Context and Rationale
NIHE was established in 1942 and has been known as a reputable research, training and public health service institution in Viet Nam. NIHE focuses on prevention and control of common and epidemic diseases at the national level, with implementing scientific researches in epidemiology, medical microbiology, immunology, molecular biology. The Institute also works on the development of new vaccines, diagnostic test kits and biological products for human use. With the mission of building human resource capacity in Vietnam, NIHE employs over 300 regular staff with one third holding a postgraduate qualification in different capacities to deliver different technological and education and training programs in its fourteen fields in public health to provincial and district levels. There are three types of courses: undergraduate, postgraduate and short courses with a wide range of methods applying to accommodate health staff varied need. Each year, there are approximately 400 health workers participating in a variety of courses who are undergone training and retraining in different technological and knowledge and skill development. It is expected to grow by 20% in the number of health staff being training and retraining for the next few years.

Cholera is an important public health problem in Vietnam which had to face with large cholera outbreaks in recent years. The causative agents (Vibrio cholerae O1 and O139) continue to thrive wherever crowded housing conditions exist and water and sanitation facilities are suboptimal. One of the critical issues is the training of health professionals to prevent and control Cholera in Vietnam: scarcity of training capacities, limited budget for training, and high turnover of the health workforce. NIHE is willing to explore new training methods to train higher number of health workers. Blended training method is considered as one solution to address this challenge.

Therefore, NIHE and the Agence de Médecine Préventive (AMP) decided to partner for building the capacity of the Institute to provide Blended training on Cholera Prevention and Control. NIHE and AMP have operated in the framework of the International Pasteur Institute Network. AMP has already developed several blended training in the health sector, and likewise, strengthened the capacity of national institutions in multimedia instructional design in developing countries. So success factors and lessons learnt are well known to tailor-made this project in accordance with the NIHE’s requirements for sustainability and national ownership.

This project was made possible thanks to the strong commitment of the NIHE, the technical support of the Agence de Médecine Préventive (AMP), and the financial support from the World Bank.

Objectives
The project aimed to promote the application of blended training methodology in NIHE’s training programs, which ultimately contribute to improved prevention, investigation and control of Cholera outbreak in Vietnam. Specific objectives are the following:

• To build the capacity of the NIHE in designing and delivering blended learning programs to entities within the Preventive Medicine System in Vietnam;
• To develop and implement the blended training in Cholera surveillance and control at regional, provincial, and district levels for 30 health professional – on the pilot basis, and to draw lessons to form the final learning material set.
• To integrate Information and Communication Technologies to reinforce communication, learning activities and resources in Cholera prevention and control to match the needs of health professionals at district level.
• To strengthen partnership of NIHE with other institutes in the Preventive Medicine system of Vietnam.

Beneficiaries
• 10 NIHE’s trainers: a dedicated blended training of trainers (ToT) has been set up to empower the NIHE’s trainers to develop blended training. NIHE’s trainers were trained and coached to develop and implement the blended training on Cholera prevention and control.
• 30 Health staff in charge of Cholera Disease surveillance, control, and prevention at district level. The blended training on Cholera combines a Face-to-face training course, a serious game CD-Rom, and e-coaching through a learning blog.
Key Components

The project focused on 2 levels of learning activities:

- Training of trainers in NIHE
- Training of health professionals in 4 Provinces and 4 Districts

Key Achievements

1. Improving capacities of Cholera experts and trainers in Blended Training

The ToT facilitated by AMP is a key activity of the project and has contributed to build the capacity of the NIHE to develop its blended training programs. The TOT has focused on the use of ICT for learning and training, the blended training approach & tools, instructional design, and the role of a blended trainer. The ToT session lasted 4 months with:

- face to face training (3 days + 2 days)
- on the job training
- e-coaching

2. Designing and developing a blended training package and ICTs tools

- F2F training
- CD-Rom application
- E-coaching and E-learning blog

3. Developing blended training material:
   a. Instructional design
      - List modules de formation – programmation des enseignements
   b. face to face training
   c. CD-Rom Application
   d. Learning blog