



Food and Agriculture Organization of the United Nations Organisation des Nations Unies pour l'alimentation et l'agriculture Organización de las Naciones Unidas para la Agricultura y la Alimentación

## PROJECT DOCUMENT

Countries: Cambodia, Indonesia, Lao People's Democratic

Republic (PDR), People's Republic of China and

Viet Nam

Project Symbol: OSRO/RAS/5xx/USA

**Donor:** Government of the United States of America

Project Title: Immediate assistance for strengthening

community-based early warning and early reaction to Avian Influenza outbreaks in Cambodia, Indonesia, Lao PDR, PR China and

Viet Nam

**Duration:** 14 months

**Starting Date:** September 2005

**Completion Date:** October 2006

**Executing Agency:** Food and Agriculture Organisation of the United

Nations in collaboration with target countries

Total Project Cost: US\$6 003 597

#### **ABBREVIATIONS and ACRONYMS**

AI Avian Influenza

ECTAD Emergency Centre for Transboundary Animal Disease

EMPRES Emergency Prevention System for Transboundary Animals and Plant Pest

Diseases

FAO Food and Agriculture Organization of the United Nations

HPAI Highly Pathogenic Avian Influenza
Lao PDR Lao People's Democratic Republic
NGO Non-governmental Organization
NPC National Project Coordinator

OIE World Organisation for Animal Health

PCU Project Coordination Unit PR China People's Republic of China

RAP FAO Regional Office for Asia and the Pacific

TA Technical Adviser

TCE Emergency Operations and Rehabilitation Division of FAO

UNDP United Nations Development Programme

VAHW Village Animal Health Workers

VND Vietnamese Dong

WHO World Health Organization

### 1. Background and justification

The situation prevailing in Asia regarding the highly pathogenic H5N1 avian influenza (HPAI) is critical, as the disease continues to spread, threatening new epidemics in other countries in the region. The poultry industry has been severely battered by continuing outbreaks of avian influenza, resulting in loss of livelihoods for large number of poor rural people who depend heavily on poultry for income and source of dietary protein. It is now apparent that the disease has become endemic in many parts of Asia and presents a constant threat to food security, livelihoods of poor farmers with a potential risk for a human global pandemic.

The affected countries, with emergency funds and technical support from FAO and several donors have endeavoured to control the early waves of avian influenza outbreaks in 2004 and 2005 with variable success. Only a few countries with adequate human and financial resources such as Japan, Republic of Korea and Malaysia have stamped out the disease, and Thailand has made significant progress in establishing disease free compartments. Most of the other countries such as Cambodia, Lao PDR, Indonesia and Viet Nam, with limited financial resources and inadequate capacity have not had similar success in getting ahead of managing the disease fully.

The HPAI outbreak in Cambodia severely hit smallholder farmers who are raising the majority of the country's poultry under subsistence conditions or on small-scale commercial poultry farms. The disease has seriously disrupted Cambodia's poultry sector and caused significant economic losses. After the first outbreak appeared to be under control by late 2004, Cambodia has seen new HPAI cases remerging in early 2005 with human cases and fatalities. The repeated outbreaks are indicative that the disease has become endemic, highlighting the inability of the country's disease surveillance system to control the disease.

Lao PDR officially reported HPAI in January 2004, but has not reported the disease again since (OIE, 2005). The majority of the outbreaks occurred in the commercial sector losing as much as 20 percent of the national layer flock. The impact of HPAI in Lao PDR has been in smallholder sector (80 percent of the poultry population) more specifically in the chicken layer and quail systems in the Vientiane Capital province. Evidence suggests that the disease has not established in Lao-PDR to the extent that it has in other countries in the region. This may be attributable in large part to the primarily extensive nature of the poultry in the country. However, the continuous occurrence of the disease in neighbouring countries (Viet Nam and Thailand and Cambodia) makes the country under high risk of resurgence. Lao-PDR is often a transition station for stock being moved between these two countries according to prices and demands, making it a potentially a highly vulnerable country to repeated outbreaks of HPAI.

Vietnam is the hardest hit country with the highest incidences of avian and human cases. The HPAI epidemic has seriously affected Vietnam's poultry industry, with an estimated total damage of VND1 800 billion (US\$120 million). The Government has sought to control the epidemic by focused stamping out campaigns where the disease has been identified and has introduced movement bans, production restrictions of ducks and augmented bio-security. Despite these measures to contain the disease, H5N1 avian influenza appears to be still widespread in many provinces and occurs in some extensive reservoirs (e.g. ducks, live bird markets, wild birds). Recognizing the fact that the disease has become endemic, and that the duck virus reservoir is likely playing a role in disease recurrence, the government is

now planning a national vaccination strategy in addition to other control measures (begun in two pilot areas in early August, 2005). Duck production, especially in the Mekong Delta, will be reduced and restructured to prevent contact with other poultry and humans. With the onset of vaccination, effective field surveillance and post-vaccination monitoring will become ever more important, for which laboratory and field worker infrastructures will have to be developed.

The disease is also widely spread in PR China and Indonesia affecting severely the poultry industry, especially in the smallholder sector. Both countries have adopted the vaccination strategy to reduce massive poultry losses. While vaccination appears to have reduced the high poultry mortalities experienced in both countries, more efforts are need to establish a well-structured post vaccination surveillance programme to determine the impact of vaccination and provide better information on the disease dynamics.

Since the outbreak of AI in late 2003 and early 2004 in South East Asia, FAO and a number of donors have provided emergency funds to support the control of HPAI. Over \$18 million has been committed to various country specific and regional projects. Most of these emergency projects will be coming to an end by the middle to end of 2005.

Four affected countries (Cambodia, Lao PDR, Viet Nam and Indonesia) of the five countries identified for support in this proposal are among the poorest in the region lacking significant financial and human resources to tackle the scale of the HPAI problem. They all have benefited from emergency assistance and put in place HPAI control and surveillance programmes. However, some difficult tasks still need to be addressed to place these countries in a position where they can better control and prevent resurgence of the disease and proceed with its eradication. The major constraint of the existing HPAI control programmes in all the five countries has been the capacity at the grassroots level to detect disease and participate in disease control strategies.

The need for establishing capacity for early detection and early warning of avian influenza outbreaks as part of disease surveillance, supported by improved diagnostic capacity, awareness campaigns and emergency response is recognized by the concerned authorities in all affected countries. Emergency preparedness plans must be developed by the countries themselves using established guidelines. Disease surveillance at the community level is especially challenging in these countries because of the nature of the poultry population, and correspondingly poor veterinary infrastructure and lack of adequate skilled technicians and professionals. In addition, setting up successful community based surveillance and early warning networks requires targeted training and significant technical support a sustained to be implemented by local staff familiar with prevailing customs and culture.

The proposed project is submitted to seek additional financial resources to support immediate assistance to Cambodia, Lao PDR, Indonesia and Viet Nam, in addition to PR China, in their efforts to control the disease and prevent reintroduction and resurgence of new outbreaks. The major focus of the project will be to build capacity for community-based disease surveillance to support the disease control programmes in each of the countries. Provincial and district staff will be trained to recognize and report the disease in a timely manner. They will be trained also to carry out disease outbreak investigation, collect specimens, collect disease history information and submit specimens to laboratories, and undertake measures necessary to prevent the disease from spreading to neighbouring villages.

Humane culling operations, proper disposal of carcasses and rigorous disinfection of poultry premises are important control measures during outbreaks of HPAI. While the guidelines of these operations are usually clear, experience from the field in affected countries demonstrate that public awareness and training are still needed to ensure that poultry premises are adequately disinfected and culling operations are conducted in an environmentally safe manner to minimize as far as possible further transmission of the virus. The proposed project will build this capacity through targeted training and awareness in each of the targeted countries to heighten the safety of culling operations.

Support will also be provided to improve communication and awareness of the disease and importance of disease control programmes at the national and regional levels to progressively eradicate the disease in target countries.

In support of the abovementioned tasks, the proposed project intends to activate regional coordination through the FAO Regional Office for Asia and the Pacific (RAP), Bangkok to assist the countries in the region to implement a coordinated regional approach to the control of HPAI by employing integrated and harmonized approaches, linked with the Emergency Centre for Transboundary Animal Disease (ECTAD) in FAO-Rome and FAO offices in the beneficiary countries.

The proposed project will implemented in line with the global strategy and plans to control HPAI, developed by FAO and OIE in collaboration with WHO and the affected and at risk countries in Asia.

# 2. Objectives of the project

The overall objective remains to counter HPAI threats posed to animals and people across the subregion, and restore sustainable poultry production and associated rural and socioeconomic development.

Specifically the project aims to:

- strengthen capacity for early detection and early warning of HPAI outbreaks through community-based field surveillance and effective disease outbreak investigations;
- enhance the capacity for rapid and effective response to outbreaks of HPAI;
- Promote public awareness and education on HPAI;
- Support the national avian influenza vaccination campaign in Vietnam.

# 3. Major project activities and implementation strategy

The project will have a 14 month lifespan and will build on the successful experiences of the FAO's avian influenza programme in the region while addressing specific tasks in five countries (Cambodia, Indonesia, Lao PDR, PR China and Viet Nam) to strengthen community based surveillance and disease outbreak investigations and heighten rapid and effective response to avian influenza outbreaks. In Viet Nam, the project will also provide support to national vaccination campaign of poultry. In Indonesia the project will focus on integrated grass roots surveillance and early warning networks in Bali province supported by the Denpasar disease investigation center. In PR China, activities will be developed in

collaboration with the veterinary department and the country FAO office after the upcoming US team field visit to this country and Indonesia as well.

The project will commence by selecting in each of the three countries targeted areas and provinces where activities will be implemented and identifying local partners. Targeted training and extension methodology through the participation of local NGOs familiar with local conditions will be favored to reach local animal health workers and villagers with differing cultural and educational backgrounds.

Technical assistance will be provided to assist the project to achieve all defined results. It is proposed that technical assistance will guide and assist and, importantly provide in-country training as required. A significant amount of capacity building will be promoted through utilising as far as possible national consultants for disease surveillance, animal health information and related components.

To avoid duplication of efforts, project activities will be implemented in close collaboration with other donor funded projects operated in the country and the subregion. The project will be strongly linked with the existing avian influenza regional networks on disease surveillance and diagnosis and policy and economic impact through the regional coordination of the FAO's Regional Office for Asia and Pacific in Bangkok.

Major activities envisaged are:

# 3.1 Strengthen capacity for early detection and early warning of AI outbreaks

An early warning system operational and functioning before the influenza season:

- establish informal networks for early warning and disease information flow to the epidemiology and data management unit within the Ministry of Agriculture. The networks will draw heavily on the local government staff, VAHWs, rural NGOs and other suitable village groups to form the core of these networks (0-3 months);
- train provincial/district veterinary staff and VAHWs: District staff and animal health workers will be trained by contracted NGOs to equip them with the skills to recognize the disease and report it in a timely manner (1-4 months);
- provide technical and logistic support to disease surveillance programmes in targeted provinces (3-14 months).

*Improved disease information and data management system* 

- provide necessary communication equipment, computers and software for disease reporting and data collection and analysis (0-3 months);
- train appropriate staff of the epidemiology unit within the Department of Animal Health on data management, epidemiological analysis for improved information decision making.

#### Diagnostic capacity for field surveillance

train community surveillance team in disease outbreak investigations including proper protocols for collecting samples from suspected and infected birds and shipping to the laboratory (0-5 months). Local partners (NGOs) in each of the three countries will

assist in sample collection and submission to the laboratories and assist in linking this information with the national animal health information system;

- provide village and district staff as well as NGOs with basic sample collection kits, cool boxes and pads of recording and laboratory submission forms; (0-3 months);
- strengthen the capacity of veterinary diagnostic laboratories in or near the project locations to undertake basic serology testing in support of the surveillance programmes. Laboratory staff will be trained in HPAI testing and participating laboratories will be provided with necessary equipment and diagnostic reagents as appropriate. (2 6 months);
- provide logistic support to regularly send field isolates to reference laboratories for virus characterisation and serotyping (2-14 months).

## 3.2 Enhance the capacity for rapid and effective response to outbreaks of HPAI

Capacity for culling operations<sup>1</sup>:

- train cullers and poultry workers to conduct rapid and safe culling operation and disinfections of poultry premises during AI outbreaks (0-3 months);
- provide personal protective equipment and supplies for culling and disinfection activities (0-3 months);
- produce appropriate educational material on the safety of culling activities in the local language and distribute to local and government staff involved in culling operations (0-3 months).

## 3.3 Promote public awareness and education on HPAI

Public awareness campaigns

- develop appropriate public awareness and education materials in the local language to encourage the support of poultry farmers, poultry workers and village groups in disease reporting and early warning (0-5 months);
- assist in the elaboration of diffusion of communications and messages adapted to the epidemiological situation regarding the human and animal health. The project will support the diffusion of these communication tools in a routine way and at intensified frequency during at-risk periods (0-5 months).

*Targeted training and workshops on bio-security measures:* 

- provide targeted training in elementary hygienic procedures, good farming procedures, and bio-security principles and methods to villagers, producers, employees, suppliers such as feed store, egg collectors and packing facilities, hatchery operators, bird haulers, and others that have direct contact with the poultry production or marketing

<sup>&</sup>lt;sup>1</sup> For Viet Nam, vaccination is highest priority at the moment, and all veterinary staff are currently organizing the vaccination campaign and therefore the training on culling would not be carried out at this time in Viet Nam.

industries, including veterinarians, technicians, and veterinary para-professionals (3-10 months).

### 3.4 Support to vaccination campaign in Viet Nam

- provide materials, transport and labor for logistic support to vaccination in selected provinces (4- 6 months);
- train animal health workers, veterinary staff and farmers to vaccinate domestic poultry against HPAI and to keep records. Farmers' groups will also be taught to confine their backyard poultry where feasible, so as to decrease exposure to disease agents (especially HPAI and Newcastle Disease), and to vaccinate regularly for poultry diseases common in their area other than HPAI; (2-4 months);
- establish post-vaccination monitoring: two suitable Districts will be selected in each of the two provinces selected for vaccination (one in North and one in South). Both pilot districts will involve approximately 40 villages or communes (4 14 months).

## 4. Expected project outputs

- Beneficiary countries will be in a better position to rapidly detect and control emerging Avian Influenza outbreaks; An early warning system operational and functioning before the influenza season;
- sufficient number of district and village veterinary staff and VAHWs are adequately trained and equipped with the skills to recognize the disease, carry out disease outbreak investigations and collect specimens for laboratory diagnosis;
- effective laboratory support to field surveillance with proper linkage with animal health information systems;
- cullers will know better how to apply safe and environmentally sound culling operations through training and public awareness programmes;
- farmers and communities are empowered to actively participate in disease control and surveillance programmes;
- regional coordination through FAO Regional Office in Bangkok activated and sustained;
- partnership with relevant NGOs in each country will be activated and reinforced.

#### 5. Target Beneficiaries

- Smallholder resource-poor commercial and backyard poultry farmers who will benefit from the increased levels of protection of poultry from avian influenza and improved disease surveillance control programmes. Poultry farmers, animal health workers and all persons involved in poultry rearing and marketing will face lower risks and potential hazards associated from HPAI;
- government veterinary staff in the participating countries, particularly at the district and village level;
- village Animal Health Workers and local NGOs involved in animal health;
- the population at large in the three beneficiary countries:
- countries in the regional network and FAO RAP.

## 6. Implementation arrangements

The implementing agency of the project will be FAO in close collaboration with the recipient institution, the national concerned veterinary authorities. Each of the target countries will implement its own project under the HPAI Project Coordination Unit (PCU), to be established within the country FAO Representation Office under the supervision of a Technical Adviser (TA). In Viet Nam, the Government has requested that all AI contributions are coordinated by the Technical Support Unit under the joint FAO/WHO/UNDP Programme on Strengthening the Management of Public Health Emergencies in Vietnam – with focus on the Prevention and Control of Diseases of Epidemic Potential including HPAI. The TA will manage and supervise the implementation of project activities in close collaboration with the National Project Coordinator (NPC) and the FAO Representative to the country. He/she will be supported by a small project staff, and will be responsible for the selection of national and international consultants; formulation of work plans and budgets; procurement; management of project funds, project monitoring; etc. Office and communications equipment will be provided. The PCU will be responsible for preparing quarterly progress reports, national consultant recruitment, project accounting and correspondence, and liaison with Government.

In Vietnam, the Government of the United States of America's contribution will be used towards Emergency Requirements in Support of National Efforts to Control AI in accordance with the phase I budget submitted to the Government of Vietnam on 5 September 2005 under the Joint FAO/WHO/UNDP Programme. It will thus cover 56.7 percent of total cost of the phase I.

All five country projects will be synchronized and coordinated through FAO's Regional Office for Asia and the Pacific (RAP) in Bangkok. Close relations will be maintained with international reference laboratories and collaborating centers as well as other relevant regional institutions.

Technical backstopping of the project will be through RAP office and the Emergency Centre for Transboundary Animal Diseases (ECTAD) based within the Emergency Prevention System for Transboundary Animals and Plant Pest Diseases (EMPRES) programme of the Animal Health Service in FAO Headquarters.

#### 7. Project reporting and evaluation

An inception report, a progress report as well as other reports will be provided to the donor during and upon completion of the project. Each international expert will prepare a report (in English) upon completion of assignment for submission to FAO Regional Office for Asia and the Pacific (RAP), Bangkok and to Lead Technical Unit in FAO headquarters. The FAO Representative will issue periodic reports as and when deemed necessary. The National Consultants will be responsible to prepare, in collaboration with Technical Advisors, a draft Final Technical Report (in English) according to FAO reporting guidelines for submission to TCEO, headquarters, and the Lead Technical Unit.

The FAO offices in the beneficiary countries will provide on-site mentoring. One terminal project evaluation mission will be undertaken towards the end of the project. The timing and duration of this mission will be agreed with the Donor, Governments and FAORs.

## 8. Proposed budget

The estimated budget for the three countries for a period of 14 months is detailed in the table below. Of the total funding requested, approximately 85 percent will go towards supporting project activities in the target countries particularly building capacity at the community level for surveillance and control of HPAI. The remaining funds will contribute towards reinforcing regional coordination (RAP) and technical support from ECTAD in addition to administration of the project.

## PROJECT BUDGET

Budget breakdown for: FAO Emergency Centre for Transboundary Animal Dieases (ECTAD), FAO Regional Office for Asia and the Pacific (RAP), FAO Representations in Cambodia, Indonesia, Lao PDR, PR China and Viet Nam

							Curr	ency: US\$
Budget Item	ECTAD	RAP	Cambodia	Indonesia	Lao PDR	PR China	Viet Nam	Total
Personnel	161,000	168,000	262,150	262,150	311,150	262,150	256,900	1,683,500
Project Coordinator (14 pm)		168,000						
International experts (4 pm)			15,750	15,750	15,750	15,750	10,500	
Technical Advisor (14 pm/country)			126,000	126,000	126,000	126,000	126,000	
Admin Officer (14 pm per country)			56,000	56,000	56,000	56,000	56,000	
UN Volunteer (14 pm)					49,000			
National consultants (14 pm/country)			42,000	42,000	42,000	42,000	42,000	
Clerk (14 pm/country)	42,000		22,400	22,400	22,400	22,400	22,400	
Project Officer (operations)(14 pm)	119,000							
Contracts	0	0	175000	175000	175000	120000	140,000	785,000
Contracts (VAHWs/NGOs) - Field activities			150,000	150,000	150,000		110,000	,
Information & public awareness			25,000	25,000	25,000		20,000	
Post-vaccination surveillance							10,000	
Travel	45,000	132,300	137,680	151,480	96,040	130,360	149,440	842,300
Duty travel (In-country/region		16,800	42,000	42,000	42,000	42,000	42,000	
travel)								
International expert travel/DSA		90,500	47,840	54,740	27,020	44,180	53,720	
Travel - TCDC			47,840	54,740	27,020	44,180	53,720	
AT S/ST S mission	45,000	25,000						
Training	0	0	90,000	80,000	80,000	80,000	176,000	506,000
Training field staff - VAHWs			40,000	40,000	40,000		73,000	
Training - cullers			30,000	25,000	25,000		40,000	
Workshops - farmers			20,000	15,000	15,000		15,000	
Training - vaccinators (Viet Nam)							48,000	
Expendable equipment	-	-	90,000	60,000	60,000	60,000	240,000	510,000
Vaccines and vaccination supplies							240,000	
Laboratory diagnostics			25,000	15,000	15,000			
Sample collection tools & supplies			30,000	25,000	25,000			
PPE & disinfectants			35,000	20,000	20,000			
Non expendable equipment	0	0	60,000	45,000	70,000	45,000	250,000	470,000
Vaccination equipment							250,000	
Cold chain equipment			35,000	20,000	45,000			
Vehicle (1 per country)			25,000	25,000	25,000			
Technical Support Services	203,450	132,930	0		0		0	336,380
Reporting	5,000							
Advisory Technical Services (AGA)	198,450					1		
Supervisory Technical Services		132,930						
General Operating Expenses	20,000	25,000	95,000	84,000	112,000	84,000	84,000	504,000
General Operating Expenses	20,000	25,000	95,000	84,000	112,000	84,000	84,000	
Subtotal	429,450	458,230	909,830	857,630	904,190	781,510	1,296,340	5,637,180
Direct Operating Costs (6.5%)						1		366,417
TOTAL	<del>                                     </del>							6,003,597