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)*

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.idrc.ca/EN/Resources/Publications/Pages

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)

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.
17 UNIVERSITIES/FACULTIES (NOVEMBER 2011)
Ecohealth principles

*(Charron, 2012)*

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

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 Heath
6. Ecosystem Health
7. Behavior Development
8. One Health Economics

*(SEAOHUN, 2013)*
Know Your OH Domains

- Identify Your Gaps
  - Communication
  - Collaboration
  - Policy
  - Culture
  - Behavior
  - Development
  - Disease Management
  - Leadership
  - Systems Thinking
  - Eco System Health
How to develop & apply Ecohealth & OH module?

- Ecohealth principles and OH core competencies
- Presented and discussed by all lecturers, Ecohealth and OH experts at the universities
- Identified the GAP.
- Integrate Ecohealth & OH modules into the current training program
- Elective module for preventive medicine, public health & veterinary students
- In-service training for public health & vet professionals

- Reviews all of current training curriculum for medical, PH and Vet. students
- Identified the relevant Ecohealth & OH modules to be developed
- Development of the detail Ecohealth & OH modules and materials
- Development of the specific case studies (e.g. Avian influenza, Rabies, Leptospirosis)
- Pilot training for students at the universities
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

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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
THANK YOU FOR YOUR ATTENTION!

M I S S I O N
To study the impact of environmental, socioeconomic, cultural, and demographic factors on health and well-being using the integrative approaches of Ecohelath One Health. Our special focus is on South East Asia with links to analogous issues in Africa.

A C T I V I T I E S
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.

2. 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 Ecohelath One Health. The context we consider cover environmental pollution, agricultural intensification, urbanization, and environmental sanitation. The primary health issues we focus on are tropical neglected diseases, vectors as well as chronic diseases.

3. 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 insisting this approach for food safety management.

G O A L S
From 2013-2020, we will become:

- Well-established, nationally and regionally recognized center on environmental health and Ecohelath 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.

K E Y D O N O R S

Center for Public Health and Ecosystem Research (CENPHR) - Hanoi School of Public Health