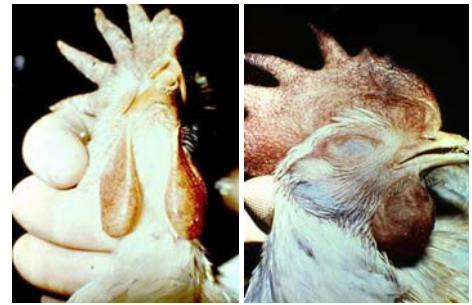


## Update on the Avian Influenza situation (As of 27/05/2004) – Issue no. 15



*Oedematous cyanotic comb and wattle of a chicken due to HPAI  
(Photo: Master file - Mexico-US Commission for the Prevention of FMD)*

The information summarized below is gathered from official and non official sources, which are quoted in the text. AIDE news is prepared by the FAO Technical Task force on Avian Influenza.

### 1. Summary of the situation

- **Thailand:** A new case of avian influenza was found in Mae Haeh (Muang district, Chiangmai Province) at a training farm belonging to the Faculty of Agriculture, Chiangmai University on 22/05/04 where 473 chickens died with AI compatible signs. The farm housed various avian species (layer, broiler, duck, goose, ostrich and native chickens). The animals were destroyed based on clinical suspicion. The farm was isolated from the community and no other poultry farms within 5 kilometre radius. (24/05/04 source: FAO; government, gphin)
- **Indonesia:** New cases of Avian Influenza were reported from Sleman and Bantul districts (DI Yogyakarta) and North Lampung District (Lampung Province), the total number of infected provinces is 14, comprising 92 districts. (25/05/04, source: OIE website)
- **Russia:** Avian Influenza was reported to occur in Altay Region. Verification and validation of the information is ongoing. (12/05/04, source: gphin)
- **Egypt:** In Damietta, avian influenza virus (H10N7) was isolated from 5 wild duck samples taken from a market having hunted migratory birds between 18 and 22 April. Two infant cases (fever and cough) were reported in Ismallia in links to the Damietta influenza case by the father of one of them. (23/05/04, source: ProMED)

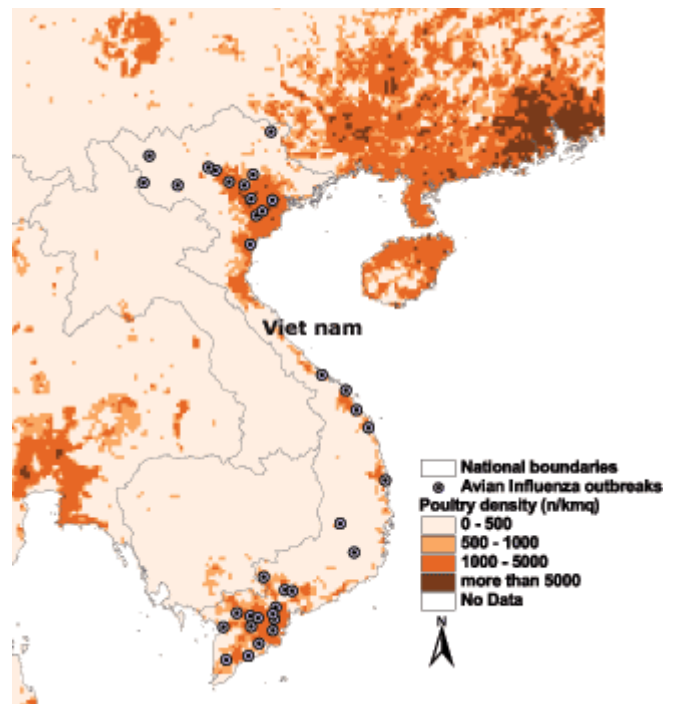
### 2. Post-epidemic surveillance and rehabilitation activities – What next?

- **Close-up on Viet Nam: A need for risk assessment capacity building – Adapted from the report of the international consultant (February 2004)**

According to the Viet Nam statistical yearbook, livestock contributed in 2002 to 17.5 % of the agricultural GDP. The fowl population increased the most during the last 14 years, from 107 million heads in 1990 to 254 million in 2003, i. e. an average growth rate exceeding 10 % per year. The domestic bird population was in 2003 mostly composed of poultry (185 million) ducks and geese (69 million). They are unevenly distributed in the country with principal concentrations in the Red River Delta (50 million) and North East (34.5 million) regions followed by the Mekong Delta (26.6 million) and the South East (20.4 million) regions. Most of the production comes from backyard poultry raised by about 8 million small holders while commercial poultry farming is represented by a number of small family producers and about 1,000 modern poultry farms of more than 2,000 birds, including only 60 farms with over 10,000 heads.

Avian influenza was first officially declared in Viet Nam on 8 January 2004, after heavy losses were experienced starting on 25 December in the southern provinces of Tien Giang and Long Han, and on 27 December in the Ha Tay Province close to Hanoi. The three provinces tested positive to Influenza A type H5N1, a strain classified as highly pathogenic for birds and potentially transmissible to humans. The disease then spread rapidly throughout the country, affecting 22 provinces by the end of January and up to 57 of the 64 provinces by mid-February (about 3,000 communes out of 8,970). In this time period, 22 human cases were reported positive to H5N1, of which 15 have been fatal.

Since then, the number of reported new cases has decreased to the point that only a few new outbreaks were reported during the two last weeks of February. The last human case was reported on 18 February, 2004. No human case of AI has been documented in workers involved in control operations despite insufficient equipment and training in protective and safety measures. Losses from deaths and culling of poultry, and to a lesser extent on ducks were 37.5 million birds or about 15 % of the initial total population. In some areas and in the main urban centres, the reduced availability of chicken meat and eggs also affected food security as these products constituted a significant portion of the animal protein diet for a large part of the population. Rural households and poultry farmers in Viet Nam continued to suffer from the trade control restrictions which deprived them of a significant part of their revenues and livelihood, forcing farmers to have continued to feed their poultry at additional cost to birds which had been ready to market.



While reconstruction of the poultry industry is indeed required, it is crucial to undertake risk assessment studies in all areas presumed AI free prior to start restocking. Building up the capacity of the Department of Animal Health, the provincial animal health sub-department and those of the existing national and regional laboratories to undertake such risk assessment studies is deemed necessary. These activities will require a comprehensive epidemiological analysis of each area along clear guidelines comprising both field surveys and samples collection with the objective to determine the absence of possible circulation of the virus in the concerned areas.

➤ **Vietnamese poultry sector: Post-Avian Influenza Rehabilitation project mission report (May 2004, TCP/RAS/3010)**

The Avian Influenza situation in Viet Nam is under control according to government sources, yet restocking is being conducted in the villages, with or without government sanction. Insufficient records are available that give the number of households, the number of poultry lost at commune level to trace back affected households, and this limits epidemiological analysis.

It may be possible to explain this in several ways such as:

*Distance:* The Viet Nam Development Report 2004 'Poverty' illustrates that the average distance to an extension centre for a rural household is 11.5 km. For the poorest households it is 14.5 km and for ethnic minorities it is 17.5 km.

*Ratio of an extension worker to farmers:* Ratio of extension worker per farmer is 1 to 3,000. It may be added that extension work is a new activity in Viet Nam, beginning in 1991 with the economic liberation schemes in which village poultry has not had a high priority for treatment.

To understand real household impact of the Avian Influenza outbreak, updated information on the poultry sector and market linkages may be required. Apart from knowledge about the situation on the farms there is a need for information about the commodity chain, market channels of poultry and poultry products, as these are obvious mechanisms through which a virus may spread.

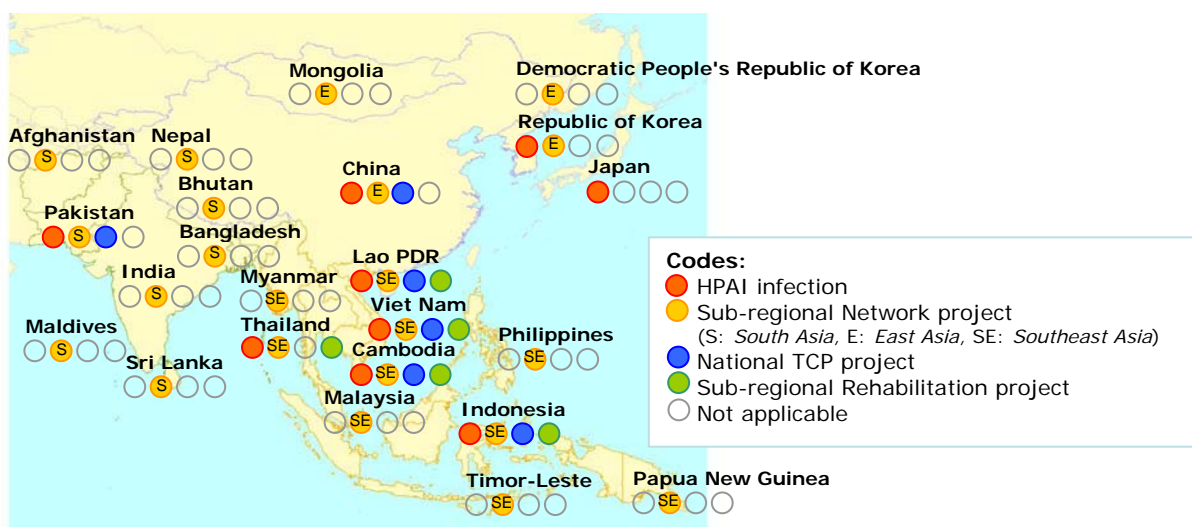
*Updated data on geography and economics of poultry marketing including:* Mapping of marketing pathways; important commodity chains; development and changes of the marketing chains; where are the profits realized?; transport and mixing of birds from different production systems, are needed.

Regarding poverty indicators, Viet Nam has quality data on stunting rates in children and trends in poverty reduction indicators over the past years, as well as the social and geographical distribution of poverty from the National Institute of Nutrition. The report of the regional rehabilitation project, and will assist national authorities, multinational, and bilateral donor/lending agencies with advice, guidelines, best management practices, as well as a review of the major outstanding issues, options and implications associated with the rehabilitation of the poultry sector. In the frame of this project, data collected by others agencies will be gathered and consolidated into a final report for each country included in the Technical Cooperation Programme (TCP) project.

### 3. Actions taken – follow-up

- **FAO/OIE Regional follow-up meeting:** The meeting of Chief Veterinary Officers jointly organised by FAO and the OIE with the participation of WHO will be held in September or October 2004 to review the progress made in the control of HPAI in the most affected countries or those at risk of being infected.

- **The FAO Technical Cooperation Programme-Emergency assistance for the control of avian influenza in parts of Asia**  
 In response to the crisis of avian influenza in Asia, FAO is implementing a number of national and sub-regional projects in countries affected or are at risk: three sub-regional projects for surveillance and laboratory network (Southeast Asia; East Asia; South Asia (pipeline)) and one for rehabilitation.



➤ **Recent Missions (April – May):**

**[Lao PDR]**

- Dr. C. Benigno, FAO RAP (Bangkok) Animal Health Officer. 6 - 10/04/04
- Dr. R. Webb (Australia) FAO consultant (Epidemiology and programme management) Ongoing.
- Ms. E. Bautista FAO Consultant (Project finance & administration officer) Ongoing.

**[Cambodia]**

- Dr. Y. Froehlich (France) FAO consultant (Project Technical Adviser) Ongoing.
- Dr. M. Guittet (France) Avian disease expert, Agence Française de sécurité sanitaire des Aliments (AFSSA). Laboratory support for the National Animal Health and Production Investigation Centre (NAHPIC), 24/03- 9/04/04
- Dr. T. Damrongwatanapoki (Thailand) GIS Information Technologist. 01-14/04/04
- Dr. T. Rawdon (New Zealand) FAO consultant (Veterinary epidemiologist) 15/04-01/05/04
- Dr. S. Desvaux (France) FAO consultant (Veterinary Epidemiologist) Ongoing.

**[Indonesia]**

- Dr. L. Allen (USA) FAO consultant (Veterinary epidemiologist) Ongoing.

**[Viet Nam]**

- Dr. G. Freeland (UK) FAO/World Bank consultant (Project analysis) 28/02 – 04/04/04
- Dr. H. Benard (New Zealand) FAO consultant (Epidemiology and emergency management) 28/03 – 17/05/04
- Dr. F. Dolberg (Denmark) FAO consultant (Poultry Production Expert) Ongoing.
- Dr. T. Damrongwatanapoki (Thailand) GIS Information Technologist. 16-30/04/04
- Dr. A. McLeod, FAO AGAL (Rome) Senior Officer (Livestock Policy) 03–09/05/04
- Dr. C. Benigno, FAO RAP (Bangkok) Animal Health Officer. 03-21/05/04.
- Dr. R. Jackson (New Zealand) FAO consultant (Veterinary Epidemiologist) Ongoing.

#### 4. Resources available

##### Relevant articles/publications:

- **FAO/OIE Emergency Regional Meeting on Avian Influenza Control in Animals in Asia (26-28 February).**  
The full text of the final report is available on:  
[http://www.fao.org/ag/againfo/subjects/en/health/diseases-cards/HPAI\\_Bangkok.pdf](http://www.fao.org/ag/againfo/subjects/en/health/diseases-cards/HPAI_Bangkok.pdf)
- China-ASEAN Special Meeting on HPAI Control. Beijing, 2 March 2004  
The full text of the Joint Press Statement “China-ASEAN Special Meeting on HPAI Control” is available on AIDNews issue 8 pages 4 - 5:  
<http://www.fao.org/docs/eims/upload/153869/AVIbull008.pdf>
- FAO/OIE/WHO Technical Consultation on the Control of Avian Influenza  
3 - 4 February 2004  
The full text of the Conclusions and recommendations is available on FAO website:  
[http://www.fao.org/newsroom/common/ecg/36647\\_en\\_experts.pdf](http://www.fao.org/newsroom/common/ecg/36647_en_experts.pdf)
- Manual on the preparation of national animal disease emergency preparedness plans  
<http://www.fao.org/docrep/004/x2096e/x2096e00.htm>
- The use of vaccination as an option for the control of Avian Influenza (I. Capua, S Marangon) – 71st OIE General Session (May 2003). Available at:  
[http://www.fao.org/docs/eims/upload/153564/A\\_71\\_SG\\_12\\_CS3E.pdf](http://www.fao.org/docs/eims/upload/153564/A_71_SG_12_CS3E.pdf)

- Information for shipping international diagnostic specimens to the International Reference Laboratories (see appendix 2 of AIDEnews issue 5 or 6, available at: <http://www.fao.org/ag/AGA/AGAH/EMPRES/index.asp>)
- FAO/EMPRES Manual on procedure for disease eradication by stamping out (Available at: <http://www.fao.org//DOCREP/004/Y0660E/Y0660E00.HTM>)
- FAO AIDE News (Vol. 1 - 14) (Available at: [http://www.fao.org/ag/AGA/AGAH/EMPRES/tadinfo/e\\_tadAVI.htm](http://www.fao.org/ag/AGA/AGAH/EMPRES/tadinfo/e_tadAVI.htm))
- FAO AIDE News maps (Available at: [http://www.fao.org/ag/AGA/AGAH/EMPRES/maps/e\\_maps.htm](http://www.fao.org/ag/AGA/AGAH/EMPRES/maps/e_maps.htm))

### **Relevant Web sites:**

FAO Avian Influenza fact sheet:

<http://www.fao.org/ag/againfo/subjects/en/health/diseases-cards/avian.html>

OIE Update on Avian Influenza in Animals in Asia web site:

[http://www.oie.int/downld/AVIAN%20INFLUENZA/A\\_AI-Asia.htm](http://www.oie.int/downld/AVIAN%20INFLUENZA/A_AI-Asia.htm)

OIE Technical Disease Cards:

[http://www.oie.int/eng/maladies/fiches/a\\_A150.htm](http://www.oie.int/eng/maladies/fiches/a_A150.htm)

WHO Avian influenza web site:

[http://www.who.int/csr/disease/avian\\_influenza/en/](http://www.who.int/csr/disease/avian_influenza/en/)

### **Contact person at FAO**

Juan Lubroth (FAO Headquarters – Rome)

[juan.lubroth@fao.org](mailto:juan.lubroth@fao.org)

Vincent Martin (FAO Headquarters – Rome)

[vincent.martin@fao.org](mailto:vincent.martin@fao.org)

Hans Wagner (FAO Regional Office for Asia and the Pacific (RAP) - Bangkok)

[hans.wagner@fao.org](mailto:hans.wagner@fao.org)

Hilde Niggemann (Emergency Operations Service (TCEO), FAO Headquarters - Rome)

[hilde.niggemann@fao.org](mailto:hilde.niggemann@fao.org) for emergency fund raising and operational responsibilities

### **Supervision and Coordination**

J. Domenech, Chief, Animal Health Service (FAO Headquarters – Rome)

[joseph.domenech@fao.org](mailto:joseph.domenech@fao.org)

**Annex 1: Countries affected (as of 27/05/2004)**

| area                     | first declaration to OIE | type             | animals affected   | human case           | additional information        |                                       | source <sup>1)</sup>                                   |
|--------------------------|--------------------------|------------------|--|----------------------|-------------------------------|---------------------------------------|--|
|                          |                          |                  |  |                      | last reported case            | new information                       |  |
| Republic of Korea        | 17/12/03                 | H5N1             | layer, duck; virus isolated: magpie  | no                   | 24/03/04                      |                                       | Government; web media                                  |
| Viet Nam                 | 8/01/04                  | H5N1             | chicken, quail, duck, muscovy duck   | yes                  | 06/05/04                      |                                       | gphin <sup>2)</sup>                                    |
| Japan                    | 12/01/04                 | H5N1             | chicken, crow  | no                   | 05/03/04 (crow)               |                                       | gphin, government                                      |
| Taiwan province of China | 20/01/04                 | H5N2             | chicken, duck, pheasant  | no                   | 09/03/04                      |                                       | gphin; meeting report                                  |
| Thailand                 | 23/01/04                 | H5N1             | virus isolation: chicken, duck, goose, quail, turkey, stork                | yes                  | 24/05/04                      | A new case in Chiangmai Province      | gphin, FAO; government <sup>3)</sup>                   |
| Cambodia                 | 24/01/04                 | H5N1             | Chicken, duck, goose, turkey, guinea fowl, wild bird                       | no                   | 09/05/04                      |                                       | FAO; government  |
| Hong Kong SAR            | 26/01/04                 | H5N1             | Peregrine falcon   | no                   | 28/01/04 (Falcon)             |                                       | gphin  |
| Lao, PDR                 | 27/01/04                 | H5N1             | Chicken, duck and quail  | no                   | 02/03/04                      |                                       | FAO; government  |
| Pakistan                 | 28/01/04                 | H7N3<br>H9N2(LP) | layer  | no                   | End of January                |                                       | FAO; government  |
| Indonesia                | 06/02/04                 | H5N1             | Chicken, duck and quail  | no                   | 25/05/04                      | 14 provinces comprising 92 districts. | gphin, FAO; government                                 |
| China                    | 06/02/04                 | H5N1             | virus isolation: chicken, duck, goose, quail, pigeon, pheasant, black swan | no                   | 20/02/04                      |                                       | FAO; government  |
| United States of America | 11/02/04                 | H7N2 (LP)        | Chicken  | no                   | 11/02/04 (Delaware)           |                                       | Delaware Department of Agriculture Statement; FAO      |
|                          |                          | H2N2 (LP)        | Chicken  | no                   | 03/02/04 (Pennsylvania)       |                                       | ProMED; Pennsylvania Department of agriculture website |
|                          | 23/02/04                 | H5N2             | Chicken  | no                   | Late February (Texas)         |                                       | Texas Animal Health Commission and USDA website; FAO   |
|                          |                          | H7N2 (LP)        | Chicken  | no                   | 09/03/04 (Maryland)           |                                       | Maryland Department of Agriculture News Release; FAO   |
| Canada                   | 19/02/04                 | H7N3 (LP)        | Chicken  | yes (conjunctivitis) | 29/04/04 (British Columbia)   |                                       | gphin; government website<br>gphin; government website |
|                          | 09/03/04                 | H7N3             |  |                      |                               |                                       |  |
| Netherlands              |                          | H7 (LP)          | Chicken  | no                   | 22/03/04                      |                                       | FAO; gphin; ProMED                                     |
| South Africa             |                          |                  | commercial poultry   | no                   | 25/03/04                      |                                       | ProMED   |
| Egypt                    |                          | H10N7            | wild duck  | yes                  | 23/05/04 (from survey sample) |                                       | ProMED   |

1) Official (OIE) and non official Information (ProMED, press agencies, FAO tracking systems...)

2) Gphin: Global Public Health Intelligence Network (Health Canada)

3) FAO; government: FAO representative in concurrence with Government sources

4) LP: low pathogenic strain

**Annex 2****- Donor Assistance –**

Many institutions and governments have committed emergency assistance funds to help control HPAI outbreaks. FAO AIDE news is collecting information on donor assistance (financial, in kind or technical assistance) through FAO representations in Asian countries. FAO recognises that the tables below may be incomplete. Nevertheless, we wish to thank all donors and governments for their cooperation in providing additional complementary information.

**Recipient countries:****Cambodia**

| Donors                 | Amount (US\$) | Description  |
|------------------------|---------------|--|
| FAO TCP                | \$390,000     | TCP/CMB/3002 Emergency assistance for the control of avian influenza   |
| Asian Development Bank | \$91,940      | Non-Trust Fund, under general coordination of FAO (for training, equipment and public awareness activities)  |
| Australia              | \$50,000      | AusAID through FAO Trust Fund (OSRO/CMB/402/AUL)   |
| China                  | \$50,000      | Direct contribution to government (no details given)   |
| France                 | \$57,600      | French Cooperation through FAO Trust Fund (OSRO/CMB/403/FRA "Protocole d` accord entre la République française, la FAO et le gouvernement royal du Cambodge, pour la création d` un fonds fiduciaire d` assistance à la lutte contre la grippe aviaire") |
| Germany                | \$50,000      | GTZ through FAO Trust Fund (OSRO/CMB/401/GER)  |
| Japan                  | \$56,000      | Non-Trust Fund, grant assistance for grass-roots human security project for antiviral medicines & equipment  |
|                        | \$402,176     | Through OSRO/RAS/401/JPN "The Japan/FAO Joint Emergency Programme for the Control of Avian Influenza in Cambodia, Indonesia, Lao PDR, Viet Nam" (total \$1,610,083)  |
| WHO                    | \$3,000       | In the form of PPE supplies and PPE and lab training for DAHPs investigating teams and Human Flu Vaccine purchase. Combined PPE training by WHO human health and lab consultants and Ministry of Health officials.                                       |

(As of 03/04/04. source: FAO representation in Cambodia)

**China**

| Donor   | Amount (US\$) | Description  |
|---------|---------------|--|
| FAO TCP | \$390,000     | TCP/CPR/3004 Emergency assistance for the control of avian influenza |

(As of 14/04/04. source: FAO Emergency Operations Service)

**Indonesia**

| Donors    | Amount (US\$) | Description  |
|-----------|---------------|--|
| FAO TCP   | \$390,000     | TCP/INS/3001 Emergency assistance for the control of avian influenza |
| Australia | \$250,000     | Human health protection through WHO                                  |
|           |               | Provide training (epidemiologist and virologist) in Australia        |
| China     | \$100,000     | Vaccines and training  |

## Indonesia (continued)

| Donors      | Amount (US\$) | Description   |
|-------------|---------------|---|
| Germany     | \$61,000      | OSRO/INS/402/GER through FAO Trust Fund: Antigen and antisera from CVL Weybridge for 3,000 samples; Four trainings on clinical & gross pathology diagnosis of AI for field veterinarians (total 222 vets) |
| Japan       | \$78,906      | From Grass Roots Aid Fund for protective gear through the Ministry of Agriculture   |
|             | \$113,000     | Public awareness campaign activities  |
|             | \$10,000      | From JICA/Indonesia for training for diagnostic laboratory in RIVS, Bogor, 17-20 May 2004 (DIC and B type laboratory – 24 veterinarians)  |
|             | \$402,117     | Through OSRO/RAS/401/JPN "The Japan/FAO Joint Emergency Programme for the Control of Avian Influenza in Cambodia, Indonesia, Lao PDR, Viet Nam" (total \$1,610,083)                                       |
| Netherlands |               | May provide veterinary experts in support of FAO operations.  |
| USA         |               | Support through the provision of laboratory analysis available in Atlanta   |

(As of 20/04/04. source: FAO representation in Indonesia)

## Lao PDR

| Donors                 | Amount (US\$) | Description   |
|------------------------|---------------|---|
| FAO TCP                | \$390,000     | TCP/LAO/3001 Emergency assistance for the control of avian influenza  |
| Asian Development Bank | \$50,000      | Direct procurement of Personnel, Protective clothing and equipment  |
| Australia              |               | Through AusAID to invite two government veterinarian to a training course on planning, surveillance strategies, Diagnosis, Movement control, Emergency response related to the HPAI outbreak in Asia, Singapore, 10-12 May 2004 |
| China                  | \$50,000      | Re-establishing poultry breeding farms  |
| France                 | \$53,745      | For surveillance activities (OSRO/LAO/401/FRA)  |
| Japan                  | \$404,040     | Through OSRO/RAS/401/JPN "The Japan/FAO Joint Emergency Programme for the Control of Avian Influenza in Cambodia, Indonesia, Lao PDR, Viet Nam" (total \$1,610,083)   |
|                        | \$50,000      | Through JICA  |
| USA                    | \$250,000     | Direct contribution to WHO Regional Office (Manila)   |
| WHO                    |               | Support for one veterinarian for a 2 month mission  |

(As of 14/04/04. source: FAO Emergency Operations Service, JICA)

## Pakistan

| Donors  | Amount (US\$) | Description  |
|---------|---------------|--|
| FAO TCP | \$390,000     | TCP/PAK/3002 Emergency assistance for the control of avian influenza               |
| China   | \$50,000      | For strengthening the diagnostic/samples analysis capacities of the national labs. |

(As of 28/04/04. source: FAO representation in Pakistan)

**Thailand**

| Donor | Amount (US\$) | Description   |
|-------|---------------|---|
| FAO   |               | Technical advice of experts   |
| Japan |               | Sent two experts from National Institute of Animal Health to assist AI typing/sub-typing. Also provided standard antigen and antibodies for typing. |

(As of 08/03/04. source: FAO representation in Thailand)

**Viet Nam**

| Donors                 | Amount (US\$) | Description   |
|------------------------|---------------|---|
| FAO TCP                | \$390,000     | TCP/VIE/3003 Emergency assistance for the control of avian influenza  |
| Asian Development Bank | \$ 50,000     | Protective gear   |
| EC                     | \$ 968,000    | Protective clothing, lab equipment  |
| Germany                | \$ 15,000     | Protective gear   |
| Japan                  | \$200,000     | Tamiflu (anti-viral drug)   |
|                        | \$401,750     | Through OSRO/RAS/401/JPN "The Japan/FAO Joint Emergency Programme for the Control of Avian Influenza in Cambodia, Indonesia, Lao PDR, Viet Nam" (total \$1,610,083) |
| WHO                    |               | unspecified   |
| World Bank             | \$170,000     | Formulation mission for Avian Influenza Emergency Recovery Project  |

(As of 16/04/04. source: FAO representation in Viet Nam, TCEO)

**Regional**

| Donor   | Amount (US\$) | Description  |
|---------|---------------|--|
| FAO TCP | \$400,000     | TCP/RAS/3004 Emergency regional coordination assistance for control of avian influenza in southeast Asia                                 |
| FAO TCP | \$400,000     | TCP/RAS/3006 Diagnostic Laboratory and Surveillance Network Coordination for Control and Prevention of Avian Influenza in Southeast Asia |
| FAO TCP | \$400,000     | TCP/RAS/3007 Diagnostic laboratory and surveillance network coordination for control and prevention of avian influenza in East Asia      |
| FAO TCP | \$400,000     | TCP/RAS/3010 Emergency regional support for post-avian influenza rehabilitation  |

(As of 22/04/04. source: FAO Emergency Operations Service)