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# RESPOND YEAR THREE QUARTERLY REPORT

FOURTH QUARTER

EMERGING PANDEMIC THREATS PROGRAM

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# RESPOND

# YEAR THREE QUARTERLY REPORT

## EMERGING PANDEMIC THREATS PROGRAM

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# ACRONYMS

AET	Applied Epidemiology Training
AFENET	Africa Field Epidemiology Network
AFRO	WHO – Regional Office for Africa
ANPN	Agence Nationale des Parcs Nationaux
AOR	Agreement Officer’s Representative
ARO	Alert and Response Operations
ASEAN	Association of Southeast Asian Nations
ATVCO	L'Association des Techniciens Veterinaires au Congo (Association of Veterinary Technicians of Congo)
AU-IBAR	African Union Interagency Bureau for Animal Resources
BVM	Bachelor in Veterinary Science
CAHW	Community Animal Health Workers
CBDS	Community Based Disease Surveillance
CCC	Country Coordinating Committee
CCN	Cooperating Country National
CDC	Centers for Disease Control and Prevention
CED	Control of Epidemic Diseases
CMOA	Ministry of Agriculture (DRC)
CMOE	Ministry of Environment (DRC)
CMOH	Ministry of Health (DRC)
COVAB	Makerere University College of Veterinary Medicine, Animal Resources and Biosecurity (Uganda)
DNP	Department of National Parks, Wildlife and Plant Conservation (Thailand)
DoA	Department of Agriculture
DoF	Department of Forestry
DoH	Department of Health
DRC	Democratic Republic of Congo
DTRA	Defense’s Threat Reduction Agency

DVO	District Veterinarian Officer
E&E	Ecology & Environment, Inc.
EID	Emerging Infectious Disease
EPT	Emerging Pandemic Threats Program
EZD	Emergency Zoonotic Diseases
FAO	Food and Agriculture Organization of the United Nations
FAS	Field Accounting System
FEAT	Field Epidemiology Association of Thailand
FESC	Field Epidemiology Short Courses
FE(L)TP	Field Epidemiology (Laboratory) Training Program
FETP-V	Field Epidemiology Training Program – Veterinary Component
FOREST	Forest Ecology and Stewardship Training
FUE	Federation of Ugandan Employees
FUS	Fédération Une Santé
GEMP	Good Service Management Practice
GOARN	Global Outbreak and Alert Response Network
IBAR	Inter-African Bureau for Animal Resources
IDSR	Integrated Disease Surveillance and Response
IEM	Institut d’Enseignement Médicale
IFC	International Finance Corporation
IGAD	Inter-governmental Agency for Development
INDOHUN	Indonesia One Health University Network
ISTM	Institut Supérieur des Techniques Médicales
ITAV	Institut de Technique Agro-Vétérinaire
ITM	Institut Techniques Médicale
KKU	Khon Kaen University
KKUVMS	KKU School of Veterinary Medicine
LOW	Line of Work
M&E	Monitoring and Evaluation
MAAIF	Ministry of Agriculture, Animal Industries and Fisheries (Uganda)

MAFF	Ministry of Agriculture, Forestry and Fisheries
MENTOR	Mentoring for Environmental Training in Outreach and Resource Conservation
MINAGRI	Ministry of Agriculture and Animal Resources
MISRZ	Multidisciplinary and Integrated Surveillance and Response to Zoonotic Diseases
MOA	Ministry of Agriculture
MoAF	Ministry of Agriculture and Forestry
MOF	Ministry of Forestry
MOH	Ministry of Health (Uganda)
MoNRE	Ministry of Natural Resources and Environment
MOPH	Ministry of Public Health (Thailand)
MOU	Memorandum of Understanding
MPH	Master of Public Health
MVPM	Masters of Veterinary Preventive Medicine
MUSPH	Makerere University School of Public Health
MYOHUN	Malaysia One Health University Network
NAC	Nabong Agricultural College
OAA	Office of Acquisition and Assistance
OH	One Health
OHCC	One Health Core Competency
OHCEA	One Health Central and Eastern Africa Network
OIE	World Organization for Animal Health
PDSR	Participatory Disease Surveillance and Response
PHI	Public Health Institute
PI	Principal Investigator
PPE	Personal Protective Equipment
Pro-MED	Program for Monitoring Emerging Diseases
RFA	Request for Applicants
RFP	Request for Proposal
ROC	Republic of Congo
RRT	Rapid Response Team

SCOM	Steering Committee Meeting
SEA	Southeast Asia Regional Office
SEAOHUN	Southeast Asia One Health University Network
SOW	Standard of Work
TAMIS	Technical and Management Information Systems
TOR	Terms of Reference
TOT	Training of Trainers
TRG	Training Resources Group, Inc.
TUSK	Tufts University Science Knowledgebase
UMA	Uganda Manufacturers Association
UMN	University of Minnesota
UNIKIN	University of Kinshasa
UNILU	University of Lubumbashi
USAID	U.S. Agency for International Development
USAID/W	USAID Washington
USDA	U.S. Department of Agriculture
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USG	U.S. Government
VETCAP	U.S. Army Veterinarian Civil Action Project
VMKKU	Veterinary Medicine Khon Kaen University
VMS	Veterinary Medical School
VPH	Veterinary Public Health
WWF-DRC	World Wildlife Fund-Democratic Republic of the Congo
WHO	World Health Organization
WILD	Wildlife Investigation and Livestock Disease

# EXECUTIVE SUMMARY

RESPOND's focus during Quarter Four of Year Three (July 1<sup>st</sup> to September 30<sup>th</sup>, 2012) was continuing support to the development of One Health University Networks in Africa and Southeast Asia. With the OHCEA award approved, the network started working directly with RESPOND's university partners in the United States to define OHCEA's needs for Year 4 and to continue progress against activities in their Year 1 work plan.

Even though RESPOND's Year 3 workplan still contains activities that follow the original four-objective structure, many of these planned activities have taken a lower priority over the course of the year, and this report will focus on OHCEA and SEAOHUN activities, with a section for "non-network-related activities" to account for remaining activities that are not One Health University Networks-related.

The past quarter presented a number of challenges in both the Africa and South East Asia Regions. Both regions continued to build and strengthen their respective university networks by providing logistical and technical support, as well as building capacity both within and without the networks.

The Kampala Regional Office's major accomplishments included the following:

1. OHCEA commenced its Year 1 activities
2. AFENET trained veterinarians in disease outbreak response and preparedness
3. Private sector disease outbreak and response training completed

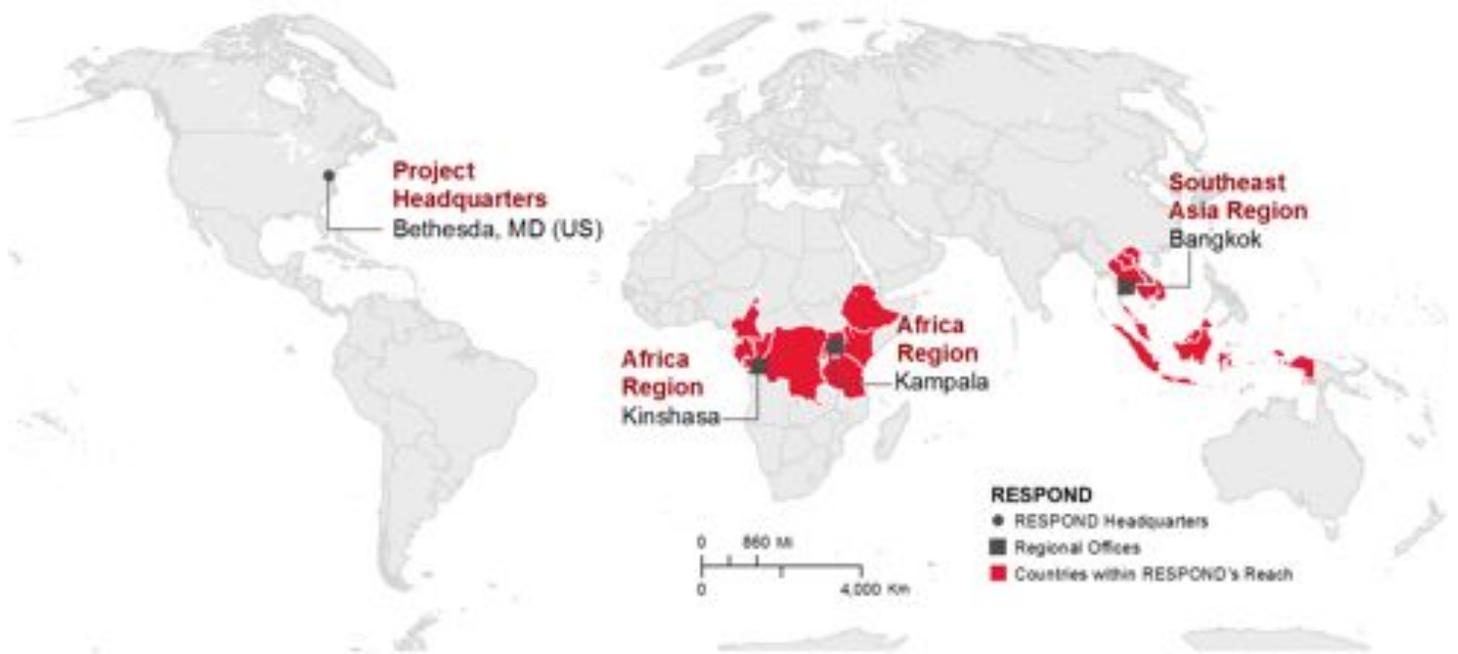
The Kinshasa Regional Office marked these significant accomplishments during the quarter:

1. Completed WILD training
2. Conducted twinning exchanges with Tufts University
3. Successfully delivered equipment, supplies and materials to recipients

Among the South East Asia (SEA) Regional Office's achievements were:

1. Completed four national-level OHCC workshops and harmonization of OHCCs
2. Continued SEAOHUN activities
3. Conducted multiple trainings throughout the region

# I. GLOBAL ACTIVITIES



The global map above displays where RESPOND currently works (in red). RESPOND Regional Hub Offices are located in Kampala (Uganda), Kinshasa (Democratic Republic of Congo), and Bangkok (Thailand), covering two regions considered hot-spot areas for the emergence and re-emergence of zoonotic pandemic threats.

## II. AFRICAN ACTIVITIES



The RESPOND project’s focus in Eastern, Central and West Africa is now almost wholly focused on support to a network of universities that integrate schools of Public Health and Veterinary Medicine, using the One Health approach to diseases outbreaks in several countries.

OHCEA (One Health Central and Eastern Africa) currently has 14 schools of Public Health and Veterinary Medicine as members, in six countries – Uganda, Tanzania, Rwanda, Ethiopia, Kenya and Democratic Republic of Congo. Its Secretariat is located in Kampala, Uganda, and implementation activities are supported by regional offices in Uganda and the Democratic Republic of Congo.

During Quarter 4 of Year 3 (July-September, 2012), both regional offices in Africa held events in support of OHCEA, as well as activities that were originally in the Year 3 Workplan (2011-2012).

# KAMPALA REGIONAL OFFICE ACTIVITIES



The map above represents the geographic reach of OHCEA (One Health Central and Eastern Africa university network).

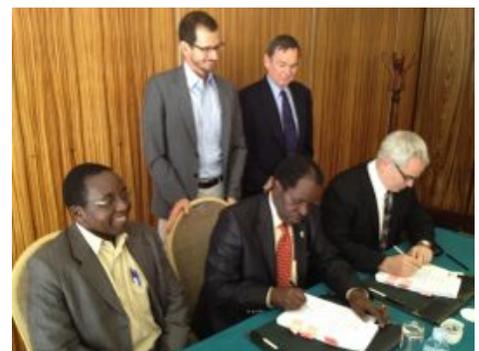
## MAJOR ACCOMPLISHMENTS

### OHCEA COMMENCES ITS YEAR ONE ACTIVITIES

RESPOND has been working closely with One Health Central and Eastern Africa (OHCEA) network for the past quarter to commence major activities towards the organizational development of the network. During the quarter the OHCEA network:

- signed an immense sub-award,
- expanded its regional secretariat staff,
- established country offices,
- held its Focal Persons Annual Work Planning meeting,
- held a One Health Core Competency (OHCC) and In-Service Training Programs Workshop, and
- conducted an orientation training week for its newly hired Country Administrators.

These activities provide OHCEA a strong ground to start rolling out its regional and country level activities.



On July 17<sup>th</sup>, 2012, DAI signed a two-year sub-award with OHCEA. At the Serena Hotel in Kampala, Uganda, OHCEA Principal Investigators, Professors William Bazeyo and David Kabasa; and RESPOND’s Project Director, Rob Ryan-Silva, signed the award in the presence of RESPOND’s USAID AOR, Rob Henry; DAI’s Managing Director of Health, Jerry Martin; and several key OHCEA deans and staff. With the award signed, OHCEA embarked on hiring new staff for the regional secretariat (Senior Administrator and a Monitoring and Evaluation Officer) and in each of the country offices (Country Administrators).

A regional Focal Person's workshop was held from August 20<sup>th</sup> to 23<sup>rd</sup> in Kampala to review and finalize OHCEA's regional and country work plans, synergize activities, and identify common strategies across the OHCEA network. The Focal Persons agreed on the following themes and activities to guide OHCEA's activities in the coming year:

- student and faculty development and exchanges;
- field training and One Health demonstration sites;
- in-service and pre-service curriculum development and implementation;
- IT and E-learning;
- One Health advocacy;
- the development of One Health partnerships and stakeholder engagement;
- OHCEA network strengthening and expansion;
- monitoring, evaluation, and documentation; and
- Resource mobilization and sustainability of the network.

Focal Persons also reviewed the OHCEA Annual Work Plan, Operations Manual and Communications Strategy, which were then presented to, and ratified by the OHCEA Board of Directors and its Deans Summit in Addis Ababa, Ethiopia in September.

OHCEA, with direct financial support from RESPOND, held a regional workshop in Dar es Salaam, Tanzania from 17 – 20 September to:

1. Identify and define the OHCCs to be used for OHCEA, and
2. Identify in-service training programs and needs, based on the OHCCs.

The workshop brought together 80 participants from different sectors of government and disciplines of academia from OHCEA's six countries, plus faculty from OHCEA's US university partners UMN and Tufts. Major outputs from the workshop were a draft of OHCEA's Regional OHCCs, which include the following domains:

- Management
- Communication
- Values and Ethics
- Leadership
- Collaboration and Partnership
- Systems Thinking
- Culture, Belief, and Gender
- Policy and Advocacy
- Research.

Workshop participants also successfully identified regional in-service courses and programs that will be customized at the country level, based on individual country needs assessments. These courses include:

- Risk Analysis
- One Health Leadership Development
- Ecosystem Health
- Conflict and Disaster Management
- Transboundary (and Emerging) Diseases
- Wildlife Epidemiology
- Disease Ecology



Participants at the OHCEA in-service training program workshop held in Dar es Salaam.

With its policies, rules and regulations, and communication strategies in place, plus an approved work plan; OHCEA has set the ground to start implementing activities at country level. TRG is currently conducting an organizational assessment, which will support the above activities and contribute to creating a viable One Health university alliance involving 14 schools of medicine, veterinary medicine, public health and allied health and environment.

### **AFENET TRAINS VETERINARIANS IN DISEASE OUTBREAK RESPONSE AND PREPAREDNESS**

With a grant from RESPOND, AFENET is undertaking a two-year training program in applied epidemiology based on the One Health approach. The training is part of the long-standing Masters of Preventive Medicine Program (MPVM) at Makerere University (Uganda) that targets veterinarians working with government at the district level. The goal of the program is to develop capacity for outbreak investigation and response that merges animal, human and environmental health dynamics into a comprehensive capacity for disease detection and control at sub national level. Three-quarters of the training is field-based, while the remaining quarter is didactic. The modules of the training focus on the following One Health approaches:

- disease surveillance,
- field investigations,
- applied epidemiology,
- data analysis and interpretation,
- outbreak response,
- communication,
- risk assessment,
- basic socio-economics,
- participatory methodologies, and
- monitoring and evaluation.

During the quarter, the five field epidemiology trainees enrolled in the MVPM program completed the third of their five semesters. They have completed all the didactics of the program and two field attachments i.e. the first attachment was at the Ministry of Agriculture, Animal Industries and Fisheries (MAAIF) and the second attachments were in the districts of Nakasongola, Wakiso, Mukono, Mubende and Masaka. During the field attachments, all trainees undertook short studies which they presented to district stakeholders from 16 to 19

July 2012. Three of the short studies will be presented at the Seventh TEPHINET Global Conference that is to be held from 10 to 15 November 2012 in Amman, Jordan. In addition, all trainees developed research concepts that are currently under review. They will present and defend their concepts on October 3, 2012. This will be followed by development of full research proposals and finally research thesis.

Furthermore, AFENET completed the development of a request for a proposal for the MVPPM program expansion to include enrollment of cohorts from Uganda, Rwanda, Kenya, Tanzania, Ethiopia and DRC. The main purpose of this intervention is to regionalize the MPVM program so that it serves member countries within the OHCEA network to develop work force capacity in field epidemiology and effective outbreak response, and to strengthen the field component of the program. It is anticipated that thirty trainees from Tanzania, Rwanda, Ethiopia, Kenya, DRC and Uganda will be recruited in the next cohort, and funded directly with OHCEA funds. OHCEA's Deans Summit ratified the proposal and granted it support.

Additionally, the AFENET officials together with stakeholders from the Uganda Ministries of Health and Agriculture and College of Veterinary Medicine, Animal Resources and Bio-security (COVAB) developed a framework for professional development of the MVPPM trainees. The framework is intended to ensure completion of the program and to help identify opportunities for trainees to participate in international activities to gain additional experience and aptitude in epidemiological principles. This will be achieved by strengthening the mentorship that staff from AFENET and faculty from COVAB, Tufts and UMN give to trainees. Opportunities will include attendance at international conferences and exchange visits to training programs in other regions such as the US, Asia as well as selected African FETPs anchored on the One Health approach. The aim is to study, observe and evaluate different approaches to disease surveillance and response to emergencies such as disease outbreaks.

### **PRIVATE SECTOR DISEASE OUTBREAK AND RESPONSE TRAINING**

During this quarter, the ECB office sponsored training of peer educators in 10 selected companies under the Uganda Manufacturers Association (UMA) and Federation of Uganda Employers (FUE). These companies were selected based on their location (at human-animal interface), extractive activities, availability of a peer educator program in their companies, and finally, management's acceptance of and willingness to participate in the program. During this period, UMA, through their master trainers have trained a total of 145 peer educators (82 males, 73 females) at Mpanga Tea Growers, Fort Portal District, Tororo Cement, Tororo District, Kakira Sugar works, Jinja District, Luwala Tea Estates, Jinja District and Uganda Clays, Mbale District. The Federation of Ugandan Employers, similarly, conducted peer education training at Kaweeru Coffee Estates, Mubende District, MacLeod Tea plantation in Bushenyi District, Hima Cement in Kasese District, the New Forest Company in Bugiri District and Tilda Rice in Bugiri District; to a total of 145 peer educators (51 females, 94 males). The three day peer education training conducted at each company enabled the peer educators to:

1. Describe how infectious diseases spread and cause epidemics.
2. Recognize how interaction of humans, animals and the environment can sometimes spread diseases.
3. Recognize the key signs and symptoms of diseases that may lead to outbreaks in Uganda.
4. Describe how to prevent the spread of infectious diseases in the workplace.
5. Educate co-workers about disease outbreaks and reportable diseases through peer education.
6. Educate co-workers on how and when to report suspected diseases or odd illnesses in people and animals.

The companies have expressed interest in disease outbreak and response training, indicating that this has been a sidelined area because most of the programs that have been taken to them targeted HIV and tuberculosis; yet emerging disease outbreaks are of significant concern. After peer education training was conducted at the different companies there have been considerable requests for additional training from other companies and

branches. McLeod Tea Company has requested training for five more of their tea estates and the Uganda Prisons in Mbale have also requested similar training.

## **MAJOR CHALLENGES AND PLANS TO OVERCOME THEM**

### **OHCEA COMMENCES ITS YEAR ONE ACTIVITIES**

Setting up and staffing country offices to serve the six OHCEA member countries was always going to be challenging. This affected implementation of OHCEA Year 1 activities since the administrators are key in managing funds at the country level. Many activities have been postponed to OHCEA's Year 2 (RESPOND Year 4) in order to take advantage of a fully-functioning network of country offices. Six OHCEA country Administrators, an M&E officer and the Senior Administrator have been hired. RESPOND provided training on applicable USAID rules and regulations, procurement processes and financial forecasting, reporting, and requisition of funds from 19 to 21 September in Dar Es Salaam for the Administrators. To take full advantage of the training, Focal Persons joined the Administrators and were also trained on financial reporting. This training should help to reduce the amount of time it takes to requisition funds, as well as to improve reporting at both the programmatic and financial levels.

Developing both regional and country level plans during the relatively short Focal Persons' work planning sessions presented a challenge. Some of the Focal persons were not able to consult their One Health Country Coordination Committees (CCCs) and therefore did not have detailed country plans ready to include in the OHCEA regional work-plan. To address this, the Focal Persons, together with US university partners UMN and Tufts, developed the regional work plan, which the Deans' Summit has approved. Meanwhile, the university Focal Persons have been tasked to consult their CCC members so that more comprehensive country implementation plans and budgets are developed. At the same time, at the country level there will be country liaison teams composed of faculty from UMN and Tufts and focal persons that will advise and help in implementing country activities.

### **AFENET TRAINS VETERINARIANS IN DISEASE OUTBREAK RESPONSE AND PREPAREDNESS**

While implementing the MVPM field epidemiology program, it was determined that streamlining field epidemiology into regular university activities will require more engagement with the university, as well as more funds from donors. The curriculum for the MVPM field epidemiology track was reviewed and completed at a retreat in Jinja, Uganda in May 2012. Makerere's College of Veterinary Medicine, Animal Resources, and Biosecurity (COVAB) -- an OHCEA member -- approved the curriculum, which the Makerere University Senate is currently reviewing before its final submission to the Uganda National Council for Higher Education (NCHE) for accreditation. Once the NCHE approves the program, it will be streamlined into the university system and the next cohort will be recruited. The OHCEA Deans' Summit has approved the program's expansion to include additional students from the region; OHCEA will fund the program's expansion.

Additionally, it was discovered that the stakeholders involved in implementing the academic programs have different interests. The university is invested in the program, the Ministry of Agriculture of Agriculture, Animal Industry and Fisheries wants to have more of its staff trained, and AFENET would like to coordinate the program. Therefore, OHCEA will be engaging partners together with COVAB to develop clear roles and regulations for managing the MVPM program.

### **PRIVATE SECTOR DISEASE OUTBREAK AND RESPONSE TRAINING**

UMA, FUE, and their member companies would like to continue the outbreak and response training into a second phase. Both FUE and UMA are planning to engage their partners to see if disease outbreak investigation and response training components can be integrated into some of their ongoing health training programs so that the training can continue.

## KINSHASA REGIONAL OFFICE ACTIVITIES



The map above of the West Congo Basin shows where RESPOND currently works (in red). The stars represent capital cities, and the capital city of Kinshasa, DRC, is where the RESPOND Kinshasa Regional Office is located.

### MAJOR ACCOMPLISHMENTS

#### WILD TRAINING COMPLETED

The WILD training in Gabon was successfully held from August 13-24 (see highlight) in close collaboration with AU-IBAR and the host government. The US Ambassador to Gabon opened the training on August 13<sup>th</sup> and brought together participants from the Democratic Republic of Congo, the Republic of Congo, Gabon, and Cameroun.

#### TWINNING EXCHANGES WITH TUFTS UNIVERSITY CONDUCTED

The last of the twinning exchanges from Tufts University to the University of Kinshasa (UNIKIN) and University of Lubumbashi (UNILU) were completed during the quarter, including the linking of OHCEA and SEAOHUN with Tufts supporting faculty exchanges from Makerere University (Dr. Odoch) and the University of Hanoi (Dr. Nguyen). In collaboration with OHCEA, an evaluation of the twinning effort will be proposed to draw lessons learned for improved programming as OHCEA gears up for designing and implementing faculty exchanges in Year 4.

#### DELIVERY OF EQUIPMENT, SUPPLIES AND MATERIALS SUCCESSFUL

RESPOND provided the final delivery of equipment and supplies to the Tshuapa District in the Equateur Province in the DRC for the Ministries of Agriculture, Health, and ICCN (Institut Congolais pour la Conservation de la Nature). The Equateur Province, and Tshuapa District in particular, is remote and highly inaccessible by road or air. The goods were delivered to two central locations in Tshuapa: Boende and Monkoto. The supplier selected has successfully delivered and set up the radio communication equipment

in four health zones in remote parts of this vast district. Reflective of the challenges faced within the province, the deliveries were completed after three days of navigation by motorcycle and canoe.

RESPOND also handed over IT equipment and materials to the Cameroonian Minister of Livestock, Fisheries and Animal Industries on July 17<sup>th</sup>, as support to the National Program for Prevention and Control against Emerging and Re-emerging Zoonoses and the veterinary service. In addition to the IT equipment, the national program has received a large supply of personal protective equipments from USAID through RESPOND, which arrived in Yaoundé on July 31<sup>st</sup>.

## **MAJOR CHALLENGES AND PLANS TO OVERCOME THEM**

### **WILD TRAINING DEVELOPMENT AND IMPLEMENTATION**

There were two significant challenges associated with the WILD training in Gabon. First, RESPOND does not have a physical presence in Gabon, which made working with suppliers extremely difficult. In some instances, suppliers had to be prepaid for their services. Sending a team of two to three people from the regional office for administrative and logistical support was the only effective way to conduct such a significant event. RESPOND will apply this lesson as the project supports OHCEA's attendance to the planned WHO inter-ministerial meeting in Gabon on One Health.

In addition, the planning and implementation of the training required collaboration among key stakeholders, notably the host government and AU-IBAR. However, the implementation of some of the program's elements was sometimes delayed due to the need to harmonize within the bureaucracies of the organizations planning and implementing the training.

# III. SOUTHEAST ASIA ACTIVITIES



The map above the Southeast Asia region displays where RESPOND currently works (in red). The stars represent capital cities, and Thailand’s capital city, Bangkok, is where the RESPOND Southeast Asia Regional Hub Office is located.

## MAJOR ACCOMPLISHMENTS

### COMPLETED 4 NATIONAL-LEVEL OHCC WORKSHOPS & HARMONIZATION OF OHCCS FOR THE SEA REGION

During the reported quarter, the South East Asia One Health University Network (SEAOHUN) worked towards developing a set of regional One Health Core Competencies (OHCCs). While SEAOHUN and the national One Health university networks played a key role in identifying national and regional OHCCs, Tufts played the lead role in guiding the process with support from UMN and TRG and logistics support from DAI.

Developing the regional OHCCs included the following major steps:

- a web-based survey targeting key players in outbreak response and university faculty;
- national-level workshops in four countries to agree on the national OH domains & core competencies; and
- a regional workshop to harmonize national OH domains and core competencies into a regional OHCC package.

The process began in April 2012 when a team from Tufts University presented a draft of OHCC domains to SEAOHUN representatives at a workshop in Bangkok, after conducting an extensive literature review and interviews with subject matter experts. The workshop identified the need for specific OHCCs at the regional and national levels and developed a plan to replicate and expand survey data collection by country and to organize workshops within each country to develop national level OHCCs. With a set of questionnaires designed by Tufts, the RESPOND SEA Office administered a web-based survey. Responses were received from a total of 137 government, NGOs and university respondents: 43 from Malaysia, 32 from Indonesia, 26 from Thailand and 36 from Vietnam.

In July, a series of 4 three-day country-level OHCC workshops were conducted in the four participating countries to develop country-specific domains and core competencies, building on the data obtained from the web-based surveys. These workshops took place in Kuala Lumpur on July 4<sup>th</sup>-6<sup>th</sup> with 22 participants, in Jakarta on July 8<sup>th</sup>-10<sup>th</sup> with 28 participants, in Bangkok on July 18<sup>th</sup>-19<sup>th</sup> with 24 participants and in Hanoi from July 23<sup>rd</sup> to 25<sup>th</sup> with 30 participants. Participants were selected from SEAOHUN member faculties.

### **CONTINUED SEAOHUN ACTIVITIES**

**THOHUN Kicked Off in August:** The official two-day kick-off meeting of the Thailand One Health University Network (THOHUN) took place on August 18-19 in Bangkok with support from RESPOND. The core participating faculties included the Faculties of Veterinary Science and Tropical Medicine of Mahidol University and the Faculties of Nursing and Veterinary Medicine of Chiang Mai University (CMU). Twenty-nine representatives from these four faculties plus one lecturer each from CMU's Faculty of Economics and Faculty of Pharmacy worked together to develop THOHUN's vision, mission, five-year strategic plan for 2012 - 2016, and a logo.

**Professional Development Support:** Since mid 2012, RESPOND has been supporting SEAOHUN member faculties in enhancing the professional development and networking opportunities for their staff, as detailed in the SEAOHUN work plan. In July, RESPOND supported the Dean of the Faculty of Veterinary Science, Mahidol University, Thailand, to attend the 61<sup>st</sup> International Conference of the Wildlife Disease Association and the 10<sup>th</sup> Biennial Conference of the European WDA in Lyon, France (July 22-27). Support was also given to a senior staff member from the Hanoi School of Public Health, Vietnam to attend the World Congress on Risk 2012: Risk and Development in Changing World in Sydney (July 18-20).

From August 27 through September 21, two senior staff from the Faculty of Veterinary Medicine, Khon Kaen University (VMKKU) visited Tufts University for one month training to strengthen their wildlife and exotic animal health skills, including diagnostic and disease prevention skills. The technical training and exchange focused on the following topics: in-vitro cultivation of blood parasites (Trypanosoma, Babesia, Ehrlichia); molecular techniques in antigen isolation and identification of parasites and other microorganisms; immuno-helminthology & protozoology; vaccine production and testing; disease diagnostics (test kit development, immunopathology, Immunohistochemistry), nuclear magnetic resonance (NMR), the use of microarrays in veterinary research; One Health & Eco-health; veterinary education (planning and administration in veterinary education & research, laboratory and research facilities). This faculty exchange will strengthen the capacity of Khon Kaen University staff and will greatly benefit the RESPOND supported collaboration between VMKKU and Nabong Agricultural College of the National University Of Laos (NAC/NUOL).

In addition, RESPOND provided financial support for the conference registration of 36 participants (15 from Malaysia, 1 from Cambodia, 8 from Indonesia, 1 from Lao PDR, 3 from Philippines, 6 from Thailand and 2 from Vietnam) to attend the International Conference on One Health and 24<sup>th</sup> VAM (Veterinary Association Malaysia) Congress 2012, held on September 21-23 at Marriott Putrajaya, Malaysia, where Dr. Stan Fenwick from RESPOND gave a presentation on veterinarians' contributions to global food security.

### **CONDUCTED TRAINING THROUGHOUT SEA REGION**

**Successful Conclusion of Thailand's One Health Field Epidemiology Training Course:** On August 20-21, the Field Epidemiology Association of Thailand (FEAT), a RESPOND grantee, successfully organized a final conference, following field project implementation by trainees from the Ministries of Health, Agriculture and Natural Resources and Environment in five selected provinces of Thailand. The conference had 121 participants and involved the Bureau of Epidemiology and the Bureau of Emerging Infectious Diseases under the Department of Disease Control, Ministry of Public Health, the Department of Livestock Development of Ministry of Agriculture and Cooperatives, the Department of National Parks, Wildlife and Plant Conservation and the Zoological Park Organization of the Ministry of Natural Resources and Environment, USCDC and RESPOND. The seminar marked the conclusion of the RESPOND funded FEAT's seven-month training course for human and animal health workers of five provincial surveillance and rapid response teams (SRRTs). Following two training workshops conducted in February and March this year for supervisors, mentors and team members, the SRRTs implemented field projects that they had developed in OH teams from March through August. The field projects were aimed at studying the disease situations with regard to West Nile Virus, Q Fever, Tuberculosis, Melioidosis, Brucellosis and cases of Encephalitis. This was the first time that professionals from different disciplines had worked together in Thailand following the OH approach. The SRRTs presented their project results and shared their field experiences and lessons learned at the final seminar. The valuable outcomes from this One Health field epidemiology training initiative are not only the development of additional data on specific diseases in the participating provinces but also for strengthening and expanding the collaborative efforts on zoonotic disease investigations and surveillance systems among the relevant sectors at the provincial and district levels. FEAT has a plan to organize a meeting at the Prince Mahidol Award Conference, to be held in Bangkok in late January 2013, to further disseminate the lessons learned on how the project has strengthened the EID response in Thailand and how the One Health approach strengthens Thailand's provincial surveillance capabilities.

**Enabling the First Cambodia's FETP-V Short Course:** Cambodia's first applied field epidemiology training took place in Takeo city for 13 district veterinary officers and 2 public health staff from the two provinces of Kampong Cham and Takeo from July 30 through August 17 as a result of collaborative efforts between RESPOND, FAO, and Cambodia's National Veterinary Research Institute, and the Department of Animal Health and Production, Ministry of Agriculture, Forestry and Fisheries. The 3-week training provided basic knowledge in field epidemiological applications focusing on animal disease surveillance (including data management and reporting) and outbreak investigation & response. The training methods comprised presentations, case studies, and field exercises.



Monique Mosolf, Director of Public Health and Education, USAID Cambodia presented a certificate to Dr. Tek Sopheap, AET graduate.

### **Enabling Applied Epidemiology Training (AET) in Cambodia:**

In collaboration with US CDC and WHO in Cambodia, RESPOND provided support to Cambodia's Ministry of Health to conduct its 2<sup>nd</sup> AET cohort training course for leaders of provincial Rapid Response Teams. This seven-month AET course included three didactic parts, field outbreak investigations, and case studies carried out by the participants to evaluate the current disease surveillance and reporting systems (CAMEWARN) in their respective provinces. The AET course started in February and concluded with the third didactic training taking place on August 20-29 and the National Epidemiology Conference on August 30-31 during which the study results of the AET students were presented. One hundred forty representatives from 23 provincial health offices and 73 operational health districts attended

the Conference. The One Health approach for the control of EIDs and recent disease outbreaks affecting Cambodia were major topics presented by the RESPOND Technical Director, Ministry, FAO and WHO colleagues, and provided the basis for a robust panel discussion on Cambodia's outbreak response capabilities and training.

**Strengthening One Health Epidemiology in Vietnam:** Following an initial TOT workshop held in Da Nang in June, RESPOND's grantee, the Institute for Preventive Medicine and Public Health (IPMPH), in conjunction with the AET leadership, conducted two 5-day didactic trainings, one from August 27<sup>th</sup> to 31<sup>st</sup> for the northern region and the other from September 10<sup>th</sup> to 14<sup>th</sup> for the southern region of Vietnam. Through these two regional workshops in Vietnam, a total of 40 participants from the Ministry of Health and the Department of Animal Health of the Ministry of Agriculture and Rural Development were brought together to design joint zoonotic disease investigations of potential zoonotic diseases in their provinces, including the diseases trichinellosis, rabies and leptospirosis. Dr. Stan Fenwick from the RESPOND/SEA Office made a presentation on the One Health approach and its importance to the investigation of zoonotic diseases. Following the completion of each workshop, the trainees returned to their provinces to work together for 10 weeks on the planned joint disease investigations. The teams were made up of veterinary and medical professionals, a major milestone for outbreak response in Vietnam. A third workshop will be organized in October for trainees from selected central Vietnam provinces. Upon completion of the field implementation in the three regions of Vietnam, a national meeting will be organized to share the findings, challenges and benefits of using the One Health approach for the disease investigations.

**Disease Surveillance Capacity Strengthening in Lao PDR:** RESPOND held a series of kick off meetings in Lao PDR in September with the National Emerging Infectious Disease Coordination Office (NEIDCO) and the Wildlife Conservation Society (WCS) in order to begin implementation of training activities after the grants were approved by USAID.

Discussions with NEIDCO were in preparation for the implementation of an in-service field epidemiology training course for relevant provincial and district level government staff and community leaders from Luang Prabang, Savannakhet and Vientiane Municipality provinces, using the One Health approach. The aim of the training is to raise awareness of zoonotic diseases, and the value in responding to outbreaks of these using the One Health approach, in these three provinces.

WCS and DAI are in the final stages of clarifying the terms and conditions in the grant agreement. Once the grant is duly signed, WCS will conduct training for forestry staff and volunteers, with the aim of strengthening disease surveillance and outbreak response in protected areas of Lao PDR and developing stronger linkages between the different sectors involved in outbreak response and emerging infectious diseases.

**Outbreak Response Capacity Strengthening in Indonesia:** During the reported quarter RESPOND successfully recruited two local consultants, Dr. Bimo, a former official of the Ministry of Public Health and Dr. Ronny Mudigdo, a former official of the Ministry of Agriculture, to assist in coordinating with local stakeholders within the country to move forward the plan for launching a RESPOND supported in-service training program in Indonesia. The two consultants have held individual and joint meetings with officials from both ministries, and the location of the training has been narrowed down to two provinces, Lampung and South Sulawesi. The next step is for them to organize visits to these provinces with selected stakeholders to solicit support from provincial government representatives. Following this, they will organize a final stakeholder workshop to discuss other issues such as training materials, venues, dates, and composition of the training teams (both trainers and trainees). As in other countries, the emphasis will be on training joint OH teams, from both animal and human health sectors.

## **CHALLENGES AND PLANS TO OVERCOME THEM**

### **DEVELOPING OHCCS**

Developing OHCCs that have enough common elements and structure to make collaboration and development across borders and disciplines, while maintaining relevance to local norms and conditions, requires a significant investment in consensus building. This made for a long process of domain identification and development, and while that has now been completed, the length of the process has left some participants hungry for concrete outputs. The RESPOND SEA Office, together with UMN and Tufts, is developing a schedule for detailed follow up with SEAOHUN member institutions in the first quarter of Year 4, including faculty development and exchange.

### **BALANCING PROJECT RESOURCES**

Most of the grants and other non-network activities in RESPOND's African offices have wound down, leaving the staff of these offices free to focus on support to the network. In addition, the offices can leverage that support through two offices, covering the network area.

The SEA Office has neither of these advantages. In addition to its support to SEAOHUN – which has a less centralized architecture than OHCEA – the SEA Office has seven non-network activities in five countries in the Year 4 workplan, versus just one in Africa. This means that the SEA office must balance more simultaneous activities, with more partners, with fewer staff than the African offices. This balance, coupled with the key vacancy of the Senior Technical Office, represents a challenge that the project will have to address through structural and managerial measures in coming quarters.

# IV. APPENDICES

## APPENDIX I: SUCCESS STORIES AND REGION HIGHLIGHTS

### RESPOND

## Highlight: WEST CONGO

### ***IT and Personal Protective Equipment for the National Program for the Prevention and Control Against Emerging and Re-emerging Zoonoses in Cameroon***

On July 17, 2012, the US Ambassador to Cameroon, in the presence of representatives from USAID's Emerging Pandemic Threats Programs (EPT) handed over to the Minister of Livestock, Fisheries and Animal Industries, IT equipment and materials for the National Program for the Prevention and Control Against Emerging and Re-emerging Zoonoses and the veterinary service.

This donation came as USG support to the national program and to strengthen Ministry of Livestock, Fisheries and Animal Industries' capacity to fulfill its mandate.

After USAID's EPT Program was launched in April 2011 in Cameroon, RESPOND supported a challenging consensus building process, taking advantage of Cameroon's strong political willingness from high-level decision makers. RESPOND sponsored two national experts to assist the ad hoc committee in developing the national program. Other EPT partners were also actively engaged and contributed to this initiative, specifically: PREDICT, represented by the Global Viral Forecasting Initiative (GVFI), and IDENTIFY represented by WHO and FAO. This collaboration allowed the integration of EPT's objectives in to the Cameroon's national program.

As part of the One Health National Strategy, the National Program for Prevention and Control Against Emerging and Re-emerging Zoonoses aims at making Cameroon a reference of success in the prevention and control of emerging and re-emerging zoonoses by 2035. The implementation of the national program will be coordinated by a multisectoral steering committee which involves: the Ministry of Livestock, Fisheries and Animal Industries, the Ministry of Environment and Protection of Nature, the Ministry of Public Health, the Ministry of Forests and Wildlife, the Ministry of Research, the Ministry of Higher Education, and the Ministry of Primary Education.

In addition to the IT equipment, the national program has received a large amount of personal protective equipments from USAID through RESPOND project, which arrived in Yaoundé on July 31, 2012.



*In front, from Left: Regional Director RESPOND West Congo office, The US Ambassador and the Minister of Livestock, Fisheries and Animal Industries.*

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## RESPOND

### SUCCESS STORY – EAST CONGO

#### One Health Applied Student Exchanges and Field Experiences



The students gained the following from the Summer School:

- Knowledge on control programs important in human and animal disease outbreaks in developing countries.
- Knowledge on tropical animal production systems in developing country settings.
- Developed an understanding of unique animal health challenges under tropical conditions.
- Knowledge in national and global disease surveillance systems.
- Gained a hands-on an appreciation of One Health approaches, public health and food safety practices in a developing country.

*The concept of 'Boma' based learning is derived from a practice in an African culture that involves a transfer of wisdom and knowledge from the (wise, knowledgeable and highly experienced) elders to the young generation that they are nurturing and mentoring into responsible members of the community.*

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RESPOND supported 12 students from OHCEA institutions within the region to participate in the annual USAID-Higher Education for Development (HED) Summer School that brought together over 100 students from six countries in the region and the U.S. The course was organized by the Makerere University College of Veterinary Medicine, Animal Resources and Biosecurity (COVAB – a OHCEA member) and North Dakota State University (NDSU) and was facilitated with faculty from the University of Minnesota and the African Field Epidemiology Network (AFENET). Held from 17 June to 14 July, 2012, the students were exposed to concepts of One Health both in class and in the field with experiences shared from different professions and countries.

Prof. David Kabasa, the OHCEA Co-Principal Investigator and Principal of COVAB presided over the opening session. The theme of the Summer School was “*International Animal Production, Disease Surveillance and Public Health*” and was designed to enable the students to appreciate and experience tropical animal production, food safety and public health from developing nations’ perspective. It provided for global career development opportunities and an international perspective to approaching the public health concerns in the field. The course was delivered in a format involving online interactions, face to face lectures from international experts and experiential learning field trips in different locations of Uganda at the human, domestic animal and wildlife interface.

The Summer School had three components:

- 1) Classroom (3 days) and field work with hands-on activities in wildlife, ecosystem health and livestock-agro-systems in the urban, peri-urban and rural areas. The classroom and field modes of delivery were organized under three sub-themes: One Health; food production, food security, food hygiene/safety and community; and ecosystem and public health, with the facilitators drawn from diverse backgrounds, disciplines and countries.
- 2) The “One Health International Boma.” Attended by more than 100 students, was held as a pre-conference workshop to address One Health concepts with case studies and best practices derived from different countries.
- 3) An international scientific conference themed “*Integrated Management of Transboundary Diseases and Biosecurity for Inclusive Economic Growth*”. The conference provided opportunities to share the global perspective of One Health Concept in relationship to the theme. The conference attracted global keynote speakers and presenters to interact and share their experiences with the students, professionals, practitioners of veterinary and public health nationally and regionally.

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## REGION HIGHLIGHT – EAST CONGO

### OHCEA Sets their Annual Agenda



OHCEA Focal Persons and faculty from the University of Minnesota (UMN) and Tufts University at the meeting

#### OHCEA Annual Work-plan Priorities:

- Student and faculty development and exchange.
- Field training and One Health demonstration sites.
- In-service and pre-service curriculum development and implementation.
- IT and E-learning.
- One Health advocacy.
- One Health partnership development and stakeholder engagement.
- OHCEA network strengthening and expansion.
- Monitoring, evaluation, and documentation of learning.
- Resource mobilization and building the sustainability of the network.

**August 20 – 23, 2012, Kampala, Uganda.** The OHCEA Focal Persons and faculty from the University of Minnesota (UMN) and Tufts University gathered together in Kampala, Uganda with the aim of expediting OHCEA's annual Year 2 work plan. This workshop followed the signing, on 17th July 2012, of a two year sub-award between DAI and OHCEA by OHCEA Principal Investigators, Professors William Bazeyo and David Kabasa, and the RESPOND's USAID AOTR Rob Henry and DAI's Director of Health Jerry Martin at Serena Hotel, Kampala, Uganda.

The workshop was opened by the OHCEA Chair, Prof. William Bazeyo, and attended by the Uganda EPT Country Coordinator Dr. Thomas Easley. Dr. Easley made a presentation on the ongoing EPT partners' work in OHCEA countries and potential synergies with OHCEA. The participants agreed on working themes that will be applied across the board within the OHCEA countries.

Using a process that was inclusive, informative, engaging and allowed contributions from all the participants present, the following achievements were realized:

1. The OHCEA Focal Persons were informed of ongoing EPT partners' work in OHCEA countries and potential synergies with OHCEA,
2. The OHCEA regional work plan with major activities from each of the countries and OHCEA country plans were reviewed and finalized according to agreed on work-plan themes,
3. Activities were synergized and common strategies across the network were identified,
4. The OHCEA operations, communications, financial and implementation plans were presented (approved in September at the Deans Summit), and
5. Focal Persons were sensitized to their operational and financial roles and responsibilities.

With this first award to OHCEA, and now the annual work plan, there is a vision and energy for the partnership to move from the conference room to the field.

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## RESPOND

# SUCCESS STORY

### OHCEA Engages Government and Academia to Develop One Health Core Competencies



Kenya multi-stakeholder country group discussing One Health core competencies

#### One Health Core Competency domains for OHCEA:

- Management
- Communication
- Values and Ethics
- Leadership
- Collaborations and Partnership
- Systems Thinking
- Culture, Belief, and Gender
- Policy and Advocacy
- Research

OHCEA, with financial support from RESPOND, organized a regional workshop to identify targeted practical and applied One Health related in-service training programs and One Health Core Competencies. Over 80 participants attended the workshop that took place from September 17<sup>th</sup> to 20<sup>th</sup>, 2012 in Dar es Salaam, Tanzania. The purpose of the workshop was to bring together faculty and non-faculty from OHCEA institutions and the countries to identify and develop in-service training programs across the OHCEA network. The participating institutions included academia, government agencies, and Non Governmental Organizations drawn from the six OHCEA member countries of: Ethiopia, Kenya, Tanzania, Rwanda, DRC and Uganda, and its US university partners the University of Minnesota and Tufts University.

Working in country-specific groups, delegates reviewed sample One Health survey data in order to define One Health core competencies. The entire process was informed by:

- core competencies developed by the Food and Agriculture Organization of the United Nations, the Stone Mountain Group and RESPOND,
- presentations on the evolution of One Health Core Competencies, and
- a review of competency domains from prior efforts.

In addition, both U.S. and African universities presented and discussed existing innovative in-service training programs in each country after. They also discussed how and how well core competencies are embedded in the innovative courses.

The main successes of the regional workshop were:

- Developing a regional One Health Core Competencies framework.
- Sharing innovative in-service courses and training programs.
- Identifying in-service courses that meet the needs of the region.
- Developing and agreeing on a plan for development and implementation of the in-service courses that is informed by the One Health Core Competencies.

With the One Health Core Competencies developed and innovative in-service courses and training programs that meet the needs of the region identified, the stage is set for OHCEA to produce better health professionals capable of performing across sectors and disciplines and creating effective One Health partnerships.

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## RESPOND

## SUCCESS STORY – SOUTH EAST ASIA

### One Health Core Competencies Developed for Southeast Asia



Participants at the OHCC Workshop in Bangkok, July 2012

#### OHCC Domains

The OHCC domains were selected based on how they would contribute to developing leaders in the field of One Health. The One Health competency domains include:

- Management,
- Culture & Beliefs,
- Leadership,
- Value & Ethics,
- Collaboration & Partnership,
- Communication & Informatics, and
- Systems Thinking.

The ultimate aim of the five-year USAID/RESPOND project is to build capacity to detect, prevent and respond to emerging and re-emerging infectious diseases of zoonotic origins. RESPOND is working primarily with a university network, South East Asia One Health University Network (SEAOHUN), to achieve this. The end of FY2012 marks a significant achievement as the One Health Core Competencies (OHCCs) for South East Asia have been developed. Thanks to the collaborative efforts of SEAOHUN, and USAID/RESPOND counterparts including University of Minnesota (UMN), Tufts University, Training Resources Group (TRG) and Development Alternatives Inc (DAI), SEAOHUN and its university members will be able to use the OHCCs to develop curricula and training programs to strengthen capacity of national and regional responses to emerging and re-emerging infectious diseases.

#### The Process

The OHCC development process began in April 2012:

1. A web-based survey was conducted. The survey gathered information from 137 respondents from Indonesia, Malaysia, Thailand and Vietnam. Survey results were shared at the national-level workshops.
2. National-level workshops in four countries were convened to agree on the One Health national domains and core competencies. The workshops were held in Kuala Lumpur, Jakarta, Bangkok and Hanoi in July 2012. Each three-day workshop included members of the national One Health university network to review the survey results to develop country-specific One Health domains and competencies.
3. A regional workshop was convened to harmonize the country-level One Health domains and core competencies into a regional package. This regional three-day workshop held in early October 2012 included 29 participants from 14 faculties from the SEAOHUN country members.

Specific core competencies and their definitions were also identified to create a full package, which will be used to guide academic institutions in the South East Asian region as they integrate One Health into their own curricula.

Through the collaborative process, faculties across universities and in different countries have developed invaluable relationships that allow them to share their academic strengths and learn from each others' gaps to improve networking and coordination and to enable participation in future exchanges. These relationships will be essential to supporting the future sustainability of SEAOHUN.

- information technology
- control of priority diseases

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