

# FBLI: Field Building Leadership Initiative: Advancing Ecohealth in Southeast Asia (2012 – 2016)

### Using an Ecohealth Approach for Better Management of Animal and Human Waste in Hanam Province, Vietnam

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trường đại học <u>Y tế công</u> cộng

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# **Please! see the picture**

Polluted Nhue River influence to Kim Bang, Ha Nam Impact to environment (smell, beauty, contaminated) Impact to human health Impact to economic

Solution:

- Medicine
- Cleaning
- Waste-water treatment (industry, hopital, households, etc.)
- Management, Collaboration between different stakeholders

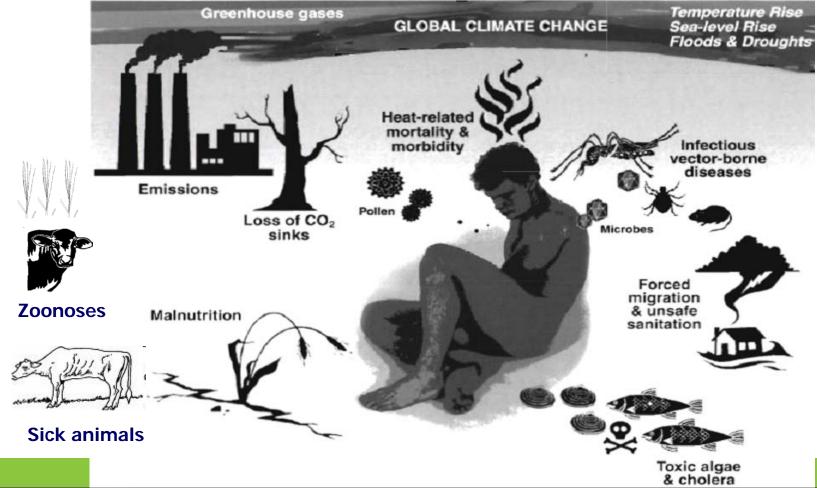
- ....

Complicated issues To be solved by using an interdisciplinary approach

### $\rightarrow$ Ecohealth

## What is EcoHealth?

Ecohealth is the transdisciplinary and systems study of dynamic relationships and interactions among animals, ecosystems and human health.



## Current situation of agricultural intensification

- Agricultural intensification had closed relationship with ecosystem and human health.
- Any innovative changes are needed to develop the agricultural and livestock systems to increase production, at the same time preserving and enhancing natural resources.
- Livestock: advantages and disadvantages
- Livestock waste management, reuse
- Using ecohealth approach to manage animal and human wastes



### Partners and Regional Core Group (RCG)















VETERINARIANS WITHOUT BORDERS VÉTÉRINAIRES SANS FRONTIÈRES

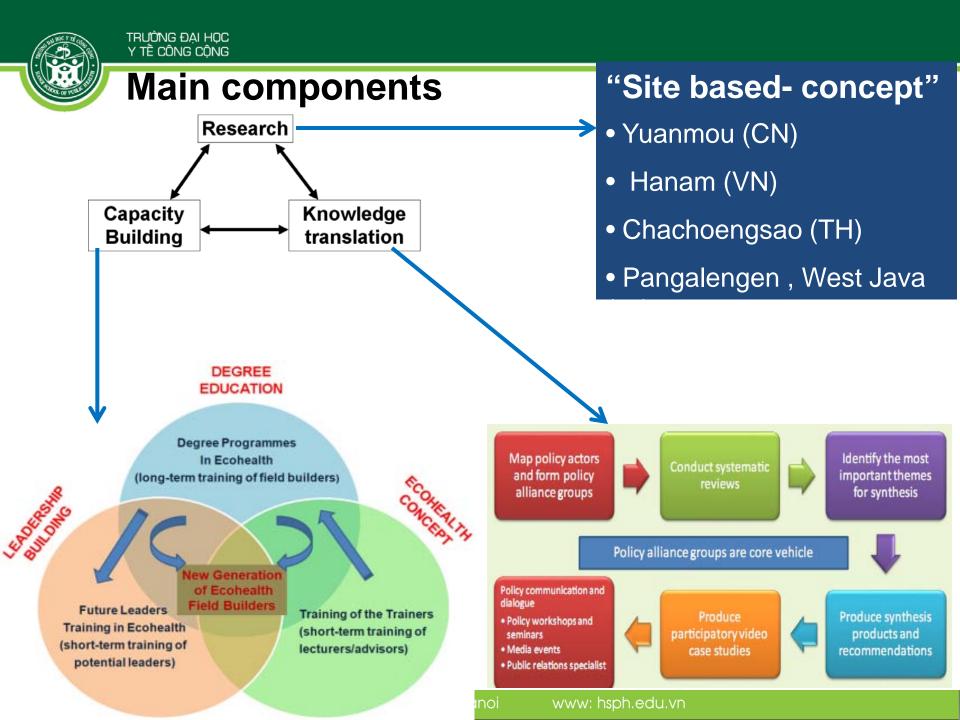




trường đại học Y tế công cộng

# **Study sites**





# **FBLI Objectives**

- 1. Conduct ecohealth research to address human health problems related to agricultural intensification.
- 2. Strengthen the capacity within SEA for ecohealth research and practice by **ecohealth training** to build **leadership** and expertise in the ecohealth field.
- Engage key policy makers at local and national levels to interact with the ecohealth research teams, sites and communities
- 4. Facilitate networking-of-networks and knowledge sharing to mainstream ecohealth approaches and foster the development of the ecohealth field in the region.

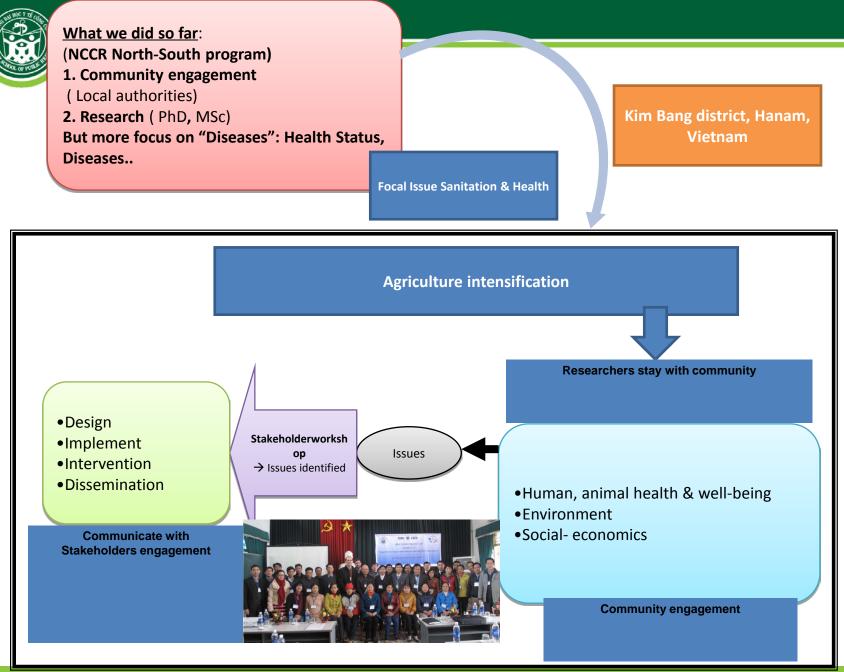
# What do we need?

Generate knowledge: relationship between agricultural activities, ecosystem and health.

Develop new solutions for health, environment.

Involvement of policy makers at the beginning and whole research process

### Interdisciplinary team, multi-institutional



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# **Study sites in Vietnam**

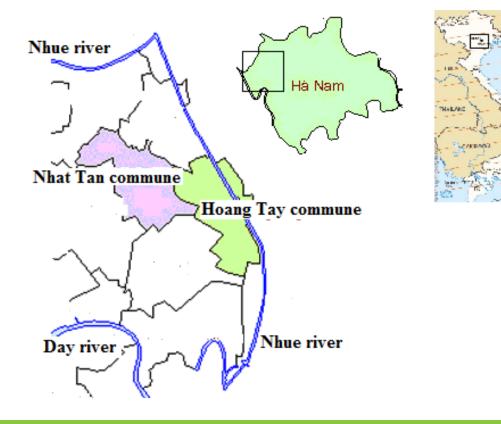
• Kim Bảng and Duy Tiên, Hà Nam





TRƯỜNG ĐẠI HỌC Y TẾ CÔNG CÔNG







## Partners

- HSPH
- NIAS
- Institute of Anthropology

TRƯỜNG ĐẠI HỌC Y TẾ CÔNG CỘNG

Etc.

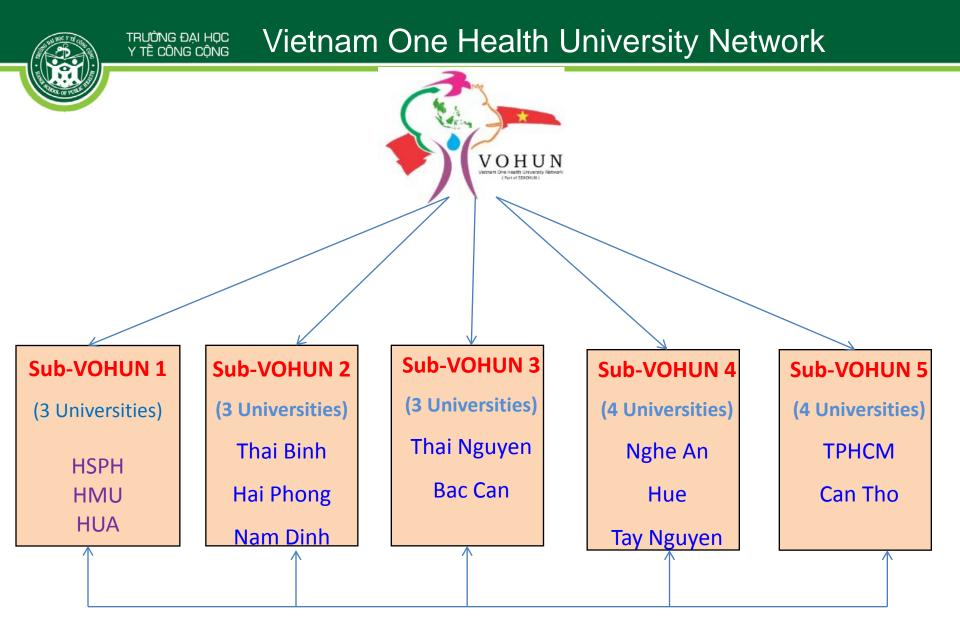
• Ha Nam

People's Committee, Department of Health, Agriculture



# **Expected outputs**

- New systems knowledge generated on the link among agricultural practices, ecosystems and human health in the strategic study sites.
- Innovative solutions developed to address problems identified by local stakeholders in the study sites.
- Ecohealth approach recognized, accepted and appreciated by local stakeholders.
- Promoting linkages between the research community and policy community by establishing and developing relationships between researchers with policy makers.
- Training students





The main objective of VOHUN is 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"

# **OH training modules**

### OH core competency modules

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



### **OH technical modules**

- 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

7/16/2014



### **Emerging Pandemic Threats Program**

PREDICT • RESPOND • PREVENT • IDENTIFY





### **RESPOND SEAOHUN One Health Course Modules**

#### Home

### One Health Course Modules Introduction

Welcome to the SEAOHUN One Health Course Modules! This website offers the most up-to-date versions of all the course module materials. **As a first step, download and read the introduction below.** 

### READ ME FIRST – Introduction to the SEAOHUN One Health Course Modules

Once you have finished, go to the topic(s) you want to explore using the menu on the right. For each topic you will will be able to download a:

- Facilitator Guide
- Student Guide
- PowerPoint Presentation(s)
- Resource Folder



#### ONE HEALTH COURSE TOPICS

- Home
- READ ME FIRST Introduction
- Behavior Change
- Collaboration and Partnership
- Communications and Informatics
- Culture, Beliefs, Values and Ethics
- Ecosystem Health
- Epidemiology and Risk Analysis
- Fundamentals of Infectious Disease
- Infectious Disease Management
- Leadership
- Management
- One Health Concepts and Knowledge
- One Health Economics
- Policy, Advocacy and Regulation
- Public Health
- Systems Thinking



### **THANK YOU FOR YOUR ATTENTION!**







### 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, outlural, socioeconomic, and demographic factors on health and well-being using the integrative approaches of Ecchealth/One Health. Our special focus is on South East Asia with links to analogous issues in Africa.

### 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 utilimate goal is to promote understanding of health issues related to eccepstems and to use research outputs to inform policy to change and improve health of the most vulnerable populations.

#### Ecohealth and One Health



environmental health in a socio-ecological context using an integrated approach such as Ecohealth or One Health. The context we consider covers environmental polution, agricultural intensification, urbanization, and environmental sanitation. The primary health issues

We aim to understand how human health is

determined by inter-linkages of human, animal and

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 taxins, posticide use, antibide resistance, growth promoters. The risk-based approach to tood safety management is still notwell 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



### GOALS

- From 2013-2020, we will become a:
- WeII-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

#### · 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 re, through research and

capacity in HLA is lacking. Therefore, through research and training with partners we will build capacity and expertise on HLA for the region.

2. TRAINING We supervise BSc, MSc and PhD students at HSPH and at other universities in and outside Vietnam.

We teach regular courses at HSPH and other universities in the region. We offer short courses on Ecohealth, One Health, Risk Assessment, Integrative Training, and Environmental Sanitation and Health.

3. SERVICES Our consultancy consists of research, training, and evaluation related to the core competencies of CENPHER

research. For examples we developed and delivered a "One Health" course for Kinshasa University Congo DRC commissioned by Tutts University/RESPOND/USAID and we did a scoping study on wastewater research in Vietnam commissioned by IWMI.

### KEY DONORS



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