

Activity Report for Small Meeting of APLMF Working Group on Quality Measurement of Agricultural Products (QMAP)

Final version as of 20 November

Dates: 23 (Tuesday) – 24 (Wednesday) October 2018
(Also see **Table 1** in Annex 1)

Venue: CBWM (Central Bureau of Weights and Measures), DIT (Department of Internal Trade), Ministry of Commerce, 563 Nonthaburi Rd., Bang Krasor, Muang, Nonthaburi, Thailand

Host: CBWM, DIT, Ministry of Commerce

Participants (also see Table 2 in Annex 1):

- (1) Mr. Surachai Sungzikaw, CBWM, DIT, Thailand / WG Chair
- (2) Ms. Haslina bte Abdul Kadir, NMIM (National Metrology Institute of Malaysia), Malaysia / WG Co-Chair
- (3) Dr. Tsuyoshi Matsumoto, NMIJ (National Metrology Institute of Japan), AIST (National Institute of Advanced Industrial Science and Technology), Japan / former WG Chair
- (4) Mr. Norihiro Yoshida, Kett Electric Laboratory Co. Ltd., Japan
- (5) Mr. Thares Yodalai, CBWM, DIT, Thailand
- (6) Mrs. Benjamas Winya, CBWM, DIT, Thailand

1 Introduction

Grain moisture is an important area of measurement in legal metrology that is closely related to international trade and quality of life. In order to improve confidence in this field within the region, the APLMF Working Group (WG) on Quality Measurement on Agricultural Products (QMAP) planned a Training Course on Verification of Rice Moisture Meters at Pattaya and Chon Buri, Thailand on 3-7 December 2018. This course will be the first training organized by the new WG chairs in Thailand and Malaysia.

At the WG meeting at CBWM in Nonthaburi in July 2018, which was held for transferring WG Chair from Japan to Thailand/Malaysia, Dr. Matsumoto (former chair) proposed this small meeting to prepare for the training course in December and to compensate for his absence at this training course.

2 Objectives

This small meeting provided practical suggestions from the former chair to the new chairs in Thailand and Malaysia in order to ensure they would be confident for the training course in December. A brief report regarding the laboratory of EWMC was also included because

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quality of the training course largely depends on the facility, instruments and samples provided at the venue. An expert from a manufacturer, who will be a trainer in December, also participated in this meeting to provide practical suggestions.

3 Summary of the meeting

3.1 Welcoming address

Mr. Surachai welcomed all participants to the meeting, and thanked PTB for their support. He informed the meeting that the host cannot bring all participants to EWMC, Chon Buri, on Wednesday, 24 October, since EWMC has not set up facilities, equipment, and tools for the training course yet. Most of facilities, equipment, and tools have to be brought from 5 branches of the bureau on Tuesday, 27 November. The participants agreed to continue this meeting on Wednesday, 24 October, at CBWM, Nonthaburi.

3.2 Preparation for the training course in Chon Buri in December, 2018

3.2.1 Confirmation of the program (also see Table 3 in Annex 1)

The participants re-conformed each item of the draft program for the five days including opening/closing ceremonies, economy reports, speakers/contents of the lectures, practical components, group/summary discussions, technical tour, and social events (dinners). They also discussed accommodation, meals, transportation, assistant trainers, support staffs, registration by PTB/APLMF, provision of equipment / instruments / materials / samples, and pre-visit to the laboratory for preparation. Some of these items are reported in more detail in the following clauses.

3.2.2 Accommodation (also see the photos in Annex 2)

Mrs. Benjamas provided information about accommodation for the training course. She informed the meeting that accommodation for the course is provided at Pullman Pattaya Hotel G, located in Pattaya City, Chonburi, Thailand. The hotel offers various facilities and activities, such as boxing class, spa and massage service, fitness, and swimming pool.

The hotel is 40 minutes' drive from Suvarnabhumi International Airport. Participants can check in from 14:00 and check out at noon (12:00). The participants requested Mrs. Benjamas to contact PTB/MEDEA coordinator regarding funding for limousine service for round trip transportation between the hotel and the airport.

3.2.3 Meeting room and facility (also see photos in Annex 3)

Mrs. Benjamas provided information about the meeting room and facility. The first day of the training course will be held at Pullman Pattaya Hotel G. For the following days, the course will be held at Eastern Weights and Measures Center (EWMC). EWMC will provide two meeting rooms: the big one is for the training course, and the smaller one is for trainers and assistant trainers gathering for meeting and preparation. Five rooms are also provided for five practical sessions. Each practical room will be set up with instruments, equipment, tools, and all facilities needed prior to Friday, 30 November.

3.2.4 Technical visit (also see photos in Annex 4)

Mrs. Benjamas provided information about the technical visit as follows. The host will bring all participants to visit C.YPB Rice Mill on Thursday, 6 December. The rice mill is located in Chachoengsao province, which is 2 hours and 30 minutes' drive from the hotel, and 2 hours' drive to EWMC. The rice mill can accommodate up to 60 people, and it is fully equipped with milling machines and moisture measuring instruments. This mill is periodically inspected by EWMC, which guarantees that the mill will demonstrate good practises.

Mr. Surachai and Mrs. Benjamas informed the meeting that the owner of the rice mill requested the host to change the date of technical visit session from Friday, 7 December to Thursday, 6 December. The participants accepted the request and agreed to re-schedule the training course programme.

3.2.5 Facility, equipment and tools (also see Table 4 in Annex 1)

Mrs. Benjamas advised that for practical sessions, each group will be provided with a set of facility, equipment, and tools in the same quality and quantity. Most of them will be brought from 1) CBWM, 2) Northern Weights and Measures Center (NWMC), 3) North Eastern Weights and Measures Center (NeWMC), 4) Phitsanulok Branch Bureau, and 5) Southern Weights and Measures Center (SWMC).

Mrs. Benjamas also advised that the host will provide each trainee with one moisture meter during the training course. The moisture meters used in the course will be brought to EWMC by CBWM. The host also requested Kett Elec. to provide additional moisture meters and moisture baths (for moisture adjustment) for practice during the course. Mr. Yoshida accepted the request and informed that he will coordinate the equipment with the host prior to the course.

3.2.6 Reference samples for training

Mrs. Benjamas advised that the reference samples for the training course will be selected from the rice harvested in the field on Wednesday, 21 November. They will be temporarily transferred to NWMC during Thursday, 22 – Saturday, 24 November, before being transferred to EWMC for use during the training course.

Mr. Yoshida suggested that trainees should have opportunities to practice on the reference samples with 10 levels of moisture contents, ranging from 9 percent to 30 percent, regardless pre-conditioning (preliminary drying process for wet samples). This means that each of the five groups will be provided with 10 bags of reference samples with different levels of moisture content, and a total of 50 bags of reference samples will be provided prior to the training course.

Ms. Haslina suggested that the training courses should contain a session of demonstration of moisture adjustment to prepare the reference samples. The participants

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agreed to put this demonstration into the schedule and programme, and to request the host to provide fresh rice from the field for this demonstration. The host accepted the request and advised that the host would provide 15 kilograms of fresh rice, as well as a video clip of a demonstration for preparing the reference samples if needed.

3.2.7 Transportation

Mrs. Benjamas advised that the host will provide vans from CBWM and EWMC for transportation during the training course. In the evening of the first day of the course, Monday, 3 December, the van will pick up all participants at the hotel and take them to the restaurant and return them after the dinner. For the following days, the van will pick the trainees up at the hotel around 8:30 and return them to the hotel around 18:00.

Regarding round trip transportation between the airport and the hotel, Mrs. Benjamas accepted the request to provide a limousine service, and will request for funding from PTB.

3.2.8 Meals (also see photos in Annex 5)

Mrs. Benjamas advised that the host would provide full boards for all trainees, trainers, assistant trainers, local observers, and local staffs from the first day of their stay in Pattaya City, Chon Buri. The board would be also provided for a visit to EWMC in advance for setting up the equipment. Ms. Haslina and Dr. Matsumoto suggested the host request meal support also for some of the local observers.

During staying at the Pullman Pattaya Hotel G, all participants will be provided with international buffet for breakfast. On the first day of the training course, Monday, 3 December, all participants will enjoy morning/afternoon break and lunch provided at the hotel. Each break will be provided with one sweet/snack, one juice, and coffee/tea. Lunch will be Thai buffet style.

On the following days, the host will provide all participants morning/afternoon breaks and lunch at EWMC. Dinners will be provided at the hotel in Thai buffet style. The host will provide all participants with a welcome dinner on Monday, 3 December, at Moom Aroi Seafood Restaurant, located 15 minutes' drive from the hotel. MEDEA will host the farewell dinner on Thursday, 6 December at the Glass House Pattaya, located 35 minutes' drive from EWMC, and also 35 minutes' drive back to the hotel.

During technical visit session, participants will be served with a snack box as a morning break at the rice mill a lunch box will be provided to the participants in the van on the way back to EWMC.

3.2.9 Revision of the schedule and programme (also see Table 2 in Annex 1)

Ms. Haslina suggested to include lectures, demonstrations and practices on evaluation of calibration curve, evaluation of uncertainty, preparation of reference samples, and method of moisture adjustment into the programme. The course schedule and programme were revised based on her suggestions.

3.2.10 Grouping

Dr. Matsumoto and Mr. Yoshida suggested that participants in each group are recommended to have an equivalent expertise related to rice moisture measurement. Also, they should have a similar background to be familiar with each other in the group. It was agreed to divide the trainees and observers into 5 groups depending upon their expertise, and their economy. They requested that the same economy should be in the same group. Also, trainers will decide the membership of each group on the first day of the course.

Mrs. Benjamas suggested that each group should consist of one CBWM staff, two local observers, and three to four registered trainees. CBWM staff who work for measurement of agricultural products will support each group, since they are familiar with the instruments, equipment, tools, and methods used during the course. Two local observers will be put into the group to which their instruments belong, because they are already familiar with these instruments.

3.2.11 Trainers and assistant trainers

The participants discussed the list of trainers/assistant trainers and their roles during the training course. The list of trainers and assistant trainers is as follows:

1) Trainers:

- Surachai Sungzikaw, QMAP WG Chair, Thailand
- Mrs. Haslina bte Abdul Kadir, NMIM, SIRIM Berhad, Malaysia / QMAP WG Co-Chair
- Mr. Norihiro Yoshida, Kett Electric Laboratory, Japan
- Ms. Mihoko Yabe, Kett Electric Laboratory
- Mr. Okimasa Chikira, Kett Electric Laboratory
- Ms. Ayano Nakazato, Kett Electric Laboratory

2) Assistant trainers:

- Mr. Warachai Triarun, CBWM, Thailand
- Mr. Sophearath Ing, NMC (National Metrology Center) in Phnom Penh, Cambodia / QMAP WG Member
- Mrs. Eri Wijayanti, DoM (Direktorat Metrologi) in Bandung, Indonesia / QMAP WG Member
- Mr. Thuc Ha Thanh, STAMEQ (Directorate for Standards, Metrology and Quality) in Hanoi, Vietnam / QMAP WG Member

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Their roles are indicated in the revised programme and agenda shown in Annex 1. All assistant trainers will support trainers mainly during the practice and demonstration sessions.

3.3 Future training courses in 2019 and 2020

The participants discussed the main targets of future training courses in 2019 and 2020.

Dr. Matsumoto commented that expansion of the target of training to other kinds of product and/or quality had been requested for a long time from the APLMF member economies. But it had not been achieved because there was a large variety in the interests and needs from the economies. Moisture content of rice actually remained as the most common target and this was the main reason why the WG had conducted a training program on rice for a long time.

From 2007 to 2009 however, the WG tried and conducted three APLMF/APEC workshops on agricultural measurement including food safety and product safety. Many speaker and participants attended these events from a much wider area outside legal metrology including food safety and chemical/biological analysis. However, there were opinions in APLMF that such a workshop was not an event for the forum and this WG should go back to the original field on grain moisture measurement under legal metrology. Based on such an experience, Dr. Matsumoto did not recommend expanding the scope too broad. Instead, he proposed a scheme in which a different target is selected for one (or two) years, then go back to the original training program on rice moisture once every two (or three) years. He also commented that long training courses for two weeks, which targeted experienced experts, were conducted several times until 2005 to cover many training items and more practical components.

Regarding the new targets, two major directions were proposed; (1) new kinds of agricultural product and (2) new kinds of qualities in agricultural measurement. Regarding (1), new products such as, wheat, corn, coffee, beans, cassava, and oil palm were highlighted. Considering the fact that the WG should respond to the needs from the South-West Asian economies, the participants agreed that WG would primarily select coffee and beans. Although corn was widely produced in the region, the measurement/calibration procedure is similar to that of rice and there was no strong reason to plan an independent training. Although wheat is an important product world-wide, it seems not produced commonly in the South West Asia.

Regarding the direction (2), the participants highlighted qualities such as, protein content, sugar content, amylose content, starch content, bulk density, appearance, whiteness and breakage. However, several participants pointed out that it was difficult to specify a standard reference method with a measurement traceability for many of these qualities. In addition, some of the qualities had a subjective nature and were not considered as a proper target of metrology that was closely connected to a quantitative result. Difficulties in finding competent trainers and provision of facility and equipment for such new qualities were also pointed out.

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The participants then agreed that WG should plan new training programs on moisture measurement of coffee and beans for the course in 2019 and 2020. These products could be selected separately, e.g., a training course would be planned in 2019 for the moisture content of coffee beans, and then another course for other beans in 2020. The participants also agreed that the chairs would seek a host economy regarding these areas in which the economy might be familiar with the product and have sufficient local production to support the delivery of a course. The possibility of a long course for two weeks for advanced experts should also be considered.

3.4 Drafting of the WG report for the 25th APLMF Meeting

With support of the participants, the WG report for the 25th APLMF Meeting in Christchurch in November 2018 was drafted during this meeting and it was submitted to APLMF Secretariat after the meeting. There were many changes made in the report from the original one submitted at 24th APLMF meeting in 2017. Brief reports of the training course in CBWM in July and the present small meeting were added. Information regarding the upcoming training courses in Chon Buri in December 2018 were added. Future directions of the WG were updated based on the discussions in the WG in July and in the present meeting.

3.5 Transfer of WG activities to a regional level

Dr. Matsumoto explained that this WG was one of the oldest WGs in APLMF and its training program and contents were already quite mature. Therefore, there had been a discussion in APLMF that this WG could be transferred to a level in a region or an economy. He even showed as an extreme case, in which this WG could be disbanded and all training activities be transferred to a regional/national organization. As a more realistic option, he proposed a possibility to transfer a part of the current activities to an appropriate group in ASEAN because its region almost covers the rice producing economies in APLMF. He said the training coordinator of APLMF, Mrs. Marian Haire was also positive to this proposal.

Following his explanation, Ms. Haslina reported the situation of WG3 of ACCSQ (Consultative Committee on Standards and Quality) in ASEAN, which is a working group responsible for legal metrology. She explained that the present activities of WG3 were related to the important fields in legal metrology such as weighing instruments, fuel dispensers and prepackages. She added that although WG3 was not responsible for grain moisture measurement, the members had concern regarding the activities in this field including the activities of WG on QMAP. The chair of WG3 was fortunately taken by Dr. Abdul Rahman Mohamed who was a colleague of Ms. Haslina of NMIM in SIRIM. She already talked with Dr. Rahman about the activities of WG on QMAP and he seemed positive about future cooperation. Mr. Surachai commented that he usually attended both meetings of WG3 and APLMF, and a WG3 meeting was going to be held in the same week with this meeting.

The participants agreed that Mr. Surachai and Ms. Haslina should be appropriate contact persons interacting between WG on QMAP and WG3, and we should implement cooperation between the two working groups. It was also suggested that a representative

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of the two organizations (APLMF and ACCSQ) should attend the meetings of each organization as an observer.

3.6 Support by the host economy to the small meeting

The host of CBWM, DIT provided dedicated and well-organized support. With MEDEA's financial support, the host institute provided (1) a meeting room in CBWM, (2) accommodation in the Richmond-Style Convention Hotel including necessary meals, (3) lunches and coffee/tea breaks from Tuesday to Wednesday, (4) three dinners from Monday to Wednesday, (5) transportations by the vans of CBWM from/ to the Suvarnabhumi International Airport, CBWM in Nonthaburi and the hotel, and (6) equipment and consumable materials.

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**Annex 1: Table 1: Final program and agenda of the small meeting of APLMF WG on QMAP
October 2018 at Nonthaburi, Thailand**

Day 1 Tuesday 23 Oct CBWM, Nonthaburi	8:30	Left the hotel by car provided by the host.
	9:00-9:20	Opening addresses by WG chairs and participants.
	9:20-10:00	<p>Discussion on preparation of the large training course in December regarding the following topics:</p> <ol style="list-style-type: none"> (1) Confirmation of schedule and program including: all lectures, demonstrations of oven method / meter-to-meter calibration, practical activity in groups, and discussions on the measurement results / future directions of WG. (2) Other items to be prepared: tour, lunch, dinners, opening / closing ceremony, transportations, accommodation etc. (3) Current status in the host including the venues in Chon Buri. (4) Registration status of the trainees and grouping of them. (5) Assistant trainers and support staffs from Cambodia, Indonesia, Japan, Thailand and Vietnam. <p>Discussion on other topics of the WG:</p> <ol style="list-style-type: none"> (6) Revision of APLMF Guide Document on Rice Moisture Measurement (7) Future training courses in 2019-2020 regarding: hosts, new contents, target samples and target properties. (8) Future directions of WG including transferring of the training program to regional levels including ASEAN-ACCSQ. (9) Recruitment of new WG members and their participation to the future training courses.
	10:00-10:30	<i>Coffee / tea break</i>
	10:30-12:00	Continued the discussion
	12:00-13:00	<i>Lunch break</i>
	13:00-15:00	Continued the discussion
	15:00-15:30	<i>Coffee / tea break</i>
	15:30-17:00	Continued the discussion
	17:30-20:00	<i>Welcome dinner by CBWM at Restaurant Krua Apsorn Returned to the hotel by car.</i>
Day 2 Wednesday 24 Oct CBWM, Nonthaburi	8:30	Left the hotel by car provided by the host.
	9:00-10:00	Continued the discussion on the items on the first day
	10:00-10:30	<i>Coffee / tea break</i>
	10:30-12:00	Continued the discussion
	12:00-13:00	<i>Lunch break</i>
	13:00-15:00	Continued the discussion
	15:00-15:30	<i>Coffee / tea break</i>
	16:00	<i>Returned to the hotel by car.</i>

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Annex 1: Table 2: List of Participants

Small meeting of APLMF Working Group on Quality Measurement of Agricultural Products (QMAP) at CBWM, Thailand in October 2018

No.	Category	Name	Economy	Institution	Photo
1	Participant/WG chair	Mr. Surachai Sungzikaw	Thailand	CBWM (Central Bureau of Weights and Measures), DIT (Department of Internal Trade) in Nonthaburi	
2	Participant /WG co-chair	Mrs. Haslina bte Abdul Kadir	Malaysia	NMIM (National Metrology Institute of Malaysia), SIRIM in Sepang	
3	Participant /WG former chair	Dr. Tsuyoshi Matsumoto	Japan	NMIJ (National Metrology Institute of Japan), AIST in Tsukuba	
4	Participant	Mr. Norihiro Yoshida	Japan	Kett Electric Laboratory Co. Ltd. In Tokyo	
5	Participant	Mr. Thares Yod	Thailand	CBWM in Nonthaburi	
6	Host staff	Mrs. Benjamas Winya	Thailand	CBWM in Nonthaburi	
7	Host staff	Ms. Mullika Tangcham	Thailand	CBWM in Nonthaburi	
8	Host staff	Ms. Paweena Hanboonsri	Thailand	CBWM in Nonthaburi	
9	Host staff	Ms. Maneerat Rodpan	Thailand	CBWM in Nonthaburi	

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10	Host staff	Ms. Rapeepan Naiyajit	Thailand	CBWM in Nonthaburi	
11	Host staff	Mr. Athirat Onbomrong	Thailand	CBWM in Nonthaburi	
12	Support staff/observer	Mr. Ratchapak Charo (Kent)	Thailand	Ngek Seng Huat Ltd. Part (local distributor of Kett)	

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Annex 1: Table 3: Tentative Programme

MEDEA: “Metrology – Enabling Developing Economies in Asia” Training Course on Verification of Rice Moisture Meters in Chon Buri, Thailand in December 2018

Day 1 Monday 3 Dec Pullman Pattaya Hotel G	08:30-09:00	Registration
	09:00-09:30	Opening addresses by APLMF, and host. A group photo.
	09:30-09:45	Explanation of schedule and outline (Haslina)
	09:45-10:45	Economy reports (APLMF).
	10:45-11:15	Coffee / tea break
	11:15-12:30	Traceability and metrological control system on grain moisture measurement, including APLMF Guide Document on Rice Moisture Measurement, OIML R59 and ISO 7700 (Surachai)
	12:30-13:30	Lunch break
	13:30-14:00	Continue the Traceability and metrological control system (Surachai)
	14:00-15:00	Lecture on a drying method using ISO 712 (Haslina)
	15:00-15:30	Coffee / tea break
	15:30-16:00	Lecture on Moisture adjustment, and preparation of reference samples (Haslina)
	16:00-17:00	Lecture on Uncertainty in Legal Metrology and Grain Moisture Measurement (Haslina)
	18:00-20:00	Welcome dinner hosted by DIT at Moom Aroi Seafood Restaurant
Day 2 Tuesday 4 Dec EWMC	08:30	Leave the hotel by bus provided by the host.
	09:00-10:00	Demonstration on Preparation of Reference Samples (Haslina, Yabe)
	10:00-12:15	Instruction, demonstration and practice on an oven method (ISO 712) in groups using one oven/group (Haslina, Yabe). (oven start at 11.30); Continue the demonstration of moisture adjustment.
	12:15-13:30	Lunch break
	13:30-14:30	Continue the ISO 712 method; Continue moisture adjustment
	14:30-15:00	Coffee / tea break
	15:00-16:30	Continue the ISO 712 method; Data analysis and Calculation of ISO 712 and Moisture Adjustment (Haslina)
	16:30-17:00	Lecture on how to use moisture meters (Yoshida, Chikira)
	17:30	Back to the hotel by bus.
Day 3 Wednesday 5 Dec EWMC	08:30	Leave the hotel by bus.
	09:00-09:15	Instruction on meter-to-meter calibrations (Haslina, Warachai, and all trainers).
	09:15-12:00	Repeat ISO 712 method (oven start at 11.30); Calibration of master meter (all trainers).
	12:00-13:30	Lunch break
	13:30-14:30	Repeat ISO 712 method; Continue calibration of master meter
	14:30-15:00	Coffee / tea break

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	15:00-17:00	Continue the ISO 712; Data analysis and Calculation of ISO 712 (Haslina); Evaluation of master meter calibration curve (Surachai); Evaluation of uncertainty (Haslina)
	17:30	Back to the hotel by bus.
Day 4 Thursday 6 Dec EWMC	07:30	Leave the hotel by bus.
	07:30-14:00	Technical tour in Chachoengsao province (Lunch box)
	14:00-15:30	Practice of meter-to-meter calibration between the master and working meters and summary of the measurement results (all trainers).
	15:30-16:00	Coffee / tea break
	16:00-17:30	Report of the measurement results by each group. Summary discussion for the future (Chairs: Surachai, Haslina & Yoshida)
	18:00-20:00	Farewell dinner hosted by MEDEA at The Glass House Pattaya
Day 5 Friday 7 Dec EWMC	08:30	Leave the hotel by bus.
	09:00-12:00	Discussion on future directions and action plans related to Quality Measurement on Agricultural Product (Surachai, Haslina)
	12:00-13:00	Lunch break
	13:00-13:30	Closing ceremony with bestowal of the certificates
	13:30	Back to the hotel by bus.

Annex 1: Table 4: Facility, equipment, and tools to be provided for the training course at EWMC in Chon Buri, Thailand in December 2018

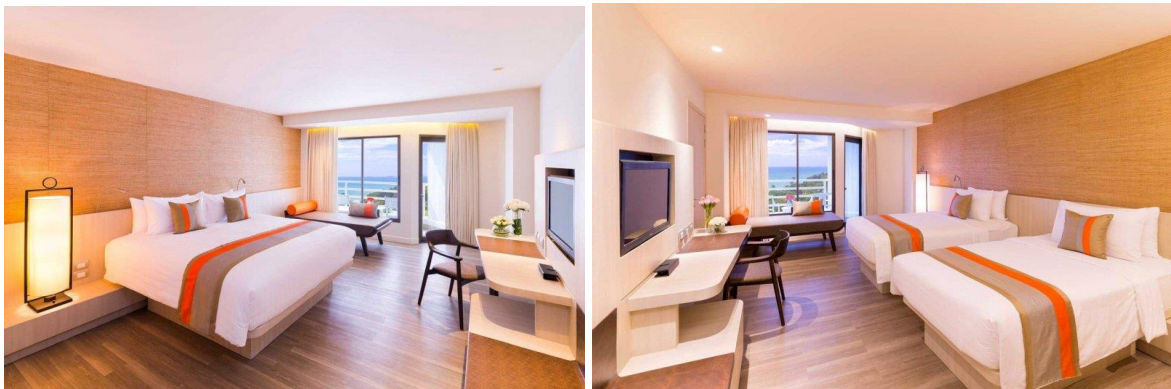
Drying oven	1 Set
Precise balance	1 Piece
Laboratory mill	1 Piece
Kevlar glove	2 Pairs
Fabric glove	10 Pairs
Auto-dry desiccator	1 Set
Metal dish	30 Sets
Stainless steel tray	4 Pieces
PE bottle	20 Sets
Dehumidifier	1 Piece
Humidity/temperature measuring instrument	1 Set
Laptop	1 Set
Scoop	2 Pieces
Microfiber cloth	4 Pieces
Stainless steel cone	2 Pieces
Horsehair brush (Anti static) 6 mm	1 Piece
Horsehair brush (Anti static) 10 mm	1 Piece
Horsehair brush (Anti static) 15 mm	1 Piece

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Annex 2: Photos of the accommodation for the training course in Pattaya, Chon Buri, Thailand in December 2018



Pullman Pattaya Hotel G.



Deluxe room, 1 King Size Bed (left) and Deluxe room, 2 Single Size Beds (right) for Participant.

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Annex 3: Meeting rooms and facility of the training course in Chon Buri, Thailand in December 2018



Meeting room at Pullman Pattaya Hotel G.



Eastern Weights and Measures Center (EVMC).

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Meeting room for trainers meeting and preparation in EWMC.



Meeting room for training courses in EWMC.

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Functional room for group 1 in EWMC



Functional room for group 2 in EWMC



Functional room for group 3 in EWMC

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Functional room for group 4 in EWMC



Functional room for group 5 in EWMC

Annex 4: Photos of the C. YPB rice mill in Chachoengsao Province, Thailand to be visited during the training course in December 2018



C.YPB Rice Mill



C.YPB Rice Mill



C.YPB Rice Mill



Equipment in C.YPB Rice Mill

Annex 5: Restaurants for social events of the training course in Chon Buri in December 2018



Moom aroi, seafood restaurant provided by CBWM for welcome dinner on
Monday, 3 December



The glass house pataya, seafood restaurant provided by MEDEA for farewell dinner on
Thursday, 6 December

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Annex 6: Photographs of the small WG meeting in October 2018

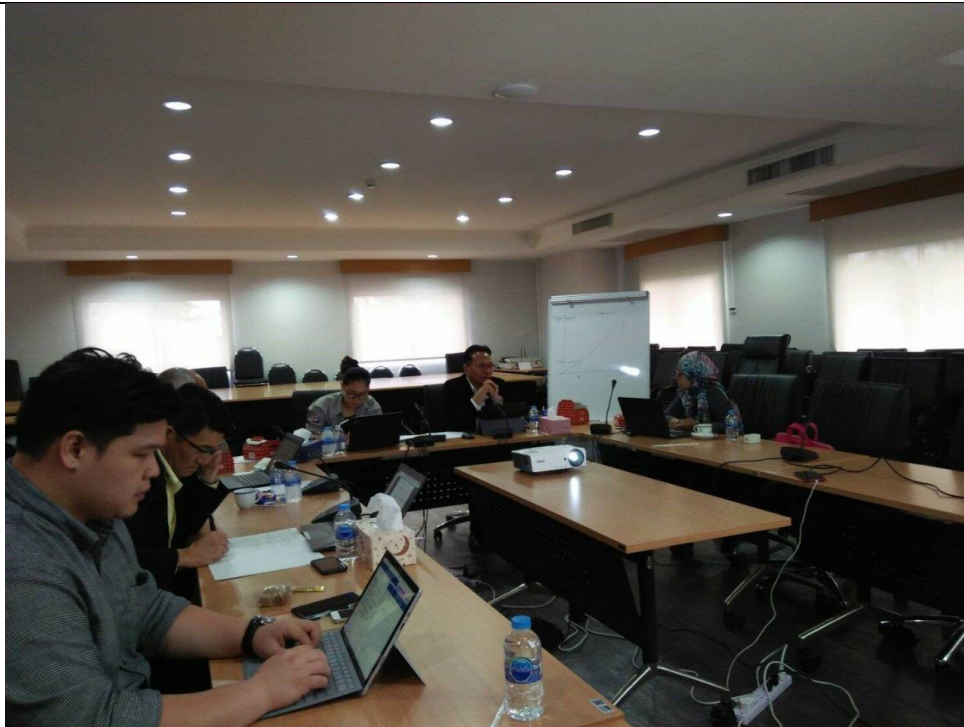


Meeting on Tuesday, 23 October, at CBWM, Nonthaburi



Meeting on Tuesday, 23 October, at CBWM, Nonthaburi

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Meeting on Wednesday, 24 October, at CBWM, Nonthaburi



Meeting on Wednesday, 24 October, at CBWM, Nonthaburi