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MATRIX OF ONE HEALTH PROJECTS AND PROGRAMMES IN VIET NAM

June 2015

MATRIX OF ONE HEALTH PROJECTS AND PROGRAMMES IN VIET NAM

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1. EPT-1: RESPOND/VOHUN

Implementing partners:	Members of the Vietnam One Health University Network (VOHUN): 17 universities/faculties) Ministry of Agriculture and Rural Development (MARD) – Applied Veterinary Epidemiology Training (AVET) Ministry of Health (MOH) – Field Epidemiology Training Program (FETP) Development Alternatives International (DAI), University of Minnesota, Tufts University, TRG, E&E, Southeast Asia One Health University Network (SEAOHUN)
Donor:	United States Agency for International Development (USAID)
Timing:	2010-2014
Budget:	USD 3,500,000
Locations:	Nationwide
Interface focus:	Humans, livestock, wildlife
Disease focus:	Zoonotic diseases
Activity areas:	Coordination, Education and Training, Research
Website:	http://www.vohun.org

Brief information about the project:

RESPOND strengthens country capacities and twins schools of medicine, nursing, public health, and veterinary medicine in the "hot spot" regions with U.S. counterpart and regional institutions to strengthen their capacities to provide long- and short-course trainings for cadres of professionals in order to identify and respond to disease outbreaks in a timely and sustainable manner.

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”.

Key activities

- Support to the Vietnam One Health University Network (VOHUN), established in Oct 2011 with 17 university/faculty members
- Joint FETP – AVET in-service training (from 2012)

2. Field Epidemiology Training Program – FETP

Implementing partners:	General Department of Preventive Medicine, Ministry of Health (MOH) National Institute of Hygiene and Epidemiology (NIHE)
Donor:	United States Agency for International Development (USAID) Centers for Disease Control and Prevention (CDC) World Health Organization (WHO)
Timing:	2008 - 2013
Budget:	USD
Locations:	14 provinces: Son La, Phu Tho, Hanoi, Hai Phong, Thanh Hoa, Gia Lai, Quang Tri, Binh Thuan, Binh Dinh, Quang Ngai, Soc Trang, Ba Ria VungTau, Dong Nai, Hoi Chi Minh
Interface focus:	Human, livestock, wildlife
Disease focus:	Avivan influenza H5N1, anthrax, rabies, Streptococcus suis, Trichicella, fasciolla, Japaness encephalitis B, leptospirosis.
Activity areas:	Training, Research for improving the practice skills of surveillance and investigations of outbreak as well as apply epidemiology studies
Website:	http://www.wpro.who.int/vietnam/topics/field_epidemiology_training_programme/en/. Http://www.vnfetp.jimdo.com/

Brief information about the project:

The Viet Nam Field Epidemiology Training Programme (FETP) was established in 2008. It aims to strengthen the national capacities for detection, investigation and response to emerging

diseases and other public health events in line with WHO's Asia-Pacific Strategy for Emerging Diseases (APSED) and the International Health Regulations (IHR 2005). Vietnam has 63 provinces/cities and 4 regions with from 4 to 28 provinces/cities. Each province has a provincial preventive medicine center (under department of health), as does each region a regional institute. The 4 institutes (2 Institutes of Hygiene and Epidemiology and 2 Pasteur Institutes) oversee public health activities in their respective regions. Priority for the FETP has been given to staff of the General Department of Preventive Medicine (GDPM), Ministry of Health and the regional institutes. The program is managed by GDPM and the Vice Director of GDPM serves as the FETP program director.

- Equip staff working in preventive medicine services with essential skills and competencies for disease prevention and control;
- Enhance preventive medicine services at the local, provincial and national levels;
- Strengthen systems for prevention, control and timely response to public health emergencies.

Key activities

- The FETP program consists of at least 10 required training modules (8 compulsory and at least 2 elective) of 1 week each with the remainder of the time spent in field work or in elective training modules.
- For the first 2 cohorts, the fellows all remained in their place of employment for their field placements and thus can only do FETP as part-time.
- For the 3rd cohort, all fellows are expected to be in Hanoi. All fellows are required to complete at least 2 outbreak investigations, a surveillance project, and an applied epi/operations study.
- All fellows have reported on 2 outbreaks for the program but many fellows participate in a much larger number of outbreaks as part of their routine work. Generally they are accompanied on the outbreaks by colleagues from their institute and sometimes their field supervisor who is their supervisor at the institute. The FETP adviser has also provided support usually by phone or email during the time in preparation and in the field. At the National Institute of Hygiene and Epidemiology, the FETP fellows are perceived as key members of the outbreak teams and are expected to participate.

3. Applied Veterinary Epidemiology Training – AVET

Implementing partners:	Department of Animal health (DAH) - Ministry of Agriculture and Rural Development (MARD) Faculty of Veterinary Medicine –Vietnam National University of Agriculture (VNUA); Food and Agriculture Organization (FAO)
Donor:	United States Agency for International Development (USAID)
Timing:	2009 – 2013
Budget:	USD
Locations:	Nationwide
Interface focus:	Humans, animal
Disease focus:	Not specified
Activity areas:	Training: biostatistics, risk factors
Website:	http://epiprograms.wikispaces.com/file/view/AVET+Master+plan,+vietnam.pdf

Brief information about the project:

The Applied Veterinary Epidemiology Training (AVET) Program is a joint undertaking of the Department of Animal Health, the Hanoi Agriculture University Faculty of Veterinary Medicine and the FAO Viet Nam Avian Influenza Programme. This is envisioned to be the approach to equip field veterinarians in government service with epidemiologic skills to apply in disease surveillance, investigations, control and response.

It is acknowledged that basic veterinary education generally lacks adequate course work on basic epidemiology and its applications to a wide range of animal health concerns. Sound epidemiologic skills are essential for public service veterinarians in their day-to-day animal health and production work and decision making. With the concerted effort of academe and national veterinary services, re-tooling the field veterinarians with theories and training in practice is a way to apply the principle of learning by doing. This will help build field veterinary services capacity through on-the-job mentoring and training. This will eventually be part of regional field epidemiology training network of the FETPV- DLD, Thailand, starting with the

participation of the AVET course coordinator in its regional epidemiology courses in Bangkok.

Due to the limited veterinary human resources in the field, there is a need to initiate this program as a short-term course with the goal of building a roster of national and regional epidemiologist trainers.

- To provide the training opportunity for field veterinary service workers to gain adequate knowledge, skills and competencies in surveillance, outbreak investigation and response and contribute to strengthening the national animal disease prevention and control program.
- To establish the AVET program facility in the Faculty of Veterinary Medicine, Hanoi Agriculture University supported by a Technical Advisory Group from partner institutions including DAH, MOH, FAO, WHO, USAIDTo develop curriculum for short course and long-term courses course content, time requirements, teaching set-up – sit-down lectures, practical classroom exercises, and field projects with mentors or field supervisors
- To build a team of trainers and potential mentors/field supervisors with duties and responsibilities, minimum professional qualifications, including the possibility of involving public health professional
- To select based on an agreed criteria and minimum qualifications, and train the cohort of trainees with government commitment to support their studies and field activities

Key activities

- Advanced biostatistics, risk-factor analysis and modeling course (May 2013): 15 veterinary epidemiologists;
- “WILD” Introductory Training course in One Health (April 2013): 30 medical doctors, veterinarians, biologists and ecologists;
- Technically supporting and 15 veterinarians’ participation to the FETP conducted by MOH and WHO Vietnam;
- FETP for Veterinarians, FAO Bangkok: 1 from Viet Nam

4. Advanced Applied Veterinary Epidemiology Training (A – AVET)

Implementing partners:	Ministry of Agriculture and Rural Development (MARD) - Department of Animal health (DAH MARD) Faculty of Veterinary Medicine – Vietnam National University of Agriculture (VNUA); General Department of Preventive Medicine (GDPM) - Ministry of Health (MOH) Food and Agriculture Organization (FAO)
Donor:	United States Agency for International Development (USAID)
Timing:	2013-2014
Budget:	USD
Locations:	AVET Center, Faculty of Veterinary Medicine –Vietnam National University of Agriculture (VNUA, Hanoi)
Interface focus:	Humans, livestock
Disease focus:	Not specified
Activity areas:	Education and trainning
Website:	

Brief information about the project:

The course provided a basis of a combination of lectures and practical sessions. Introduction to basic statistical and graphical analysis concepts, to qualitative risk analysis as well as introductory spatial analysis

- To equip to participants with skills of basic descriptive, graphical and univariable analyses; Qualitative risk analysis of simple animal health problems; Basic principles of descriptive and exploratory spatial analysis

Key activities

- Lecture and practice of univariable analysis
- Lecture and practice of Qualitative risk assessment
- Risk communication and management
- Design of disease surveillance programme
- Lecture and practice of spatial analysis

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5. PREDICT

Implementing partners:	Department of Animal health (DAH) - Ministry of Agriculture and Rural Development (MARD) National Center for Veterinary Diagnosis (NCVD) & Regional Animal Health Office No.6 (RAHO6); Viet Nam Administration of Forest Industry (VN Forests) Vietnam National University of Agriculture (VNUA) Wildlife Conservation Society - WCS
Donor:	United States Agency for International Development (USAID)
Timing:	2010-2014
Budget:	USD
Locations:	Hanoi, Lam Dong, Ho Chi Minh City, Soc Trang, Dong Nai
Interface focus:	Humans, wildlife
Disease focus:	Not specified
Activity areas:	Research, Surveillance and laboratory
Website:	http://www.vetmed.ucdavis.edu/ohi/predict/ http://www.healthmap.org/predict/

Brief information about the project:

- To strengthen wildlife disease surveillance and diagnostics to protect human and animal health through strategic partnerships with government and research institutions

- To build a global early warning system for emerging diseases which move between wildlife and people. Building local capacity to investigate and monitor diseases at the animal-human interface. Developing a risk-based approach to concentrate efforts in surveillance, prevention, and response at the most critical points for disease emergence from wildlife

Key activities

- Perform field-based surveillance with project partners to collect samples from wildlife for pathogen detection and risk assessment;
- Respond to infectious disease outbreaks with a potential wildlife source or involvement as requested;
- Build laboratory capacity for pathogen detection (primarily family-level viral screening and sequencing) in wildlife;
- Raise awareness through organization and participation in conferences, workshops and meetings of the links between human, domestic animal and wildlife health

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6. IDENTIFY

Implementing partners:	General Department Preventive Medicine (GDPM), Ministry of Health (MOH) National Institute of Hygiene and Epidemiology (NIHE) TayNguyen Institute of Hygiene and Epodemiology (TIHE) Pasteur Institute HoChiMinh (PI HCMC) Pasteur Nha Trang (PI Nha Trang) Ministry of Agriculture and Rural Development (MARD) - Department of Animal health (DAH MARD) Regional Animal Health 6 (RAHO6), Food and Agriculture Organization (FAO) World Organization for Animal Health (OIE), World Health Organization (WHO)

Donor:	United States Agency for International Development (USAID)
Timing:	2010-2014
Budget:	USD
Locations:	Nationwide
Interface focus:	Human, Animal
Disease focus:	Not specified
Activity areas:	Laboratory
Website:	

Brief information about the project:

IDENTIFY focuses on strengthening laboratory capacity to safely diagnose and report common animal and human pathogens.

- The project aims to help develop laboratory networks and strengthen diagnostic capacities in geo-graphic “hot spots” in order to improve detection of normative diseases in animals and humans

Key activities

- Improving laboratory assessment tools to allow for better targeting of technical support and training;
- Developing and rolling out training modules on diagnosing highly-infectious diseases;
- Improving laboratory management practices related to biosafety and biosecurity;
- “Twinning” labs with developed country labs;
- Expanding monitoring of antimicrobial resistance rates among priority bacterial pathogens.

7. PREVENT: Global Avian Influenza and Zoonotic Behavior Change and Communication Support Activity

Implementing partners:	Ministry of Agriculture and Rural Development (MARD) - Department of Animal health (DAH MARD) Department of Livestock Production (DLP), Viet Nam Administration of Forest Industry (VN Forests); Family International Health (FHI360)
Donor:	United States Agency for International Development (USAID) Australia Agency for International Development (AusAID)
Timing:	2010-2014
Budget:	USD
Locations:	Ba Ria Vung Tau, Binh Duong, Dong Nai, Lam Dong, and Tay Ninh
Interface focus:	Humans, livestock, wildlife
Disease focus:	Wildlife diseases
Activity areas:	Prediction early detection, risk reduction and biosecurity, training and research
Website:	

Brief information about the project:

- The PREVENT project builds upon GVN's ongoing H5N1 avian influenza efforts to develop effective behavior change and communication responses to diseases of animal origin. It also supports efforts to characterize behaviors that increase the potential for the amplification and spread of new disease threats from wildlife or wildlife products, and formulates strategies for behavior change and/or communication approaches that meet the challenges posed by emerging pandemic disease threats.

Key activities

- Strengthening wildlife farm biosecurity & supporting the development of good production practices:
- Workshop on Wildlife Farming (HCMC, Jan 2013);
- Wildlife farming survey,
- Wildlife diseases

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8. Characterizing Influenza Viruses posing risks as the next global pandemic (EPT+)

Implementing partners:	Ministry of Agriculture and Rural Development (MARD) - Department of Animal health (DAH MARD) National Center for Veterinary Diagnosis (NCVD) Regional Animal Health 6 (RAHO6) Food and Agriculture Organization (FAO)
Donor:	United States Agency for International Development (USAID)
Timing:	2012-2014
Budget:	USD
Locations:	Bac Ninh, Hai Duong, Dong Thap
Interface focus:	Poultry, pigs, human
Disease focus:	Not specified
Activity areas:	Sampling, coordination
Website:	

Brief information about the project:

- Concurrent complimentary sampling of farmers, pigs & poultry

Key activities

- Swine sampling for influenza viruses;
- Coordination starting with public health sector, CDC, WHO and GoVN agencies (MARD DAH; MOH GDPM)

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9. Reducing Disease Risks and Improving Food Safety in Smallholder Pig Value Chains in Vietnam (PigRisk)

Implementing partners:	Center for Public Health and Ecosystem Research (CENPHER) Hanoi Public health School (HSPH); Vietnam National University of Agriculture (VNUA) International Livestock Research Institute (ILRI) 17 universities/faculties) Ministry of Agriculture and Rural Development (MARD) – Applied Veterinary Epidemiology Training (AVET) Ministry of Health (MOH) – Field Epidemiology Training Program (FETP) Development Alternatives International (DAI), University of Minnesota, Tufts University, TRG, E&E, Southeast Asia One Health University Network (SEAOHUN)
Donor:	(Australian Centre for International Agricultural Research (ACIAR)
Timing:	2012-2017
Budget:	USD 389.930
Locations:	Hung Yen, Nghe An
Interface focus:	Human and animal health and economic

Disease focus:	Not specified
Activity areas:	Research
Website:	http://www.ilri.org/node/1242 http://aciar.gov.au/project/lps/2010/047

Brief information about the project:

While Vietnamese policy makers currently favors industrial pork production systems based on perceptions that industrialization will improve productivity, profitability, and food safety, there is strong interest in better understanding food safety and health of producers in smallholder pig value chains and developing, testing and promoting incentive-based risk management approaches that are pro-poor.

Taking advantage of this opportunity, the project will address three research questions:

What are the human health risks and economic costs of pork-borne diseases in smallholder pig value chains in Vietnam? What are the critical points / opportunities for risk management?

What is the added utility of risk-based approaches to food safety and pork-borne disease (that focus on human health impacts) compared with current hazard-based approaches (based on presence of pathogens in pork)?

What is the most appropriate role for incentive-based innovations in improving management of human and animal health risks in these smallholder pig value chains?

- Improve the livelihoods of rural and urban poor in Vietnam through improved opportunities and incomes from pig value chains as a result of reduced risks associated with pork-borne diseases.

Key activities

- Assess impacts of pork-borne diseases on human health and the livestock sector.
- Develop and test market-based innovations to improve management of human and animal health risks.
- Communicate the lessons learned to sustainably improve capacity to assess and manage risks in the pork value chain

10. USAID Avian and Pandemic Influenza Initiative (USAID/APII)

Implementing partners:	Vietnam Poultry Association (VIPA) Vietnam Veterinary Association (VVA) Abt Associates Australian Foundation for the Peoples of Asia and the Pacific (AFAP)
Donor:	United States Agency for International Development (USAID)
Timing:	2009 - 2013
Budget:	USD 11,000,000
Locations:	Can Tho, Ha Nam, Hung Yen, Kien Giang, and Quang Tri
Interface focus:	Human and poultry disease
Disease focus:	Avian Influenza
Activity areas:	surveillance, disease control, preparedness, training, biosecurity
Website:	http://www.usaid.gov/node/46771

Brief information about the project:

- Building on previous experiences, the project strengthens the capacity of the GoVN and its counterparts to identify, prevent, and control outbreaks of avian influenza and other emerging infectious and zoonotic diseases in animals and humans.

Key activities

- Human disease surveillance;
- Animal disease surveillance;
- Infection control in district and commune medical facilities;
- Pandemic preparedness planning;

- AHW capacity building & and AEW biosecurity training for poultry farmers;
- Poultry supply chain activities;
- BCC

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11. CDC - Vietnam Influenza Program

Implementing partners:	Centers for Disease Control and Prevention (CDC) National Institute of Hygiene and Epidemiology (NIHE) Ministry of Health (MOH)
Donor:	CDC
Timing:	2005 - 2009
Budget:	USD
Locations:	
Interface focus:	Human
Disease focus:	H5N1
Activity areas:	Training, surveillance, diagnosis
Website:	http://www.cdc.gov/flu/pdf/international/program/2011/vietnam.pdf

Brief information about the project:

The CDC-Vietnam Influenza Program has three cooperative agreements with Vietnam's MOH:

i) A five-year sustainability agreement with the NIHE provides support to the existing national influenza surveillance system developed under the first five-year capacity-building cooperative agreement (2005–2009),

ii) A five-year research agreement with NIHE is in its third year of activities and includes animal-human interface projects

iii) A five-year pandemic preparedness and response agreement with the General Department of Preventive Medicine (GDPM) is in its final year. CDC is developing a fourth cooperative agreement with MARD.

- Vietnam's Ministry of Health (MOH), through the National Institute of Hygiene and Epidemiology (NIHE) and with support from the U.S. Centers for Disease Control and Prevention (CDC) Influenza Program in Vietnam as successfully initiated both severe acute respiratory infection (SARI) and burden of disease surveillance.

- The animal-human interface (AHI) Initiative at CDC-Vietnam, together with the NIHE, successfully completed a pilot extension of an AHI study in Thai Binh province, North Vietnam.

- CDC-Vietnam provided AHI technical assistance and information on the "One Health" Initiative to the Laos MOH and Ministry of Agriculture through a training workshop held by CDC Lao PDR and the U.S. Department of Agriculture (USDA).

- In December 2010, CDC's Influenza Program in Vietnam participated in, and provided recommendations during the "Capacity-building Workshop on Vaccination against Avian Influenza" held in Hanoi, with member countries of the Asia-Pacific Economic Cooperation (APEC). The U.S. Embassy published a press release about the workshop titled, United States Provides Recommendations on Combating Avian Influenza.

- The MOH has seen the graduation of its first class of eight field epidemiology training program (FETP) fellows. CDC-Vietnam has supported Vietnam's FETP through the provision of class instruction, abstracts, presentations, and manuscripts.

- CDC-Vietnam reviewed the veterinary diagnostic laboratory at the Ministry of Agriculture and Rural Development (MARD), identifying a functional laboratory with limited resources. CDC-Vietnam made recommendations for the laboratory's improvement. Data collected through Vietnam's influenza surveillance system has been analyzed and presented by NIHE at the Options for the Control of Influenza and TEPHINET conferences.

Key activities

The CDC-Vietnam Animal-Human Interface (AHI) Initiative continues to support and enhance the "One Health" strategy forged by the collaboration between Vietnam's MOH and MARD, through joint meetings, technical assistance, and cooperative agreement supported activities. The influenza and AHI programs provide mission support on a regular basis to the U.S. Embassy Health Team, including requests for infectious disease information. The programs also provide technical assistance to Vietnam's FETP, and in FY 2011, this included a CDC-NIHE presentation

on AHI at the Sixth Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET) Global Conference in December 2010. The influenza and AHI programs provide technical support to other U.S. government and non-government organization (NGO) partners in Vietnam, including the U.S. Agency for International Development (USAID), USDA, the World Health Organization (WHO), and the Food and Agricultural Organization of the United Nations (FAO).

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12. Improvement of regional capacities for the prevention, control and eradication of highly pathogenic and emerging diseases (HPED) including HPAI in ASEAN and SAARC countries - (OSRO/RAS/901/EC)

Implementing partners:	Department of Animal health (DAH) - Ministry of Agriculture and Rural Development International Cooperation Department - ICD (PAHI Secr't) Food and Agriculture Organization (FAO)
Donor:	European Commission – EC
Timing:	2013-2017
Budget:	USD
Locations:	Nationwide
Interface focus:	Humans, livestock, wildlife
Disease focus:	Not specified
Activity areas:	Coordination, Education and Training, Research
Website:	

Brief information about the project:

Key activities

- Technical contribution to assist PAHI to update OHCN communications strategic framework;
- Support the Viet Nam National One Health Conference, Apr 2013;
- Support to National Operation Plan on Avian Influenza Control and Prevention 2013-2017

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13. WHO: International Health Regulations (IHR) and Asia Pacific Strategy for Emerging Diseases (APSED)

Implementing partners:	Ministry of Health (MOH) World Health Organization (WHO)
Donor:	World Health Organization (WHO)
Timing:	2010-2016
Budget:	
Locations:	Nationwide
Interface focus:	Humans, animal
Disease focus:	Zoonoses

Activity areas:	1) surveillance, risk assessment and response; 2) laboratory; 3) zoonoses; 4) infection prevention and control; 5) risk communications; 6) public health emergency preparedness; 7) regional preparedness, alert and response; 8) monitoring and evaluation
Website:	http://www.who.int/ihr/publications/9789241596664/en/ http://www.wpro.who.int/emerging_diseases/APSED2010/

Brief information about the project:

- To support Ministry of Health (MOH) Viet Nam develop, sustain, and strengthen comprehensive and functioning all-hazard public health emergency preparedness and response capacity.

Key activities related to zoonosis

- Development and implementation of legal documents for facilitating the collaboration and coordination between animal and human health sectors;
- Development and implementation of technical guidelines on surveillance, prevention and response to zoonotic diseases;
- Building capacity for human and animal health staff on surveillance, prevention and response to zoonotic diseases;
- Building risk communication skill for human and animal health officials;
- Supporting operational research on zoonosis.

14. Study of hygienic practices of small-scale poultry slaughterhouses in Asian partnership countries

Implementing partners:	Ministry of Agriculture and Rural Development (MARD) National Institute of Veterinary Research (NIVR) Hanoi Sub – Department of Animal Health (Hanoi SDAH) Hanoi School of Public Health (HSPH) International Livestock Research Institute (ILRI)
Donor:	International Development Research Centre (IDRC)
Timing:	2012-2013
Budget:	USD 131,148
Locations:	Central Hanoi, Chiang Mai
Interface focus:	Ecosystems, health , environment
Disease focus:	Zoonoses
Activity areas:	Education , Training; Research
Website:	https://cgspace.cgiar.org/handle/10568/12569 http://www.slideshare.net/ILRI/the-study-of-hygienic-practices-of-small-scale-poultry-slaughter-house-in-asian-partnership-countries-10644215

Brief information about the project:

SE Asia is a major focus for emerging and re-emerging disease. Rapid economic growth within the region is linked to and driving major changes in ecosystems and social systems which create conditions ideal for the emergence and spread of new disease. SE Asia is a hot spot with 42% of the world's EID including SARS, avian influenza, and Nipah virus.

The H5N1 epidemic demonstrated the need for good co-operation and collaboration between sectors and disciplines. This needs to be consolidated further. Socio-economic, environmental and ecological aspects should be considered as well as bio-medical expertise

- To elucidate the status of small scale poultry slaughterhouses and their affect to ecological and health in the community
- To sustainably enhance hygiene and functioning of the slaughterhouses

Key activities

- Recommendation of the hygienic practices in the small scale poultry slaughter houses
- Systemic approaches for sustainably improving the hygienic status of slaughterhouses
- Development of suitable hygienic practices in the small scale poultry slaughterhouses in two countries in this study, which can be recommended to the (local) governments.
- Completion of research trainings for some graduate students in each country.
- Development model for establishment of participatory problem solving particular post graduate study and community.

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15. The GREASE Research Network Partnership for the Management of Emerging Epidemic Risks in Southeast Asia

Implementing partners:	Core members of the network: - Kasetsart Uni. (Thailand) (Presidency 2012-2016) -Center for International Research and Agricultural Development (CIRAD) (coordination) - National Institute of Veterinary Research (NIVR) (Presidency from 2016-2018) representing the Ministry of Agriculture and Rural Development (MARD) (Vietnam) - National University of Lao PDR (Lao PDR) - National Veterinary Research Institute (NaVRI) (Cambodia) - Central Mindanao University (CMU) (Philippines) Associated partners : IPC, HKU-PRC, MU-A, AVSF, IRD, CNRS, OIE, FAO-RAP, AIT.

Donor:	Contribution from all core members; coordination of the network supported by CIRAD DP action.
Timing:	Launched in 2012
Budget:	Coordination: around 10,000 Euros/year
Locations:	Laos, Cambodia, Indonesia, Philippines, Thailand and Vietnam
Interface focus:	Human, Animals, Environment
Disease focus:	Not specified (activities ongoing on viral and parasitic diseases)
Activity areas:	Cooperation, Research
Website:	http://www.grease-network.org

Brief information about the project:

GREASE is a regional non-profit structuring organization of research institutions and/or researchers dedicated to research and scientific activities for the development on TADs and EIDs. Network Members agreed to: i) share experiences and results; ii) define regional priorities and design corresponding research programmes; and iii) search & mobilize funding to implement regional programmes. GREASE will allow members to do together what individually can't be achieved.

GREASE involves stakeholders from Thailand, Lao PDR, Cambodia, Vietnam, the Philippines and Indonesia. The impacts of global changes (including climate changes) on sanitary risks emergence are claimed by international organizations and supported by several international programs. Particularly, vast changes affecting biodiversity and livestock production/marketing may unexpectedly increase the risk of zoonotic diseases transmission.

Objectives

- The general objective of the network is to improve the management of epidemiological emergent risks in Southeast Asia by strengthening synergies and skills sharing.

Key activities

- Defining interdependence between epidemiological and socio-economic systems in veterinarian public health
- Defining the interactions between biodiversity and health

- Improving epidemiological data sharing at the animal/human public health interface
- Evaluating and controlling animal and zoonotic diseases impact
- Development of participatory approaches for health risk management
- Educating inter-disciplinary students in a One-Health perspective

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16. GRIPAVI project focusing on the epidemiology and ecology of the highly pathogenic avian influenza (HPAI) in Vietnam

Implementing partners:	Center for International Research and Agricultural Development (CIRAD) National Institute of Veterinary Research (NIVR) National Institute of Animal Husbandry (NIAH) Institute of Policy and Strategy for Agriculture and Rural Development (IPSARD) Vietnam National University of Agricultural (VNUA)
Donor:	Priority Solidarity Fund of the Ministry of Foreign and European Affairs, France - MAEE-FSP
Timing:	2007 – 2011
Budget:	3.5 million Euros
Locations:	Ethiopia, Madagascar, Mali, Mauritania, South Africa, Vietnam, Zimbabwe
Interface focus:	wild birds, poultry and water
Disease focus:	avian diseases outbreaks in wild birds and poultry
Activity areas:	Coordination, Education and Training, Research
Website:	http://www.grease-network.org/main-projects/completed/gripavi http://gripavi.cirad.fr/en/project_description/ai_ecology_epidemiology

Brief information about the project:

The GRIPAVI project conducts ecological, epidemiological, virological and socio-economic studies to improve our understanding of the mechanisms and determinants of highly pathogenic avian diseases outbreaks in wild birds and poultry. It aims to improve prevention and management of health crises.

Two worldwide viral diseases are specifically targeted: avian influenza and Newcastle disease, the later being particularly frequent in Africa. In their highly pathogenic forms, both diseases show similar clinical signs, are highly contagious and cause heavy mortality in poultry populations.

- To better understand the introduction, circulation and maintenance dynamics of avian influenza and Newcastle disease viruses in wild and domestic bird populations in southern countries
- To contribute to risk assessment and optimization of monitoring and control tools
- To train and inform stakeholders and decision makers

Key activities

- 45,000 birds including 10,000 wild birds tested.
- 11 PhD theses, including six by students from southern countries.
- 30 Masters-level internships in the six partner countries.
- 15 field or laboratory training sessions.
- 30 scientific publications and another 20 currently submitted.
- 60 symposium papers
- 6 national workshops and 2 international conferences

17. REVASIA project on the development of new methods of evaluation of surveillance systems, with a focus on avian influenza in Southeast Asia

Implementing partners:	Center for International Research and Agricultural Development (CIRAD) National Institute of Veterinary Research (NIVR) National Institute of Animal Husbandry (NIAH) Vietnam National University of Agricultural (VNUA)
Donor:	Avian Influenza Research Fund (FRIA) from Directorate-General of Food – DGAL ; Ministry of Agriculture, Food, and Forestry (MAAF), France (2009-2010) French Development Agency (AFD) (2010-2013)
Timing:	2009 – 2015
Budget:	550,000 Euros
Locations:	Cambodia, Lao PDR, Thailand and Vietnam
Interface focus:	Humans, livestock, wildlife
Disease focus:	avian and swine influenza
Activity areas:	Coordination, Education and Training, Research, Development
Website:	http://revasia.cirad.fr http://www.grease-network.org/main-projects/on-going/revasia

Brief information about the project:

The avian influenza panzootic caused by highly pathogenic H5N1 subtype, the risk of new highly pathogenic strains emerging on an intercontinental level, and the risk that a pandemic strain may develop require the reinforcement of controls at the animal level above all in countries where the disease is recurrent or enzootic, particularly in Southeast Asia.

A central issue in disease management is how to construct permanent surveillance networks that are capable of promptly detecting the emergence of an epizootic to enable a rapid reaction. This issue is even more important in developing countries where human and financial resources are limited and geographic access and communications are sometimes very restricted.

Standard evaluation methods are generally qualitative or semi-quantitative and are often subjective. The objective of our research programme REVASIA (Research for the Evaluation of Avian Influenza Surveillance in South East Asia) is to develop innovative quantitative methods

based on an evaluation of the health situation and the existing surveillance systems in South-east Asia region.

Objectives

- The main objective of REVASIA is to investigate tools and methodologies for the evaluation of animal diseases surveillance and control systems. The project is working towards the identification of the most relevant tool(s) and method(s) to be applied to the specific contexts for each country.

Key activities

We are basing our research on methods that are being studied in the field of veterinarian medicine (probabilistic modelling, cost-efficacy) and human health systems (capture/recapture, cost/benefits, disability adjusted life years DALYs, quality-adjusted life years QALYs), as well as with multi-agent models applied to the simulation of a surveillance network. In order to develop generic tools for the evaluation and modelling of influenza virus surveillance systems that would be applicable to both developing and industrialized countries:

1. To develop innovative quantitative evaluation methods based on:

- stochastic modelling

- capture-recapture

- multi-agent modelling

2. To develop innovative methods for the socio-economic evaluation of animal health surveillance and control programs

3. To provide evidence based information to inform cost-effective and sustainable surveillance designs

4. To contribute to the evaluation of the surveillance systems in place at national and regional level

5. To contribute to the risk assessment of zoonotic disease emergence and spread from South East Asia

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18. SWEID research project: Surveillance on Swine Emerging Diseases in South East Asia

Implementing partners:	Center for International Research and Agricultural Development (CIRAD) National Institute of Veterinary Research (NIVR) Vietnam National University of Agricultural (VNUA) Hong Kong University (HKU)
Donor:	NIH in collaboration with Hong Kong University (2013-2015) AIRD (IRD and CIRAD) (2013-2017)
Timing:	2013-2017
Budget:	100,000 Euros
Locations:	Lao PDR and Vietnam
Interface focus:	Humans and livestock
Disease focus:	swine infectious diseases and swine influenza
Activity areas:	Coordination, Education and Training, Research, Development
Website:	http://revasia.cirad.fr http://www.vietnam.ird.fr/les-activites/renforcement-des-capacites/jeunes-equipes-aird/jeai-sweid-umr-226-isem-2014-2016

Brief information about the project:

SWEID brings together 9 researchers from 2 vietnamese institute (VNUA, NIVR) and NUoL, under the coordination of Dr. Vu Dinh Ton (VNUA) and in partnership with CIRAD-AGIRs. Co-funded by IRD and CIRAD, SWEID team works on :

- Evaluation and development of swine disease surveillance systems
- To monitor swine infectious diseases
- For early detection of swine disease emergence (e.g. new strain of swine influenza)

19. Asia Partnership on Emerging Infectious Diseases Research (APEIR) - Vietnam Network

Implementing partners:	International Development Research Center (IDRC), Canada
Donor:	United States Agency for International Development (USAID)
Timing:	first phase: 2006-2009, second phase: 2010 - 2016
Budget:	USD
Locations:	Cambodia, China, Lao PDR, Indonesia, Thailand, Vietnam
Interface focus:	Humans – Animals
Disease focus:	bird flu (H5N1), EIDs
Activity areas:	Collaboration, Research
Website:	http://www.apeiresearch.net/new/aboutus.php?content=aboutus

Brief information about the project:

The Asia Partnership on Emerging Infectious Diseases Research (APEIR) was initiated in 2006 to promote regional collaboration in avian influenza research. In 2009, the partnership expanded its scope to include all emerging infectious diseases (EIDs). APEIR is a research network, composed of researchers, practitioners and senior government officials from Cambodia, China, Lao PDR, Indonesia, Thailand and Vietnam.

- Develop a strong research network in Asia that generates 3M (multi-disciplinary, multi-sector and multi-country) collaborative researches and actions on EIDs based on ecohealth/onehealth concepts
- Facilitate communication and knowledge sharing among countries to reduce the threat of EIDs and their burden on these countries, especially on poor and marginalized groups in the region.
- The network aims to accommodate, and facilitate the researchers with and within

countries in order to support activities on knowledge generation (e.g., through research), facilitate research capacity building (e.g., by coordinating multiple researchers to develop high-quality research proposals, planning and conducting joint research projects), and encourage and accommodate policy and social advocacy (e.g., by disseminating research results to policy makers) through the network and partnership.

Key activities

- In Vietnam, APEIR research projects include the ECO-EID and EcoZD projects:
- An Ecohealth Approach to Develop a Strategy for the Prudent Use of Antimicrobials to Control Antimicrobial Resistance in Human, Animal, and Environmental Health in Asia.
- Surveillance of Emerging Infectious Diseases in Wildlife Trade to Increase Awareness for Zoonoses Prevention and Wildlife Conservation

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20. An Ecohealth Approach to Develop a Strategy for the Prudent Use of Antimicrobials to Control Antimicrobial Resistance in Human, Animal, and Environmental Health in Asia - APEIR-AMR

Implementing partners:	National Institute of Veterinary Research (NIVR) Institute of Animal Sciences (NIAS) – Ministry of Agriculture and Rural Development National Institute of Hygiene and Epidemiology (NIHE)
Donor:	International Development Research Center of Canada (IDRC)
Timing:	9 August 2013 to 12 August 2016
Budget:	5,695,200.00 THB
Locations:	Vinh Phuc province – Vietnam
Interface focus:	Human-pig and layer

Disease focus:	Not specified
Activity areas:	Action research
Website:	http://www.apeiresearch.net/new/main.php

Brief information about the project:

Antimicrobial resistance (AMR) is a global health issue. The wide use and abuse of antimicrobials as anti-infective drugs and non-therapeutic treatments have contributed substantially to the persistence of infections and are a major cause of morbidity and mortality.

- To understand how easy to get the antibiotic and the availability of the antibiotics in animal health and human medical practice
- To measure the knowledge, attitude and practice of antimicrobial use from different stakeholders including the general public, farmers, health care practitioners, animal practitioners and pharmacists
- To identify the factors that influence decision making on using or not using antimicrobial agents on farms and by the general public

Key activities

- Desk Study, Systematic Review and Stakeholders Mapping on AMR in each country;
- Survey on Drug Accessibility and Practices on Antimicrobial used in Farm and Human;
- Survey on KAP on AMR; Economic impact Study and Intervention Phase (Action research)

21. Control and preventive measures for highly pathogenic avian influenza in Thailand, China and Vietnam – a comparative study (APEIR-CM)

Implementing partners:	National Institute for Veterinary Research (NIVR)
Donor:	International Development Research Centre (IDRC)
Timing:	2008 – 2011
Budget:	USD
Locations:	Thailand, China, Vietnam
Interface focus:	Humans - Animals
Disease focus:	H5N1, bird flu
Activity areas:	Surveillance
Website:	

Brief information about the project:

China, Vietnam and Thailand are among the countries most severely affected by highly pathogenic avian influenza viruses of the H5N1 subtype. A range of control and preventive measures have been implemented concurrently to combat the disease in these three countries. The measures used varied from country to country, within countries and over time

- To review the measures recommended or stipulated for control of AI, and specifically H5N1 HPAI, in each of the three countries.
- To determine how the recommended and stipulated control and preventive measures have been implemented (both individually and collectively) and how the mplementation of these measures has affected the risk of infection, persistence of H5N1 HPAI viruses and/or recurrence of HPAI in selected

Key activities

- Identification of the most effective control measuresarea(s) of each country.

22. Study on prevention of Zoonotic Emerging Infectious Disease in provinces in Southern Vietnam: Ecosystem studies (EcoZD: Zoonotic research in southern Vietnam)

Implementing partners:	Department of Animal Health and Nong Lam University
Donor:	International Development Research Centre (IDRC-EcoZD)
Timing:	2008 – 2013
Budget:	USD
Locations:	Binh phuoc anh An Giang province
Interface focus:	Livestock-human-environment
Disease focus:	Leptospirosis
Activity areas:	Disease surveillance
Website:	

Brief information about the project:

During the period following Doi Moi Viet Nam has experienced significant economic development with many people having more purchasing power to be able to shift to a more diversified diet that includes increasing share of animal protein. The 'Eco-health' approach proposed here aims to link surveillance data and knowledge about zoonoses.

- To estimate occurrence of 'selected zoonoses' using human and animal surveillance data

- To measure incidence/prevalence in detail of 'priority zoonoses' within pilot communities & households – taking into account community priorities and
- To study ecological, agricultural and social risk factors for the 2 'priority zoonoses' and identify possible risk factor based interventions.

Key activities

- Questionnaire/Sampling; Laboratory analysis; synthesis and reporting

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23. Eco-health Assessment on Poultry Production Clusters for the Livelihood Improvement of Small Producers - Eco-EID

Implementing partners:	Institute of Planning and Strategy on Agriculture and Rural Development - CAP-IPSARD
Donor:	United States Agency for International Development (USAID)
Timing:	2011-2014
Budget:	USD
Locations:	Dong Nai, Hanoi
Interface focus:	Poultry-Environment-Human
Disease focus:	Not specified
Activity areas:	Research
Website:	http://ipsard.gov.vn

Brief information about the project:

South-east Asian countries posed higher bio-security requirements for poultry producers. Has driven small producers out of the expanding markets. Many Asian countries promoted

the construction of PPC as a vehicle to drive small producers into intensive and standardized livestock production

- To assess the impact of these PPCs on the socio-economic status of the small producers;
- To explore the changes in attitudes, behaviours and relations among various stakeholder groups;
- To conduct eco-health pilot interventions to improve the livelihoods of small producers and to reduce the risk of disease emergence in the PPCs and
- To develop policy recommendations to improve the PPCs so as to integrate small producers into high-value and safe poultry production chains

Key activities

- Literature reviews; Impacts of Poultry Production Cluster

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24. Application of an Eco-Bio-Social Approach to Emerging Infectious Diseases in Southeast Asia Global Outreach Hotspots (EcoEID)

Implementing partners:	Ministry of Health (MOH) National Institute of Hygiene and Epidemiology (NIHE); Hai Phong Provincial Preventive Medicine Center (Hai Phong PPMC)
Donor:	International Development Research Centre (IDRC)
Timing:	2012 – 2014
Budget:	USD
Locations:	Hai Phong

Interface focus:	Humans, livestock, wildlife
Disease focus:	vector-borne (dengue) and zoonotic diseases
Activity areas:	Coordination, Education and Training, Research
Website:	

Brief information about the project:

To develop comprehensive, community-based, inter-sectoral strategies to empower vulnerable human populations in global outreach hotspots in six Southeast Asian countries in order to reduce risks of emerging vector-borne and zoonotic diseases

Key activities

- In 2013, NIHE and Hai Phong PPMC will complete the baseline survey and apply a community-based control program to protect international and domestic tourists and local people from dengue in Cat Ba Island

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25. Vietnam Avian and Human Influenza Control and Preparedness Project - VAHIP

Implementing partners:	Ministry of Agriculture and Rural Development (MARD) Ministry of Health (MOH)
Donor:	Government of Vietnam, AHI Facility Trust Fund, PHRD Grant of Japan and IDA Credit World Bank (WB)
Timing:	2007-2013

Budget:	USD 38,000,000
Locations:	11 selected provinces, namely Lang Son, Ha Tay, Thai Binh, Thanh Hoa, Ha Tinh, Thua Thien Hue, Binh Dinh, Tay Ninh, Long An, Dong Thap, and Tien Giang
Interface focus:	Humans, livestock, wildlife
Disease focus:	HPAI
Activity areas:	Coordination, Education and Training, Research
bsite:	http://www.baobinhdinh.com.vn/business/2008/2/54871/ http://www.worldbank.org/en/topic/pandemics/projects/operational-documents?qterm=vahip&lang_exact=English

Brief information about the project:

The project's development objective is to increase the effectiveness of Government services in reducing the health risk to poultry and humans from avian influenza in eleven high priority provinces and thus contribute to addressing highly pathogenic avian influenza (HPAI) at the national level by controlling the disease at source in domestic poultry, by early detection and response to poultry and human cases, and by preparing for the medical consequences of a human pandemic. This is in line with and supports the implementation of Vietnam's plans for the medium to long-term control of avian and human influenza as outlined in the OPI (Integrated National Operational Program for the Avian and Human Influenza 2006 – 2010, The Green Book), and is fully consistent with the approach envisaged under the Global Program for Avian Influenza and Human Pandemic Preparedness and Response (GPAI).

- Further strengthening veterinary and human health services
- Improving the quality and scope of disease control and surveillance and public awareness
- Supporting integration of animal and human health activities and OPI coordination

Key activities

- The Project comprises three components:
- Component A - HPAI Control and Eradication in the Agricultural Sector;
- Component B - Influenza Prevention and Pandemic Preparedness in the Health Sector;
- Component C - Integration and OPI Coordination, Results Monitoring and Evaluation (M&E), and Project Management.

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26. Vietnam - Additional Financing for the Avian and Human Influenza Control and Preparedness Project - VN-VAHIP

Implementing partners:	Ministry of Agriculture and Rural Development (MARD) Ministry of Health (MOH)
Donor:	World bank (WB)
Timing:	2011 – N/A
Budget:	USD 25,000,000
Locations:	Nationwide
Interface focus:	Human, poultry
Disease focus:	A/H5N1
Activity areas:	Coordination, Research
Website:	http://www.worldbank.org/projects/P123783/vn-vahip-additional-financing?lang=en

Brief information about the project:

The project is aim to increase the effectiveness of public services in reducing the health risk to poultry and humans from avian influenza in eleven high priority provinces.

The Ministry of Health will be the lead agency for implementation of the AF project, instead

of the Ministry of Agriculture and Rural Development. At the provincial level, the joint Provincial Project Management Units (PPMUs) in 11 project provinces will be responsible for implementation of the AF project. Provincial Department of Health will be the lead agency for implementation of the AF project in respective provinces

The additional credit will help finance the costs associated with: (a) implementation of expanded activities that consolidate and scale up the project impact under component A, Highly Pathogenic Avian Influenza (HPAI) control and eradication in the agricultural sector; and (b) scaling up of the successful pilots in strengthening human health systems in 51 additional districts in 11 provinces under component B, influenza prevention and pandemic preparedness in the health sector.

- To assist the recipient to increase the effectiveness of public services in reducing the health risk to poultry and to humans from avian influenza in selected provinces

Key activities

- Controlling the disease at source in domestic poultry
- Early detection and response to poultry and human cases of infection Preparing for the medical consequences of a human pandemic.

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27. USAID, FAO extend project to address risks of avian influenza in Vietnam

Implementing partners:	Food and Agriculture Organization (FAO) Ministry of Agriculture and Rural Development (MARD)
Donor:	United States Agency for International Development (USAID)
Timing:	6/2013
Budget:	USD 1,700,000
Locations:	Nationwide
Interface focus:	Humans, poultry

Disease focus:	H5N1, H7N9
Activity areas:	Surveillance and monitor, biosecurity
Website:	http://www.usaid.gov/vietnam/press-releases/us-supported-project-extended-address-risks-avian-influenza-vietnam

Brief information about the project:

- To strengthen the control of H5N1 outbreaks and other emerging infectious diseases including the emerging H7N9 risk
- To help the Ministry of Agriculture and Rural Development's Departments of Animal Health and Livestock Production develop and apply policies and legislation to improve bird flu and other animal disease control nationwide

Key activities

- Support the Department of Animal Health, Department of Livestock Production, National Centre of Veterinary Diagnosis, Regional Animal Health Offices and associated laboratories to continue monitoring viruses through collection and analysis of bird samples at more than 250 live bird markets
- Improve biosecurity in poultry production.
- Enhance overall animal health systems through support to laboratory staff, improve surveillance and diagnostic quality as well as monitoring vaccines and evolving viruses to inform government responses.

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28. USAID additional funding on H7N9 help the FAO and the Vietnamese Government continue to build capacity to prevent and cope with avian flu outbreaks

Implementing partners:	Food and Agriculture Organization of the United Nations-FAO; Department of Animal Health (DAH) Department of Livestock Production (DLP)
Donor:	United States Agency for International Development (USAID)

Timing:	2010-2014
Budget:	USD 1,700,000
Locations:	Central Lang Son, Hanoi, Thai Binh, Thanh Hoa, Ha Tinh, Thua Thien Hue, Binh Dinh, Tay Ninh, Long An, Tien Giang and Dong Thap
Interface focus:	
Disease focus:	H5N1, H7N9
Activity areas:	Bio-security, Training capacity
Website:	

Brief information about the project:

- To build capacity in controlling H5N1 flu infected areas and related hazards including the H7N9 flu, the new phase of the project will help the Veterinary Department and the Department of Animal Husbandry under the Ministry of Agriculture and Rural Development draw-up and apply policies and laws to enhance control of the avian flu and other animal-to-human infectious diseases nationwide

Key activities

- Monitoring viruses by collecting and analyzing avian samples at more than 250 markets
- Strengthen biological security in poultry breeding,
- Build capacity of the veterinary system in helping lab experts improve the quality of monitoring and diagnosis and effectively monitor vaccines and viruses in order to notify the government of the readiness to cope with would-be outbreaks.

29. Support to knowledge management and policy dialogue through the partnership on avian and pandemic influenza (KMP-API)

Implementing partners:	United Nations Development Project (UNDP) Partnership on Avian and Pandemic Influenza (PAHI) International Cooperation Department, Ministry of Agriculture and Rural Development - ICD MARD
Donor:	United States Agency for International Development (USAID)
Timing:	2012 – 2013
Budget:	USD $300,000 USAID; National co-funding: $14,285
Locations:	Nationwide
Interface focus:	Environment, Human, Animal
Disease focus:	Not specific
Activity areas:	Coordination, management and policy
Website:	http://www.vn.undp.org/content/vietnam/en/home/operations/projects/environment_climatechange/Support-to-knowledge-management-and-policy-dialogue-through-the-partnership.html http://www.vn.undp.org/content/dam/vietnam/docs/Project%20Documents/29588_Prodoc_KMP-API.pdf

Brief information about the project:

Avian influenza viruses of the H5N1 subtype emerged as a serious cause of disease in poultry and humans in Viet Nam in late 2003. The response activities undertaken over the past five years have been guided by the first National Integrated Operational Program for Avian and Human Influenza, 2006-2010 (Green Book). To follow on from the Green Book, the Government of Viet Nam, represented by the Ministry of Agriculture and Rural Development (MARD) and the Ministry of Health (MOH), has worked closely with international partners to develop the

new Integrated National Operational Program on Avian Influenza, Pandemic Preparedness and Emerging Infectious Diseases (AIPED), 2011-2015.

This project will provide support for launching the AIPED, 2011-2015 and will play a lead role in Avian and Pandemic Influenza (API) knowledge management and policy dialogue between national and international partners and their activities within the framework of AIPED, through the Partnership on Avian and Human Influenza (PAHI)

- By 2016, increased quality and effective management of a comprehensive national health system, including health promotion and health protection, with a focus on ensuring more equitable access for the most vulnerable and disadvantaged groups
- Policy advice and technical support provided to strengthen the building blocks of human and animal health systems, including information systems and the generation of evidence, at national and sub-national levels

Key activities

- A Launching and inception of the AIPED 2011-2015;
- Enhancing API knowledge management and policy dialogue;
- Support to personnel and operations for KMP-API

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30. Strengthening Global Health Security Capacity – Vietnam Demonstration Project

Implementing partners:	General Department of Preventive Medicine (GDMP) - Ministry of Health (MOH) Centers for Disease Control and Prevention (CDC) National Institute of Hygiene and Epidemiology (NIHE) Pasteur Institute - Ho Chi Minh City
Donor:	PEPFAR
Timing:	2013
Budget:	USD

Locations:	Hanoi, Ho Chi Minh
Interface focus:	Human, Animal
Disease focus:	MERS-CoV, H5N1, H7N9, SARS
Activity areas:	Detection and response capacity
Website:	http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6304a3.htm

Brief information about the project:

Over the past decade, Vietnam has successfully responded to global health security (GHS) challenges, including domestic elimination of severe acute respiratory syndrome (SARS) and rapid public health responses to human infections with influenza A(H5N1) virus. However, new threats such as Middle East respiratory syndrome coronavirus (MERS-CoV) and influenza A(H7N9) present continued challenges, reinforcing the need to improve the global capacity to prevent, detect, and respond to public health threats. In June 2012, Vietnam, along with many other nations, obtained a 2-year extension for meeting core surveillance and response requirements of the 2005 International Health Regulations (IHR). During March–September 2013, CDC and the Vietnamese Ministry of Health (MoH) collaborated on a GHS demonstration project to improve public health emergency detection and response capacity.

- Demonstrate, in a short period, that enhancements to Vietnam's health system in surveillance and early detection of and response to diseases and outbreaks could contribute to meeting the IHR core capacities, consistent with the Asia Pacific Strategy for Emerging Diseases.

Key activities

- Establishing an emergency operations center (EOC) at the General Department of Preventive Medicine with training of personnel for public health emergency management;

- Improving the nationwide laboratory system, including enhanced testing capability for several priority pathogens (i.e., those in Vietnam most likely to contribute to public health emergencies of international concern);

- Creating an emergency response information systems platform, including a demonstration of real-time reporting capability.

31. Four-Way Linking Project for Assessing Health Risks at the Human-Animal Interface

Implementing partners:	General Department of Preventive Medicine (GDPM) – Ministry of Health (MOH) National Institute of Hygiene and Epidemiology (NIHE) Department of Animal Health (DAH) National Centre of Veterinary Diagnosis (NCVD) Pasteur Institute in Ho Chi Minh city (PI) National Institute of Veterinary Research (NIVR) Regional Animal Health Office – RAHO 6 (Ministry of Agricultural and Rural Development) National Hospital of Tropical Disease (Hanoi) Hospital for Tropical Diseases (Ho Chi Minh city
Donor:	World Health Organization – WHO
Timing:	Launched in June, 2011
Budget:	USD
Locations:	Nationwide
Interface focus:	Human and animal
Disease focus:	Human and animal diseases
Activity areas:	Laboratory, Early detection
Website:	http://www.who.int/influenza/human_animal_interface/EN_GIP_FourWay_HAI_2013.pdf?ua=1

Brief information about the project:

The project was launched in Viet Nam in June 2011, supported by the General Department

of Preventive Medicine (GDPM), National Institute of Hygiene and Epidemiology (NIHE), Department of Animal Health (DAH), and National Centre of Veterinary Diagnosis (NCVD). During the 2-week review mission, the joint team visited different national stakeholders in both the North and South of Vietnam, including the GDPM at the Ministry of Health, NIHE, DAH, NCVD, Pasteur Institute in Ho Chi Minh city (PI), National Institute of Veterinary Research (NIVR), Regional Animal Health Office – RAHO 6 (Ministry of Agricultural and Rural Development), the National Hospital of Tropical Disease (Hanoi) and Hospital for Tropical Diseases (Ho Chi Minh city), as well as partners in Ha Nam, Tien Giang, and Binh Duong provinces. Opportunities for strengthening communication within and between sectors and mechanisms for joint risk assessment were identified. Importantly, at that time, the Government of Viet Nam was formalising an official interministerial circular to "guide the collaboration among different units and sectors in the prevention and control of zoonotic diseases" addressing improving cross-sectoral collaboration, which facilitated and influenced much of the discussion

- To establish a mechanism for intersectoral and epidemiology laboratory cooperation (facilitated by the interministerial circular)
- To improve data sharing at all levels and harmonize data reporting
- To jointly perform risk assessments, in addition to specific sectoral risk assessments.
- To strengthen inter-sectoral communication
- To strengthen reporting procedures from the district to the provincial level and to the national level and harmonize data reporting
- To strengthen the risk assessment process contribution to early warning at the provincial level

Key activities

- Evaluation of collaboration activities between human and animal health sectors on AI in four southern provinces (Can Tho, Kien Giang, Dong Thap and Vinh Long).
- Workshop on strengthening the collaboration between human and animal health sectors at district and provincial level in Dong Nai province in the south.
- Training on strengthening the collaboration between epidemiology and laboratory on surveillance, investigation and response of infectious diseases for human and animal health sectors in the northern and central regions of Viet Nam

32. Field Building Leadership Initiative (FBLI): Advancing Ecohealth in Southeast Asia - Research study "Using Ecohealth Approach for a Better Management of Livestock and Human Waste in Hanam Province, Vietnam" - Eco-HANAM

Implementing partners:	Center for Public Health and Ecosystem Research (CENPHER), Hanoi School of Public Health (HSPH)
Donor:	International Development Research Centre – (IDRC, Canada)
Timing:	2012-2017
Budget:	CAD 551.400
Locations:	Ha Nam province
Interface focus:	Human-livestock-environment
Disease focus:	Not specified
Activity areas:	Research
Website:	www.ecohealthasia.net

Brief information about the project:

The "Field building leadership Initiative (FBLI): Advancing Ecohealth in Southeast Asia" project is funded by the International Development Research Center (IDRC), Canada and hosted by the Hanoi School of Public Health, Vietnam and partner institutions within the Southeast Asia region. In Hanam Province, Vietnam, the project uses an Ecohealth approach to address human and animal health issues related to agricultural intensification.

- Understand the overall situation of agricultural activities (livestock and crop productions)
- Explore the current handling practices on livestock and human waste management
- Assess the impacts of human and animal waste management on human health, animal health, environment and economics and social aspects

Key activities

- Develop and implement practical and innovative solutions for better livestock and human waste management to improve health and well-being of people and environment
- Capacity building and Knowledge translation

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33. Building capacity for research and practice in ecosystem approaches to health in Southeat Asia - BECA

Implementing partners:	University of Calgary
Donor:	International Development Research Centre (IDRC)
Timing:	2010-2012
Budget:	USD 3,500,000
Locations:	Vietnam, Lao,Cambodia, Thailand, Indonesia
Interface focus:	EIDs
Disease focus:	Not specified
Activity areas:	Research, policy
Website:	www.vwb-vsf.ca

Brief information about the project:

- Long term goal of this project reduce the risk of EID outbreaks in through increased capacity responding to the development and promotion of sustainable approaches to health, thereby promoting healthy livelihoods region.

Key activities

- Identify through research activities and promote through research networks methodologies for developing and measuring of sustainable ecosystem approaches to health.
- Promote and facilitate regional networking and collaboration between high-level researchers, decision makers, and community research and EID prevention and control in the region

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34. Partnership on global animal health and biosecurity initiatives(OSRO/GLO/102/AUL)

Implementing partners:	Ministry of Agriculture and Rural Development (MARD) Department of Animal Health (DAH) Phu Tho Sub-Department of Animal Health (SDAH) Provincial Preventive Medecine Center (PPMC) Department of Education and Tranining (DOET); Food and Agriculture Organization of the United Nations (FAO)
Donor:	Department of Agriculture, Fisheries and Forestry, Australia (DRAFF)
Timing:	2009 – 2013
Budget:	USD 1,695,399
Locations:	Phu Tho Center
Interface focus:	Human- Animal (dog)-Environment
Disease focus:	Rabies

Activity areas:	Prevention, risk reduction, Communication, Education and Training
Website:	

Brief information about the project:

- Overall objective: to build capacity for evidence-based management of rabies control program in Viet Nam.
- Specific objective: to develop base-line data on dog ecology, record current practices, attitude and knowledge about potential threat to public health due to rabies in Viet Nam and consider options for an optimum and cost-effective control program in the animal sector for a strategic rabies control program in Viet Nam.

Key activities

- School public awareness campaign on rabies prevention (Phu Tho);
- Collaboration between animal health and public health officials to finalize an educational entertainment script on rabies prevention for dog owners & school students;
- Dog Ecology Survey;
- Upcoming workshop to include international inputs

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35. Impacts of livestock intensification on community health - ECOMORE

Implementing partners:	National Institute of Hygiene and Epidemiology (NIHE) Hanam Preventive Medicine Center (Hanam PMC) ANSES - French, Irstea National Research Institute of Science and Technology for Environment and Agriculture (IRSTEA)

Donor:	AFD (French Agency for Development)
Timing:	2013 – 2016
Budget:	450,000 EU
Locations:	Ha Nam
Interface focus:	Human-Animal (pig and poultry)- Environment
Disease focus:	Influenza, Hepatistis E, S.suis, leptospira
Activity areas:	Surveillance, prediction early detection; Disease control; Preparedness; risk reduction; Education and training
Website:	http://www.afd.fr/, http://www.nihe.org.vn http://ecomore.org/

Brief information about the project:

Small-scale household based production accounts for about 70% of the total livestock production. The waste from livestock farms is one of the biggest polluting sources in agriculture production: 73 million tons of waste is discharged every year from the animal husbandry.

- To describe noticeable health events/diseases in both animal and human populations living in area with intensive livestock farming system in comparison with area with traditional rural system
- To evaluate environmental contamination level, behavioral risks and health risks among the population in intensive livestock context vs. traditional system
- To provide recommendations on good livestock practices and good personal hygiene practices to reduce health risks
- To strengthen cross-sectoral collaboration with national and international stakeholders involved in relevant sectors of health, agriculture, environmental hygiene etc

Key activities

- Longitudinal study in 1-year period: icluding population-based surveillanc and livestock farm- based surveillance, Cross-sectional study, Environment surveys
- Participatory Rapid Appraisal (PRA)
- Knowledge transfer and Involving process

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36. Environmental and food reservoirs of antibiotic resistant organisms and its link with human disease - VLIR-UOS No.2013-83

Implementing partners:	National Institute of Veterinary Research (NIVR) National Institute of Hygiene and Epidemiology (NIHE) University of Antwerp, Belgium - UA Belgium
Donor:	Vlir, Belgium
Timing:	2013-2015
Budget:	EU 66,405
Locations:	Hanoi
Interface focus:	Human-Animal - Environment
Disease focus:	UTI
Activity areas:	Training, Research
Website:	www.vliruos.be

Brief information about the project:

Since mid-2011 the Flemish and Vietnamese partners investigated potential collaboration on a common research interest, namely the alarming spread of antibiotic resistant bacteria (ARB) in the clinical setting as well as in the environment such as the recently discovered

carbapenemase producing organisms in seepage and drinking water in India. This global emergence of organisms resistant to virtually all antibiotics is considered as one of the major public health threats . Vietnam faces a serious antibiotic resistance problem due to the high and inappropriate antibiotic use in humans and recently resistant organisms in healthy humans and water samples have also been demonstrated. Simultaneous analysis of different reservoirs of ARB such as livestock, food, water and human carriers is a highly novel and effective methodology to elucidate their transmission routes and their disease causing potential

- To study livestock, food, water and humans for presence of antibiotic resistant bacteria (ARB) and resistance determinants. This objective will provide a comprehensive picture of the level of ARB in different reservoirs as well as in the clinical setting in a defined study area, Hanoi.
- To determine the transmission and molecular epidemiology of the recovered ARB . The genetic relatedness of these ARB allows understanding how antibiotic resistance spreads within the reservoirs and will elucidate a potential correlation between the presence of ARB in the environment and their presence in humans

Key activities

- Questionnaire/Sampling; Laboratory analysis; exchange training and reporting

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37. Strengthening research capacity for some neglected diseases in Vietnam

Implementing partners:	National Institute of Infectious Diseases (NIID) National Institute of Hygiene and Epidemiology (NIHE)
Donor:	Ministry of Health, Labor and Welfare, the Government of Japan (H23-Shinkou- shitei-020), NIID
Timing:	01/01/2012- 31/12/2014
Budget:	89,842,810 USD (7m Japan Y)
Locations:	Hanoi, ThanhHoa, DienBien
Interface focus:	Human-Animal-Environment

Disease focus:	Necglected diseases
Activity areas:	Coordination, Education and Training, Research
Website:	http://www.nihe.org.vn

Brief information about the project:

- Including 9 sub-projects: improve diagnosis, surveillance capacity: rabies, FHM, Histoplasma, Lepto, AMR, measles, cholera

Key activities

- Surveillance, collection of samples, diagnosis, trainning

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38. Molecular epidemiologic characteristics of multiple antibiotic-resistant Salmonella and Campylobacter isolates from poultry and human (NAFOSTED 106.03-2011.03)

Implementing partners:	National Institute for Veterinary Research (NIVR) National Institute of Hygiene and EPidemiology (NIHE) Ministry of Science and Technology (MOST)
Donor:	NAOSTED
Timing:	2012-2015
Budget:	1.391.892.306 VND
Locations:	Hanoi, Hung Yen, Bac Giang
Interface focus:	Human-Animal
Disease focus:	AMR

Activity areas:	Surveillance, disease control; prevention, risk reduction, AMR
Website:	www.nafosted.gov.vn

Brief information about the project:

The current status of antimicrobial resistance of bacteria is a global concern and particularly prominent in developing countries with the burden of infectious diseases and the costs required for the replacement of older antibiotics with new and expensive antimicrobial. Bacteria exposed as much to antibiotic, their resistant ability had been growing and spreading. Particularly in Vietnam, until the present time, no published results of the type the characteristic of antibiotic resistant genes of bacterial strains isolated from food chain and related persons

- To determine the similarity in genetic structure of the related resistance antibiotic factors of Salmonella and Campylobacter isolates from poultry and human

Key activities

- Baseline survey, isolation of Salmonella/Campylobacter strains from collected samples in the poultry meat chain, and the stool specimens from infected patients/ healthy individuals.
- To determine an extent of antibiotic resistance of isolates strains and select a multiple drug resistant strains.
- To identify and describe the genetic factors in promoting an microbial resistance in the isolated strains by using molecular methods such as polymerase chain reaction, pulse field gel electrophoresis (PFGE), plasmid profiling

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39. Study on rabies transmission from neighboring countries via butchering and consuming dog meat in Northern Vietnam

Implementing partners:	Hanoi Preventive Medicine Center (PMC Hanoi) National Institute of Hygiene and Epidemiology (NIHE)
Donor:	NAFOSTED

Timing:	2015-2017
Budget:	1,292,903.000 VND
Locations:	Hanoi
Interface focus:	Human-animal (dog)
Disease focus:	Rabies
Activity areas:	Surveillance, laboratory detection, KAP, prevention, reduce risk, research
Website:	www.nafosted.gov.vn

Brief information about the project:

Currently, rabies has been increasing and being the complicated public issue in the region such as China, Vietnam, Thailand, Laos, Cambodia ... Even, some countries such as Taiwan and Korea which were considered as free of animal rabies in the past but have been reemerging in recent years. Many questions related to current reemerging of rabies in the region to be addressed are: Is there any possibility of rabies virus entry from countries to others via illegal importation of reservoirs (specific to dogs for slaughter)? And what are risks of rabies infection to dog butchers? This research will furnish the scientific evidences for the nations developing and applying the effective intervention measures in control of rabies.

- To determine rabies transmission abilities from surrounding countries via dog meat consumption in Northern Vietnam

Key activities

- To determine the rate of rabies infected dogs and to characterize rabies viruses (if any) isolated in dogs which are gathered from local zones of Vietnam and surrounding countries for slaughter;
- To assess rabies related knowledge, attitude and practices (KAP) among professional dog butchers;
- To determine immune response to rabies virus of vaccinated and unvaccinated professional dog butchers.

40. Immediate technical assistance to strengthen emergency preparedness for Highly Pathogenic Avian Influenza (HPAI) - OSRO/RAS/604/USA

Implementing partners:	Food and Agriculture Organization of United Nations (FAO)
Donor:	United States Agency for International Development (USAID)
Timing:	Phase 1: 10/2006-9/2007 Phase 2: 10/2007-9/2008 Phase 3: 10/2008-9/2009 Phase 2-extension: 10/2009-9/2010 Phase 4: 10/2010-9/2011 Phase 5: 10/2011-9/2012 Phase 6: 10/2012-9/2013 Phase 7: 10/2013-12/2014
Budget:	Phase 1: total 5,615,000 USD. Budget for Vietnam: 2,000,000 USD Phase 2: 3,100,000 USD Phase 3: 3,300,000 USD Phase 3-extension: 1,075,000 USD Phase 4: 2,200,000 USD Phase 5: 2,408,373 USD Phase 6: 1,700,000 USD Phase 7: 1,300,000 USD Total: 17,083,373 USD

Locations:	Nationwide, focus on Central level. Plilot provinces: Phase1-2: Thai Nguyen, Quang Binh, Quang Ngai, Hau giang, Soc Trang Phase 1-2: Thái Nguyên, Quảng Bình, Quảng Ngãi, Hậu Giang, Sóc Trăng Phase 3-4: Hà Nam, Hưng Yên, Quảng Trị, Cần Thơ, Kiên Giang Phase 5-6-7 (zonal approaches): focus on RAHO 3,6,7
Interface focus:	Human, Poultry diseases
Disease focus:	HPAI
Activity areas:	Preparedness & Planning, animal surveillance, animal response; Research: vaccine efficiency and characterization
Website:	

Brief information about the project:

Highly Pathogenic Avian Influenza (HPAI) caused by the H5N1 subtype of influenza A virus, led to international concern early in 2004 with its occurrence in several Asian countries. International organizations including the Food and Agriculture Organization of the United Nations (FAO) and many donors were swift to respond with support that initially focused on short-term activities including urgent measures to limit the spread and improve surveillance and disease recognition and reporting. The project OSRO/RAS/604/USA-Phase 1 has been started in October 2006 with the aim to address the urgent short-term actions that are to be undertaken by the countries in the region to strengthen their capacity to rapidly detect the introduction of HPAI into the country and minimize its spread in case of its occurrence.

After this phase, the project have been received continuous support from the donor to conduct the 6 following phases from October 2007 to December 2014 with a view to reducing and stopping the spread of H5N1 among and between the flocks of birds in the country thus reducing the risk of contagion to mammals and humans and avoiding the possibility of a pandemic

- Phase 1: The overall objective is to address the urgent short-term actions that are to be undertaken by the countries in the region to strengthen their capacity to rapidly detect the introduction of HPAI into the country and minimize its spread in case of its occurrence. Achieving this goal will significantly reduce the threat of pandemic

influenza and help safeguard the livelihoods of the rural and peri-urban population.

- Phase 2-3-4: The project goal aims at achieving a situation in which Viet Nam no longer represents a risk for development of human pandemic influenza from H5N1 virus. The immediate outcome is to reduce the health risk to humans from avian influenza – in the medium-term as well as short-term – by controlling the disease in poultry.

- Phase 5-6: The main broad objective of the project will be to reduce and stop the spread of H5N1 among and between the flocks of birds in the country thus reducing the risk of contagion to mammals and humans and avoiding the possibility of a pandemic.

- Phase 7: The main high-level objective of the project will be to enable GoVN to sustainably reduce and stop the spread of influenza among in the country thus reducing the risk of contagion to mammals and humans and mitigating the possibility of a human pandemic. The project also aims to strengthen capacity to protect human health and well-being by strengthening country systems to effectively address emerging and transnational public health threats and support the Government for a sustainable growth through activities geared toward building capacity for planning, budgeting, and coordination

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41. Surveillance and Characterization of Influenza Viruses Posing Risks As the Next Global Pandemic - OSRO/INT/001/USA

Implementing partners:	Food and Agriculture Organization of United Nations (FAO)
Donor:	United States Agency for International Development (USAID)
Timing:	Phase 1: 9/2012-9/2013; Phase 2: 9/2013-9/2015
Budget:	Phase 1: 200,000 USD; Phase 2: 332,000 USD
Locations:	Nationwide
Interface focus:	Humans, livestock, wildlife
Disease focus:	Avian Influenza

Activity areas:	Coordination, Education and Training, Research
Website:	

Brief information about the project:

In order to improve the understanding of the role livestock play in serving as reservoirs for potential pandemic influenza viruses in South East, East and Southern Asia, USAID has provided funding to The Food and Agriculture Organization of the United Nations to expand influenza surveillance activities through the EPT+ programme, part of the broader Emerging Pandemic Threat (EPT) umbrella. Initial EPT+ project activities include a regional approach to influenza surveillance in some countries including Vietnam, Bangladesh, China and Thailand. The scope of EPT+ surveillance activities is primary to detect and characterize animal influenza viruses circulating in targeted livestock systems and address current gaps in influenza knowledge. Following genetic characterization of viruses, their genetic diversity will be described and geographic distribution of virus subtypes, clades and clusters will be depicted. The influenza surveillance will be conducted in targeted locations and include serological screening for all subtypes, virus isolation, and full genomic sequencing.

Project OSRO/INT/001/USA is part of the broader Emerging Pandemic Threat (EPT) umbrella funded by USAID, is designed to contribute to improve our understanding of the influenza virus, their spread, the livestock production systems at high risk of potential pandemic influenza and other zoonotic diseases that may threaten human health. Targeted surveillance in high-risk areas and in animals is key for the early detection of infectious pathogens in humans and animals, to understand the mechanism circulation and transmission of the virus, improve preparedness and effective response to disease outbreaks and pandemic prevention

- The overall objective of this project is to contribute to rural development, livestock health and production in Southest East, Est and Southern Asia in coordination with global efforts to prevent and control new emerging pandemic threats (EPT) viruses and reduce impacts to human life. This project aims to improve the understanding in: (i) the role of livestock play in serving as reservoirs for potential pandemic influenza viruses in Southest East, Est and Southern Asia; (ii) important features of surveillance, epidemiology, market chain analyses, data management; (iii) transparency of reporting disease events and isolated viral sequences and (iv) interventions to prevent impact to human life, including animal vaccination and genome sharing to develop human vaccines

Key activities

- Phase 1: The surveillance in Vietnam will be conducted in pigs at targeted groups in 2 production systems (farrowing and fattening) in the two different delta regions (Red River delta and Mekong Delta)
- Phase 2: The surveillance in Vietnam will be conducted in pigs at targeted groups in 2 production systems (Commercial breeding/fattening farms and Small holder farms) in 3 different regions of Vietnam (North, Central and South)

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42. Emergency Surveillance Response to Avian Influenza A (H7N9) in China and high risk countries - OSRO/GLO/302/USA

Implementing partners:	Food and Agriculture Organization of United Nations (FAO)
Donor:	United States Agency for International Development (USAID)
Timing:	Phase 1: 4/2013-9/2013; Phase 2: 9/2013-9/2015
Budget:	Phase 1: 114,124 USD; Phase 2: 425,050 USD
Locations:	Project location: High risk countries in Southeast Asia (Laos PDR, Myanmar, Vietnam, Cambodia and Indonesia) and high risk countries in South Asia (Bangladesh, Bhutan and Nepal). Project location in Vietnam: The surveillance in Vietnam is conducted at border markets and poultry gathering points in 9 high risk provinces including Bac Giang, Bac Ninh, Cao Bang, Ha Noi, Ha Giang, Hung Yen, Lang Son, Lao Cai, Quang Ninh Besides strengthening activities of H7N9 testing will be also carried out in 7 Regional Animal Health Offices of the Department of Animal Health.
Interface focus:	Humans, animal
Disease focus:	Avian Influenza (H7N9)
Activity areas:	Coordination, prevention, training, research
Website:	

Brief information about the project:

In 2013, HPAI H7N9 virus was detected in Chinese patients in Shanghai, Anhui and Jiangxi provinces of China with high mortality in humans. The detection of this new virus in people in eastern China and the rapidly increasing case count, along with the many unknowns beginning with source of infection and geographical distribution has additionally raised concerns that this virus may have pandemic potential. In response to these emerging events, FAO has been playing a leading role in coordinating actions to support Government of China and 'at risk' countries in the region to address the H7N9 situation and mitigate the human and animal impacts. The north of Vietnam shares a long border with China. Daily, there are many cross border movements, including trade, people movements and animal movements, including spent hens trade. These activities pose the potential risk of introducing the new strain of HPAI H7N9 virus to Vietnam. Therefore, this project will support the Government of Vietnam prevention and control measures to detect H7N9 in Vietnam.

- Identify which animal(s) are the source of A(H7N9);
- Determine the geographical distribution of the virus - how widely the A(H7N9) virus has spread outside the current infected provinces/municipalities in China, and outside China to 'at risk' neighboring countries in the South and Southeast Asia region.
- The goals of the project in Vietnam is to:
- Understand the epidemiology of A virus (H7N9) in Vietnam to inform and guide avian influenza monitoring, response, control and prevention measures;
- Strengthen capacity for surveillance, control and management of avian influenza virus, management live-bird markets control in Vietnam through the active surveillance of potential circulation of A virus (H7N9) at live-bird markets;
- Strengthen capacity for testing and diagnosis of avian influenza virus (H7N9) for government veterinary laboratories in Vietnam;
- Improve the knowledge about poultry value chains, risk of circulation and potential infection to human of A virus (H7N9) through risk communication;
- Provide technical advice and assistance for preparedness and emergency response to H7N9;
- Improve the information sharing and coordination in the disease prevention and control between public health and animal health services at nationwide and regional level.

Key activities

- H7N9 Surveillance activities at live bird markets and poultry gathering points in 9 northern provinces including Bac Giang, Bac Ninh, Cao Bang, Ha Noi, Ha Giang, Hung Yen, Lang Son, Lao Cai, Quang Ninh.
- Diagnostics capacity building on H7N9 for all Regional Animal Health Offices of Department of Animal Health;
- Provision of laboratory reagent and consumables to detect H7N9 and for training purposes;
- Preparation of H7N9 risk communication package;
- A rapid assessment on H7N9 market control measures and stakeholders' opinions; and
- Table top simulation exercise(s) on H7N9;
- Procurement of disinfectants and Personal Protect Equipment

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43. Strengthening institutional capacity for and improving inter-sectoral collaboration, coordination and communication for effective prevention and control rabies in Viet Nam - (TCP/VIE/3404)

Implementing partners:	Food and Agriculture Organization of United Nations (FAO)
Donor:	AusAid Agency for International Development (AusAID)
Timing:	2014-2015
Budget:	USD 380,000
Locations:	Northern mountainous provinces
Interface focus:	Humans, livestock, wildlife
Disease focus:	Rabies
Activity areas:	*Surveillance, Disease control; Communications*
Website:	

Brief information about the project:

Rabies is a widespread, neglected and under reported zoonosis with an almost 100% case fatality rate in humans and animals if post-bite vaccination is not delivered soon after exposure. The disease causes a significant social and economic burden in many countries worldwide.

In Viet Nam, the main reservoir of rabies are dogs and they are responsible for transmitting the virus to more than 95% of fatal rabies cases in humans. Over the past few years, Viet Nam has once again seen a rise in human deaths from rabies, following a period of successful progressive control efforts between 1994 and 2003. In May 2013, due to growing concern over the increasing number of rabies outbreaks in the Northern Mountainous provinces, the Department of Animal Health of Viet Nam officially requested FAO through its Crisis Management Center - Animal Health (CMC-AH) to deploy a team to support the Government of Viet Nam to respond to the ongoing rabies situation in the country, and to recommend interventions for rabies prevention and control in animals and humans. Following this mission, it was confirmed that there was a need to urgently provide technical assistance and advice to the Government of Viet Nam, both Ministry of Agriculture and Rural Development and Ministry of Health, to effectively control of rabies considering the escalating number of cases and poor infrastructure and capacity to prevent a widespread epidemic.

The control of rabies in dogs and the reduction of this impact on the human population is also aligned with the One Health approach to emerging and re-emerging infectious diseases as stakeholders from human, livestock and environmental health must all work together to solve the problem and manage risk

- Through the effective management and control of rabies, the project will contribute to the larger vision of improving animal and public, enhancing food safety and food security, improving livelihoods of poor smallholder farming or rural communities, and protecting the health of ecosystems in Viet Nam.
- The expected outcome of the project is that animal health and human health authorities at all levels can implement effective rabies management and control programmes, leading to a gradual increase in vaccination coverage and reduction of death in humans and domestic animals due to rabies

44. Study at the Animal-Human Interface of Influenza and Other Zoonotic diseases in Vietnam

Implementing partners:	National Institute of Hygiene and Epidemiology (NIHE) Department of Animal Health (DAH)
Donor:	Centers for Disease Control and Preventions (CDC) under the United States Department of Health and Human Services
Timing:	9/2012-9/2017
Budget:	USD 2,000,000
Locations:	Nationwide, focus in Central level - Surveillance in swine is conducted at 3 regions (North, Centre and South) - Surveillance in poultry is conducted at bordering provinces and Hanoi
Interface focus:	Swine samples at slaughterhouses, workers at/around sampled slaughterhouses.
Disease focus:	Influenza
Activity areas:	Surveillance, Research
Website:	http://grantome.com/grant/NIH/U01-IP000619-03

Brief information about the project:

- To strengthen the capacity of the animal health and public health sectors in Vietnam to design and conduct, and analyze and describe the results of local, regional, and national surveillance and research studies;
- To develop and implement animal-human interface (AHI) surveillance and research activities related to influenza and other zoonotic diseases;
- To identify and monitor the risks of and risk factors for cross-species transmission of influenza and other zoonotic pathogens;
- To use knowledge gained from this project to support recommendations for better surveillance, response, and control efforts in both humans and animals, of influenza and other zoonotic diseases in Vietnam;

- Provide the opportunity for enhanced collaborative efforts within Vietnam MARD departments and across other Vietnam Ministries, and the U.S. CDC, thereby enhancing the cooperation and coordination between animal health and human health;

- Estimate the burden of disease of influenza and emerging and re-emerging zoonotic diseases, including measures of morbidity, mortality, and economic impact in Vietnam

Key activities

- Building capacity of the Vietnam DAH organizations and public health agency (NIHE) to be able to develop and conduct a cross-section study of swine influenza at slaughterhouses in North, Central and South of Vietnam in one year

- Provide baseline information for a six-moth longitudinal study of swine influenza at pig raising households

- Six-moth longitudinal study of avian influenza at pig raising households that also have different poultry species

- An assessment of the co-evolution, genetic diversity and lineage of influenza viruses isolated from swine

- Laboratory and epidemiologic assessment of human, swine, and poultry influenza viruses co-circulating in Vietnam

- Laboratory, epidemiological and statistical analyses will be used for these study results.

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45. Livestock Competitiveness and Food Safety Project - LIFSAP

Implementing partners:	Ministry of Agricultural and Rural Development
Donor:	The World Bank (WB)
Timing:	2010-2014
Budget:	USD 79,003,000
Locations:	Implemented in following 12 provinces, including Ha Noi, Thai Binh, Hung Yen, Hai Duong, Hai Phong, Cao Bang, Thanh Hoa, Nghe An, Ho Chi Minh City, Long An, Dong Nai, and Lam Dong

Interface focus:	Humans, livestock, environment
Disease focus:	Not specified
Activity areas:	Food safety, Bio-security
Website:	www.lifsap.vn

Brief information about the project:

The agriculture sector currently accounts for 22 percent of GDP and more than 60 percent of employment, of which the livestock sub-sector accounts for 27 percent of agriculture's contribution to GDP (about 6 percent of total GDP). Pig production is the most significant contributor (about 71 percent of total livestock production). Livestock production is one of the fastest growing sub-sectors in agriculture and is projected to account for about 42 percent of agriculture GDP by 2020.

The demand for livestock products has been rising rapidly during the past 10 years as the result of increasing incomes. Total meat production has increased from an estimated 2.0 million metric tons in 2000 to 3.3 million metric tons in 2007, an average annual increase of 7.5 percent. The average annual meat consumption in Vietnam is now about 40 kg per capita, above average for Asia, and is projected to increase to 57 kg per capita by 2020. Pork consumption accounts for 76 percent of the total meat market, followed by poultry meat at 13 percent and red meat at 9 percent. Livestock production as a major source of income for households. Livestock plays a significant role in generating rural income in Vietnam and is dominated by small-scale household pig and poultry production. The output of household-based livestock producers comprises about seventy percent of overall livestock sector production that serves the bulk of Vietnam's population of 86 million people. An estimated 8.3 million households produce poultry and 7 million households produce pigs. For poor households, livestock is a major source of food and a means to save and accumulate capital. Livestock can also provide draught power, transport, organic fertilizer and a ready source of household cash. Poultry has traditionally been the most important source of income and animal protein for poor communities.

- To improve the competitiveness of household-based livestock producers by addressing production, food safety and environment risks in livestock product supply chains towards clean livestock from farm to table in selected provinces.

Key activities

- Promoting GAHPs in existing livestock production areas. The sub-component would finance: (i) the training of farmers, extension officers, and animal production and veterinary staff in the application of GAHPs including feed conversion technology, proactive disease control measurements and others; (ii) the forming the producer groups to have better negotiation power to reduce the feed cost and improve access to market; (iii) the provision of equipment and goods to strengthen provincial and district level livestock services delivery, including animal disease control and surveillance; (iii) support to waste management and bio-security investments at the farm level (i.e., matching grants for constructing biogas digesters and bio-security measures) (iv) support to DARD and Department of Nature Resources and Environment (DONRE) for monitoring of feed quality and environment impact; and (v) design and implementation of a pilot livestock identification system for pigs.

- Piloting Livestock Planning Zones (LPZs). This sub-component would support the producers in the LPZ increase competitiveness through: (i) consultant services for spatial planning, design and ex-post evaluation of the LPZs; (ii) the construction of basic public infrastructure, including small access roads, and electricity and water supply systems, (iii) the provision of livestock production and veterinary services and training in data recording and disease monitoring with the establishment of livestock producer groups, and (iv) support to waste management and bio-security investments at the farm level (e.g., biogas digesters) and communal level (e.g., central lagoon and pipe systems).

- Upgrading Slaughterhouses and Meat Markets. This sub-component would support the processing and markets linking with the household producers through: (i) eligible civil works for upgrading slaughter houses and meat markets with linkages to household producers to improve their hygienic conditions and waste treatment and management; (ii) basic equipment for safe and hygienic slaughtering and meat handling; (iii) training of meat inspectors to carry out proper inspection; (iv) training of veterinary staff, butchers and middlemen; and (v) equipment and operating costs for provincial sub-Departments of Animal Health to implement meat inspection.

- Support strengthening capacity of the Department of Livestock Production (DLP) and Department of Animal Health (DAH) under MARD in developing and monitoring the implementation of animal health including livestock disease, bio-security, animal production technology, food safety, and livestock waste management policies and technical standards.

46. Food and Agricultural Products Quality Development and Control - FAPQDCP

Implementing partners:	Ministry of Agriculture and Rural Development (MARD) in coordination with Ministry of Health (MOH) and Ministry of Science and Technology (MST)
Donor:	Canadian International Development Agency (CIDA)
Timing:	4/2008 – 3/2014
Budget:	CAD 17,000,000
Locations:	Hanoi and 7 provinces; Bac Giang, Thanh hoa, Lam Dong, Dong nai, HCMc, Tien Giang, Long an
Interface focus:	Interface focus on food safety and environment for human. Four commodities such as vegetables, fruits, pork and poultry.
Disease focus:	Not specified
Activity areas:	Prevention, risk reduction and biosecurity, Surveillance, Education & Training; Research
Website:	http://www.thucphamantoanviet.vn

Brief information about the project:

To improve the quality, safety and marketability of agriculture and food products through strengthened production, processing and quality/safety development and control systems

To support the application of Good Production Practices (GPPs) throughout the whole value chain “from farm to table” and to implement innovative marketability measures.

Key activities

- Review current Vietnamese Production Practices in reference with international regulations and standards (HACCP, CODEX, OIE, IPPC) to develop manuals/guidelines for Good production Practices (GPP) implementation (including VietGAP, VietGAHP

and GMPs); inspection, audit, monitoring and certification for food safety and quality in compliance with Vietnam regulations and standards at all steps of the four commodity value chains. Implementation of those GPPs manuals/guidelines has been be validated through Pilot Projects (PPs) taking place in 8 provinces and was followed by GPPs certification and eventually multiplication/enlargement of the successful PPs.

- Support capacity building in agricultural food control system by: (a) upgrading the testing laboratories, in compliance with international standards (ISO 17025); (b) improving capability of relevant central and local agencies in inspection, regulatory enforcement, auditing and certification.

- Support the improvement of marketability through communication, branding and marketing activities in order to help farmers, cooperatives and stakeholders involved with the projects in their efforts to seek for premiums that could contribute to cover the cost of operating under GPPs and generate additional benefits such as scale economy.

- Promote the important role played by women in all steps of the value chains and support the importance of gender equity in all activities in the project.

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47. Manufacturing technology Project H5N1 bird flu vaccine: Research creating influenza vaccine strains A/H5N1 bang new technologies; Research on H5N1 prevention vaccine production of new varieties; Implementation of the model vaccine production

Implementing partners:	Institute of Biotechnology Academy of Sciences of Vietnam Company of veterinary drugs (NAVETCO)
Donor:	Ministry of Science and Technology (MOST)
Timing:	2013-2018
Budget:	From state: 30 billion VND, from Companies 13 billion VND
Locations:	Institute of Biotechnology, Academy of Sciences of Vietnam, Company of veterinary drugs (NAVETCO)
Interface focus:	HPAI/human, livestock

Disease focus:	A/H5N1, HPAI
Activity areas:	HPAI vacxin seed production
Website:	

Brief information about the project:

Because avian influenza is more complicated, due to the condition of small livestock house holding, especially raising field running duck which is very susceptible to avian influenza and the initiative of vaccine production in the country to meet the requirements of disease prevention

- To create a master seed of Avian influenza A/H5N1 virus in the country and to produce high quality and effective vaccine for prevention of new varieties virus met the requirements for the prevention of disease in poultry and humans.

Key activities

- Isolation, selective and creating a vaccine virus strain by recombinant technology
- Production of the vaccine in pilot
- Identify the characteristics and effectiveness of vaccine
- Production of vaccine in industrial scale

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48. CERC: Animals, Water and Public Health in Vietnam

Implementing partners:	Center for Public Health and Ecosystem Research (CENPHER) Hanoi Public health School (HSPH) Hanoi Water Resources University (Hanoi WRU) Uni. of Prince Edward Island Uni. of Calgary (Canada)

Donor:	International Development Research Center (IDRC)
Timing:	2012-2013
Budget:	USD
Locations:	Nationwide
Interface focus:	human, animal and environment
Disease focus:	Not specified
Activity areas:	Research
Website:	

Brief information about the project:

- Determine the level of coliform bacteria in aquaculture ponds associated with small scale livestock production in Vietnam; Determine the association of fecal coliforms with the presence of fish and livestock; Record farmers' perceptions of the cleanliness of the water and risk factors of diseases to animals and humans from water

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49. JOINT VIETNAM GOVERNMENT-UNITED NATIONS PROGRAMME

Implementing partners:	The National Steering Committee for Avian Flu Control and Prevention (NSCAI) Ministry of Agriculture and Rural Development (MARD) (DAH, DLP, PAHI) Ministry of Health (MOH) UNDP, FAO, WHO, UNICEF

Donor:	Government of Finland, Australia, Canada, Netherlands, Luxembourg, New Zealand, Sweden, Switzerland , Japan; UNDP; WHO; WB, FAO, USDA, EC
Timing:	Phase I: 10/2005 – 7/2006 Phase II: 1/2007 – 12/2010
Budget:	Phase I: USD 6.9 millions Phase II: USD 18.1 millions
Locations:	Nationwide
Interface focus:	Human, Animal
Disease focus:	HPAI and other emerging infectious diseases
Activity areas:	Human health, Animal Health, Communication, Coordination
Website:	

Brief information about the project:

The Joint Programme (JP) was developed by the Government of Vietnam together with United Nations (UN) Agencies to address the immediate emergency support needed to control the current outbreak. The Emergency Phase, or Phase I, of the JP was implemented from October 2005 to July 2006. The objectives of the Emergency phase were mostly achieved while 95% of budgeted assistance was delivered. Several lessons were learned, particularly regarding JP mechanisms, such as work planning and programme coordination.

The Second Phase of the JP continues the implementation of the Vietnam Integrated National Operational Programme for Avian and Human Influenza 2006-2010 (the Green Book or OPI), including support for planning and longer-term capacity building to respond to emerging infectious diseases in animals and humans, such as Highly Pathogenic Avian Influenza (HPAI). The JP Phase II was signed by the Ministry of Agriculture and Rural Development (MARD), the Ministry of Health (MOH), the United Nations Development Program (UNDP), the United Nations Children's Fund (UNICEF), the Food and Agriculture Organization of the UN (FAO), and the World Health Organization (WHO) on January 9th, 2007. The JP Phase II is being implemented until December 2010.

Programme and Expected Outcomes

The overall objective of the programme is "To reduce the health risk to humans from avian influenza by controlling the disease at source in domestic poultry, by detecting and responding promptly to human cases, and by preparing for the medical consequences of a human pandemic".

The JP Phase II will contribute to the following expected outcomes through support to implementation of the OPI:

i) Reduced risk of a global pandemic of HPAI emanating from Viet Nam and

ii) Enhanced national and local capacity to manage outbreaks of diseases of epidemic potential caused by human and animal pathogens.

Expected outputs of Phase II:

- Enhanced coordination of Vietnamese and International agencies supporting implementation of the OPI;
- Progressive control of HPAI in domestic poultry and enhanced overall national and local capacity to detect and respond to outbreaks of zoonotic and other diseases in animals;
- Strengthened national and local capacity to prepare for, respond to and recover from public health emergencies caused by infectious diseases such as HPAI; and
- Increased public awareness generally and within specific population groups on critical HPAI-related risk factors resulting in effective behavioral change.

50. Strengthening capacity for the implementation of One Health in Viet Nam (SCOH)

Implementing partners:	United Nation Development Program (UNDP) Partnership on Avian and Pandemic Influenza (PAHI), International Cooperation Department, Ministry of Agriculture and Rural Development (MARD)
Donor:	USAID
Timing:	24 months (12/2013-12/2015)
Budget:	USD 800,000
Locations:	Hanoi, Hochiminh city, Can Tho, Nha Trang, Danang, Lang Son
Interface focus:	Human, Animal, Environment
Disease focus:	AI and other emerging infectious diseases
Activity areas:	Human health, Animal Health, Communication, Coordination
Website:	www.onehealth.org.vn

Brief information about the project:

The project "Strengthening Capacity for the Implementation of One Health in Vietnam" (SCOH) was funded by United States Agency for International Development (USAID) via United Nations Development Programme (UNDP). Project implemented in partnership with Ministry of Agriculture and Rural Development (MARD) and Ministry of Health (MOH) will contribute to the reduction of the threats to public health from avian and pandemic influenza (API) and other emerging infectious diseases (EIDs) through the application of a One Health approach in Viet Nam. The objectives of the project are the establishment and sustainable operation of a revised and improved coordination structure on API and EIDs, and the reinforcement of national policy dialogue and knowledge sharing mechanism on the implementation of the One Health approach in Viet Nam as well as in regional and international networks.

51. 7th International Ministerial Conference on Avian and Pandemic Influenza (IMCAPI Hanoi 2010)

Implementing partners:	United Nation Development Program (UNDP) Partnership on Avian and Pandemic Influenza (PAHI) International Cooperation Department, Ministry of Agriculture and Rural Development (MARD)
Donor:	USAID
Timing:	9/2009 – 12/2011
Budget:	USD 500,000
Locations:	Hanoi
Interface focus:	Human, Animal
Disease focus:	Avian Influenza and other emerging infectious disease
Activity areas:	Conference, Human health, Animal Health, Coordination
Website:	www.imcapihanoi2010.org

Brief information about the project:

This project will provide support for the preparations for IMCAPI Hanoi 2010, including support for enhanced human resources within the PAHI Secretariat and for the cost of high-level discussions and working-level preparation meetings between the host Government and key international partners to agree on the overall focus of the conference, develop the proposed Conference Statement, and prepare the plan for Conference implementation and logistics. It will also contribute substantially to the cost of major procurement items for the actual implementation of the Conference, including the Conference facility and meal costs, materials and equipment, and other Conference expenses.

After the Conference, the remaining budget was reallocated to the Secretariat Office of Partnership on Avian and Human Influenza (PAHI) in order to develop AIPED 2011-2015.

52. Gathering Evidence for Transitional Strategy (GETS)

Implementing partners:	Food and Agriculture Organization (FAO) Ministry of Agriculture and Rural Development (MARD) World Health Organization (WHO) National NGOs
Donor:	USAID
Timing:	2009-2011
Budget:	USD $ 4,000,000
Locations:	Nam Dinh, Ninh Binh, Quang Binh, Soc Trang, Hau Giang
Interface focus:	Human, Animal
Disease focus:	Highly Pathogenic Avian Influenza (HPAI) H5N1
Activity areas:	Human health, Animal Health
Website:	http://www.fao.org/fileadmin/user_upload/faoweb/vietnam/docs/GETS_Prodoc.pdf

Brief information about the project:

The GETS project is trialling a number of alternative targeted vaccination strategies in five high and low risk provinces (Nam Dinh, Ninh Binh, Quang Binh, Soc Trang, Hau Giang) for Highly Pathogenic Avian Influenza (HPAI) H5N1. The project uses a multidisciplinary approach to gather data consisting of a vaccine strategic intervention that incorporates public awareness, training and surveillance field activities, a cost-effectiveness component, a sociological behavioural component and a policy analysis component. FAO is implementing Project with the Ministry of Agriculture and Rural Development (MARD), with the Department of Animal Health (DAH) and is partnering with WHO and national NGOs.

The purpose of the GETS project is to assist the Government of Viet Nam in transitioning from the current national, mass vaccination of poultry to more cost-effective and targeted measures for sustained control of HPAI.

53. Enhance the research capacity on emerging and re-emerging ID (ERID)

Implementing partners:	Provinces of Vietnam: 20 Provinces Pasteur Institute in Ho Chi Minh city Pasteur Institute in Nha Trang Tay Nguyen Institute of Hygiene and Epidemiology Kyoto Unviversity, Japan Tottory University, Japan
Donor:	Nagasaki Unversity, Japan
Timing:	4/2011-4/2016
Budget:	USD 980,392
Locations:	NIHE
Interface focus:	Humans, livestock, wildlife, avian
Disease focus:	Not specified
Activity areas:	Coordinate, monitor and and support studies on ERID in Vietnam
Website:	

Objectives

- Enhance the research capacity on emerging and re-emerging infectious diseases (ERID) in Viet Nam

Key activities

- Research related to ERID in 4 major areas:
- Zoonotic infectious diseases
- Insect Vector-borne diseases
- Human to human infections
- Food-borne infectious diseases

54. Vietnam Initiative on Zoonotic Infections (VIZIONs) (2012-2016)

Implementing partners:	Oxford University Clinical Research Unit (OUCRU)-Ho Chi Minh City OUCRU-Hanoi Wellcome Trust Sanger University of Edinburgh Many Vietnamese partners (Hanoi Medical University; Provincial and District level PMC and SDAH offices)
Donor:	Wellcome Trust Major Overseas Programme
Timing:	2012-2016
Budget:	
Locations:	Ho Chi Minh City, Hanoi (BaVi district), Hue, Nha Trang, Dak Lak, Dong Thap
Interface focus:	Humans with high levels of occupational exposure to domestic & wild animals
Disease focus:	*Viral zoonotic agents*
Activity areas:	Research
Website:	

Brief information about the project:

Hospital-based syndromic surveillance implemented at provincial hospitals, combined with a longitudinal cohort study of individuals with occupational exposure to animals. (Please see attached manuscripts submitted for publication)

55. OUCRU

Implementing partners:	National Hospital for Tropical Diseases (NHTD) Hanoi Medical University (HMU) Oxford University Clinical Research Unit (OUCRU)-Hanoi
Donor:	Asia Research Network Seed Awards Scheme of the Li Ka Shing Foundation – University of Oxford Global Health Programme (SM29), the Wellcome Trust Major Overseas Programme and the Vietnam Initiative on Zoonotic Infections (VIZIONs) (2012-2016)
Timing:	2012-2015
Budget:	USD 47,000
Locations:	North of Vietnam
Interface focus:	Humans, high-risk practices, health and economic burden of disease
Disease focus:	*Streptoccocus suis*
Activity areas:	Research
Website:	

Brief information about the project:

Whilst recent years have seen the accumulation of substantial new data on the incidence, clinical and microbiological characteristics, and risk factors for *S. suis* infection in Asia, this has not yet resulted in comprehensive control programs or a measurable reduction in this preventable disease. This research will involve the development of methods to estimate the health and economic burden of human *S. suis* infection in Vietnam; to better understand determinants of known or suspected risk factors; the identification of potential interventions targeting modifiable risk factors.

- The main objective is to develop the evidence base for the implementation of interventions to reduce the burden of human S. suis infections.

Key activities

- Mix-methods study on high-risk food consumption including cross-sectional surveys in FiLa Bavi and DodaLab on high-risk exposures to pigs/ pork products and focus group discussions on high-risk consumption of pork products
- Longitudinal study to evaluate the health and economic impact of S. suis infection on patients and their families
- Quantification of burden of disease due to S. suis infection in humans in Vietnam in Disability Adjusted Life Years loss

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56. National Program on Rabies prevention & control (2011 – 2015)

Implementing partners:	MOET (education), MIC (communication) MPS (Pub. Security) MARD MOH
Donor:	Government (MOH& MARD)
Timing:	2011-2015
Budget:	USD 11.6 million
Locations:	North of Vietnam
Interface focus:	Vaccine and vacccination fees
Disease focus:	*Rabies*
Activity areas:	Research
Website:	

Brief information about the project:

Rabies has existed and circulated in Vietnam for many years. It occurs at any time in the year.

- Most cases occur in the northern mountainous provinces
- Most outbreaks were detected when humans bitten by dogs
- Since dogs population cannot be fully managed, numbers of dog cases may not be accurately counted
- Two rabies vaccination rounds annually: April-May and Sept - October
- In urban areas, more than 80% of pets was vaccinated while in rural and remote areas, vaccination percentage was less than 50%.

Objectives

- Increase public awareness of the risk of rabies and methods for rabies control & prevention.
- Improve MARD & MOH rabies monitoring & surveillance systems
- 80% of dog population will be managed
- 80% of dog population will be vaccinated against rabies.
- 70% of Provinces will be free from rabies
- The rabies case fatility rate (CFR) will decrease about 30% compared to the average CFR in period 2006-2010.

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57. ASEAN Rabies

Implementing partners:	General Department of Preventive Medicine (GDPM) – Ministry of Health - MOH Ministry of Agriculture and Rural Development - MARD World Organization for Animal Health (OIE) World Health Organization (WHO) Food and Agriculture Organization of the United Nations (FAO)
Donor:	
Timing:	2015 - 2020
Budget:	
Locations:	
Interface focus:	
Disease focus:	**Rabies**
Activity areas:	
Website:	

Brief information about the project:

Rabies is endemic in the canine population in majority of ASEAN Member States. Nearly all of the human rabies cases are due to bites from rabid dogs. Controlling the disease in dogs, primarily through mass dog vaccination, is a cost effective way to prevent rabies in humans

The strategy describes an integrated “One Health” - a multi-sectoral, multi-stakeholder and multi-disciplinary approach that brings together the necessary socio-cultural, technical, organisational and political pillars to address this disease

58. GHSA Zoonotic Disease Action Package (GHSA Action Package Prevent-2)

Implementing partners:	General Department of Preventive Medecine (GDPM) – Ministry of Health - MOH Ministry of Agriculture and Rural Development - MARD World Health Organization - WHO Food and Agriculture Organization of United Nations - FAO
Donor:	Centers for Diseases control and Prevention - CDC, United States Agency for International Development - USAID
Timing:	2015-2020
Budget:	Estimated to 2 millions USD
Locations:	Vietnam
Interface focus:	Policies and/or practices
Disease focus:	zoonotic diseases
Activity areas:	Enhance surveilance/control system
Website:	

Brief information about the project:

Implementation of guidance and models on behaviors, policies and practices to minimize the spillover, spread, and full emergence of zoonotic disease into or out of human populations prior to the development of efficient human-to-human transmission. Nations will develop and implement operational frameworks—based on international standards, guidelines, and successful existing models—that specify the actions necessary to promote One Health approaches to policies, practices and behaviors that could minimize the risk of zoonotic disease emergence and spread.

- Emphasize One Health approaches across all relevant sectors of government with the goal of detecting and controlling zoonotic threats while they are still in animal populations. Implement joint IHR and PVS training programs for human and animal health services.

- Increase the compatibility of existing animal and human diagnostics and surveillance data fields, avoiding the creation of new data systems wherever possible.

- Introduce and advice national multi-sectoral policies and regulatory guidelines promoting poultry and livestock production and marketing practices that minimize the risk of zoonotic disease emergence, including food safety policies and guidelines as well as legislation reinforcing veterinary supervision of the use of antibiotics in animals.

- Support the implementation of national architecture for real-time bio-surveillance, spanning animal and human populations to support disease monitoring, reporting and analysis via bio-surveillance of high-risk wildlife groups (i.e., birds, bats, etc.)

- Actively address the proposal of core competencies and systems requirements (e.g., laboratory methods, surveillance data fields) for implementation of the surveillance system.

- Enhance, link, and increase analytic capability within disease reporting systems (WHO, WAHIS)

- Introduce an operational framework that supports multi-sectoral notification for outbreaks of suspected zoonotic origin in the early stage of emergence (prior to efficient human-to-human transmission). The framework should address outbreaks that occur in both animals and humans at a similar time and/or place.

- Introduce systems that promote complementary research, for public health purposes, and analysis within and across countries for enhanced prevention, detection and response activities for emerging zoonotic diseases.

Key activities

- Identify core competencies and systems requirements (e.g., laboratory methods, surveillance data fields) necessary for implementation of an operational framework, policies, guidelines and method of surveillance.)

- Determine where it will be possible to enhance surveillance and laboratory diagnostics

for selected priority zoonotic diseases to aid in early detection. Such an approach would be preferable to the establishment of new electronic disease surveillance systems.

- Evaluate the implementation of appropriate One Health policies in national operational frameworks to minimize the risk of zoonotic disease emergence and spread.

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59. Enhancing the joint collaboration between the animal health and human health sectors to control the zoonotic diseases through the implementation of Inter-ministerial Circular No. 16/2013/TTLT-BYT-BNN&PTNT in Bình Định province and Thanh Hoa, 2015

Implementing partners:	National Institute of Hygiene and Epidemiology -NIHE, DAH, General Department of Preventive Medicine – GDPM, Ministry of Health - MOH Deparment of Animal Health - DAH, Ministry of Agriculture and Rural Development - MARD World Health Organization - WHO Food and Agriculture Organization of United Nations - FAO
Donor:	United States Agency for International Development - USAID UN joint plan
Timing:	2015
Budget:	
Locations:	Binh Dinh, Thanh Hoa
Interface focus:	Control zoonotic diseases
Disease focus:	zoonotic diseases
Activity areas:	Implementation guide or Standard Operating Procedures (SOPs)
Website:	

Brief information about the project:

Experiences in prevention and control of influenza A (H5N1) have shown that the cooperation between the health sector and the agricultural sector is essential and has brought significant positive effect on thoroughly controlling influenza outbreaks in poultry and limiting the spread of disease to humans. In order to mitigate risks from zoonotic diseases and to ensure sustainable and effective coordination and collaboration, mechanisms between the human and animal health sectors is vitally important and needs to be further strengthened in Viet Nam.

In-line with both APSED (2010) and the One Health approach, Viet Nam aims to strengthen coordination of human and animal sector surveillance, risk assessment and response activities at all levels through information sharing and collaboration.

An inter-ministerial circular between Ministry of Health (MoH) and Ministry of Agriculture and Rural Development (MARD) "Guidelines for coordinated prevention and control of zoonotic diseases" (Circular 16) was officially approved and in effect since 15.07.2013. To effectively prevent and control zoonotic diseases, the circular must be implemented from the local to the central level. In order to facilitate implementation of the circular, implementation guide or Standard Operating Procedures (SOPs) are currently being developed.

Key activities

- We propose an activity to assess application of Circular 16 and Circular 16 SOPs in the selected provinces. After field visits by a team consisting of NIHE/GDPM/DAH/WHO/FAO staff members, the implementation progress will be documented and technical guidance on improving implementation process will be provided. Lessons learned will be compiled and shared with other provinces as well as used to improve the SOPs.

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60. Avian Influenza Behavior Change Communication (AI BCC) – AED

Implementing partners:	Ministries of Agriculture and Departments of Animal Health
Donor:	Family Health International - FHI 360
Timing:	2005 - 2009
Budget:	NA
Locations:	Southeast Asian countries -- Vietnam, Cambodia, and Laos

Interface focus:	Environmental sanitation, women's and children's health, and parenting skills
Disease focus:	Avian Influenza and other emerging infectiuos diseases
Activity areas:	Traning
Website:	*http://www.aliveandthrive.org/countries/vietnam*

Brief information about the project:

The project -- Avian Influenza/ Behavior Change Communications (AI/BCC) -- is part of the U.S. Government's emergency response to avian influenza and will support the development and rapid launch of a 12-month communication campaign in three Southeast Asian countries -- Vietnam, Cambodia, and Laos. The campaign will target key audiences in the 3 countries -- including poultry farmers, consumers, and health workers--with messages on risk behaviors for contracting AI, simple measures to prevent it, and how to recognize and manage cases of AI in animals or humans.

Objectives

- to reduce risky behavior and increase healthy behavior

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61. Avian Influenza Behavior Change and Communications Support Activity

Implementing partners:	Ministries of Agriculture and Departments of Animal Health
Donor:	USAID
Timing:	
Budget:	NA
Locations:	Southeast Asian countries -- Vietnam, Cambodia, Laos and Indonesia
Interface focus:	Animal and human
Disease focus:	Avian Influenza
Activity areas:	Traning, mass media communication, advocacy
Website:	*http://avianflu.fhi360.org/docs/AI_SEAprojectinfo.pdf*

Brief information about the project:

USAID has embarked on a behavior change and communications (BCC) program aiming to reduce and control the spread of avian influenza in key areas of Southeast Asia where avian influenza outbreaks have been reported, including Vietnam, Cambodia, Laos and Indonesia. This program is being implemented by the Academy for Educational Development as part of the U.S. Government's Emergency Response to Avian Influenza Plan of Action, a rapid-response constellation of activities aimed at controlling the spread of avian flu. Because the Emergency Plan outlines country-specific lines of action over a one-year period, USAID has been actively engaging and working with each host country's government officials, particularly those in the Ministries of Agriculture and Departments of Animal Health.

Objectives

- Increase awareness among key target audiences of high-risk behaviors for contracting avian influenza, practical preventive measures, and how to recognize and respond to cases of avian influenza in animals and humans. The key audiences include backyard farmers, consumers of poultry, and health care and veterinary staff. • Establish alliances with private-sector companies to support planning and preparation for mitigating the impact of a potential avian influenza pandemic

Key activites

USAID has been employing an integrated campaign approach – combining mass media communication – radio and television advertising, public relations, community-based communications, and interpersonal communication – to create an environment that informs our target audiences about avian influenza and introduces best practices for its prevention and containment. Specific strategies include:

- Interpersonal communications, such as farmer education by extension agents and veterinary staff, patient counseling by clinic health workers, peer education (farmer-to-farmer; vendorto-vendor), and informal discussion (vendor-to-consumer, neighbor-to-neighbor).

- Organizational and community outlets, such as workplace, schools, community and village level meetings, affinity groups (women's unions, farmer groups, health associations, and so forth).

- Mass media, including national TV, radio, and print, and international and web-based communication.

- Public relations/advocacy, such as high-level thought-leader conferences with international