



5 February 2004

## **ADB SUPPORT FOR THE FIGHT AGAINST EMERGING INFECTIOUS DISEASES INCLUDING AVIAN FLU**

1. The Asian Development Bank (ADB) recognizes that the avian flu outbreak currently affecting several countries in the Asia and Pacific region poses a significant threat to human health and economic activity in Asia and beyond. As the leading multilateral development bank for the region, ADB is ready to assist its developing member countries (DMCs) with short-, medium-, and long-term responses to this situation. In the short term, ADB is already using the assistance for emerging infectious diseases mobilized in response to the outbreak of the severe acute respiratory syndrome (SARS) in 2003. In the medium to long term, given the current situation and that of the SARS outbreak in 2003, ADB should consider how to support and strengthen regional capacity to rapidly identify, protect against, and respond to disease outbreaks that originate in animal populations or through human-to-human transmission. ADB is working closely with World Health Organization (WHO), Food and Agriculture Organization of the United Nations (FAO), and other international agencies in developing all stages of its response and support.

### **A. Background**

2. Mutations of the avian flu virus into new and more aggressive strains are relatively common and have already resulted in several severe avian flu outbreaks in the past, some of them causing human cases and fatalities. In 1997 in Hong Kong, China, 18 people were reported to be infected and 6 died, and in the Netherlands in 2003, several people were infected and one died. In both cases as well as in other similar outbreaks, spread of the virus was stopped by immediately culling the whole population of infected chickens. At present, infection of humans appears to have only occurred through direct contact with infected birds (predominantly chickens at this stage), although WHO is investigating a situation in Viet Nam where human-to-human transmission may have occurred within one family. This mode of transmission is not confirmed (and may never be given the particular circumstances) and is not being interpreted by WHO to be indicative of a new strain that will lead to widespread human-to-human transmission at this time.

3. The present avian flu outbreak is unprecedented because of its size and the aggressiveness of the virus, which has already killed thousands of birds. At present,<sup>1</sup> outbreaks of influenza in captive bird (predominantly chicken) populations caused by the highly contagious H5N1 virus subtype have been reported in eight countries: Cambodia, People's Republic of China, Indonesia, Japan, Republic of Korea, Thailand, Viet Nam and Lao Peoples' Democratic Republic (Lao PDR). Human cases have been reported only in Viet Nam (13 confirmed cases, 9 deaths) and in Thailand (4 confirmed cases, 4 deaths). Pakistan and Taipei, China have reported outbreaks of avian flu but caused by different, more benign strains. No outbreak has been reported in the Philippines.

4. While the virus has already a major impact on poultry, health authorities concerned with human health are not very concerned about the virus itself but rather by the possibility that,

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<sup>1</sup> This memo incorporates outbreak statistics reported by WHO as of 4 February 2003.

through a larger number of accidental human cases, the new strain might mutate so that it can be transmitted from human to human, allowing widespread human infection (a pandemic). Previous flu pandemics include the 1918–1919 "Spanish flu" that infected 600 million people and killed between 20 million and 50 million people, the 1957–1958 "Asian flu" that killed approximately 100,000 and the 1968–1969 "Hong Kong flu" that killed approximately 700,000. Health authorities are particularly concerned with the current situation as the logistics of surveillance, laboratory confirmation, and hospital treatment, particularly given the extent of outbreak in rural areas, are sufficiently challenging that many cases could go undetected and untreated.<sup>2</sup>

5. Unlike SARS, which affected mainly urban dwellers, the avian flu is predominantly spreading in rural areas. Human cases are difficult to confirm. Positive identification requires specific laboratory tests that are often not available in areas outside of big cities. WHO does not exclude the possibility that there have been more human cases, including fatalities, that were not, or have not yet been, identified.

## **B. Potential Impact on the Regional Economy and the Poor**

6. Chicken is a major export product for Asia. Thailand alone exports about 500,000 tons of broiler meat, mainly to Japan, and the annual value is about \$1 billion (1.3% percent of exports). Any possible revenue losses of this magnitude could prove devastating, especially for poorer rural areas, which depend on the poultry industry.

7. As chicken is a food staple in most Asian countries, a major crisis will reduce supply and push up prices (including for other meat products), and would therefore disproportionately affect poorer consumers. Chicken is also a major source of protein and other nutrients for Asian populations (especially the poor) and thus a major assault on supply will affect food security and nutritional status. The main control mechanism—the culling of infected, or potentially infected, chicken populations—will also force governments to increase public expenditure to assist affected farmers and take the necessary sanitary measures. The increase in expenditure is occurring as several governments in affected countries are already facing fiscal constraints.

8. A conference in Bangkok on 28 January brought together agriculture and health ministers and senior officials from 12 governments to discuss the situation. The joint ministerial statement<sup>3</sup> issued at the completion of the conference announced agreement on a range of actions that include:

- (i) adopting more stringent surveillance and effective response systems, improving research and development and sharing information and technology;
- (ii) investigating options for designing more bio-secure facilities for both small-scale and commercial poultry producers;
- (iii) implementing measures to control bird flu in line with WHO, FAO, and World Organization for Animal Health (OIE)<sup>4</sup> recommendations;
- (iv) promoting rapid warning of possible outbreaks; and
- (v) developing effective, low-cost diagnostic kits, vaccination, and antiviral drugs.

<sup>2</sup> Paras 2-4 adapted from 26 January 2004 memo from Dr F. Ausseil to ADB staff as well as advice from WHO (ADB appointed disease outbreak team leader).

<sup>3</sup> Joint Ministerial Statement on the Current Poultry Disease Situation, Bangkok, Thailand, 28 January 2004.

<sup>4</sup> This is the animal equivalent of WHO and is widely referred to by the acronym of its original name *Office International des Epizooties*.

9. On 3 and 4 February 2004, the FAO hosted a joint FAO-OIE-WHO emergency meeting on avian influenza in Rome. The 2-day meeting aimed to set policies and strategies for controlling the disease and develop action plans to address the animal as well as public health concerns in each affected country. Participants included veterinary experts from around 14 countries.

10. FAO officials have already called for a more coordinated response and identified actions include the following:

- (i) Encouraging farmers and communities to share timely information about avian flu with government authorities so that culling operations can be initiated (this may involve information, education, and communication campaigns, especially in remote rural areas, and some form of financial compensation to the effected farmers would discourage surreptitious sales of infected birds in nearby markets that would lead to further spread);
- (ii) disseminating information about the best practices for culling and ensuring access to protective equipment for workers engaged in culling; and
- (iii) increasing awareness about the importance of good hygiene and handling practices during handling of poultry products, including hand-washing, prevention of cross-contamination and thorough cooking (70°C).

### **C. ADB Support for Health System Preparedness to Control SARS and Other Emerging Infectious Diseases**

11. The regional SARS outbreak last year revealed weaknesses in public health systems (epidemiological surveillance and preparedness of health care services for highly contagious diseases) in several countries. In response ADB initiated an action plan<sup>5</sup> calling for a number of activities. These included the following:

- (i) An advisory technical assistance (TA)<sup>6</sup> for strengthening surveillance of disease outbreaks, emergency response systems, information, education, and communication in Western Region of the People's Republic of China.
- (ii) A regional TA<sup>7</sup> allowed initially for DMCs to apply for funds to strengthen national capacity for surveillance and control of SARS and other emerging communicable diseases. Subsequently, additional funding was approved from the Japan Special Fund to bolster available funds to DMC governments and to establish a regional "disease outbreak response team" comprising four long-term consultants based at WHO's Western Pacific Regional Office (WPRO), Manila. WHO is the key implementing partner for this regional TA, providing advice on all country allocations and support in implementation.

<sup>5</sup> ADB. 2003. *Action Plan to Address Outbreak of Severe Acute Respiratory Syndrome (SARS) in Asia and the Pacific*. Manila. This and other information are available at [www.adb.org/sars](http://www.adb.org/sars).

<sup>6</sup> ADB. 2003. *Technical Assistance to the People's Republic of China for Combating Severe Acute Respiratory Syndrome in the Western Region*. Manila (approved on 22 May for \$2,000,000).

<sup>7</sup> ADB. 2003. *Technical Assistance for Emergency Regional Support to Address the Outbreak of Severe Acute Respiratory Syndrome*. Manila (approved for \$2,000,000, with an additional \$3,000,000, approved on 29 September 2003).

- (iii) A loan reallocation of \$6.3 million from a Viet Nam health loan to respond to the SARS outbreak and create capacity for the care of SARS patients<sup>8</sup>. Smaller loan reallocations were made in Cambodia and Lao PDR.
- (iv) A Memorandum of Understanding between World Health Organization and ADB on Severe Acute Respiratory Syndrome, signed by President Chino (18 June 2003), and then Director General of WHO, Gro Harlem Brundtland, outlines the areas for cooperation and coordination, including provisions for the regional response team based at WHO's WPRO.

12. Under regional TA 6108,<sup>4</sup> ADB's support was approved for DMCs' short-term needs and for longer term capacity building to improve preparedness for future outbreaks of any emerging, infectious disease. Allocations of up to \$200,000 have been made to 15 countries. WHO is ADB's partner in this.

#### **D. ADB Support for a Response to Avian Flu**

13. When ADB mobilized support for its DMCs for the response to SARS in 2003, the support was intended to have a broad impact on improving response capacity for any newly emerging diseases and infectious disease outbreaks. Many of the health sector needs for responding to avian flu are similar and, thus, use of ADB's TA funds for a broad range of activities related to avian flu control is well within the scope of regional TA 6108. Training, equipment and supplies, surveillance and screening, information and education campaigns, and technical support can be funded.

14. Although the measures taken to control SARS will make DMC health systems better prepared for the avian flu crisis, differences between the SARS and avian flu crises require additional measures for the latter. Unlike SARS, the avian flu mainly affects people in rural rather than urban areas, and has disproportionately affected children as they seem to be at increased risk of infection and of death resulting from infection. And unlike SARS, hospital workers are not so much at risk, while workers involved in mass chicken culls are at high risk. So health systems need to adapt their response.

15. In addition, unlike SARS, the disease-causing agent (H5N1 influenza virus) is known; the source of infection (bird populations) is identified; and in general we know a lot more about influenza, including how to work with the virus and how to treat (and prevent) the disease. (However, one of the two major antiviral drug families has been reported ineffective, and WHO warns that the availability of an effective vaccine against the H5N1 strain of the virus is probably months away.) Not surprisingly, the central agency in all countries currently dealing with the epidemic is the agriculture-livestock ministry and not the health ministry. While the health ministries are dealing with the effect of the disease outbreak, the agriculture-livestock ministries are dealing with the cause.

16. As an initial response to the crisis, ADB's President has written to affected governments to express ADB's concern and willingness to provide assistance.<sup>9</sup> Regional departments and resident missions for affected countries are consulting with counterpart staff to see how ADB

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<sup>8</sup> ADB. 2000. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Socialist Republic of Viet Nam for the Rural Health Project*. Manila (approved on 9 November 2000 for \$70 million).

<sup>9</sup> As of 3 February, the President has written to counterparts in Cambodia, Indonesia, Lao PDR, Philippines, Thailand, Viet Nam and People's Republic of China.

might assist, in close partnership with WHO and other concerned agencies. For example, in coordination with WHO, Viet Nam resident mission has purchased \$50,000 worth of urgently needed essential supplies (e.g., protective clothing and sprayers). This was done with regional TA 6108 funds. Lao resident mission is planning a similar activity. Other DMCs are considering some redirection of funds committed but not yet disbursed under the regional TA 6108, for public health activities related to avian flu. In several countries, capacity-building and training activities can easily include additional information and training on epidemiological surveillance and precautions against the spread of the avian flu to humans.

17. Finally, ADB is considering how it might best support the efforts of FAO, OIE, and other agencies in addressing the agricultural-livestock aspects of the crisis. Mekong department staff have met with FAO and OIE officials to discuss regional coordination and necessary responses, and FAO is expected to provide a more detailed proposal on regional and individual country needs.