









Workshop Report



Regional Workshop on

The Labor Market Needs in IR 4.0 Era between the Private Sector and Technical Education Teachers in the ASEAN Region

July 14-15, 2022 Preah Sihanouk Province, Cambodia

CONTENT

Tentative Agenda	1
Opening Session	
Session I : ASEAN Responsiveness to Digital Transformation: Perspectives of Industries	7
Session II : Issues and Challenges of Skills Development in Southeast Asia: School Perspectives Session III : Issues and Challenges of Skill Teaching in Southeast Asia: School Perspectives	
Session IV : Technical Education Development in Southeast Asia: Perspectives of Policy Makers	10
Networking Session	11
Closing Session	13
Field Visits	14
Conclusion	16
List of Participants	17

Wed. 13 July 2022 Arrival of National and International Delegates

Thursday 14 July 2022

08:00-09:00 Participant Registration

OPENING CEREMONY

09:00-09:30 Cambodia National Anthem

ASEAN Anthem and SEAMEO Colors

Welcome Remarks: **Dr. Songheang Ai**, Director of SEAMEO TED

Opening Remarks: **Prof. Dr. Hidetoshi Nishimura**, President of ERIA

Opening Remarks: **H.E Dr. Hang Chuon Naron,** Minister of Education, Youth and Sport,

the Kingdom of Cambodia

Group Photo

Emcee: Ms. Kim Mey Chou, Officer of Ministry of Education, Youth and Sport

09:30-09:50 Coffee / Tea Break

SESSION I

ASEAN Responsiveness to Digital Transformation: Perspectives of Industries

From the perspectives of Industries, digital education is disruptive everywhere during the pandemic enabling learners and teachers to involve it as a transformative learning approach in cooperation with industries. To share resources, schools and industries can work cooperatively to be responsive and complemented for productivity maximization. Therefore, industries play key roles in enriching digital transformation.

09:50-11:10 (12 minutes each)

- Human Resources Development and Management: Present and Future by Mr. Yasuhiro Emi, Vice President of Administrative & Corporate Division, DENSO CAMBODIA
- Industry World Demands To Face Rapid Changes In The Era of The Industrial Revolution 4.0 Regarding Labor by Mr. Rochmad Yuwono, HR GA and Purchasing General Manager, PT Mesin Isuzu, Indonesia
- Workforce Demands for IR 4.0 Skills by Mr. Alex Dos, Director of Daily Operations, ENTEREX (CAMBODIA) INDUSTRY. CO., LTD, Cambodia
- Growing together with SEAMEO TED: New TVET Teacher Training Program for Blended and Online Learning for TED school Network by Dr. Steven Mckee, President of LABTECH International Co., Ltd, Malaysia
- **ASEAN Responsiveness to Digital Transformation: Perspectives of Industries** by Mr. Lui Lianchi, Deputy General Manager of Sihanouk Special Economic Zone Co., Ltd.
- **Technological Transformation and Skills Needs in Production and Packaging** by Mr. Hym Piseth, Deputy Managing Director (Administration and HR and Commerce), Investco, PPM Enterprise, and Confirel Co., Ltd, Cambodia

Q&A

Moderator: Mr. Ansgar Schaefer, Integrated TVET Expert, SEAMEO Secretariat



SESSION II

Issues and Challenges of Skills Development in Southeast Asia: School Perspectives

A school plays a battle field in developing skills for youth. The core elements of schools are school policies, curriculum and textbooks, management and system, instructors, students, parents and communities, and facilities and infrastructures. From school to school, there is a variety of issues and challenges according to the school context and perspective. Therefore, issues and challenges of skills development for youth capturing the aforementioned core elements are highlighted as follows:

11:10-12:10 (10 minutes each)

- Strategies in Incorporating STEM into TVET to Prepare Students for Ever Changing Job Market by Dr. Sirhajwan Idek, Head of ICT Department and Senior Lecturer of Keningau Vocational College, Malaysia
- Effective Skills Training by Bringing the Clients into the Classroom by Ms. Martalia Lo, Founder and Director, Academy of Careers & Technology, Cambodia
- Machinery Skill Provision and Industrial Matching by Mr. Nguyen Phan Anh Quoc, Rector of Ninh Thuan Vocational College, Vietnam
- Mechatronics Skills Development and Industrial Relation: Dual System SMK SMTI Yogyakarta by Mr. Yahya Farqadain, Senior Teacher SMTI Yogyakarta Vocational High School, Indonesia
- Challenges & Innovative Practices of Skills Development in the School Context by Dr. Josie Teofila N. Quijano, Vocational School Administrator II, Glan School of Arts and Trades, the Philippines
- **Using Analytics to Support Teaching and Learning** by Mr. Swee Soon Yeow, Divisional Director / Examinations, Institute of Technical Education (ITE), Singapore

Q&A

Moderator: **Dr. Meak Chantheng,** Deputy Director, Vocational Orientation Department, **MoEYS**

12:10-13:30

Lunch Break (Independence Hotel)

SESSION III

Issues and Challenges of Skill Teaching in Southeast Asia: Teacher and School Perspectives

Teachers are key catalysts for technical education development. Hand-on skills, content knowledge, pedagogical knowledge and technological knowledge are core elements that teachers should possess to ensure quality training programs. Interestingly, professional commitment and contribution are important for teachers to be considered. Therefore, technical education teachers' capacities can be enhanced through professional development programs in the aforementioned elements.

13:30-14:30 (10 minutes each)

- Skill Provision on Food Production, Packaging and Employment by Ms Nuon Chenda, Vice Principal of François General and Technical High School, Cambodia
- Practicing Vocational Program Curriculum in the IR 4.0 Context and School Good Practices by Mr. Kaprian Gunawan, Senior Teacher of SMK GLOBAL TEKNOLOGI, Indonesia
- Supplying High-Quality Human Resources For Labor Market by Nguyen Tuan Vu, Senior Teacher of Electrical Electronic Faculty, College of Machinery and Irrigation (VCMI), Vietnam
- Practicing Vocational Program Curriculum in the IR 4.0 Context and School Good Practices by Ms.Rosdiana Bakar, Lecturer of Sepang Vocational College, Malaysia
- 5 Shielded Metal Arc Welding(SMAW) Skills for Industry and Employment by Ms. Cynthia B. Llacer, Principal of Palapas National High School Ligao City, the Philippines

Q&A

Mr. Tim Vorn, Head of Research and Development Division, SEAMEO TED

SESSION IV

Technical Education Development in Southeast Asia

Technical education tackles technical and general education at secondary education levels. The curriculum categories academic and vocational subject clusters for student learning. Core subject clusters impart practices and theories ensuring that students get quality skills entering the labor market successfully. The development envisions three unambiguous goals consisting of 1) developing learners for further studies; 2) developing learners for entrepreneurship and self-employed; and 3) developing learners for immediate employment upon graduation. The most important goal is immediate employment to be productive.

14:30-15:30 (10 minutes each)

- RE-Imaging Technical Education Curriculum at Technical-Vocational High Schools by Dr. Meak Chantheng, Deputy Director of Vocational Orientation Department, MoEYS, Cambodia
- Human Capital Investment in TVET in Southeast Asia: Case of Indonesia by Mr. Sulistio Mukti Cahyono, Deputy Director for Alignment of Vocational Education and Industry, Ministry of Education, Culture, Research and Technology, Indonesia
- Industrial Promotion Policy and Skills Development for Youths: Case of Thailand by Dr. Rangsan Thepmondhri, Policy and Strategy Division, Bureau of Policy and Planning, OVEC, Thailand
- TVET Skill Development for Industrial Employment Readiness: The Policies and Best Practices in Malaysia by Prof. Dr. Ramlee Mustapha, Professor and TVET Expert, Sultan Idris Education University, Malaysia
- Reskilling and Upskilling Programs in the Digital Era by H.E Thorng Samon,
 Deputy Director General of DGTVET, Ministry of Labor and Vocational Training (MoLVT),
 Cambodia

Q & A

Moderator: Mr. Ith Vuthy, Deputy Director, SEAMEO CECCEP

15:30-15:40

SESSION V

15:40-17:10

Coffee / Tea Break

Networking Session Instruction

This networking session will allow all participants from both private companies and schools/colleges to have interactive discussion and understanding one another in the workshop. Participants are also expected to gain their social well-being and extend partnership for joint activities in the future. This network session will allow them to interact and deeply understand their interesting topics after each speakers' presentation as well.

The session is expected to run as follows:

- Six public and private company representatives will provide some brief and in-dept information of their organizations, products, skills, employment opportunities and other relevant issues at the prepared table to the visiting participants. One company will be given one table.
- There will be 19 schools/colleges and universities are from 7 ASEAN countries including Cambodia, Indonesia, Malaysia, the Philippines, Thailand, Singapore and Vietnam. Schools/colleges from each country are invited to sit together at their own country table. They can show their school marketing at the given space. The organizing team will assist in case more tables and space for school are needed;
- · Participants will have to move around to discuss and interact with each table of company representatives;
- Each group is required to visit and discuss with public and private sector for 10 minutes, then rotate to other table;
- All parties should prepare their own network tools for the network session (business profile, brochure, leaflet, name card...);
- · Each group will have one note taker to summarize the outcome of discussion;
- Moderator (s) will present the overall outcome of the discussion.

Moderators: Mr. Khat Prumsochetra, Deputy Director, SEAMEO TED

Mr. Phann Sophea, Chief-ASEAN Office, Department of Information and ASEAN Affairs, **MoEYS**

3

17:10-17:30	Closing Ceremony

- Wrap-up by Mr. Suong Saruon, Head of Public Relations and Partnership, SEAMEO TED
- Closing Remarks: **H.E Dr. Dy Khamboly,** SOCA Chair for ASEAN and SEAMEO High Official for Cambodia
- SEAMEO Song
- Filling out Evaluation Forms for Certificates

Emcee: **Miss Hun Sothkimheang**, Officer of Research and Development Division, **SEAMEO TED**

18:00-20:00 Dinner Reception at Independence Hotel

Friday 15 July 2022

	Field Visit
08:00-08:30	Gathering at the Palm Bay Resort
08:30-11:00	Field visit to Sihanoukville Autonomous Port in Preah Sihanouk Province
11:00-12:30	Lunch break at the Palm Bay Resort
13:30-17:00	Field visit to Special Economic Zone (SEZ) in Preah Sihanouk Province
	Ruito Wire & Cable Co.,LtdEnterex (Cambodia) Industrial Co., Ltd
18:00-20:00	Dinner at The Palm Bay Resort

Saturday 16 July 2022

07:00-17:00 Departure of Delegates

Regional Workshop on "The Labor Market Needs in IR 4.0 Era between the Private Sectors and Technical Education Teachers in the ASEAN Region"

July 14-15, 2022, Preah Sihanouk Province, Cambodia

INTRODUCTION

Education is the backbone of economic development, in which the participation of stakeholders is indispensable to achieve educational goals for all. Stakeholders driving the education sector are schools, government and the private sector, which work together in order to complement each other, meaning that the government supports and facilitates the process of producing and training schools and producing workforce. In the context of ASEAN, skills development is necessary to prepare labor forces, especially youths in an uncertainty of the future. Skills development should aim at addressing future challenges such as the digital transformation, the transformation of labor markets, social inequality and a lack of social cohesion as well as environmental degradation and climate change.

SEAMEO Regional Centre for Technical Education Development(SEAMEO TED), with supports from Economic Research Institute for ASEAN and East Asia (ERIA) and the Ministry of Education, Youth and Sport (MoEYS) of Cambodia, organized the Awareness-Raising Workshop on the Labor Market Needs in IR 4.0 Era Between the Private Sector and Technical Education Teachers in the ASEAN Region. The workshop was participated by education specialists and experts of private sector from ASEAN countries to share their best practices of demand and supply sides and pave the way how to promote skills for ASEAN youth in achieving the theme on ASEAN A.C.T: Addressing Challenges Together for Cambodia ASEAN Chairmanship 2022.

This workshop was attended by 103 delegates as technical education teachers, vocational and technical high school management, industrial representatives, policy makers, TVET experts, and supporting administrators. Among them, 29 participants were from 7 ASEAN countries including Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam. There are 4 presentation sessions consisting of 22 speakers raising 22 different topics. Day 1 ended with a networking session embracing 13 partners/booths. Among them, 6 from industries and 7 from technical and vocational high schools/colleges/ministries/universities. Day 2 was proceeded with field visits to industries to experience the current practices of IR 4.0 skills.

Opening Session



H.E Dr. Hang Chuon Naron, Minister of Education, Youth and Sport, Cambodia



Prof. Hidetoshi Nishimura, ERIA President



Dr. Songheang Ai, Director, SEAMEO TED

The Opening Session was presided over by H.E. Dr. Hang Chuon Naron, Minister of Education, Youth and Sport, Cambodia and ASCC Council Chair and Prof. Hidetoshi Nishimura, ERIA president. The workshop commenced with welcome remarks by Dr. Songheang Ai, director of SEAMEO TED. He highlighted the objectives and outlines of the workshop and appreciation to the participants, particularly ERIA and MoEYS management for contributing to the workshop success. In his opening remarks, Prof. Hidetoshi Nishimura briefly shared the background of ERIA, which is an international organization established by 16 leaders at the East Asia summit in 2007 to support the ASEAN Chair and East Asia Summit through economic research and policy analysis. He raised the resilient role of ERIA to support Cambodia's ASEAN Chairmanship 2022 for 15 projects through a MoU with ASEAN Social Cultural Community. He also addressed the important roles of Technological advancement and introduction of Artificial Intelligence(AI) for academic and work settings. In his opening remarks, H.E. Dr. Hang Chuon Naron addressed the active role of Cambodia as a chair of ASEAN, how education changes through digitalization for economic development, and problem solving and comprehensive perspectives of integration, innovation, inclusiveness and sustainability. Dr. Naron pointed out the urgent need of regional cooperation and partnership between private sector and academics for future development of the region.



Workshop Delegation on Stage



103 Workshop Participants

Session I:

ASEAN Responsiveness to Digital Transformation: Perspectives of Industries

Session I was shared by 6 eminent speakers from industries in the ASEAN Region. The whole session mainly covered key points as follows:

Workforce demands different types of workers such as (1) great energy; (2) high mentality; (3) dare to be different and unique; (4) have high, curiosity of information stamina;



(5) excellent team work; (6) visionary; and (7) think globally

- The benefits and environment for workers such as competitive wages, safe working condition, equal opportunities for all workers, free accommodation on sites including utilities, cafeteria on sites, free uniforms, break time in the morning and afternoon. In addition, the government labor laws and regulations have to be adhesive
- Some challenges of digital modes of learning and teaching on TVET consist of lacking rigorous supports for teachers and digital tools. Interactive contents that use technologies to transform teaching and learning processes with IR 4.0 platforms might respond to the challenges that we face but we need to put them into the hands of teachers and students. Effective and easy-to-use learning platforms with contents make it easier for teachers to teach, engage students, and improve their understandings of the subject matters, theories and applications



Smart factories using smart technologies for improving the digital transformation, the need for public-private partnership between education institutions and private companies to sharpen the youth's skill supplies and narrow the skill gaps.













6 Speakers' Presentations for Session I

Session II:

<u>Issues and Challenges of Skills Development in Southeast Asia:</u> School Perspectives

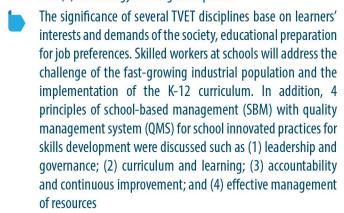
Session II was presented by the school expert and management level from 6 ASEAN countries including Malaysia, Cambodia, Indonesia, Vietnam, the Philippines, and Singapore. They covered the key points as follows:

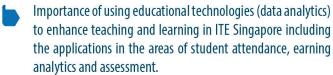
The incorporated roles and importance of science, technologies, engineering, mathematics, arts, innovation, and entrepreneurship



known as (STEM, STEAM and SEAMIE) in preparing student readiness with skill sets in emerging technologies in the emerging changes of real world

- Student-run designed studios in actualizing Project Based Learning (PBL) by bringing real-industry clients, which allow for the development of innovation, creativity, problem solving skills, critical thinking, and management skills
- The needs for better partnership between industries and colleges/schools responding to the needs of enterprises proposing solutions to implement effective training activities
- The concept and perception between industries and schools by paying more attentions to the alignment of supplies and demands such as lessons learnt on Link and match 8+1 alignment for (1) curriculum development and alignment; (2) project-based learning; (3) enhancing the resilient roles of instructors; (4) field work practice; (5) competency certificate; and (6) technology training and updates

















6 Speakers' Presentations for Session II

Session III:

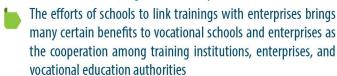
<u>Issues and Challenges of Skill Teaching in Southeast Asia:</u> Teacher and School Perspectives

Session III was shared by teachers, and school principals from 5 ASEAN countries including Cambodia, Indonesia, Vietnam, Malaysia and the Philippines. The whole session covered the main points as follows:

- Impressive school profiles and schools' skill provision on food production and packing (Production Worker and Production, Product Packager, Package Designer)
- SESSION III I Issues and Challenges of Skill Teaching in Southeast Asia:

 Teacher and School Perspectives

 We have been been and several properties and the second perspectives of the second perspective of the second perspectiv
- Dual system's success factors of the vocational program covering (1) partnership with industries; (2) curriculum development; (3) instructional system; (4) teachers and instructors' motivation and support mechanisms; (5) practical equipment and facilities; and (6) graduate absorption



- Colleges' cooperation with industries a way by giving students courses or knowledge-sharing activities regarding the industries and technologies involved
- Shielded Metal Arc Welding (SMAW) Skills for Industries and Employment including a mock environment given the available school facilities, materials, and equipment. The arrangement was made between the school management and parents/guardians.











5 Speakers' Presentations for Session III

Session IV:

<u>Technical Education Development in Southeast Asia:</u> Perspectives of Policy Makers

Session IV was shared by policy makers and experts from 4 ASEAN countries including Indonesia, Cambodia, Thailand and Malaysia. The whole session discussed the following key points:

Cambodia puts emphasis on the importance of providing and promoting the excellence in education for international and relevant standards acceptable for



industries. Design and developing technical education curriculum for upper secondary schools in Cambodia is a steppingstone moving forward digitally

- Indonesia puts emphasis on vocational development and transformation improving the quality of learning facilities and infrastructure in accordance with the requirement of industries, school linkage with industries, promoting entrepreneurship and government intervention
- Thailand 's 6 strategies enhance TVET for 1) stability; (2) competitiveness; (3) human resource development and promotion; (4) opportunity and equity; (5) prosperity and quality of life based on friendly environment; and (6) adjustment and development of public sector.
- For Malaysia, job displacement in ASEAN countries, issues and challenges for TVET governance, future ASEAN TVET agenda, and characteristics of innovation for IR 4.0 skills were raised
- Cambodia needs to assess the employment readiness of TVET graduates; the significance of collaboration between TVET institutions and industries in order to support the development of relevant knowledge and skills.











5 Speakers' Presentations for Session IV

Networking Session

The networking session was undertaken for all participants including industrial representatives, schools/colleges, and policy makers to enable interactive discussions and understanding one another for the skill demands and supplies. It was also arranged for participants to extend partnership for future joint activities/programs. Technical education teachers can interact and communicate directly with industrial experts/presenters for industrial skills and knowledge acquisition. Questions and answers and experience sharing can be possible socially.

How was the Networking Session conducted?

- 13 desks/booths were provided to the participating institutions. Among them, 6 from industries and 7 from relevant ministries and schools
- The 6 industries include: (1) DENSO CAMBODIA; (2) PT Mesin Isuzu Indonesia; (3) ENTEREX (CAMBODIA) INDUSTRY. CO., LTD; (4) LABTECH International CO., LTD, Malaysia; (5) Preah Sihanouk Special Economic Zone Co., Ltd, Cambodia; and (6) Confirel Co., Ltd, Cambodia
- 7 ministries/schools from 19 participating schools/colleges/universities/ministries from 7 ASEAN countries were arranged as follows:
 - Cambodia: (1) Academy of Careers & Technology; (2) St Francois General and Technical High School; Department of Vocational Orientation, Ministry of Education Youth and Sport (MoEYS); and other 3 Schools
 - Indonesia: (1) SMK GLOBAL TEKNOLOGI; (2) SMTI Yogyakarta Vocational High School; (3) SMK 2 LPPM RI MAJALAYA; and (4) Alignment of Vocational Education and Industry, Ministry of Education, Culture, Research and Technology, Indonesia
 - Malaysia: (1) Keningau Vocational College; (2) Sepang Vocational College, (3) KOLEJ VOKASIONAL SUNGAL BULOH; and (4) Department of Engineering Technology, Faculty of Technical and Vocational Education Sultan Idris Education Universityak
 - Philippines: (1) Glan School of Arts and Trades; and (2) PALAPAS NATIONAL HIGH SCHOOL PHILIPPINES, City Schools Division of Tanauan City and Tanauan School of Fisheries
 - Singapore: Institute of Technical Education (ITE)
 - Thailand: Office of the Vocational Education Commission (OVEC)
 - Vietnam: (1) Electronic Faculty, College of Machinery and Irrigation (VCMI); and (2) Ninh Thuan Vocational College
- In every booth desk, the participating companies and schools/colleges/universities prepared marketing materials such as company profiles, product samples, I-stand banner, X-stand banner, souvenirs, leaflets, posters, brochures, and others materials presenting to participants
- The networking session was conducted for one hour through discussion and interaction that the participants have chance to move around from the booth desk to tooth desk for information and idea exchange.

Outcome of the Networking Session

During the networking session, one note taker was assigned to take note and summarize the session outcome for each discussion. As a result, there were remarkable outcomes shared during the session as follows:

Current status of school development and skills needs were discussed between PT Mesin Isuzu Indonesia to find out the way forwards for cooperation

- Future cooperation such as teacher and student exchange programs, study visits, joint skills competitions, scholarship, and student internship programs was raised by Preah Sihanouk Special Economic Zone and participants
- MoU for student internship program, specially between schools and industries from Indonesia
- The proposed cooperation and knowledge sharing forums were raised by industries (Labtech International Co.,Ltd, Malaysia and PT Mesin Isuzu Indonesia) on engine assembling process, convert to the 3D video
- Future cooperation on teacher capacity building was proposed by Directorate General of TVET in Cambodia and Labtech international Co.,Ltd, Malaysia
- Future cooperation between Preah Sihanouk Special Economic Zone and Bavet General and Technical High School, Preah Norodom Sihamoni General and Technical High School on capacity building programs on new technologies for technical teachers, Chinese and English language training programs for students, exchange programs for students and teachers, internship for students, scholarship for graduate students, Job opportunities for students
- Expanding equity and access to learn computer science, building teacher capacities to teach STEM throughout K-12, English language skill development through experiential learning, preparing students for 21st century knowledge economy and jobs through hands-on learning and introducing a series of VEX platforms. Grounded in a continuity of resources, curriculum, and materials, teachers and students can build upon their STEM learning from year to year, which was discussed among schools from Cambodia and other schools
- Future collaboration on exchange program for teachers and students for relevant experiences from each other between schools from the Philippines (Glan School of Arts and Trades, and Palapas National High School) and the representative of Ministry of Labor and Vocational Training (Cambodia), St Francois General and Technical High School, Electronic Faculty, College of Machinery and Irrigation, Office of The Vocational Education Commission, Sepang Vocational College, Institute of Technical Education
- Curriculum matching on Accounting program, diploma programs for culinary arts, fashion design, information technology, automotive technologies and online training course were also raised.

Activities Photos of the Networking Session



Labtech International Co.Ltd Discussed with Ministry Labor and Vocational Training, Cambodia



Discussion between Enterex Industry Co., Ltd and SEAMEO Secretariat



Discussion between Bavet General and Technical High School, Cambodia and Preah Sihanouk Special Economic Zone



Discussion between the management of general and technical high schools, Cambodia and St. Francoise General and Technical High School



Discussion between Thai participants and Schools in Malaysia



Discussion between ITE, Singapore and School Management in Cambodia



Discussion between Schools in Philippines and Participants



Discussion between Schools in Cambodia and Confirel Co.Ltd

Closing Session

The closing session was made by **H.E Dr. Dy Khamboly**, SOCA Chair for ASEAN and SEAMEO High Official for Cambodia. He raised the important role of Cambodia as the ASEAN Chair in 2022 in solving the ongoing challenges of ASEAN members state stabilizing the ASEAN region with people-and-people orientation. He expressed high appreciation to all speakers for the contribution to the workshop as a fruitful outcome through their presentations and knowledge and experience sharing and SEAMEO TED's team for the arrangement of the workshop. It is a steppingstone for Cambodia as one of the side events to celebrate Cambodia ASEAN Chairmanship 2022.



H.E Dr. Dy Khamboly Delivering his Closing Remarks

Field Visits

On 15 July, 2022, three enterprises in Preah Sihanouk Province namely Sihanoukville Autonomous Port and Special Economic Zones (SEZ): Ruito Wire & Cable Co.,Ltd and Enterex (Cambodia) Industrial Co., Ltd were chosen to be the field visit sites in which their productions are mainly operated by machines. The field visits are the way to prove the presentation by industrial representatives in Cambodia. To realize the skills, interaction and communication between the participants and industrial managers and technicians were undertaken. Three factories/enterprises were selected for the study visits in order to experience hand-on activities and practical skills on technical education.

Purposes of Field Visits

The field visits were attended by 90 technical education teachers, general and technical high school management, ASEAN experts, and policymakers from ASEAN countries aiming to:

- harness hand-on skills of technical education management and teachers;
- harmonize skill supply and demand between technical education institutions and private sectors;
- find out emerging challenges and opportunities of factories/enterprises and technical education institutions for cooperation;
- network technical education institutions with industrial factories/enterprises on future activities;
- create a forum to share best practices, lessons-leant, experiences and knowledge of industrial skills and expertise.

Sihanoukville Autonomous Port

The field visit was conducted at Sihanoukville Autonomous Port which was led by Dr. Songheang Ai, Centre of SEAMEO TED and welcomed by Ms Sokunthea Chey, Director of Marketing Department. After an orientation session by Ms Sokunthea Chey, participants raised the questions regarding skill needs, employee statistics, types of jobs, job opportunities, how to develop employees' skills such as upskilling and reskilling programs. In response, each line manager and supervisor answered the questions accordingly. In this regard, Dr Songheang Ai highly appreciated Sihanoukville Autonomous Port Management Team for allowing participants to pay a study visit here to learn more about skill needs and hands-on skills. All participants were guided by technicians and operators to observe the navigational services, cargo handling and passenger services, infrastructure & facilities, general cargo & roco ship, storage facilities, etc.



Visiting Sihanoukville Autonomous Port

Ruito Wire & Cable Co., Ltd

In the afternoon, a field visit was conducted at Ruito Wire & Cable Co., Ltd which is located in Sihanoukville Special Economic Zone. All participants were oriented by technicians and operators prior to the site visit on overview of the factory, skill needs, job opportunities, the number of the employees, safety protocols. Then, questions and answers simultaneously approached. During the visit, the experts of company guided and explained participants the production and sale of wires, capacities of production machines and quality testing equipment. The factory has a total of 400 workers working with a monthly production capacity of more than 200 cabinets.



Visiting Ruito Wire & Cable Co., Ltd

Enterex (Cambodia) Industrial Co., Ltd

Enterex (Cambodia) Industrial Co., Ltd is located in Preah Sihanoukville Special Economy Zone. This site visit was guided by Mr. Alex Dos, Director of Daily Operations Department focusing on radiators, condensers, intercoolers and evaporators for cars and for industrial purposes ranging from molds to manufacturing products and packaging. All participants have learnt and experienced the real production, skill needs, job opportunities, emerging challenges, sources of market demands and fringe benefits for employees and workers.



Visiting Enterex (Cambodia) Industrial Co., Ltd

Conclusion

The Regional Workshop on "The Labor Market Needs in IR 4.0 Era between the Private Sector and Technical Education Teachers in the ASEAN Region" has assured the important role of Ministry of Education, Youth and Sport of Cambodia as the Chairman of ASEAN 2022 in addressing challenges of skills mismatches and skills gaps for the region, particularly at vocational and technical high schools. By doing so, engaging industries into the training programs is a key catalyst in enhancing skill demands. To enhance this, SEAMEO TED plays an active role in coordinating and administering technical education at vocational and technical high schools by establishing SEA vocational-technical high school/college network consisting of 77 vocational-technical high school members from the 11 SEAMEO member countries.

The ultimate goals of the workshop can be met by strengthening closer relationship between schools and industries under an effective coordination from supervising ministries/institutions. Industries and schools communicated and interacted productively for skills enhancement for students. Technical education teachers and school management experiences hand-on skills at the factories by interrogating industrial technicians during the study visit. Finally, job opportunities, study visits, student internship programs, teacher and student exchange programs, and other joint forums are proposed.

List of Participants

No.	Name	Position	Countries	Status
1	H.E. Dr. Hang Chuon Naron	Minister of Education Youth and Sport(MoEYS)	Cambodia	Delegate and Speake
2	Prof. Dr. Hidetoshi	President-Economic Research Institute for ASEAN and East Asia	Japan	Delegate and Speake
	Nishimura	(ERIA)		,
3	H.E. Kim Sethany	Secreatary of State, MoEYS	Cambodia	Delegate
4	H.E Sok Keang	Secreatary of State, Ministry of Environment	Cambodia	Delegate
5	H.E. Ms. Khun Rachana	Under Secretary of State, MoEYS		
6	H.E Puth Sorithy	Under Secretary of State, Ministry of Environment	Cambodia	Delegate
7	H.E.Mang Sineth	Deputy Governor of Preah Sihanouk Province	Cambodia	Delegate
8	Mr. Fusanori Iwasaki	Director for Policy Research of ERIA	Japan	Delegate
9	H.E. Dr. Dy Khamboly	SEAMEO High Official and Deputy Director General of Policy and Planning, MoEYS, Cambodia	Cambodia	Delegate & Speaker
10	H.E. Thang Samon	Deputy Director General of DGTVET, Ministry of Labor and Vocational Training (MOLVT), Cambodia	Cambodia	Delegate & Speaker
11	Dr. Songheang Ai	Director of SEAMEO TED	Cambodia	Delegate & Speaker
12	H.E. Tep Pyorith	Director General of Amin and Finance, MoEYS	Cambodia	Quest of Honor
13	H.E.Sroy Socheath	Director General of Youth, MoEYS	Cambodia	Quest of Honor
14	H.E. Han Divin	Director of Administration Department, MoEYS	Cambodia	Quest of Honor
15	Mr.Khem Pisoth	Deputy Director of MoLVT, Cambodia	Cambodia	Quest of Honor
16	Mrs.Ouch Sophea	Director of Department of Education Youth and Sport-Preah Sihanouk Province	Cambodia	Quest of Honor
17	Noviawaty	Secretary of ERIA President	Japan	Delegate
18	Mr.Yasuhiro Emi	Vice President of Administrative & Corporate Division, DENSO	Cambodia	
18	Mr. Yasuniro Emi	CAMBODIA	Cambodia	Speaker
19	Dr. Rochmad Yuwono	HR GA and Purchasing General Manager, PT Mesin Isuzu, Indonesia	Indonesia	Speaker
20	Mr. Alex Dos	Director of Daily Operations, ENTEREX (CAMBODIA) INDUSTRY. CO., LTD, Cambodia	Cambodia	Speaker
21	Dr. Steven Mckee	President of LABTECH International CO., LTD.	MALAYSIA	Speaker
22	Mr. Lui Lianchi	Deputy General Manager of Sihanouk Special Economic Zone Co., Ltd.	Cambodia	Speaker
23	Mr. Hym Piseth	Deputy Managing Director (Administration and HR and Commerce), Investco, PPM, and Confirel Co., Ltd Cambodia	Cambodia	Speaker
24	Dr. Mohd Sirhajwan Bin	Head of ICT Department and Senior Lecturer of Keningau	MALAYSIA	Speaker
-21-10	Idek	Vocational College		
25	Mr. Kaprian Gunawan	Senior Teacher of SMK GLOBAL TEKNOLOGI, Indonesia	Indonesia	Speaker
26	Ms. Martalia Lo	Founder and Director, Academy of Careers & Technology, Cambodia	Cambodia	Speaker
27	Dr.Nguyen Phan Anh Quoc	Rector of Ninh Thuan Vocational College	Vietnam	Speaker
		Vocational School Administrator II, Glan School of Arts and		
28	Dr. Josie Teofila N. Quijano	Trades, the Philippines	Philippines	Speaker
29	Mr. Swee Soon Yeow	Divisional Director/Examinations Institute of Technical Education, SINGAPORE	Singapore	Speaker
30	Ms. Nuon Chenda	Vice-Pricinapl of St Francois General and Technical High School	Cambodia	Speaker
31	Mr.Nguyen Tuan Vu	Lecturer of Electrical – Electronic Faculty College of Machinery and Irrigation (VCMI), Vietnam	Vietnam	Speaker
32	Mr. Yahya Farqadain	Senior Teacher SMTI Yogyakarta Vocational High School	Indonesia	Speaker
33	Ms.Rosdiana Bakar	Lecturer of Sepang Vocational College	MALAYSIA	Speaker
34	Ms. Cynthia B. Llacer	Principal of PALAPAS NATIONAL HIGH SCHOOL	Philippines	Speaker
35	Dr. Meak Chantheng	Deputy Director of Vocational Orientation Department, MoEYS	Cambodia	Speaker & Moderator
36	Mr. Sulistio Mukti Cahyono	Deputy Director for Alignment of Vocational Education and Industry, Ministry of Education, Culture, Research and	Indonesia	Speaker
37	Dr.Rangsan Thepmondhri	Technology, Indonesia Director of Policy and Strategy Division, Bureau of Policy and Planning, The Office of the Vocational Education Commission	Thailand	Speaker
38	Prof. Dr. Ramlee Mustapha	Professor in TVET, Department of Engineering Technology, Sultan Idris Education University	MALAYSIA	Speaker
39	Mr.Suong Saruon	Head of Public Relations and Partnership-SEAMEO TED	Cambodia	Speaker
40	Mr. Ith Vuthy	Deputy Director of CECCEP	Indonesia	Moderator
41	Mr. Ansgar Schaefer	Integrated TVET Expert, SEAMEO Secretariat	Thailand	Moderator
42	Mr.Khat Prom Sochetra	Deputy Director-SEAMEO TED	Cambodia	Moderator
43	Mr. Phann Sophea	Offcie Chief of Information and ASEAN Department	Cambodia	Moderator
44	Mr. Tim Vorn	Head of Research and Development-SEAMEO TED	Cambodia	Moderator
45	Mr.Pho Mara	Head of Training and Technical Education-SEAMEO TED	Cambodia	Moderator
46	Dr. Brad Ker	General Manager of Labtech Academy	Indonesia	Participant
47	Mr. SHAHRIR SHAFIEK	MARKETING MANAGER (ASIA)	Indonesia	Participant
48	Mr.Mr.Suematsu	DENSO CAMBODIA	Cambodia	Participant
49	Mr.PHOEM Saben	Sale Supervisor,nvestco, PPM, and Confirel Co., Ltd Cambodia	Cambodia	Participant
50	Ms.Ing Sovannaroth	Sihaknouk ville Special Economic zone	Cambodia	Participant
	Mr.Shahrir Shafiek	Manager of LABTECH International Co., Ltd	Indonesia	Participant

No.	Name	Position	Countries	Status
2	Mr.LI CHUANBIN	Sihaknouk ville Institute of Technology	Cambodia	Participant
3	Mr.JING WEI Du	Sihaknouk ville Special Economic zone	Cambodia	Participant
54	Mr.Yana Manjuan	Enterex and Wire Co., Ltd	Cambodia	Participant
55	Mr. Mr. Suematsu	DENSO CAMBODIA	Cambodia	Participant
56	Dr. Shirely SIMAN	City Schools Division of Tanauan City	Philippines	Participant
57	Dr. SYAHRIR	DIRECTOR of SMKN 5 BANJARMASIN	Indonesia	Participant
58	Mr. Usman. M.Pd	Vice Principal SMK 2 LPPM RI MAJALAYA	Indonesia	Participant
59	Ms.Intan Keristina Binti Mohd Yusop	KOLEJ VOKASIONAL SUNGAI BULOH	MALAYSIA	Participant
60	Mr. Koy Chumnith	Director of Institute of Community Development	Cambodia	Participant
61	Mr. Lim Chantha	Principal of Hun Sen Chumpuvorn General Education and Technical High School	Cambodia	Participant
62	Mr. Yun Sam Ath	Principal of St Francois Technical High School	Cambodia	Participant
63	Mr. Lem Vinh	Vice-Principal of Chea Sim Theng Meanchey General and Technical High School	Cambodia	Participant
64	Mr. KHANN PROEK	Vice-Principal of ROTA Technical High School	Cambodia	Participant
65	Mr. Pol Savuth	Principal of Bavet General and Technical High School	Cambodia	Participant
66	Mr. Heng Socheth	Principal of Preah Bat Sihamoni High School	Cambodia	Participant
67	Mr. Sat Ponleu	Vice-Principal of Institute of Techical and Prodfessional Training	Cambodia	Participant
68	Mr. Sam Teara	Principal of GENERAL AND TECHNICAL EDUCATION DEMONSTRATION HIGH SCHOOL OF KAMPONG CHHEUTEAL	Cambodia	Participant
69	Mr. Ry Sarom	Vice-Principal of Preah Norodorm Sihamoni General and Techical High School	Cambodia	Participant
70	Mr. An Limkheng	Principal of Pouk General and Technical High School	Cambodia	Participant
71	Pho Bunthoeun	Principal of Techo Sen Koh Kong General and Technical High School	Cambodia	Participant
72	Ms. SOUK MALIS	Vice-Principal of Hun Sen Chumpuvorn General Education and Technical High School	Cambodia	Participant
73	Mr. Sean Sophal	Vice-Principal of Hun Sen Peamchikorng High School	Cambodia	Participant
74	Mr. PIN VANNAK	Vice-Principal of Banteaychhma General Education and Technical High School	Cambodia	Participant
75	Ms.Chendamony Ek	ACT Founder and General Manager	Cambodia	Participant
76	Mr. THOEUN PUNLORK	Teacher of Pouk General and Technical High School	Cambodia	Participant
77	Mr. OEM SINATH	Teacher of Preah Reach Samphea General and Technical High School	Cambodia	Participant
78	Mr. MANN RAKSA	Teacher of DONBOSCO Poipet Private General and Technical High School	Cambodia	Participant
79	Mr. PRUM THEARA	Teacher of Bavet General and Technical High School	Cambodia	Participant
80	Mr. Keo Sophorn	Teacher of Samdach Aka Moha Sena Padei Techo Hun Sen – ROTA General and Technical High School Khsach Kandal	Cambodia	Participant
81	Mr. RIEN VUTHA	Teacher of Hun Sen Chumpuvorn General Education and Technical High School	Cambodia	Participant
82	Mr. SRENG THAVARIN	Teacher of Hun Sen Peamchikorng High School	Cambodia	Participant
83	Mr. Kong Nak	Vice-Offcie Chief of Information and ASEAN Department	Cambodia	Participant
84	Mr. Reach Mony	Office Chief-GD-Admin-MoEYS	Cambodia	Participant
85	Mr.Chhun Senghak	MoEYS	Cambodia	Participant
86	Mr. Tim Rady	MoEYS	Cambodia	Participant
87	Ms. Hun Sothkimheang	MoEYS	Cambodia	Participant
88	Mr.CHEA PUTHIH	MoEYS	Cambodia	Participant
89	Mr. Voeun Ravy	MoEYS	Cambodia	Participant
90				
90	Mr.Nhel Sothy Ms.Om Vandene	MoEYS MoEYS	Cambodia Cambodia	Participant
		MoEYS		Participant
92	Mr. Lors Salorn	MoEYS	Cambodia	Participant
93	Mr. In Pau	MoEYS	Cambodia	Participant
04	Ms. Cheng Chantola	SEAMEO TED	Cambodia	Facilitator
95	Mr. Rien Chamrong	SEAMEO TED	Cambodia	Facilitator
96	Ms.Chea Sienghor	SEAMEO TED	Cambodia	Facilitator
97	Mr.Suos Sovannarin	SEAMEO TED	Cambodia	Facilitator
98	Mr.PHOU VIREAK	SEAMEO TED	Cambodia	Facilitator
99	Ms.San Kimsean	SEAMEO TED	Cambodia	Facilitator
100	Mr.Tuon Sokly	SEAMEO TED	Cambodia	Facilitator
101	Ms. Kim Meychu	SEAMEO TED	Cambodia	Facilitator
102	Ms.CHIN THEARY	SEAMEO TED	Cambodia	Facilitator
103	Mr.Heng Samnang	SEAMEO TED	Cambodia	Facilitator





"Public-Private Partnership in Technical and Vocational Education is very important to better skills development, and strengthen industrial relations, and active engagement of both private stakeholders and public institutions towards an effective human resources development."

By SEAMEO TED

www.seameoted.org

Email: song.heang@yahoo.com