dr.Krongthong Thimasarn	OC chair	CCM Thailand
2.	Dr. Chusak Prasittisuk	OC-Malaria consultant	
3.	Dr.Phusit Prakongsai	CCM executive secretary	CCM Thailand
4.	Ms.Phatradasorn Chuangcham	CCM coordinator	CCM secretariat office
5.	Ms Phatamon Yimyam	Admin & Finance officer	

Co-PR DDC

1. Ms Sunsanee Rojanapanus Senior public health technical officer, program specialist on malaria
2. Ms Nichada Panyafoo, Project coordinator and monitoring & evaluation

Division of Vector-borne Disease

1. Ms Thannika Thongard, Public Health Technical officer (professional level)
2. Ms Woranat Kaewkamthong M&E RAI3E project

Field site – Phetchaburi Province

Office of Disease Prevention and Control (ODPC) No. 5 Ratchaburi

1. Mr Kawee Po-ngen, Public Health Technical officer, senior professional level
2. Ms Suchada Kiratithamrong, Public Health Technical officer, operational level.
3. Ms Orawan Eimmongkol, RAI3E Project coordinator (PA)
4. Mr Anond Chankhamsaeng

Provincial Health Office (PHO) Phetchaburi

1) Dr Jirasak Worasuntharosot, Medical Officer, Professional level.
2) Mr Pinyo Puprapa, Head Disease Control Cluster
3) Mr Pratum Semthoen, Public Health Technical Officer, Professional level.
4) Ms Noparat Netkaew, RAI3E Project coordinator (PA)

Vector-borne Disease Center (VBDC) No. 5.2 Phetchaburi

1) Ms Supranee Jongmuenwai, Public Health Technical officer, operational level - head VBDC
2) Ms Paweena Sukornsao, Public Health Officer, Professional level.
3) Mr Thanwa Siriroeng, Vector Control Operation Worker.
4) Mr Kriwan Yimyam, Information Officer RAI3E Project
5) Ms Monruedee Plubthong, RAI3E Project Assistant Coordinator (PA)
6) Ms Kanok-orn Panrod, Entomologist
7) Mr Wittaya See-ngam, Entomologist

Vector Borne Disease Unit (VBDU)

VBDU 5.2.1 Nong Ya Plong

1) Mr Sattha Sukthon, Laboratory Assistant, Acting Head VBDU 5.2.1 Nong Ya Plong

VBDU 5.2.2 Kaeng Krachan

1) Mr Prayat Chanklad, Vector Control Operation Worker, Acting Head VBDU 5.2.2 Kaeng Krachan
2) Mr Manop Saeko, Vector Control Operation Worker
3) Ms Kritika Loengkrai, Laboratory Assistant.
4) Mr Anurak Rakbanggloy, malaria clinic worker, MC Pongluk
5) Ms Kamolchanok Tubu, malaria clinic worker, MC Pongluk

Nong Ya Plong District Health Office

1) Ms Sumalee Chantharasukko, District Health Officer (DHO)
2) Flight Sergeant Second Class Prapot Neamsiri, Director – Ta Ta klaw Tambon Health Promoting Hospital (HPH)

Kaeng Krachan District Health Office

1) Mr Boontham Khlinkan, Public Health Technical Officer, for District Health Officer
2) Mr Charoonsak Pratueng, Public Health Technical Officer
3) Mr Noppadol Suksri, Public Health Officer, Professional Level

Malaria post – Bangkloi (belongs to PHO/DHO)

1) Mr Ronnachai Ladaw, Malaria Post Worker, Village Health Volunteer and Assistant Village Headman.

Kaeng Krachan National Park

1) Mr Somjed Chanthra, Head, Kaeng Krachan National Park

Pongluk Military Base Camp

1) Captain Saranpat Kengpimol, Commissioned officer

Pongluk Border Patrol Police base

1) Mr Roengdet Charoenkait

ANNEX 2

Programme of the Oversite committee visit to Phetchaburi Province

22-24 August 2022

Date	Time	Activity	Site/ remark
22-Aug-65	09.00 – 11.00	Travel by microbus from Dept Disease Control in Nonthaburi to Center of Vector Borne Disease (VBDC) 5.2 Phetchaburi	3 hrs
	12.00 - 13.00	Lunch in Phetchaburi	
	13.00 – 13.15	Orientation, objectives of OC visit Self-introduction	VBDC 5.2 office
	13.15 – 15.30	Presentation of VBDC 5.2 Phetchaburi and PHO Phetchaburi	
	15.30 - 17.00	Discussion	
	17.00 – 18.00	Travel to stay overnight in a hotel in Kaeng Krachan (dam site)	1 hr.
23-Aug-65	07.30 – 10.30	Travel by 4WD to Pongluk and Bangkloi hamlets in Mae Preng Subdistrict of Kaeng Krachan District.	3 hrs
	10.00 – 12.00	Visited MC Pongluk Met head of the military base camp in Pongluk	Pongluk hamlet
	12.00 – 13.00	Lunch at MC Pongluk	
	13.00 – 15.00	Visited MP Bangkloi and observed Bangkloi community. Met head of Subdistrict Hoy Mae Preng Visited Border Patrol Police base in Pongluk	Bangkloi hamlet
	15.00 – 17.30	Travel by 4WD to the Hotel in Kaeng Krachan (dam site)	2.5 hrs.
24-Aug-65	08.30 – 10.30	Travel by microbus from the hotel to visit: - Head office of Kaeng Krachan National Park Travel to VBDU 5.2.2 Kaeng Krachan.	
	10.30– 13.00	Debriefing with PHO Phetchaburi Discussion with VBDU 5.2.2 staff.	VBDU 5.2.2 Kaeng Krachan
	13.00 – 14.00	Lunch at Kaeng Krachan town	
	14.00 -14.30	Travel to Nong Ya Plong district to visit VBDU 5.2.1	
	13.00 – 15.00	Discussion with VBDU 5.2.1 staff Discussion with Nong Ya Plong District Health Officer and Head of Nong Ya Plong Health Promoting Hospital.	VBDU 5.2.1 Nong Ya Plong
	15.00 – 17.30	Travel by microbus to the Dept Disease Control, Ministry of Public Health, Nonthaburi.	2.5 hrs.

ANNEX 3

Key Issues for the Oversight Site Visit to Malaria Program

1. Malaria situation in the area of Vector Borne Disease Center (VBDC) # 5.2, Phetchaburi. Between 2019 - 2022, there was a continuous infection in the area. In the past 2 years, there has been an increasing trend of P. falciparum infection.

2. Want to know the progress of malaria elimination operations in the area of Vector Borne Disease Center # 5.2, Phetchaburi, especially in the Vector Born Disease Unit (BVDU) # 5.2.2, Kaeng Krachan District and VBDU# 5.2.1, Nong Ya Plong District, Phetchaburi Province.

a. Malaria elimination plan of Phetchaburi province, particularly Kaeng Krachan and Nong Ya Plong districts.
b. Problems and obstacles to eliminating Foci Investigation
c. Increase in P. falciparum malaria cases
d. Follow-up for cured treatment of P. vivax malaria patients.
e. Implementation of 1-3-7 surveillance strategy
f. Vector Control plans by chemical use and distribution of long-lasting insecticidal nets
g. Coordination with local organization and partnership network participation in the area

3. Project results supported by the Global Fund under RAI3E program during 2021-2022

a. Performance based on key indicators
b. Report on key activities budget expenditures and obstacles (if any)
c. Coordinating with various organizations such as Local Administrative Organizations, Civil Society Organizations

4. Problems, obstacles, and recommendations for eliminating malaria in the area of VBDC 5.2 responsibility, Phetchaburi

a. at the level of the VBDU and BVDC
b. at the provincial level and OPDC.
c. Central level (Division, Department, Ministry)

ANNEX 4

Malaria situation in Phetchaburi province, Kaeng Krachan and Non Ya Plong districts (from Malaria Online)

FY	Phetchaburi (No. of case)								Thailand (No. of case)		
	Thai	M1	M2	Total	Pf	Pv	Total	No. of transmission foci	Total cases	Pf	Pv
2015	206	43	10	259	35	213	259	28	24332	7189	15732
2016	123	19	2	144	47	83	144	19	17578	3348	12890
2017	90	12	2	104	28	66	104	15	14948	2190	11823
2018	57	8	0	65	10	53	65	7	7371	6132	822
2019	191	8	1	200	33	145	200	19	5859	759	4859
2020	188	23	1	212	39	162	212	13	4425	256	4051
2021	132	7	1	140	5	131	140	15	2950	56	2772
2022 (Oct 21-12Jul 22)	118	4	0	122	15	106	122	15	5554	135	5220
2021 (Oct 20-Jul 21)	110	7	1	118	5	111	118	13	2444	50	2290

Nong Ya Plong and Kaeng Krachan

	Phetchaburi Province			Nong Ya Plong District				Kaeng Krachan District			
	Total malaria case	Pf	Pv	Total malaria case	No. of active Foci	Pf	Pv	Total malaria case	No. of active Foci	Pf	Pv
2015	259	35	213	20	4	4	12	209	23	26	181
2016	144	47	83	34	5	13	10	98	14	33	63
2017	104	28	66	26	7	5	13	70	8	21	48
2018	65	10	53	3	2	0	2	60	5	9	50
2019	200	33	145	65	6	6	41	125	13	24	99
2020	212	39	162	35	4	8	22	162	9	31	129
2021	140	5	131	14	4	1	13	119	11	3	114
2022 (Oct21-12Jul 22)	122	15	106	24	4	0	23	96	11	14	82
2021 (Oct20-Jul21)	118	5	111	13	4	1	12	98	9	3	95