

陸、附錄

一、研習會議程

Final Program of the workshop on Innovations in Food Value Chain, 26-30 Nov 2018, Phnom Penh, Cambodia		
Hotel Accommodation and Workshop Venue:		
Phnom Penh Era Hotel		
Address: No. 44, Street 163, Olympic Khan Chamcarmorn Chamkar Mon, Phnom Penh, Cambodia Tel: + 855 23 222 122 Fax: +855 23 223 1110 E-mail: info@phnompenhera.com Website: http://www.phnompenhera.com/		
Day 1: Monday, 26 November 2018		
Time	Activity	Responsible
08:30–09:00	Registration	NPCC team
09:00–10:00	Opening session <ul style="list-style-type: none"> - Welcome address by National Productivity Centre of Cambodia - Opening message by the chief guest - Self-Introduction of participants and resource persons - Group photograph 	NPCC Director H.E (Mr.) Phork Sovarith, Secretary of State of MIH and APO Director for Cambodia NPCC Team NPCC Team
10:00–10:15	Coffee break	
10:15–10:30	Program Orientation	Mr. Um Serivuth, Deputy Director of NPCC, MIH, local coordinator of the program
Technical Session 1. Global trends, current issues, and fostering advances in Food Value Chains		
10:30–11:30	Presentation 1: Value chain concept, approaches, and tools to support FVC development	Mr. Waheed Ahmad Manager (Operations)/ Consultant, Capital Food Industries, Pakistan
11:30-12:00	Discussions	Facilitated by Local coordinator and experts
12:00– 13:00	Lunch break	
13:00–13:45	Presentation 2: Value addition through food quality and safety assurance certification systems	Mr. Michele Maccari, Independent Consultant, Italy
13:45-14:15	Discussions	Local coordinator and experts
14:15– 15:00	Presentation 3: Business models for improved inclusion of small farmer and SMEs in Food Value Chain (FVC)	Mr. Pakin Juthasilaparuth, Vice President- New Business

15:00– 15:15	Coffee break	
15:15– 16:00	Presentation 4: The increment of agribusiness value chain through innovative process	Mr. EM HUY, a Vice Chief of Agribusiness Office, From Agro-industry of Department, MAFF
16:00– 16:30	Discussions and wrap-up	Facilitated by Local coordinator and experts
Day 2: Tuesday, 27 November 2018		
09:00– 09:30	Recapitulation of important knowledge gained from Day 1	Participants
Technical Session 2. Applications of innovative Food Value Chain technologies in agribusiness		
09:30– 10:15	Presentation 5: Product development, Innovation and value added in food processing	Mr. Waheed Ahmad
10:15– 11:00	Presentation 6: Public-private partnerships for developing innovative and inclusive Food Value Chains (FVCs)	Mr. Michele Maccari
11:00– 11:15	Coffee break	
11:15– 11:30	Discussions	Facilitated by Local coordinator and experts
11:30– 12:15	Presentation 7: Successful case study of innovative FVC	Mr. Pakin Juthasilaparuth
12:15– 12:30	Discussions	Facilitated by Local coordinator and experts
12:30– 13:30	Lunch break	
13:30– 14:15	Presentation 8: Innovative value addition technologies for food packaging and marketing	Mr. Waheed Ahmad
Technical Session 3. Sharing Country Case Studies on Organic agriculture		
14:45– 15:15	Country paper presentation (selected)	Participants
15:15– 15:30	Coffee break	
15:30– 16:00	Country paper presentation (selected)	Participants
16:00– 17:00	Discussions Briefing on field visit	
Day 3: Wednesday, 28 November 2018		
09:00– 14:00	Site visit at Kiriroom Food Production Co., Ltd	NPCC team
Leaving time from hotel is 7:00 am		
Day 4: Thursday, 29 November 2018		
09:00– 09:30	Recapitulation of important knowledge gained from Day 2 and 3	Participants
9:30– 10:15	Presentation 9: Successful cases of innovative FVCs	Mr. Michele Maccari
10:15– 10:30	Coffee break	
Technical Session 4		

Group break-out sessions		
10:30– 11:00	Briefing on Group Breakout Sessions	Resource Persons
11:00– 12:30	<p>Group Breakout Sessions (hands-on experience)</p> <ul style="list-style-type: none"> Group discussions will be based on the outcome of the Day 1–3 workshop proceedings such as presentations by resource persons and participants, resource papers and country papers, learning from field visit, and discussions and exchange of views among the participants/resource persons on the subject. Participants facilitated by resource persons will discuss the opportunities, issues and challenges on food value chains and formulate strategic action plans to address them. A framework for group discussions will be provided separately later. 	Resource Persons and Participants
12:30– 13:30	Lunch break	
13:30– 17:00	Group Breakout Sessions (hands-on experience) –Contd.	Resource Persons and Participants
18:30– 20:00	Farewell dinner	Hosted by NPCC, MIH
Day 5: Friday, 30 November 2018		
08:00– 09:00	Presentations of Group Breakout Sessions	Participants
09:00– 09:30	Discussion	
09:30– 09:45	Tea/coffee break	
09:45– 10:15	Panel Discussion: The way forward	Resource Persons
10:15– 10:30	Lunch break	
10:30– 11:00	Workshop recommendation and output action plan	Resource Persons and Participants
11:00– 11:45	Formulation of action plans for follow-up by individual participants after the project completion	Facilitated by the Workshop Secretariat
11:45– 12:15	Program evaluation by participants, resource persons, and implementing organization	Participants, Resource Persons, and implementing organization
12:15– 13:00	<p>Closing & certification</p> <ul style="list-style-type: none"> Remarks of resource persons Vote of thanks by a participant Closing remarks by NPCC director Certificate conferment 	NPCC Team
Day 0: Saturday, 01 December 2018- Departure of Participants from Phnom Penh		

二、國情報告文字及簡報檔

The summary containing salient points of the country paper

In Taiwan, there are many competent authorities including Council of Agriculture, Ministry on Economic Affairs and Ministry of Health and Welfare in charge of the management of agribusinesses and food chain industries in different stages. They work closely and collaboratively to enhance the food chain value and reduce food loss and waste. Meanwhile, many enterprises try to form a cross-industry alliance which will speed up innovation on food value chain spontaneously. Carrefour, a global hypermarket enterprise in Taiwan, also makes efforts to add the value of food and reduce food waste simultaneously. Carrefour has worked with a social enterprise called “Buy NearBy” and established a successful model to reduce food waste from the downstream of the food supply chain since 2017. They purchase the fruits and vegetables with the “ugly” appearance directly from the farmers and the shapes against the specification from CAS certified fresh cutting plant. After being cut and processed in the HACCP certified factory, these edible materials are transformed into different new brand products named “O’Gaspi”. To sum up, integration of production and marketing operations, combination of charity organization and appropriate marketing events are the three key strategies to reach the goal of adding value of food and reducing food loss and waste.

Brief overview of the current developments and trends in food value chain in Taiwan

In Taiwan, there are many competent authorities including Council of Agriculture, Ministry on Economic Affairs and Ministry of Health and Welfare in charge of the management of agribusinesses and food chain industries in different stages. The duties of each authority are as follows:

Council of Agriculture (COA): guides and helps the farmers (Agriculture and Food Agency and Agricultural Research Institute), livestock farmer (Bureau of Animal and Plant Health Inspection and Quarantine and Livestock Research Institute) and fishermen (Fisheries Agency and Fisheries Research Institute) utilize innovative technology to cultivate and reduce food loss through better postharvest techniques, storage and transportation condition. The organization chart is shown as Fig.1.

Ministry of Economic Affairs (Industrial Development Bureau, IDB): accelerates industry upgrading and transformation, and provides the financial support (including the food factories). They are now working hard on implementing the "Industry Upgrading and Transformation Action Plan" approved on Oct. 13, 2014 including "revitalizing traditional industries," "consolidating main-strength industries" and "cultivating emerging industries," as well as four main strategies, namely "raising product levels and product added value," "setting up complete

industry supply chain systems," "establishing systems solutions project competency," and "accelerating the development of emerging industries," with an aim of encouraging enterprises to raise the content of the industries toward smart, green, and culture & creativity development. The organization chart is shown as Fig.2.

Ministry of Health and Welfare (Food and Drug Administration, FDA): monitors and regulates the safety and quality of food when they are imported from other countries, processed in the factories and distributed to the retailers (including but not limited to convenience stores, supermarkets and hypermarkets). In order to reach the goal of food waste reduction under the food hygiene, safety and quality situation, FDA has been dedicating to ease the status of food waste in the retailer level by making and harmonizing related policies, guiding the food business operators to follow the principles of Good Hygienic Practice (GHP), encouraging the retailers to utilize the fresh products before expired date as well as they can through simple processing skills and value adding strategies, establishing the bridge between the retailers and food bank and charity organization since 2016. In 2018, FDA dedicates to collecting the related strategies which can add food value and reduce food loss and waste in advanced countries, and promoting these new concepts via briefing meetings, counselling and discussion forum for FBO (at least 30 sessions). The food safety management chart in Taiwan is shown as Fig.3.

The competent authorities work closely and collaboratively to enhance the food chain value and reduce food loss and waste.

The enterprise that has successful food value chain approach---Carrefour

Meanwhile, many enterprises try to form a cross-industry alliance which will speed up innovation on food value chain spontaneously. For example, a famous Taiwan snack manufacturer established in 1968 tried to combine rice powder harvested locally and excess production fruits like bananas into brand new season limited products.

In addition, a global hypermarket enterprise in Taiwan also makes efforts to add the value of food and reduce food waste simultaneously.

The profile and the enterprise, nature of the business activity, core products and services and the food value chain approach

Carrefour was founded in 1959 in France, where its first hypermarket was opened in 1963. As the leading retail group in the world, Carrefour is the largest hypermarket enterprise in France, other European countries and Taiwan. Carrefour has opened more than 100 stores across Taiwan in multiple forms, including hypermarkets, supermarkets and online shops. There's no doubt that Carrefour has the advantage of distribution channel, and they want to do more. By establishing Carrefour Cultural and Educational Foundation, Carrefour has been a successful model to combine social enterprise, retailer and charity

organization with reduction of food waste.

Many fruits might be thrown away because they were overripe or “ugly”, and sometime just simply because their shapes couldn’t meet the requirements of the business operators. However, they would still be edible. In the same time, the climate change has influenced the crop yield significantly in the past ten years. When the crops were experiencing bumper harvests, these surplus food stocks were unable to enter the distribution channels owing to poor infrastructure. It happens all the time. In 2017, dragon fruits, pineapples and bananas yielded an unusually productive harvest. Carrefour worked with a social enterprise called “Buy NearBy”, purchased the ugly pineapples directly from at least 10 farmers, and collected dragon fruits and bananas whose shapes against specification from CAS (Certified Agricultural Standards) fresh fruit cutting plant. These edible 720 kilograms fruits were then processed in the HACCP (Hazard Analysis Critical Control Point) food factory, and resulted in 12,000 pieces “O’Gaspi ugly fruit sherbet” with 60% fruit flesh (shown as Fig. 4). It was truly a unique product since it was the first time to connect the upstream (cultivation), midstream (procession) and downstream (retailer) of food value chain together and form the “Food waste reduction block chain” (shown as Fig. 5). Based on the concept of circular economics, every sherbet reduced 48% food waste. Moreover, the meaningful product had different contribution in the aspect of charity. Carrefour Cultural and Educational Foundation donated 2 New Taiwan dollars (about US0.06) to Yunlin (a rural county in southern Taiwan) food bank to provide supplies to those who need them whenever each sherbet (29 New Taiwan Dollar, about US 0.96) was sold.

From July 2018, according to the previously successful cooperation mode, Carrefour and “Buy NearBy” together have presented the magic effects of the block chain on the carrots. They routinely purchase the carrots with the “ugly” appearance and the shapes against the specification, cut them into two brand new ready to eat products including smaller sized (5 centimeters length) product and sliced product which were named “Baby Carrot” (shown as Fig. 6). Carrefour distributes the new products via its channels, and promotes them on its social media (e.g. fan page and group of Facebook). Meanwhile, since the products provide a more convenient way for those who take care of babies under two to prepare solid food, Carrefour also highlights the advantage on its advertisement.

The main challenges encountered for marketing of the food products and how those were resolved

Generally speaking, the distribution channel has been the most difficult and money consuming part for the new product to be known by the consumers in the traditional food supply chain. That’s why Carrefour plays such an important role on the successful model. It is a wholesaler itself, and no doubt, has plentiful channels including over 100 stores, social media (e.g. Facebook) and APP to reach the consumers as well as they can. A good beginning is half the battle. That

turns the cooperation mode oriented from the downstream of food supply chain a wonderful start. In other words, integration of production and marketing operations and appropriate marketing events are the two key strategies. Besides, the charitable image that consuming the products could also help those who in need truly encourages the public to buy the limited products.



Fig.1 The organization chart of Council of Agriculture (adapted from official website).



Organization of IDB

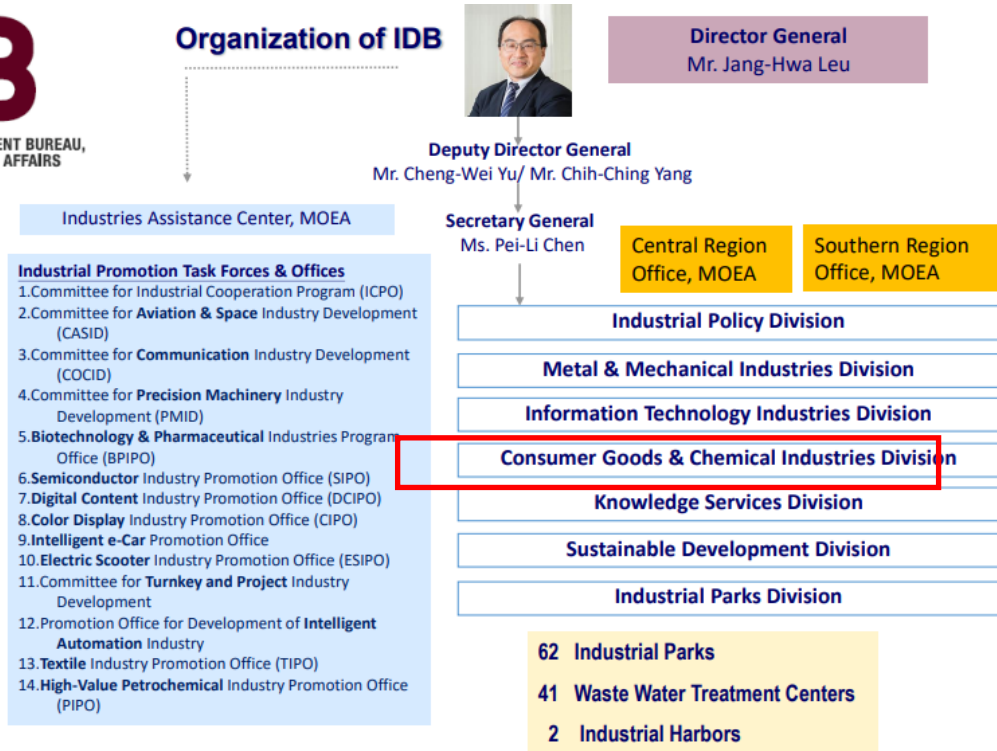


Fig.2 The organization chart of Industrial Development Bureau (adapted from official website).

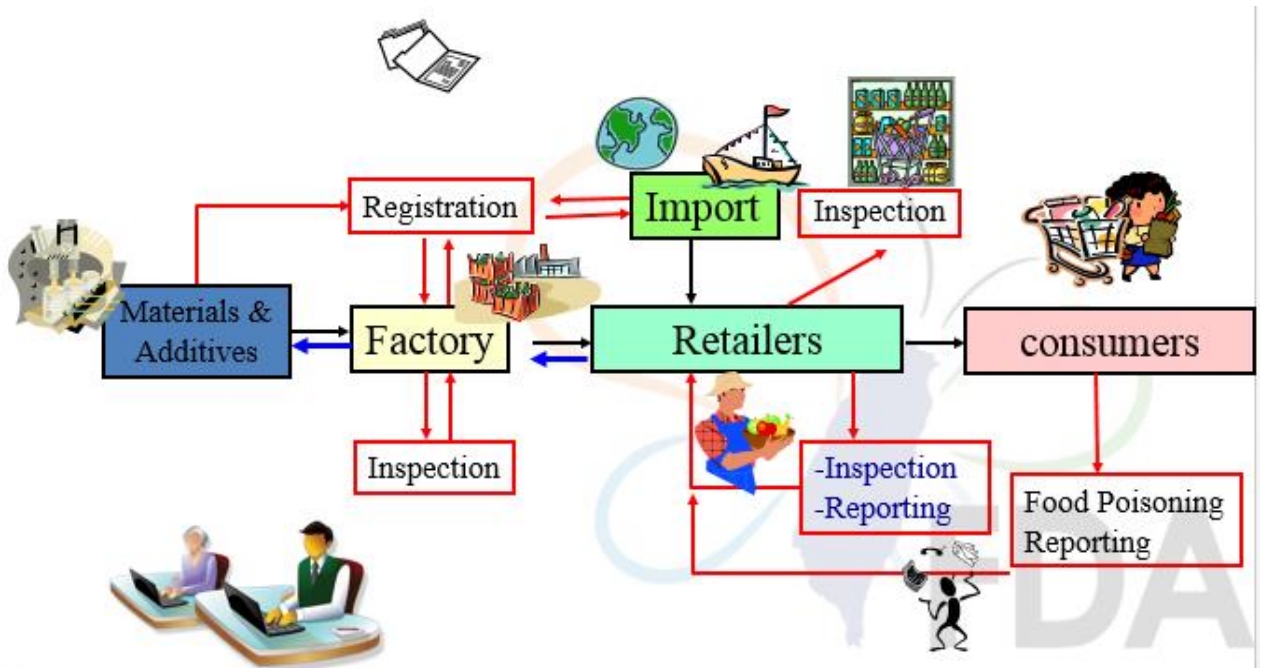


Fig.3 The food safety management chart in Taiwan.



Fig.4 The ugly fruit sherbet products.



Fig.5 The advertisement of ugly fruit sherbet products.



Fig.6 The baby carrot products.

Country Paper

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Section chief
Food Safety Division



1 <http://www.fda.gov.tw/>

Outline

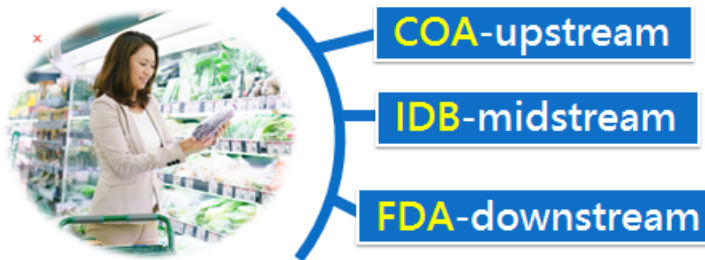
- Overview
- The successful food value chain approach—Carrefour

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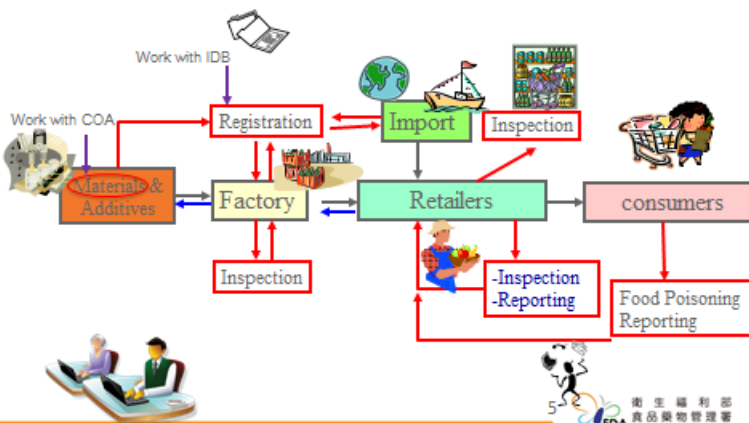
Overview

3 

Competent Authorities



Food Safety Management



The successful food value chain approach—Carrefour

Carrefour

- Founded in 1959 in France, where its first hypermarket was opened in 1963
- The largest hypermarket enterprise in France, other European countries and Taiwan
- More than 100 stores across Taiwan in multiple forms, including hypermarkets, supermarkets and online shops



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Cross-Industry Alliance



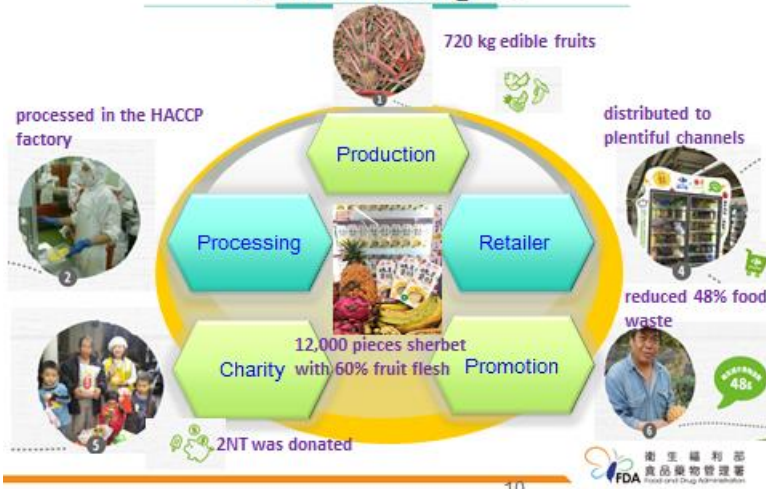
8

Ugly Fruit Sherbet



9

The Strategies



Food and Drug Administration Ministry of Health and Welfare

Thanks for
your attention !

FDA 衛生福利部
食品藥物管理署
Food and Drug Administration

12 <http://www.fda.gov.tw/>

三、小組討論簡報



Lessons Learnt from Sessions....

Day-1

- Concept of Food Value Chain
- Various stakeholders involved at each segment of Value Chain
- Importance of business development services in food value chain development (Frito-Lay's example)
- Food Safety standards and certifications as a tool for value addition for competitive advantage
- Public private partnerships (PPP)
- Market for Poores (M4P)
- Contract farming model

Lessons Learnt from Sessions....

Day-2

- Application of technologies is crucial not only at the production stage but also at processing, packaging and marketing
- Commercialisation of new products
- Public private producers partnerships (4Ps)
- New Product development should be consumer oriented (Market Intelligence)

Lessons Learnt from the Site Visit



Kirirom Food Production Co. Ltd.

Best Practices

- Company has applied the Integrated Value Chain
- They have wide and unique product range
- Being complemented by various customers for the unique taste of their products (no added flavours and no colouring agents)
- Have different products for different customer segments
- Adopting organic farming techniques and sustainable processing technologies
- Have a well developed environmental policy
- Very active in CSR activities
- Provide accommodation and meals to the employees
- Take care of recreation facilities and well being of employees

Opportunities

- Relationship with Suppliers for sustainable growth
- Improvement of productivity and quality of raw material
- Standardisation of Production and processing techniques
- IPR protections for better commercialisation
- Waste Management (composting)

Recommendations

- Strengthen relationships with Suppliers through social activities
(important stakeholder in the value chain)
- Support from Govt./NGO for financial assistance
- Adoption of GAP
- Technical assistance
- Active IPR policy with the support of experts and govt. departments
- Adopt Lean Practices with the support of APO (projects)/ any other agency

四、會議及工廠參訪剪影



圖一、研習會開幕儀式合影。



圖二、筆者報告我國食品衛生安全管理製度。



圖三、我國代表與三位講師合影。



圖四、Kirirom 工廠參訪合影。



圖五、工廠員工洗手圖。



圖六、廁所前洗手處備有洗手乳、擦手紙及垃圾桶。



圖七、筆者參與小組討論。



圖八、筆者代表小組上台報告學習心得。



圖九、我國代表報告獲得第一名，第二名至第五名依序為斐濟、印度、寮國及馬來西亞。頒獎儀式並與講師合影。



圖十、筆者獲頒結業證書。



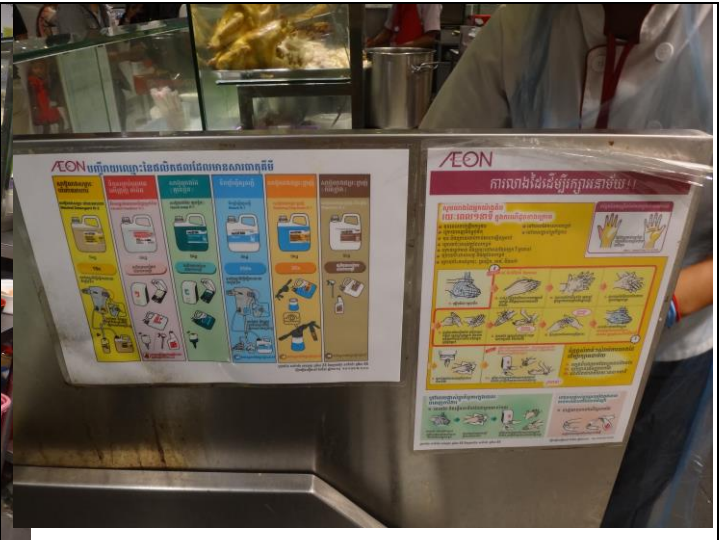
圖十一、我國代表與講師合影。



圖十二、閉幕儀式大合照。



圖十三、柬埔寨金邊市之美食街餐飲場所亦於作業場所一隅設置洗手設備，備有洗手乳、消毒液、擦手紙、洗手刷及洗手圖示。



圖十四、餐飲場所之洗手圖示。