

TB Monitoring and Evaluation and Data Quality Review

Operational District-Level Trainings

Battambang, Kampot, and Kampong Cham provinces,
Cambodia

March to May 2023



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TB DIAH

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Abbreviations

CENAT	National Center for Tuberculosis and Leprosy Control
COMMIT	Community Mobilization Initiatives to End Tuberculosis
DQR	Data quality review
M&E	Monitoring and evaluation
NTP	National tuberculosis program
OD	Operational district
STAR	Sustaining Technical and Analytical Resources
TB	Tuberculosis
TB DIAH	Tuberculosis Data, Impact Assessment and Communication Hub
ToT	Training of trainers

Introduction

Capacity is the ability of an individual or organization to carry out activities to achieve the stated objectives of the organization. In the context of tuberculosis (TB) monitoring and evaluation (M&E), the objectives of an M&E system are to provide quality data and to guide planning, coordination, and implementation of the TB program; assess its efficacy; and identify areas for improvement. From an organizational perspective, this requires that the organizations have adequate capacity in terms of (A) human resources who possess the necessary knowledge and skills, (B) appropriate and adequate technical and management systems, (C) suitable physical infrastructure, and (D) ample financial and other resources.¹ Thus, in the context of TB M&E, the M&E staff at the national level, provinces, and operational districts (OD) constitute the essential building blocks of the M&E system of the national TB program (NTP) in Cambodia. The ability of these staff to understand and analyze M&E data to make relevant decisions and communicate and implement those decisions is reflective of their capacity to carry out the M&E of the TB program.²

Training M&E staff is just one intervention to strengthen the M&E capacity within the NTP in Cambodia. It goes hand in hand with other interventions to build organizational capability such as the development of tools and procedures for assuring M&E data quality, data visualization, and data analysis.

The Tuberculosis Data, Impact Assessment and Communication Hub (TB DIAH)—in collaboration with the National Center for Tuberculosis and Leprosy Control (CENAT), the Sustaining Technical and Analytical Resources (STAR) advisor, and Community Mobilization Initiatives to End Tuberculosis (COMMIT)—has developed tools and procedures for TB data quality checks and a mock dashboard that serves as a practice tool for M&E staff to improve their data visualization, analysis, and interpretation capabilities. TB DIAH has also provided training to national and provincial TB M&E staff to strengthen their capacity to carry out M&E functions. The project supported CENAT to train a TB provincial supervisor to be part of the M&E trainers and to train all OD TB M&E staff. All these efforts are consistent with the goals of the TB M&E system in Cambodia, which are to produce quality data from TB surveillance; monitor progress toward the national TB program’s target; and inform decisions on program planning, management, policymaking, and resource allocation.

Through these trainings, TB DIAH introduced the data quality review (DQR) toolkit and helped the OD staff build the basic skills to understand, analyze, and interpret TB data. The DQR toolkit is adopted from the World Health Organization’s DQR modules and is designed to facilitate periodic data quality checks to be conducted routinely through desk reviews and supervisory visits. This checklist will help to systematically identify and address data quality problems across health facilities. The data quality check identifies areas of improvement and helps inform corrective actions.

Training Objectives

By the end of the training, the OD TB supervisors were able to:

- Explain the fundamentals of TB M&E and surveillance in light of the national priorities set in the TB national strategic plan
- Analyze, interpret, and synthesize TB data to develop M&E reports with relevant visuals

¹ <https://www2.ed.gov/about/offices/list/osers/osep/rda/cipp2-conceptualizing-capacity-building-2-10-15.pdf>

² <https://www.nhs.uk/conditions/consent-to-treatment/capacity/>

- Elaborate on the basics of the TB M&E plan and how to manage a well-functioning M&E system in the context of TB M&E in Cambodia
- Conduct data quality checks on the data collected from the health center using the DQR toolkit

Participants

Batch 1 (March 28–30, 2023)

- A. Trainer/co-trainers/facilitators
 1. CENAT technical staff/deputy directors: 4
 2. TB Provincial Supervisors: 7
 3. COMMIT technical staff: 2
 4. STAR advisor: 1
 5. TB DIAH: 3
- B. Trainees
 1. TB OD supervisors: 25
 2. Local NGO: TB program implementation partners (CRS and A head): 6

Batch 2 (April 18–20, 2023)

- A. Trainer/co-trainers/facilitators
 1. CENAT technical staff/deputy directors: 6
 2. TB Provincial Supervisors: 5
 3. STAR advisor: 2
 4. TB DIAH: 3
- B. Trainees
 1. TB OD supervisors: 20



Training Batch 2. First row: TB OD supervisor, TB local implementing partners. Second row: (from left to right) STAR advisor, TB DIAH, CENAT and TB provincial supervisor. Third row: TB OD and provincial supervisors. Photo credit: CENAT

Batch 3 (May 10-12, 2023)

- A. Trainer/co-trainers/facilitators
 - 1. CENAT technical staff/deputy directors: 4
 - 2. TB Provincial Supervisors: 9
 - 3. COMMIT/KHANA: 3
 - 4. TB DIAH: 2
- B. Trainees
 - 1. TB OD supervisors: 20



Training Batch 3. First row: (from left to right) TB OD supervisor, TB local implementing partners, Second row: TB provincial supervisor, CENAT, COMMIT/KHANA, TB DIAH. Third row: TB OD and provincial supervisors. Photo credit: CENAT

Methods

CENAT was a core trainer and led all the sessions; COMMIT and the STAR advisor were supplemental trainers and facilitators, and TB DIAH backstopped. The TB provincial supervisors were assigned tasks as co-trainers and co-facilitators and were responsible for each participant group.

The TB provincial supervisors sat with the participants and led all the group work. They also ensured that all the group has submitted the result of the group. They would help the participants to do the recap of the day and assign one of the participants to present the recap.

Pre-Training Day

Under the guidance of CENAT, a pre-training session was organized for TB provincial supervisors. The purpose of the pre-training (orientation) was to introduce the training materials and divide tasks (please see the

agenda in Annex I) among TB provincial supervisors. A lesson plan was developed as part of the materials and was provided to lead the sessions.

Orientation Session Process

The orientation started with the introduction of the training materials. Then, guidance was provided on how to read and connect the agenda and lesson plan to the presentations and handouts. Below is a list of the training materials utilized in the session.

Materials List

- Training agenda (English/Khmer)
- Training lesson plan (English/Khmer)
- Slide deck (English/Khmer)
- Handouts (English/Khmer)
- Excel training lesson
- Pre/posttest (Google form)



Participants doing a group exercise for TB OD supervisors (groups 4 and 5) from Batch 1 in Battambang province. Photo credit: CENAT

Proceedings

Day 1

The training started with an opening remark from Dr. Tan Vutha, Battambang TB provincial supervisor (Batch 1) and Mr. Noun Leng, Kamptot, the TB provincial supervisor (Batch 2) and province host. Next, Dr. Khun Kim Eam, CENAT's Deputy Director and TB MIS lead, gave his remarks at the beginning of each day to emphasize the importance of the training course and summarize the content of the all the modules. He also asked the participants to be attentive during the sessions as the content serves to ensure the quality of the data collected from the OD health facilities in their catchment areas.

Group participants: The first two batches of participants were divided into five groups and the last batch was divided into three groups not including the co-trainers (TB provincial supervisors) and facilitators (COMMIT and TB DIAH).

Pre-test

The pre-test questionnaire was requested to be completed prior to the beginning of the training session. Not all OD supervisors were finished at the proposed time, but since the trainings were divided into three batches covering all 63 TB OD supervisors at a different time, the TB DIAH team was still able to track pre-test submissions. The pre-test was administered via the M&E e-learning platform hosted on the CENAT website. The pre- and post-tests were optional for TB provincial supervisors because they were assigned as co-trainers/facilitators.

After the opening remarks, Dr. Eam kicked off Module 1 with the co-facilitators from the provinces (TB provincial supervisors). Dr. An Yom, STAR advisor supported the first two batches and Mr. Menh Saren, COMMIT/KHANA, led the M&E session. The TB supervisors led TB related program topics (e.g., basic facts about TB indicators and case definitions, TB epidemiology in Cambodia and TB surveillance - why and how). Dr. Eam backstopped the sessions led by the TB supervisors.

Day 2

Day 2 began with a recap of the first day led by a TB provincial supervisor.

Then, Module 1 was completed and Module 2 started. Most of the agenda was led by Dr. Eam, Dr. Yom, Mr. Saren, and Ms. Sarady because the last part of Module 1 and Module 2 focused on TB indicators, data quality, and the DQR, which went beyond the TB provincial supervisor's knowledge at the time. Instead, the TB provincial supervisors facilitated the group work.

The DQR was recently integrated into Module 2. All three batches of OD supervisors were trained on its use. The 64 OD supervisors learned what the DQR is and how to enter data using the report from one OD. The TB provincial supervisors and the OD supervisors under COMMIT/KHANA who were trained before March 2023 were not able to learn how to use the DQR. The tool was under development and was not ready to be included in the M&E training modules.



TB OD supervisors complete a group exercise focused on data generated from the TB MIS.
Photo credit: CENAT

Day 3

During day 3, Module 2 and Module 3 were completed. At the end of the last session, a post-test was administered and Dr. Eam gave closing remarks. He encouraged the ODs to apply the DQR toolkit to ensure the quality of the data in the reports from the OD level prior to reaching their supervisors. This is a critical step before it is sent to the national level.

Findings

Total participants:

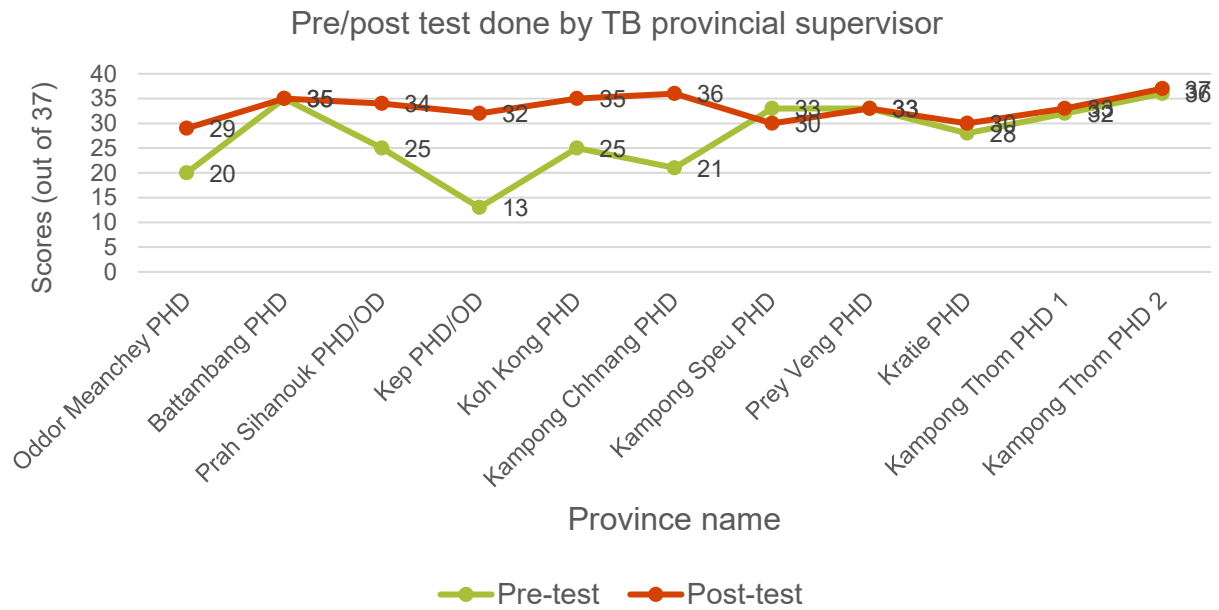
- ODs trained: 64 OD supervisors participated. A total of 63 OD supervisors sent the completed pre-test; one of the OD TB supervisors was not able to use the online platform. TB DIAH provided assistance over the phone, but he was still unable to submit it.
- One of the ODs, Svay Anthor OD, got the appointment to participate in the M&E training only when an official letter was sent to the provincial health department. As a result, this person has never been in the group where TB DIAH can conduct a pre-test.
- TB provincial supervisors: 26 (4 TB provincial supervisors are also OD TB supervisors). Since the pre- and post-tests were optional for the TB provincial supervisors, only 11 out of 26 completed the pre-test and only 15 completed the post-test.

The pre- and post-test results are presented below.

Pre- and Post-test Results

TB Provincial Supervisors

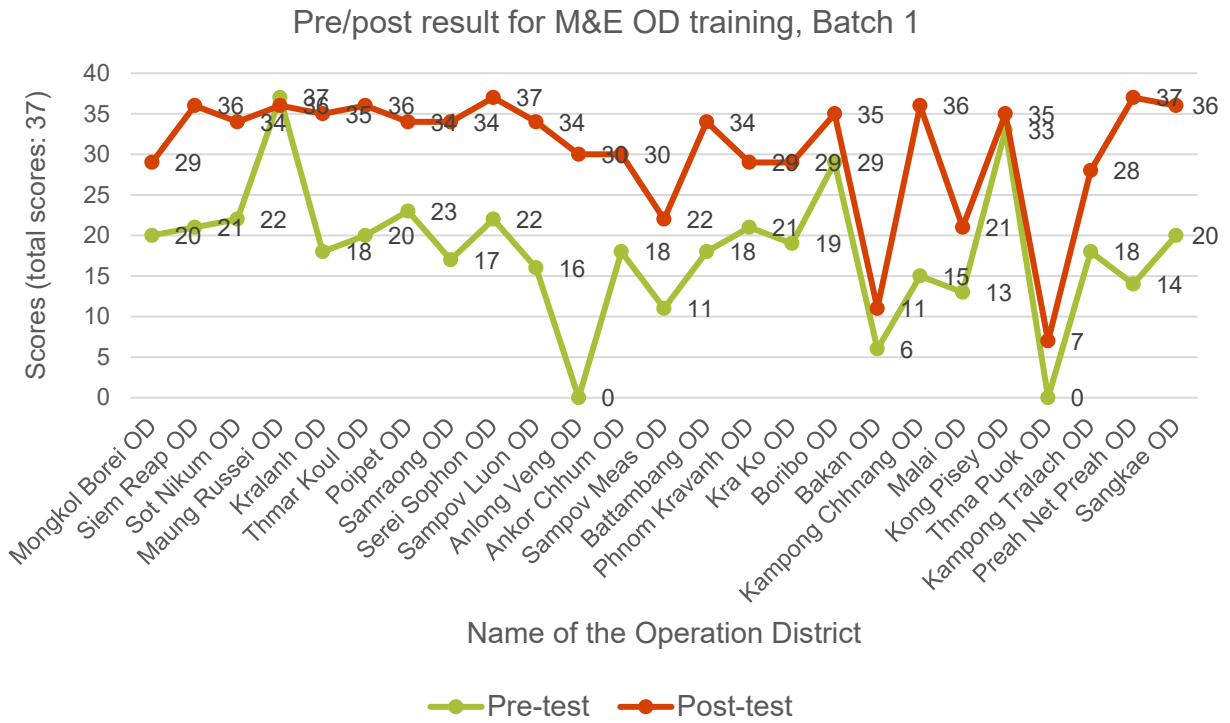
Figure 1. TB provincial supervisor pre- and post-test scores



The M&E course was more like a refresher training for most of the TB provincial supervisors who had participated in the previous training of trainers (ToT) organized by TB DIAH. As result, most of them scored high on the pre-test and even higher on the post-test. Only one TB provincial supervisor had low scores for the pre-test (13 out of 37), but he vastly improved in the post-test.

TB Operation District Supervisors

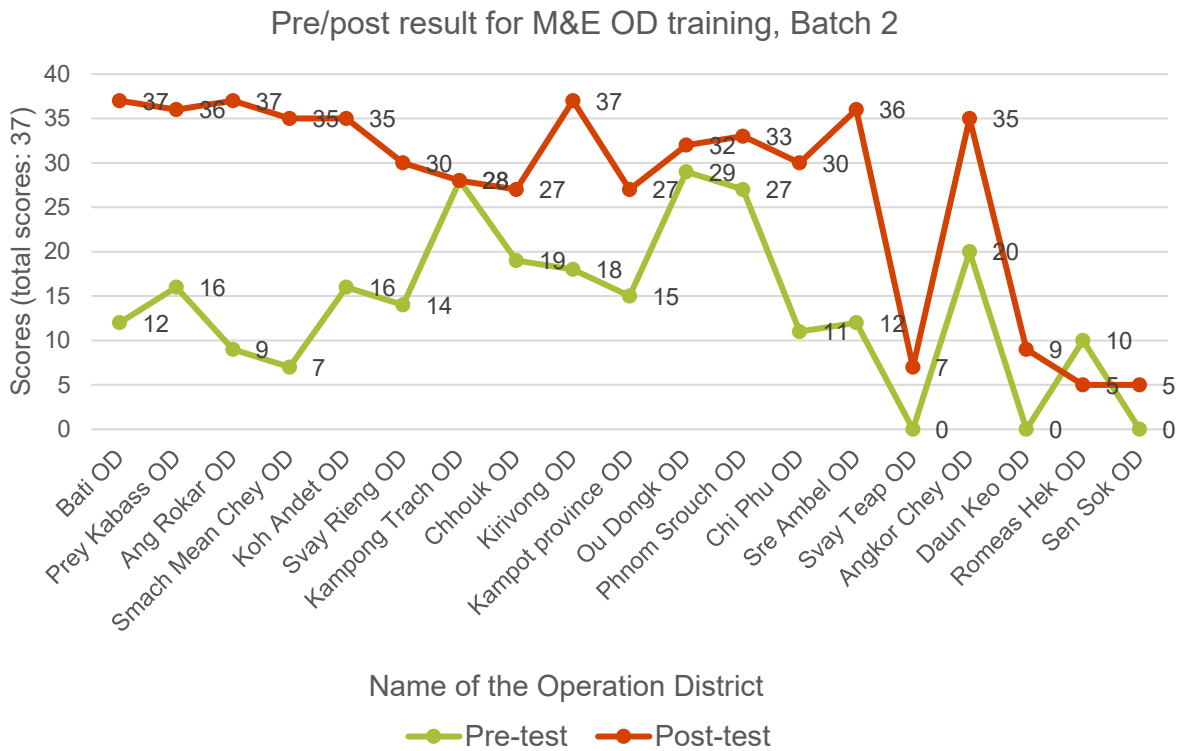
Figure 2. Training Batch 1 pre- and post-test scores



Two ODs from Batch 1 did not complete the pre-test. They claimed that they were not able to access the e-learning site, so they did not get the link to the pre-test and did not have a score for the pre-test. However, Anlong Veng OD, which had no pre-test score, scored 30 out of 37 on the post-test, and Thmor Puok OD, which had 0 for the pre-test, still had low post-test scores.

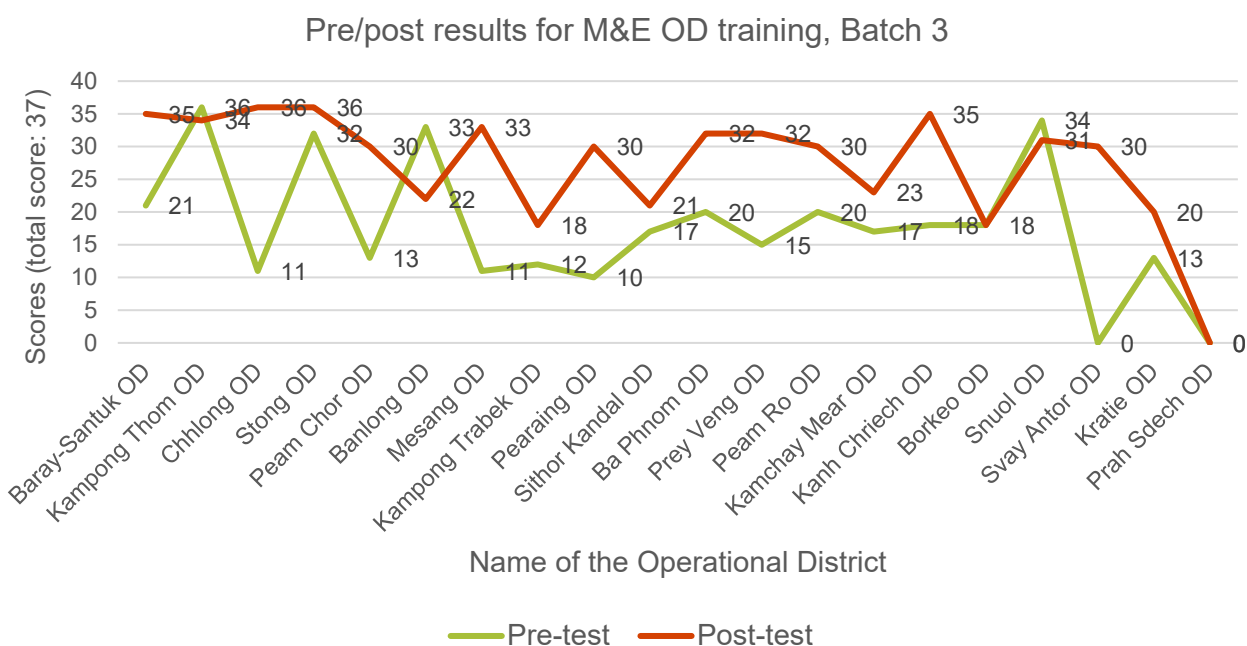
Maung Russei and Kong Pisey ODs had the highest scores for the pre-test (36 and 33 respectively).

Figure 3. Training Batch 2 pre- and post-test scores



In Batch 2, there were 3 ODs who did not complete the pre-test. They expressed that the online platform was hard for them to utilize and the internet connection in their homes was not good enough for stable connectivity. These ODs scored very low on the post-test, 5 and 7 out of 37. Most of the ODs that scored low on the pre-test obtained high scores for post-test after the training, such as Smach Meanchey OD. The person in this OD scored a 7 on the pre-test but a 35 on the post-test. A large gap was observed between the pre- and post-test results.

Figure 4. Training Batch 3 pre- and post-test scores



The pre- and post-test results for the participants in Batch 3 were not significantly different. However, one OD, Svay Anhor OD, was not able to complete the pre-test but received a high score for the post-test. The lowest post-test score was 18 while the lowest pre-test score was 10.

Opportunities

Having the TB provincial supervisors as co-facilitators and group work leads for their ODs was very practical. It provided an opportunity for them to implement what they learned during the ToT while being a co-trainer with the support of CENAT, a STAR advisor, COMMIT/KHANA and TB DIAH as needed. Also, the group work requiring the extracted data from the TB MIS made it easier to place them in the same team, however, there was a need for some TB provincial supervisors to observe and make adjustments as they seemed to have difficulty managing ODs from the same province.

Challenges

Due to the pre-test being hosted on the CENAT website, there was no guarantee that the participants would complete the e-Learning session. Following up with each OD required much time and effort. A few of them could not do the pre-test, therefore, there are gaps in the analysis of the scores. Also, some participants reported experiencing internet difficulties during the post-test. One OD claimed to have already submitted the post-test, but the test and score did not appear in the system. Nevertheless, the e-Learning and pre-tests were also an opportunity to prepare in advance of the training and make adjustments to ensure focus on areas that need strengthening based on the findings.

The TB provincial supervisors of Batch 2 were not able to lead the group work, but most of them were willing to lead the sessions related to TB disease. Those who attended the ToT once in person forgot some parts of the training sessions. This made it challenging for them to confidently lead the sessions, even with the

presence of the core-trainer. Still, they were interested in leading the sessions and the core trainer emphasized the more detailed parts of the session.

In addition, most of the trainees from the same batch were seniors and not particularly engaged in the training. They expressed a lack of interest of the first module but were attentive during Module 2 (data quality, data visualization and interpretation, and link to the MIS demonstration), and Module 3.

Moreover, there was staff turnover within the training period (ToT to OD training: Nov 2021 to May 2022). The main purpose of the ToT was to engage the TB provincial supervisors to train the OD under their administration on M&E, TB program priority area and its indicators, and data visualization and interpretation. However, the staff turnover made this impossible. A total of seven TB provincial supervisors participated in the last training batch (Batch 3). Among them there were two TB provincial supervisors who are also OD TB supervisors. Two of the TB provincial supervisors from Prey Veng and from Stoeung Treng were new to their roles. This training was an opportunity for them to learn M&E, but the curriculum was not as thorough as the ToT curriculum.

Lessons Learned

Batch 1 was mixed between junior and senior level staff. They had the opportunity to exchange field experiences. The TB provincial supervisors were keen to lead some sessions on TB disease and TB program-related content. They were able to lead the group work and supported the group members to finish the exercises. Meanwhile, the second batch was made up mostly of senior level staff and it was hard for them to introduce new lessons such as the M&E lesson and the DQR. They were interested in plotting charts and extracting the data from the MIS. Although it was difficult for the core trainers to encourage them to lead the session, they were able to do so with the backup of the national team.

In the Batch 3, a few of the TB provincial supervisors and OD supervisors were new and had not attended the previous TB DIAH-hosted ToTs. There was limited time for them to learn all the content and lead the M&E session, but they were confident in doing so.

During the ToT, the recap of the previous day was followed by a request to complete a recap form. This caused a bit of disruption since the participants only wanted to fill out the recap form and did not listen to the session. Learning from this challenge, the recap of the OD training was freestyle, however they didn't meet the expectation of the recap concept. On the third day of the training, the TB provincial supervisor was instructed on how to organize the recap. In future trainings, the recap session should be more freestyle and have limited instruction. Instead, the recap should be led by the TB provincial supervisor who led the group with clear instructions from the trainer.

Conclusion

The first M&E training for the OD TB supervisors was organized by COMMIT/KHANA in Siem Reap province in September 2022. The training covered 31 ODs under COMMIT/KHANA areas (originally planned for 32 ODs but one OD was not able to join). The project planned to cover all the remaining ODs for the M&E OD training with 72 ODs (103 ODs country wide).

The 72 ODs remaining were divided into three batches and the trainings were planned for March, April, and May. The DQR toolkit and SOP were completed in parallel and integrated in the curriculum under Module 2 (data quality). Out of 72 ODs, only 64 were able to join the training.

The OD training curriculum was customized from the ToT and shortened from seven to three days. The provincial supervisors were assigned to be co-facilitators and led some of the session. The ToT was organized in late 2021 and early 2022. Therefore, between the ToT and OD training, there was a small change of TB provincial supervisors. Fortunately, during the OD training, the new TB provincial supervisors had an opportunity to learn and strengthen their M&E capacity.

The national program shall reintroduce the e-learning module to all TB OD supervisors since their M&E capacity could still be strengthened, particularly in TB program priority areas.

The DQR lesson was not integrated in the M&E modules for the 31 ODs under COMMIT/KHANA. The DQR should be introduced to those ODs. TB DIAH will provide technical support during the demonstration of the DQR, if COMMIT/KHANA plans to host a DQR lesson at a later date.

Annex I

Agenda

Module 1: Overview of Cambodia's NTP and TB M&E system

Time	Session Title and Description	Methods	Session Lead
Day 1			
07h–08h00 (60 min)	Registration		Sopha/Sarady
08h00–08h30 (30 min)	CENAT's Director opening speech		Dr. Khun Kim Eam, CENAT's Deputy Director
08h30–9h00 (30 min)	Activity 1: Introduction to the TB M&E training	Lecture Slides: 3–7	Mr. Men Chean
09h00–09h15 (15 min)	Activity 2: Divide participants into groups and assign co-facilitator for the training	Slide: 8	Dr. Saorith/ Sarady/Saren
09h15–09h30 (15 min)	Tea Break		Hotel
Lesson 1: Epidemiology of TB			
09h30–11h15 (105 min)	Activity 1: Introduction to M&E (basic definition), indicators/surveillance	Lecture Slides: 9–29	Dr. Eam/ Dr. Rithy/Dr. Yom
11h15–12h00 (45 min)	Activity 2: Basic facts about TB Indicators and case definitions	Lecture: Slides: 30–41	Dr. Eam/Dr. Rithy/Dr. Saorith
12h00–13h30 (90 min)	Lunch		Hotel
13h30–14h30 (60 min)	Activity 3: TB epidemiology in Cambodia and TB surveillance—why and how?	Lecture Slides: 42–44	Dr. Eam/ Dr. Rithy/ Dr. Saorith

Time	Session Title and Description	Methods	Session Lead
14h30–15h30 (60 min)	Activity 4: Cambodia National Strategic Plan 2021–2030: M&E indicators	Lecture, discussion Slides: 45–64	Dr. Eam/ Dr Rithy/ Dr Saorith
15h30–15h45 (15 min)	Tea Break		Hotel
Lesson 2: TB M&E System in Cambodia			
15h45–16h30 (45 min)	Activity 1: Define monitoring and evaluation; define M&E system, TB M&E system in Cambodia	Plenary, Slides: 66–81	Dr. Eam/Dr. Rithy/Dr. Saorith
16h30–17h00 (30 min)	Q&A and clarification	Discussion	All TB provincial supervisors

Day 2			
Lesson 3: Programmatic areas of NTP in Cambodia			
08h00–08h30 (30 min)	Recap from Day 1		All TB provincial supervisors/Mr. Men Chean
08h30–09h00 (30 min)	Activity 1: Priority programmatic areas of the NTP in Cambodia	Lecture, plenary, Q&A Slides: 82–85	Dr. Eam/Dr. Rithy/Dr. Saorith
09h00–09h30 (30 min)	Activity 2: Programmatic Overview of DS-TB and M&E indicator	Lecture, plenary, Q&A Slides: 86–88	Dr. Eam/Dr. Rithy/Dr. Saorith
09h30–10h00 (30 min)	Activity 3: Programmatic management of DR-TB and M&E indicator	Lecture, plenary, Q&A Slides: 89–95	Dr. Eam/Dr. Rithy/Dr. Saorith
10h00–10h15 (15 min)	Tea Break		Hotel
10h15–10h45 (30 min)	Activity 4: Strategies for prevention and treatment of childhood TB and M&E indicator	Lecture, plenary, Q&A Slides: 96–101	Dr. Eam/ Dr. Saorith
10h45–11h15 (30 min)	Activity 5: LTBI and CI guidelines and M&E indicator	Plenary, discussion, Slides: 102–106	Dr. Eam/ Dr. Saorith

Module 2: Data Collection and Verification

Time	Session Title and Description	Methods	Session Lead
Lesson 1: Introduction to Data Quality			
11h15–11h30 (15 min)	Introduce Module 2 and objectives	Slides: 107–108	All TB provincial supervisors / Mr Men Chean
11h30–12h00 (30 min)	Activity 1. Introduction to Data Quality	Lecture, Slides: 109–115	Dr. Eam/Dr. Yom/Sarady

Time	Session Title and Description	Methods	Session Lead
12h00–13h30 (90 min)	Lunch		Hotel
13h30–15h00 (90 min)	Activity 2. Using Data Quality Metrics: <ul style="list-style-type: none"> Reporting completeness Reporting timeliness Completeness of indicator data Verification of data accuracy Internal consistency over time 	Lecture, Discussion, Slides: 116–131	Dr. Eam/Sarady/ Mr. Saren/ Mr. Seyha
15h00–16h00 (60 min)	Activity 3. Group exercise on identifying the causes of poor data quality at health facilities and OD levels and actions to improve data quality	Group work, Discussion, Slides: 132–134	Dr. Eam/Sarady/ Mr. Saren/ Mr. Seyha
16h00–16h15 (15 min)	Tea Break		Hotel
16h15–16h45 (30 min)	Activity 4: How to use and who should use DQR form <ul style="list-style-type: none"> DQR Excel format DQR's schedule Data source for quality review 	Lecture, Discussion, Slides: 135–137	Dr. Eam/Sarady/ Mr. Saren/ Mr. Seyha
16h45–17h00 (15 min)	Activity 5: Group work (homework): Exercise on data visualization using TB treatment coverage	Explain homework, Group work after the session, Slides: 138	Mr. Saren/ Mr. Raskmey/ Sarady/Sopha
17h00–17h15 (15 min)	Q&A and clarification		All TB provincial supervisors

Time	Session Title and Description	Methods	Session Lead
Day 3			
Lesson 2: Data Use			
08h00–08h30 (30 min)	Recap from Day 2		All TB provincial supervisors / Mr Men Chean
08h30–09h30 (60 min)	Activity 1: Use Excel to create tables and charts with TB M&E data	Lecture, Discussion, Slides: 139–140	Dr. Eam/Dr. Yom/ Dr. Rithy/Sopha
09h30–10h30 (60 min)	Activity 2: Data communication and the Fundamentals of Data Visualization	Lecture, Slides: 141–175	Dr. Eam/Dr. Yom/ Dr. Rithy/Sopha
10h30–10h45 (15 min)	Tea Break		Hotel
10h45–12h00 (75 min)	Activity 3: Improving data visuals on TB treatment coverage (use the output from the activity 2 of lesson 3)	Lecture, discussion Slides: 176–177	Dr. Eam/Mr Raksmeay/ Mr. Saren/Sarady
12h00–13h30 (90 min)	Lunch		Hotel

Module 3: Data Interpretation and Use

Time	Session Title and Description	Methods	Session Lead
Lesson 1: Key TB epidemiological and program quality indicators			
13h30–13h45 (15 min)	Activity 1: Introduction to Module 3	Presentation, Slides: 178–179	Mr Men Chean
13h45–14h45 (60 min)	Activity 2: Analysis and interpretation of selected TB indicators	Discussion, Slides: 180–191	Dr. Eam/Dr. Yom/Mr. Saren/ Mr Seyha

Time	Session Title and Description	Methods	Session Lead
14h45–16h00 (75 min)	Activity 3: GROUP WORK—practical examples of TB data analysis (TB treatment outcome, DR-TB, and TB prevention/contact investigation indicators)	Group work, group presentations, Slides: 192–199	Dr. Eam/Dr. Yom
16h00–16h15 (15 min)	Break		Hotel
16h15–16h45 (30 min)	Post-test assessment	Online post-test	Sarady
16h15–17h00 (15 min)	CLOSING remarks		Dr. Khun Kim Eam CENAT's Deputy Director

Annex II

Total participants

Table 1. Pre and post-test results for the TB OD supervisors and the TB provincial supervisors*

Number	Province	OD name	Pre-test Score	Post-test Score	Batch #
1	Banteay Meanchey	Mongkol Borei OD	20	29	1
2	Banteay Meanchey	Poipet OD	23	34	1
3	Banteay Meanchey	Serei Sophon OD	22	37	1
4	Banteay Meanchey	Malai OD	13	21	1
5	Banteay Meanchey	Thma Puok OD	0	7	1
6	Banteay Meanchey	Preah Net Preah OD	14	37	1
7	Battambang	Maung Russei OD	37	36	1
8	Battambang	Thmar Koul OD	20	36	1
9	Battambang	Sampov Luon OD	16	34	1
10	Battambang	Battambang PHD	35	35	1
11	Battambang	Battambang OD	18	34	1
12	Battambang	Sangkae OD	20	36	1
13	Kampong Chhnang	Boribo OD	29	35	1
14	Kampong Chhnang	Kampong Chhnang OD	15	36	1
15	Kampong Chhnang	Kampong Tralach OD	18	28	1
16	Kampong Chhnang	Kampong Chhnang PHD	21	36	2
17	Kampong Speu	Kong Pisey OD	33	35	1
18	Kampong Speu	Ou Dongk OD	29	32	2
19	Kampong Speu	Phnom Srouch OD	27	33	2
20	Kampong Speu	Kampong Speu PHD*	33	30	2
21	Kampong Thom	Baray-Santuk OD	21	35	3
22	Kampong Thom	Kampong Thom OD	36	34	3
23	Kampong Thom	Stong OD	32	36	3
24	Kampong Thom	Kampong Thom PHD 1	32	33	3
25	Kampong Thom	Kampong Thom PHD 2	36	37	3
26	Kampot	Kampong Trach OD	28	28	2

Number	Province	OD name	Pre-test Score	Post-test Score	Batch #
27	Kampot	Chhouk OD	19	27	2
28	Kampot	Kampot province OD	15	27	2
29	Kampot	Angkor Chey OD	20	35	2
30	Kep	Kep PHD/OD	13	32	2
31	Koh Kong	Smach Mean Chey OD	7	35	2
32	Koh Kong	Koh Kong PHD	25	35	2
33	Koh Kong	Sre Ambel OD	12	36	2
34	Kratie	Chhlong OD	11	36	3
35	Kratie	Kratie PHD	28	30	3
36	Kratie	Snuol OD	34	31	3
37	Kratie	Kratie OD	13	20	3
38	Kratie	Kratie_TB Lab	0	23	3
39	Oddor Meanchey	Samraong OD	17	34	1
40	Oddor Meanchey	Anlong Veng OD	0	30	1
41	Oddor Meanchey	Oddor Meanchey PHD	20	29	1
42	Phnom Penh	Sen Sok OD	0	5	2
43	Prah Sihanouk	Prah Sihanouk PHD/OD	25	34	2
44	Prah Vihear	Prah Vihear PHD/OD	0	25	3
45	Prey Veng	Prey Veng PHD	33	33	3
46	Prey Veng	Peam Chor OD	13	30	3
47	Prey Veng	Mesang OD	11	33	3
48	Prey Veng	Kampong Trabek OD	12	18	3
49	Prey Veng	Pearaing OD	10	30	3
50	Prey Veng	Sithor Kandal OD	17	21	3
51	Prey Veng	Ba Phnom OD	20	32	3
52	Prey Veng	Prey Veng OD	15	32	3
53	Prey Veng	Peam Ro OD	20	30	3
54	Prey Veng	Kamchay Mear OD	17	23	3
55	Prey Veng	Kanh Chriech OD	18	35	3

Number	Province	OD name	Pre-test Score	Post-test Score	Batch #
56	Prey Veng	Svay Antor OD	0	30	3
57	Prey Veng	Prah Sdech OD	0	0	3
58	Pursat	Sampov Meas OD	11	22	1
59	Pursat	Phnom Kravanh OD	21	29	1
60	Pursat	Kra Ko OD	19	29	1
61	Pursat	Bakan OD	6	11	1
62	Ratanakiri	Banlong OD	33	22	3
63	Ratanakiri	Borkeo OD	18	18	3
64	Siem Reap	Siem Reap OD	21	36	1
65	Siem Reap	Sot Nikum OD	22	34	1
66	Siem Reap	Kralanh OD	18	35	1
67	Siem Reap	Ankor Chhum OD	18	30	1
68	Steung Treng	Steung Treng PHD/OD*	0	24	3
69	Svay Rieng	Svay Rieng OD	14	30	2
70	Svay Rieng	Chi Phu OD	11	30	2

*TB OD supervisor who had never joined a ToT, and only joined the M&E OD training

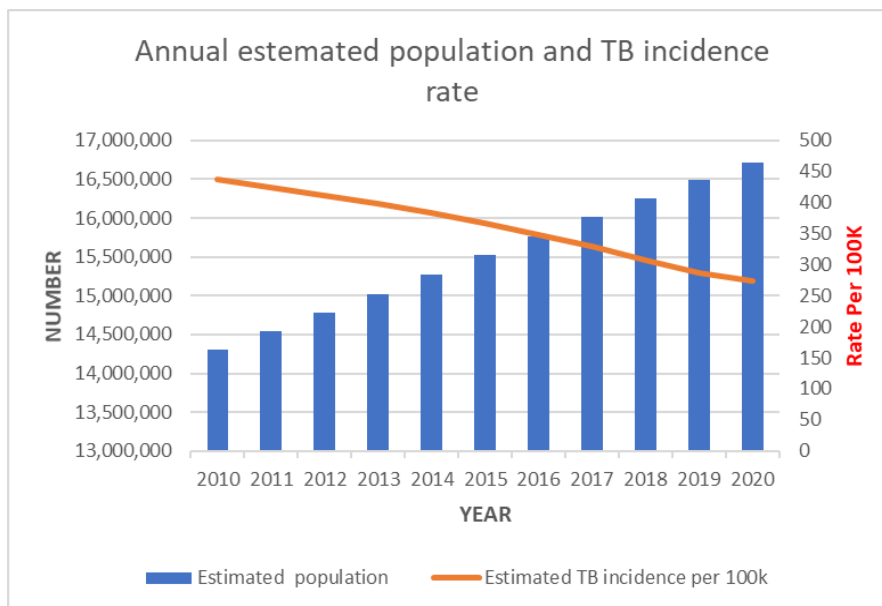
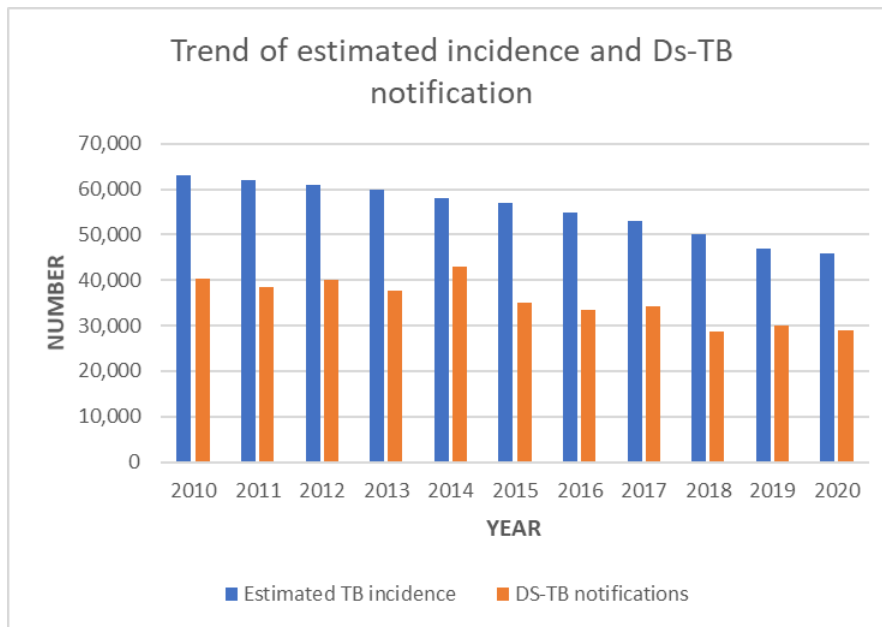
Annex III

Group Assignment: Completed by participants from Batch 1 in their individual working groups.

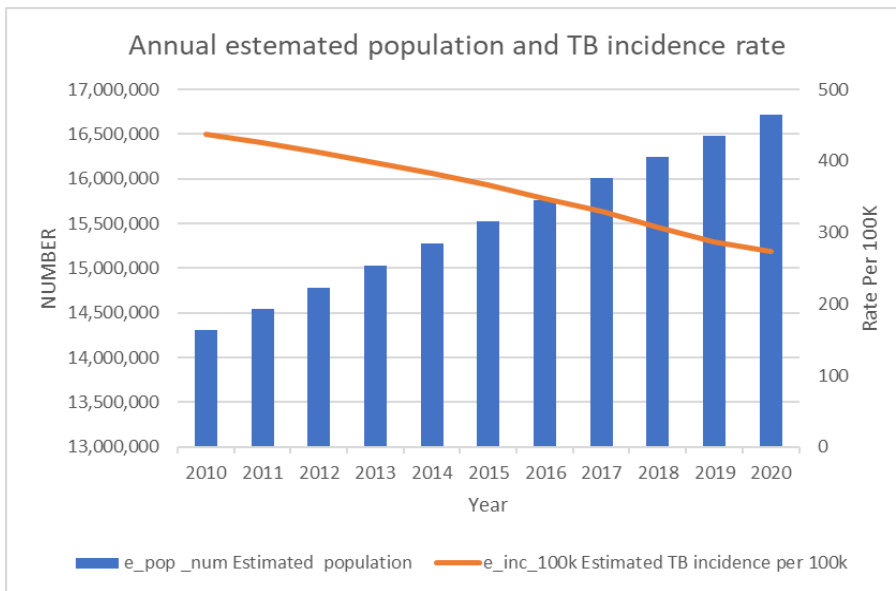
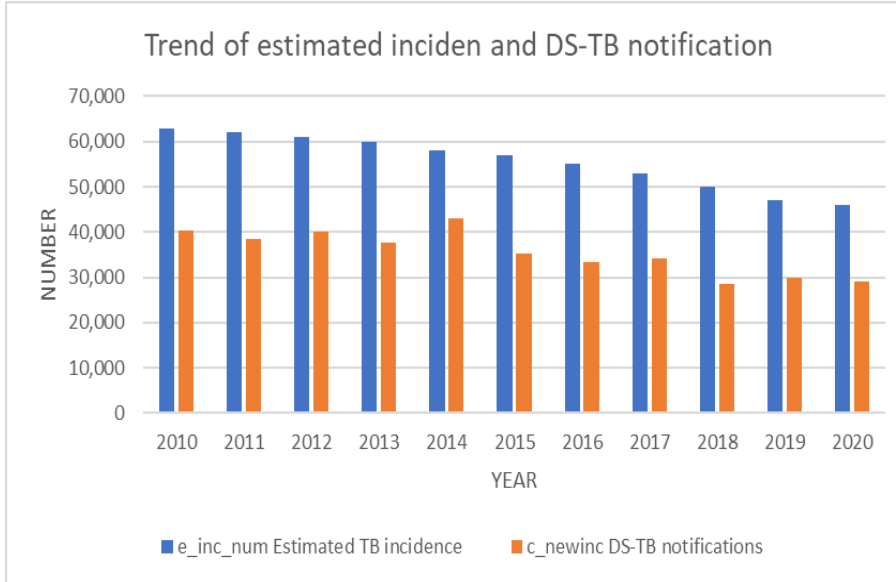
Batch 1

- Practice chart data extracted from the MIS.
- Charts created by working groups, misspellings are true to original versions.
- Below are the examples of the participants plotting the chart using the data from their dedicated OD:

A. Odd or Mean Chey



B. Kampong Chhnang



Batch 2

The handout below was completed by participants from Batch 2 in their individual working groups.

- Group Name: 3 (Takeo province)

Handout 1.2.1b: Review of Implementation of M&E System Components in Cambodia

M&E System Components	Status in Cambodia	What Can be Done to Strengthen the TB M&E System in Cambodia	Comments by Other Groups
1. Organizational Structures with M&E Functions	Existed only at the national program and at the provincial level (do not yet exist at the OD level).		
2. Human Capacity for M&E	There were HR at the national, province and the OD. It is limited for health center	Requested for more trainings	
3. Partnerships for Planning, Coordinating and Managing the M&E System	There are partnerships between the national, the province and the OD with a coordination from the local authority but still limited at the health center		
4. M&E frameworks/Logical Framework	At the national, there are SP, Goal Objectives), at the province (Operational Plan,) but at the OD there is no framework set up yet		
5. M&E Work Plan and costs	At the national and at the provincial level, the M&E plan existed, at the OD, there are targeted indicators and the expense plan for some activities, such supervision, meeting, and education health related in the community		
6. Communication, Advocacy and Culture for M&E	The national program called for funding while at the provincial level coordinate with partners and engaged by the local authority		
7. Routine Program Monitoring	Routinely monitor program performance such review result on quarterly and annually		
8. Surveys and Surveillance	The national program has the surveys plan and work with partner to organize the monitoring system		

M&E System Components	Status in Cambodia	What Can be Done to Strengthen the TB M&E System in Cambodia	Comments by Other Groups
9. National and Sub-national databases	Uses TB MIS and is being integrate another database system		
10. Supportive Supervision and Data Auditing	Supervision from the national program and from province to OD, to health center and to the community		
11. Evaluation and Research	Only for national program and provincial level		
12. Data Dissemination and Use	Disseminate through monthly, quarterly and annual meeting		



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