



# NTS ALERT

## Mutation of Bird Flu Virus Threatens Global Economic Security

The World Bank (WB) warned of a "sharp decline" in economic activity if the current strain of bird flu mutates into a strain transmittable between humans. "The extent of the decline and the prospects for a rapid recovery would depend on the characteristics of the new virus, as well as on the degree of preparedness in both the public and private sectors," the institution said in its Global Financial Stability Report.

According to the report, a pandemic would pose important risks for the global financial system, "Some reduction in risk appetite is highly likely" in a pandemic, "leading to a greater demand for liquidity and for low-risk assets." While the "flight to quality" ought to be temporary, asset price declines could put the balance sheets of some financial institutions under stress," the report said.

It also addressed the possibility of a "period in which net capital flows to emerging markets decline, perhaps substantially for countries with relatively weak fundamentals." Operational risks could arise from high absenteeism disrupting critical functions and services of the financial system, including payments, clearing and settlement, and trading.

Indonesia and Vietnam have been the hardest hit by the disease since 2003.

The IMF is encouraging countries to prepare for a possible pandemic and has been organizing regional seminars that bring together central banks and supervisory authorities, health experts, and business continuity planners.

**Source**

Deutsche Presse Agentur, 12 Sept 2006

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### Why H5N1 Bird Flu is So Lethal

**Researchers in Vietnam have discovered why the H5N1 bird flu virus currently at large is so lethal to humans.**

In a small study done in 2004 and 2005 involving 18 patients infected with H5N1 and 8 with human flu, found that the H5N1 virus replicates itself far more aggressively in people than common human flu viruses. The study also found that the virus had infiltrated into the blood stream of many of the human victims it killed, which means it could have spread to other parts of the body.

Thirteen patients with the H5N1 virus died and the virus was found in the blood of at least 9 of them, and also in the rectums of most of them, which suggests it could have spread from the respiratory tract through the blood stream into the gastrointestinal tract.

Menno de Jong of the Oxford University Clinical Research Unit at the Hospital for Tropical Diseases in Ho Chi Minh City, Vietnam, says the high levels of the virus triggered an overwhelming inflammatory response that contributed to lung dysfunction and eventual death and says there is a need to stop the virus replicating as soon as possible in order to prevent damage to the lungs and prevent the inflammatory response to the virus.

De Jong also states that people with bird flu had much higher levels of the virus in their throat than in their nose, which is the opposite of human flu and their finding may help doctors diagnose H5N1 bird flu earlier in people.

They note however that early diagnosis is a particular challenge in poor and remote farming areas that lack health facilities and where families live in close contact with their poultry which is also an essential source of both food and income.

**Source**

/www.news-medical.net, 11 September 2006



# The Bird Flu Battle

## **Indonesia**

Indonesia has confirmed 60 cases of bird flu with 46 deaths; the highest number in the world. Its failure to effectively alleviate the situation is attributed to two major challenges.

One primary challenge is educating its rural population regarding the danger posed by the H5N1 virus and the need to be more health-conscious. This, according to UNICEF officials, is due to two factors. Firstly, the country's massive size prevents government officials from disseminating information to remote areas. Secondly, Indonesia's population of 222 million people of diverse ethnicities requires extra effort in relaying information in various languages.

This need to educate Indonesians is crucial. Government officials noted that in the past month, approximately 30 million homes continue to rear chickens in their backyards, despite offers of compensation to surrender their birds to the authorities.

Another major impediment to the fight against bird flu in Indonesia has been the lack of funds to support it. According to Bayu Krisnamurthi, head of the national commission on bird flu prevention, Indonesia would need up to 260 million dollars annually for the next three years to finance its anti-bird flu programs. However, this is far from possible given the government's decision to cut its 2007 bird flu budget from \$57.37 million to \$46.5 million. Moreover, the government has planned to spend \$93 million this year, a far cry from the estimated 260 million that is actually needed.

Indonesia is thus banking on international donors for additional financial support. The extent to which this is viable, however, seems fairly bleak. According to Indonesia Welfare Minister Aburizal Bakrie, Indonesia had not received "a single cent" of the \$1.9 billion pledged by international donors for the global fight against bird flu during a conference in Beijing at the beginning of this year.

### **Sources**

ChannelNews Asia , 1 Sept 2006  
Reuters, 1 Sept 2006

## **China**

China has not provided international health agencies with samples of bird flu viruses found in the country since 2004 but is now putting in place procedures to do so. Scientific analyses of bird flu samples are vital as they assist experts in tracing the evolution of viruses and the geographical spread of any particular strain.

An official from China's Ministry of Agriculture noted that it was in Beijing's interest "to conform to WHO (World Health Organization) standards for international transfers". China has also gearing up for its autumn poultry vaccination effort, which would also include monitoring for signs of vaccine-resistant strains.

Even so, China still faces the major setback of lacking effective coverage. Similar to Indonesia, China has failed to penetrate geographically remote areas. As a result, several cases of bird flu in humans were reported in areas without known outbreaks among poultry.

### **Source**

Reuters, 5 Sept 2006

## **Philippines**

**September 11, 2006**

Though bird flu has not been reported in the Philippines, precautions against the virus are being taken by some Filipino provinces. The Baguio City Council's committee on health and sanitation, ecology and environmental protection, in coordination with the Department of Agriculture (DA), Department of Health-Cordillera Administrative Region (CAR), Health Services Office, and Veterinary Office, is studying the proposed ordinance authored by Councilor Erdolfo Balajadia meant to prevent and control the entry of bird flu in the city.

### **Source**

Sun Star, 11 Sept 2006

## ***Indochina***

Thai and Lao authorities have stepped up cooperation in response to the possible spread of avian influenza, particularly along the Mekong River, which serves as much of the border between the two countries. Thailand's Deputy Agriculture and Cooperatives Minister Adisorn Piengkes met with Lao officials earlier this week to reinforce cooperation between the health authorities of the two neighbouring countries to jointly combat the spread of bird flu.

After a briefing on the disease, Mr. Adisorn conferred with his Lao counterpart and agreed to disclose the real situation of the disease to each other on a regular basis in future. Such disclosures regarding the disease would benefit both countries as officials concerned with the potential spread of bird flu would be more able to efficiently contain and control the disease, he said.

Mr. Adisorn also proposed a meeting of the Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy grouping (ACMECS) to be held in Thailand to allow member countries to exchange ideas and ways to control the avian influenza. ACMECS membership is comprised of the three Indochina countries--Cambodia, Laos and Vietnam--as well as Myanmar and Thailand.

### ***Source***

Bangkok Post, 11 Sept 2006

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# Water Scarcity

## **China's Problems and Possible Solutions**

The fifth World Water Congress was held in Beijing from the 10<sup>th</sup> to 14<sup>th</sup> September. Such a venue was apt as the 1.3 billion people of the world's most populous country have at their disposal only a quarter of the water per person that is available on average around the world.

In addition to this, pollution has left nearly half of the water in the country's rivers suitable only for agricultural and industrial use, making fresh drinking water a luxury for many of China's 800 million peasants. It has cost China about US\$136 billion, close to 7% of its gross domestic product, to clean up all the pollution pumped into the country's environment in 2004 alone.

China is looking to the World Water Congress as a means of tapping into the latest technology and attract more foreign participation in its water industry. Foreign investment in the water sector currently accounts for only 10% of the total, but Beijing hopes to raise this drastically. More than 2,000 water experts and government officials from various countries and international organizations were expected to attend the congress. The forum will assist China in dealing with its acute shortage of water resources and its ever increasing water demand. Nearly three decades of breakneck economic growth, with little attention paid to ecological degradation, has taken its toll on the country's meager water resources - already strained by rapid urbanization and population growth.

Currently, 312 million Chinese villagers are facing water shortages and unsafe water supplies that have been contaminated with fluorine, arsenic, high levels of salt or other industrial pollutants. China's urban water environment is worsening too. About 400 of China's 600-odd cities are short of water, according to the Water Ministry. In Beijing and some 100 other cities, the shortages are deemed "extreme".

The adverse consequences are apparent. As rural areas have fallen behind the cities in their development, public resentment and social unrest have become some of the main worries for the government in the countryside. Protests against polluting





## **Water management problems in South East Asia**

Water scarcity remains a problem in the South East Asian region due to the lack of effective water management. This is caused by involving too many government agencies, which result in overlapping workloads, poor coordination and difficulty in regulating and implementing policies. Such concerns were voiced at a recent regional meeting on water management held by the United Nations Environment Programme (UNEP) in Thailand. The three-day meeting was attended by more than 100 water experts from Southeast Asia.

The Thai government had cut the number of agencies involved in water management to three – the Agriculture and Cooperatives, Natural Resources and Environment, and Interior ministries.

Moreover, Thailand's newly established river basin committee, which aims to promote public participation in water management, had not worked to its capacity because it did not have legal mandate to manage water resources. Part of the reason for this was the ongoing political crisis that had prevented the government from coming up with regulations needed to facilitate its work.

Even so, despite legislation the lack of commitment on the part of government officials in some states has stagnated any progress to clean water. The 2004 Clean Water Act in the Philippines mandates that all households must be connected to a sewerage system or included in any sewerage treatment programs of the water concessionaires and water districts such as regular collection of sewage from septic tanks every five years. Yet 2 years on, very little has materialized.

### **Source**

*Bangkok Post*, 13 Sept 2006

*Manila Times*, 10 Sept 2006

industries and lack of water have become a common sight in villages across China, as the environment has all too often been sacrificed in the pursuit of profit.

Rather than risk social unrest by raising water prices significantly, Beijing has announced that it will spend about 1 trillion yuan (\$125 billion) over the next five years to improve urban water security and build sewage-treatment systems. Another \$5 billion is allocated to improve the water supply in rural areas.

Chinese officials have also vowed that by 2015 all the 300 million peasants who currently lack clean drinking water would be provided with safe, potable water. By doing so, China is likely to exceed by far its United Nations Millennium Development Goal, which is to reduce by half the number of people without sustainable access to safe drinking water by 2015. Yet, such rhetoric has so far failed to materialize into action.

Water scarcity threatens China's food security as well. A persistent drought this summer has affected the lives of 17 million people in central and southwestern China and has caused crops to dry up in the fields.

Moreover, the traditional agricultural practice of flooding of rice wetlands is not sustainable and is a waste of precious water resources. Chinese leaders have shied away from raising water prices to promote water conservation, as rural incomes are relatively low. What is therefore needed are sustainable agricultural methods, such as the System of Rice Intensification (SRI) developed in Madagascar in the 1960s and gaining increasing credibility worldwide. Not only does the SRI reduce water consumption in agricultural practices but also results in a higher crop yield. Though the SRI has made some inlay into Chinese agricultural practice, it has yet to fully adopted by majority of Chinese farmers

In a nutshell, while the intent of providing clean and safe water to all in China is admirable, achieving it is a challenge of a much larger magnitude. Given that this is a progressively slow and steady process, China must be prepared for any further adverse consequences of water scarcity and persevere to reach their goal in the long run.

### **Sources**

More Rice with Less Water, *Appropriate Technology*, Jul- Sept 2001

*Atimes.com*, 12 Sept 2006

CIIFAD, 2006 <http://ciifad.cornell.edu/sri/countries/china/>

## **Philippines' Water Woes**

Twelve Filipinos die every day from exposure to unsanitary wastewater. According to the World Bank, over 90 percent of all sewage generated in the Philippines is not treated, leading to fatal water-borne diseases and economic losses estimated at P67 billion a year.

The inability to dispose, collect and treat human and industrial waste has produced a rise in water-borne diseases. Diarrhea, cholera, typhoid and paratyphoid and hepatitis A account for 31 percent of the total number of illnesses with an annual health cost of P3 billion. The fisheries production loses P17 billion; tourism chalks up P47 billion in losses every year.

Slum areas and factories adjacent to the Manila Bay, Pasig River and Laguna Lake in particular have contaminated many of the main water sources. Due to the lack of proper facilities, poor Filipinos resort to disposing of waste in plastic and paper bags while factories simply dump their wastes in rivers. As a result, pollution has seeped into tap water and public faucets, restaurants, hotels, cocktail lounges and other public places.

This crisis has thus produced a booming industry for distilled or bottled water. Middle-class families in Metro Manila support the business, with several water refilling stations throughout the region. Yet, this does little to alleviate the situation for the many Filipinos who can't afford to buy bottled water thus widening the socio-economic gap within society. Moreover, the inherent problem of poor sanitation is not addressed effectively.

### **Hope for Filipino Fishermen**

Polluted ground water will not be a problem for fisher folks in a resettlement village in Bayawan City with the construction of the first LGU-managed artificial wetland in the country.

Bayawan City holds the distinction of being the first local government unit in the country to construct and manage an artificial wetland that will rid domestic water of organic and toxic pollutants. The Wastewater Treatment Plant is intended for the fishermen and their families living in the Gawad Kalinga Housing Project in Barangay Villareal, Bayawan City.

The Bayawan city government poured in P10M for the project covering about 3000 square meters, which broke ground in June 2005, with the technical assistance provided by the German Technical Cooperation Agency (GTZ). Andreas Kanzler, Country Director of GTZ described the wetlands as a perfect solution to treat the sewage of a small community since it is cost effective, easy to maintain and very efficient in the cleaning process. This method has also been successful in other Asian countries.

#### **Source**

*Philippine Information Agency, 12 Sept 2006*

Another mid-term solution has been contract-bound water concessionaires that regularly collect sewage from households that have no sewerage by charging their customers a 10% environmental tax in their water bills. This rate is intended to help fund the development of free desludging of septic tanks and sludge disposal services by the water concessionaires. Even so, such an alternative is not sustainable as the lack of sewerage to treat domestic wastewater also pollutes ground water, which serves as drinking water for many communities that have no access to water concessionaires and water districts outside Metro Manila. The only solution, though immensely taxing, is thus proper sanitation facilities.

#### **Source**

*Manila Times, 10 Sept 2006*

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