



**The 5th Biennial Conference of the International Association
for Ecology and Health**

The Development of Ecohealth & One Health Training Programs in Vietnam

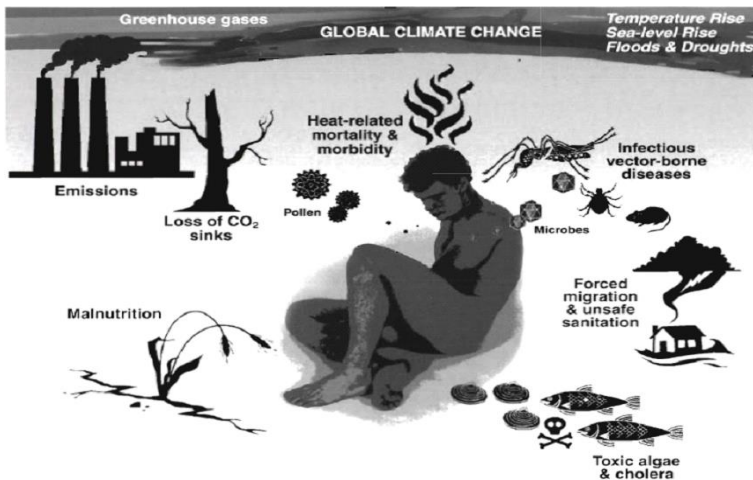
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Outline

- Ecohealth, One Health approaches
- Ecohealth principles and One Health core competencies
- Develop and apply Ecohealth and One Health module
- Elective Ecohealth & One Health module
- Challenges
- The way forward

Ecosystem approach to health

Considers human health is closely linked to animal and environmental health in a socio-ecological interactions. (IDRC, Canada)



<http://www.idrc.ca/EN/Resources/Publications/Pages>

One Health (OH) approach

...encourages the collaborative efforts of multiple disciplines working locally, nationally, and globally, to attain optimal health for human, animals, and our environment. (FAO, OIE & WHO)

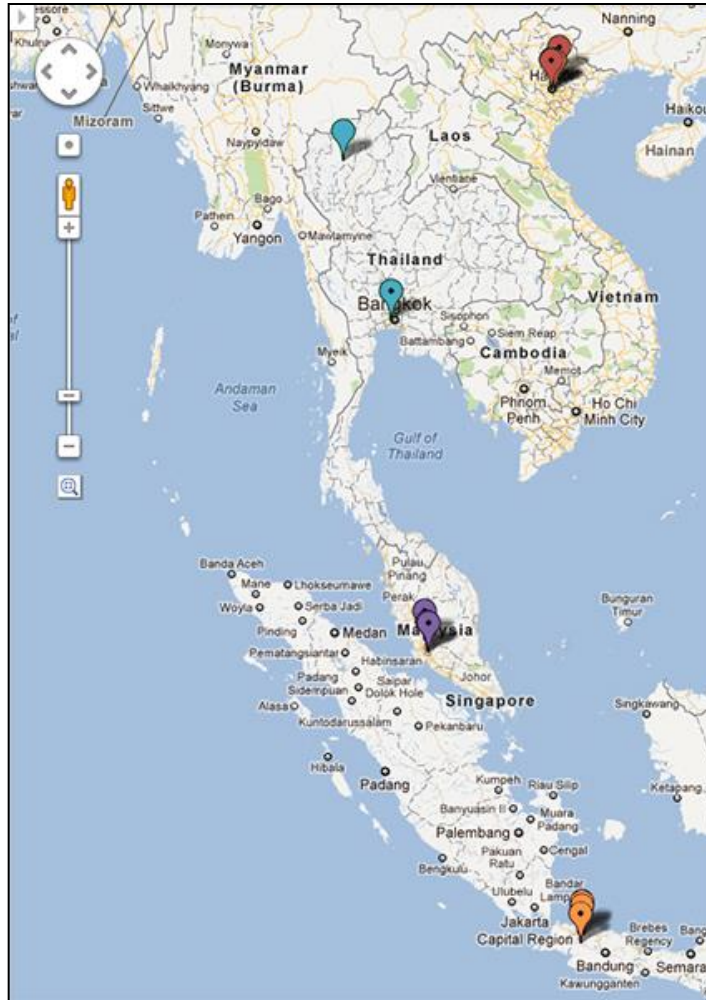


<http://www.cdc.gov/onehealth>

Ecohealth / One Health approaches

- Involve many **different disciplines, working trans-disciplinarily**, to strengthen the ability of professionals to work together and with the communities in addressing complex health problems.
- Professionals from governmental agencies, NGOs and private sector working in outbreak responses usually have **undergone university training programs**.
- Therefore, **embedding the philosophy of Ecohealth/OH in the university training programs** can be an appropriate way to ensure that the approaches will be strongly supported and implemented in the near future.

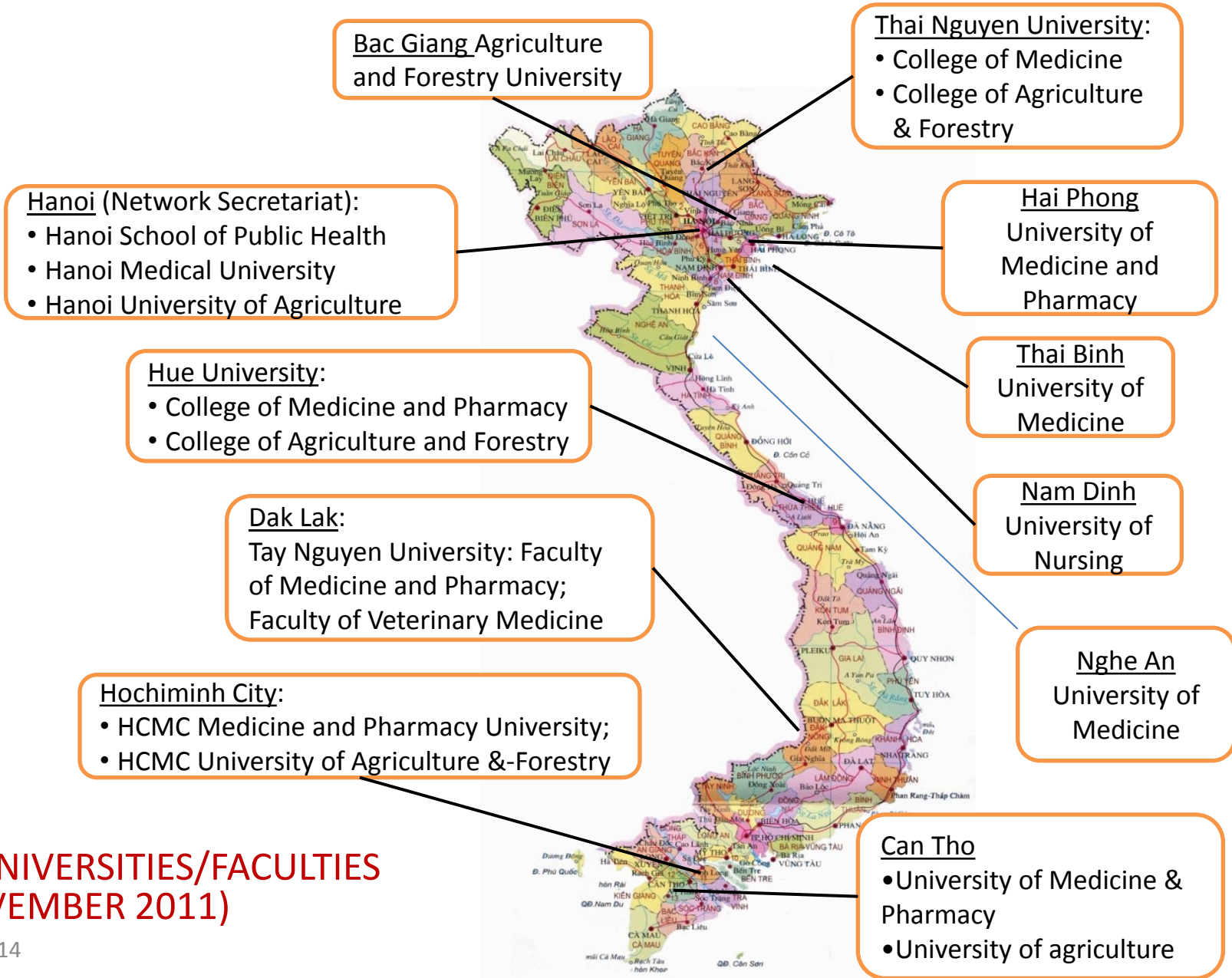
SEAOHUN (South East Asia One Health University Network)



-  Hanoi School of Public Health
-  Hanoi Medical University
-  Hanoi University of Agriculture
-  Chiang Mai University
-  Mahidol University
-  Universiti Kebangsaan Malaysia
-  Universiti Putra Malaysia
-  Institut Pertanian Bogor
-  Universitas Indonesia
-  Universitas Gadjah Mada

Our purpose: to develop the One Health approach through **training activities and research** in the universities and to build a generation of new lecturers and researchers having a full range of **knowledge and skills in practicing One Health.**

VOHUN (Vietnam One Health University Network)



**17 UNIVERSITIES/FACULTIES
(NOVEMBER 2011)**

9/9/2014

Ecohealth principles

(Charron, 2012)

1. System thinking
2. Transdisciplinary
3. Participatory
4. Sustainability
5. Gender and social equity
6. Knowledge to action



9/9/2014

OH core competencies

1. Collaboration and Partnership
2. Communication and Informatics
3. Culture, Beliefs, Values and Ethics
4. Leadership
5. Management
6. Policy, Advocacy and Regulation
7. Systems Thinking

OH technical modules

1. One Health Concepts and Knowledge
2. Fundamentals of Infectious Disease
3. Infectious Disease Management
4. Epidemiology and Risk Analysis
5. Public Health
6. Ecosystem Health
7. Behavior Development
8. One Health Economics

(SEAOHUN, 2013)

Communication **Behavior**
Collaboration **Development**

Policy
Culture

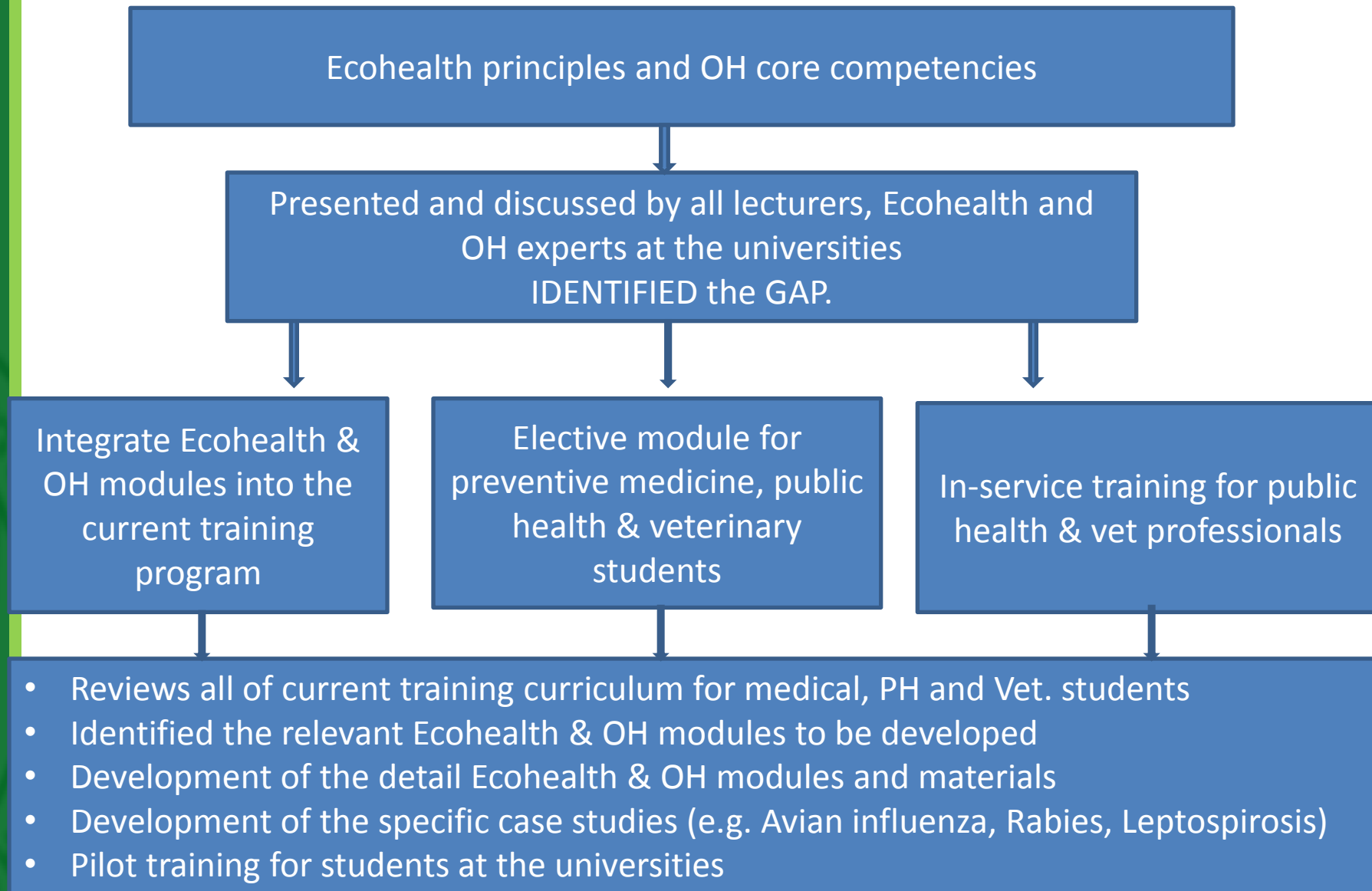
Disease
Management

Leadership

Systems
Thinking

Eco
System
Health

How to develop & apply Ecohealth & OH module?



Elective Ecohealth & OH Module for Preventive Medicine and Public Health Students

- Object: preventive medicine and public health students
- Subject: elective module
- Duration: 60 hours (3 credits)
- Starting time: 2014-2015

Objectives: At the end of module students could:

- Present basic concepts of Ecohealth & One Health
- Analysis issues related to human health, animal health and environmental health in the ecosystem context
- Present the relationship between Ecohealth / One Health and Preventive Medicine and Public Health
- Identify the specific problems related to an Ecosystem and One Health problem.
- Recommend an interdisciplinary solutions to solve the specific health problems (human, animal and environment).

Tentative contents

<i>No</i>	<i>Contents</i>	<i>Modules</i>	<i>Theory /Practice</i>
1	Ecohealth and OH Introduction	Ecohealth and OH concepts and knowledge	4/0
2	Ecohealth principles and core competencies of OH	Ecohealth principles and OH core competencies	4/8
3	Management Infectious diseases and risk analysis	Infectious Disease Management, Epidemiology & Risk Analysis	4/4
4	Environmental health, Ecosystem and OH	Public Health	2/2
5	Food safety, Ecosystem and OH	Public Health	2/2
6	Infectious diseases factors and basic laboratory skills	Fundamental Infectious Disease	4/0
7	Zoonotic diseases	Zoonotic diseases	4/2
8	Economics impacts	Health Economics	4/2
9	Behavior change in Ecohealth & OH	Behavior changes	2/2
10	Practice and recommend multidiscipline solutions for one Ecosystem and OH problem.		0/8
	Total		30/30

Challenges for Ecohealth & One Health

- As an emerging field, Ecohealth & One Health is still **an amorphous entity**.
- Educational & research in Ecohealth & One Health still to be **further defined**.
- Relationship between the different disciplines still to be **further developed**
- Collaborative practices are **still evolving**, at different rates, in varying ways in different parts of the world

Way forward

- With government, academia, and other key partners in defining Ecohealth / One Health workforce needs.
- Assist government ministries to train the current and future Ecohealth / One Health workforce.
- Strengthening faculty capacities for Ecohealth / One Health teaching, research, and community outreach.

ACKNOWLEDGMENT



HỘI Y TẾ CÔNG CỘNG VIỆT NAM
VIETNAM PUBLIC HEALTH ASSOCIATION



Australian Government

Australian Centre for
International Agricultural Research



Canada




USAID
FROM THE AMERICAN PEOPLE

Emerging Pandemic Threats Program

REDICT • RESPOND • PREVENT • IDENTIFY

THANK YOU FOR YOUR ATTENTION!






CENPHER
TRƯỜNG Y HỌC CÔNG CỘNG VÀ HỆ SINH THÁI
UNIVERSITY OF PUBLIC HEALTH AND ECOSYSTEM RESEARCH

CENTER FOR PUBLIC HEALTH AND ECOSYSTEM RESEARCH
at Hanoi School of Public Health

The Center for Public Health and Ecosystem Research (CENPHER) was founded in June 2012 as a research center of Hanoi School of Public Health (HSPH) to conduct and strengthen interdisciplinary research at HSPH.

The center focuses on three main pillars - Research, Training and Services - to develop links between health and the environment at the national and regional level.



MISSION

To study the impact of environmental, ecological, cultural, socio-economic, and demographic factors on health and well-being using the integrative approaches of Ecohealth/One Health. Our special focus is on South East Asia with links to analogous issues in Africa.

GOALS

- From 2013-2020, we will become a:
- Well-established, nationally and regionally recognized center on environmental health and Ecohealth/One Health.
 - National reference center for health risk assessment
 - Resource Center for integrative research and training in environmental health
 - Consultancy resource for policy makers and donors

ACTIVITIES

1. RESEARCH We focus on the link between health and agriculture, infectious and zoonotic diseases, chemical pollution, food safety and nutrition. Research is conducted at different levels of organization (molecular, individual, and population) and from lab to the field. Our ultimate goal is to promote understanding of health issues related to ecosystems and to use research outputs to inform policy to change and improve health of the most vulnerable populations.

• Health Impact Assessment (HIA)



There is a clear need for Health Impact Assessment in SEA where many large infrastructure development projects (dam construction, mining industry) are going on and the capacity in HIA is lacking. Therefore, through research and training with partners we will build capacity and expertise on HIA for the region.

• Ecohealth and One Health



We aim to understand how human health is determined by inter-linkages of human, animal and environmental health in a socio-ecological context using an integrated approach such as Ecohealth or One Health. The context we consider covers environmental pollution, agricultural intensification, urbanization, and environmental sanitation. The primary health issues we focus on are tropical neglected diseases, zoonoses as well as chronic diseases.

• Food Safety and Risk Assessment

Our main food safety issues relate to microbial contamination and toxins, pesticide use, antibiotic resistance, growth promoters. The risk-based approach to food safety management is still not well known and rarely applied in the developing world. Therefore, we generate evidence of how risk assessment can be used for specific cases of food safety management which is important to assist policy makers in using this approach for food safety management.



PARTNERS



KEY DONORS



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