

## One-Health Concept is a New Knowledge for Cambodian TVET Stakeholders

### Executive Summary

Safety and hygiene are important for TVET people. One-Health concepts cover safety and hygienic factors consisting of animals, environment, and plants that might affect human health condition. Most TVET people are neglected about it. The study aims to (1) explore the satisfaction level prior to project implementation of One-Health concepts; (2) explore the perception of One-Health concepts among TVET stakeholders; (3) identify the improvement factors for next workshop. In response to three research objectives, a mixed research method was employed. 96 participants (n=96) were accessed via a google survey form for their completion. For the quantitative method, means of each questionnaire item were measured among six items, with a five-point rating scale. The results highlighted that 85% of participants were satisfied with the One-Health project implementation. One-Health concepts

are new Knowledge for TVET stakeholders (M=4.3). Teachers/administrators rated Content and Relevance higher than students (F=4.2, p=0.02<0.05). New Knowledge and Skill Enhancement were correlated (r=0.76, p<.0.001). Students requested Khmer materials ( $\bar{X}$ =8.3, p<0.004). For qualitative feedback for improvement, the thematic analysis was applied with open-ended questions to participants. For example, 28% of participants' comments were about language barriers. 22% of participants' comments were about logistics arrangements. 15% of participants' comments were about content depth. The results implied that more One-Health activities should be enlarged to other TVET-crowded areas to gain more perception of One-Health

### I. Introduction



One Health is an integrated, cross-disciplinary approach that aims to improve health outcomes through collaboration across human, animals, plants, and environmental sectors at local, national, regional, and global levels. While the concept itself is not new, its significance has grown in recent decades due to shifts in the dynamics between humans, animals, plants, and environment. Expanding human populations have increased proximity to both wild and domestic animals, facilitating disease transmission. Furthermore, climate change, deforestation, land degradation and intensive farming practices have disrupted ecosystems, creating new opportunities for disease spread. The global movement of people, animals, and animal products has further accelerated the transmission of diseases across borders.

On May 16, 2025, there was an online kickoff workshop, accommodating 96 participants, such as students, teachers, and school management for a purpose to get buy-in from stakeholders before starting the project. Demographic Information among them, 50 participants (52.1%) were male, 46 participants (47.9%) were female. 56 participants (58.3%) were students. 19 participants (19.8%) were teachers. 15 participants (15.6%) were school management and administrators. 6 participants (6.3%) were others. For their educational

levels, 45 participants (46.9%) have completed primary education, 11 participants (11.5%) have completed high schools, 28 participants (29.2%) have completed bachelor's degrees, 9 participants (9.4%) have completed master's or Ph. D levels, and 3 participants (3.1%) have completed vocational education levels. Satisfaction Survey Six-item satisfaction survey questionnaires were distributed to 96 participants after the workshop ended to measure their satisfaction levels. The questionnaires were rated with five-point Likert type Scale consisting of (1) for Very Poor; (2) for Poor; (3) for Neutral; (4) for Good; and (5) for Every Good. For example, item 1 is Content Clarity. Item 2 is New Knowledge. Item 3 is Relevance. Item 4 is Skill Enhancement. Item 5 is Presenter Clarity. Item 6 is Time Management.

The study aims to (1) explore the satisfaction level prior to project implementation of One-Health concepts; (2) explore the perception of One-Health concepts among TVET stakeholders; (3) identify the improvement factors for next workshop. In response to the above objectives, a mixed research method was employed.

### II. Quantitative Results



Table 1. Satisfaction Levels of Participants

Item	Mean	Percentage/Rate
Content Clarity	4.2	
New Knowledge	4.3	
Relevance	4.1	
Skill Enhancement	4.2	
Presenter Clarity and Knowledge of Project Activities	4.4	
Time Management	4.3	
<b>Total</b>	<b>4.25</b>	<b>85%</b>

The results were shown in Table 1. The satisfaction levels regarding the project implementation were 85%.

Objective 1: the satisfaction level prior to project implementation of One-Health concepts was 85%.

Objective 2: the perception of One-Health concepts among TVET stakeholders was new (M=4.3).

If we test whether teachers/administrators rated Content and Relevance higher than students. One-Way Anova (ANOVA) was applied. The results showed that teachers/administrators rated Content and Relevance higher than students with F=4.2, p=0.02<0.05, statically significant.

If we test the relationship level between New Knowledge and Skill Enhancement, Pearson's correlation coefficient was measured with the significance level. Pearson's correlation was  $r=0.76$ ,  $p<0.001$ , statically significant. This means that New Knowledge and Skill Enhancement were correlated.

If we test whether students request Khmer-language materials, Chi-Squared Test were applied. The Chi-Squared Test resulted in  $\chi^2=8.3$ ,  $p<0.004$ . This means that it was statistically significant. Therefore, students really requested more materials in Khmer language.

### III. Qualitative Feedback

At the end of the survey questionnaire, the feedback space was provided as open-ended questions like suggestions for more improvement. The thematic analysis was employed with three top suggestions as follows:

- Language Barriers (28% of comments): Student 17 stressed that "Use more Khmer in slides". Student 37 noted that "Translators needed for English terms".
- Logistics Arrangement (22% of comments): Student 16 asserted that "Prefer in-person workshops". Student 18 claimed that "Internet was unstable during Zoom".
- Content Depth (15% of comments): Administrator 45 raised that "More hands-on activities". Administrator 32 argued that "Extend workshop duration".

Objective 3: identify improvement factors for next workshop. 28% of participants' comments were about language barriers. 22% of participants' comments were about logistics arrangements. 15% of participants' comments were about content depth.

### IV. Policy Implication

Following up with the satisfaction level (85%), the project can be implemented for phase II. However, some points for consideration are as follows:

- More activities of One-Health activities should be enhanced and enlarged to a broader area of TVET to gain their in-depth perception. One-Health activities can be integrated into TVET people's daily lives and into the teachers' instructional plans. The materials and documents should be in Khmer language to capture their interests.
- In-depth activities of One-Health concepts should be applied as role play, drama, demonstration, and case studies for students, teachers, and community members to enhance their learning.

### V. Conclusion

One-Health concepts can be important for TVET stakeholders as they might be the precautionary measure for them to be preventive and safety from any forms of infectious diseases during operating machines. One-Health concepts can be scaled up countrywide for the benefits of TVET students, teachers, school management, and community members as preventive approaches. If they can be applied, the people will live in a healthy way enabling them to work and run businesses well for the country's development.

Southeast Asian Ministers of Education Organization Regional Center for Technical Education Development (SEAMEO TED) was established in 2017 in the Kingdom of Cambodia to support SEAMEO Priority Area No. 4 (Promoting Technical and Vocational Education and Training). SEAMEO TED is one of the 26 SEAMEO regional centres, caters for public relations and partnership, research and development, and technical education and training for technical education teachers, TVET school management, and supporting administrators at technical-vocational high schools/colleges/polytechnics in the SEAMEO country region.

[www.seameoted.org](http://www.seameoted.org) 

#80, Preah Norodom Blvd, Phnom Penh, Kingdom of Cambodia  
Email: [song.heang@yahoo.com](mailto:song.heang@yahoo.com)

Sponsored by

