

INTERNATIONAL SHORT COURSE ON ECOSYSTEM HEALTH (THOHUN-TELI)

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Due to the increase in the number of emerging pandemic threats, students (future One Health workforce) must be experienced in detection, surveillance, control and response of emerging infectious diseases (EIDs) under real circumstances. In 2016, an International Short Course on Ecosystem Health or THOHUN-TELI was developed to integrate One Health approach into field- and community-based multidisciplinary teaching curriculum of students to prepare them to respond to EID outbreaks.

Students of Clinical Tropical Medicine, Nursing and Public Health (Fig 1), had an opportunity to be exposed to complex health problems, infectious diseases and related public health problems, which originate from interconnections among humans, animals and the environment in the One Health village of Ban Mo Tao, Kanchanaburi province (June 5-23, 2017). At the village students used questionnaires and interviews (Fig 2) and found that there were three major problems villagers faced, namely, human - elephant conflict, water- and food-borne diseases and vector-borne diseases.

At the village site (June 7, 2017), students were given tasks to identify, investigate and come up with practical solutions to manage the infectious diseases and other health problems. As a hallmark of the short course, multidisciplinary teams of students, facilitators and instructors worked together to apply knowledge from their own disciplines and collaborative problem-solving skills.

Samples, such as water (Fig 3) and mosquitoes (Fig 4), were collected and analyzed by the students in the laboratory (Fig 5) for presence of hazardous biological organisms, such as coliforms in food and water, mosquito vectors of malaria and dengue, and pathogens of humans and domestic animals.

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Fig 1 – Multidisciplinary teams of students, facilitators and instructors preparing to visit One Health village of Ban Mo Tao, Kanchanaburi province.



Fig 2 – Typical interview session conducted by students with resident of One Health village of Ban Mo Tao, Kanchanaburi province.

With inputs from the concept of Social Innovation (Fig 6), which focuses attention on ideas and solutions creating social values, students then worked together (Fig 7) to develop a plan for communication to villagers the possible risks of contracting infectious diseases along with proposed solutions and/or suggestions to the identified problems.

Objective 2: Education & Pre-Service Training of One Health Students (Future Workforce)



Fig 3 – Example of water collection site at One Health village of Ban Mo Tao, Kanchanaburi province.



Fig 4 – Identification of mosquitoes collected at One Health village of Ban Mo Tao, Kanchanaburi province.

Objective 2: Education & Pre-Service Training of One Health Students (Future Workforce)



Fig 7 – Group of students working together using Social Innovation to find solutions to mitigate risks facing residents of One Health village of Ban Mo Tao, Kanchanaburi province.

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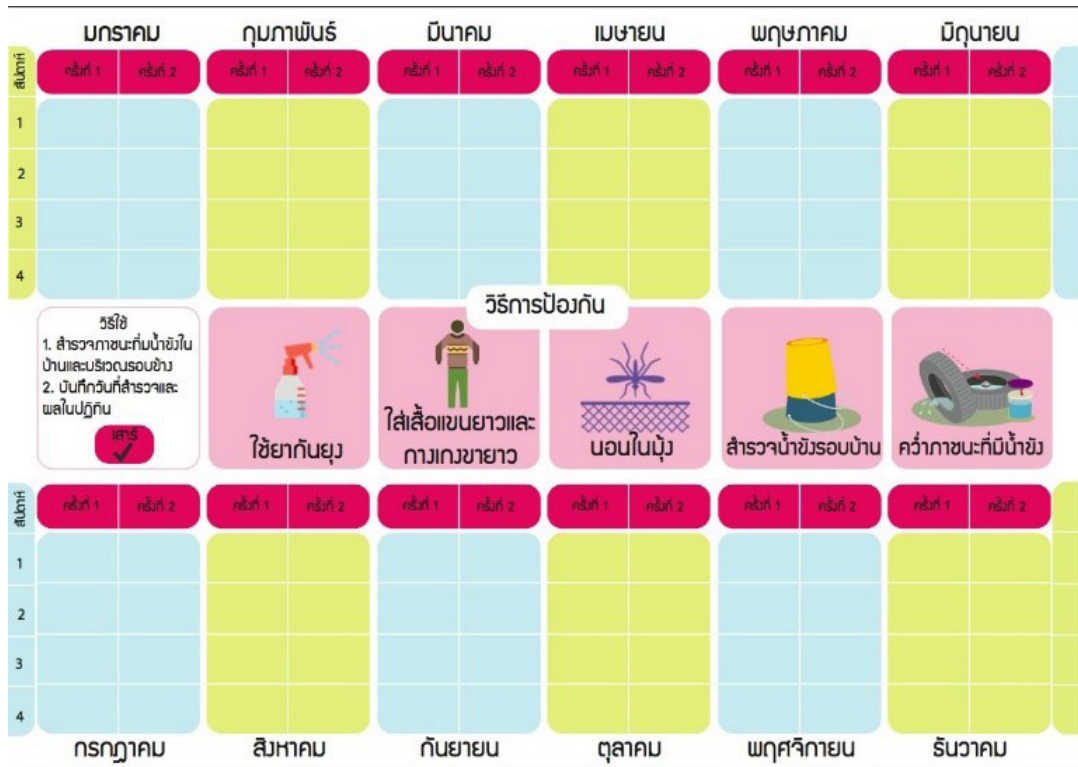


Fig 8 – Solutions for human - elephant conflict, water-borne diseases and vector - borne diseases proposed by participants of THOHUN TELI 2017.