

On Bird Flu and beyond:

A human security perspective

By Liu Zhijun

The first case of the highly pathogenic H5N1 avian flu virus appeared in China's Guangdong Province in 1996. The next year, Hong Kong reported its first case, but after the large-scale culling of poultry, the epidemic seemed to disappear, not reemerging in Hong Kong until February 2003.



US\$10 billion
estimated cost of
H5N1 to Asia alone
by August 2006

THE EPIDEMIC then appeared in many regions around the world, covering substantial areas of Asia, Europe and Africa. According to statistics from the World Health Organization (WHO), 241 cases of H5N1 in humans were documented in 10 countries (Vietnam, Thailand, Indonesia, China, Egypt, Turkey, Iraq, Cambodia, Azerbaijan and Djibouti) as of August 23, 2006, with a total of 141 deaths. The impact already has been substantial. According to the World Organization for Animal Health, in Asia alone the economic cost of H5N1 exceeds US\$10 billion. The epidemic has lately broken out again in some Southeast Asian countries, following the migratory routes of wild birds.

As the disease spreads, fears of a human pandemic deepen. Fortunately, the international community is trying to cope with the specter of a bird flu pandemic through a number of cooperative measures worldwide. Although there are many obstacles in this effort, most can be addressed by thinking beyond traditional notions of national security. Avian flu is an example in which governments must learn to rise above narrow definitions of national interest in order to resolve new security challenges, like epidemic disease, that require the international community to see these issues through the concept of "human security".

The task is urgent. British researchers announced this year they had found an H5N1 strain more suited to human infection among samples of infected birds from Pakistan. A recent case in Indonesia, in which a family of six

died of the disease, was like a warning shot for the world. Once a global outbreak of a human strain of avian flu occurs, it will constitute a direct threat to human security. Klaus Stohr, the top influenza expert at WHO, believes the total death toll could reach as high as 7.4 million. A European think-tank has estimated that in the worst-case scenario, an outbreak could result in 1.42 million deaths and economic losses of about US\$4.4 trillion. The greatest challenge would be to developing countries, particularly those in East Asia. The highest death tolls would likely come from India, Indonesia and China.

Human costs aside, all countries would be impacted by related economic stagnation and the shutdown of commerce. Poverty and social upheaval would intensify. Related losses, according to World Bank estimates, could reach US\$800 billion. Preliminary estimates from the Asian Development Bank put short-term economic losses in the Asia-Pacific region between US\$250 billion and US\$290 billion.

Research from The University of Hong Kong has suggested that aside from the well-documented H5N1, a new strain, H9N2, has already appeared in the poultry supply at street markets in Hong Kong. While not highly pathogenic, there is still the danger this could develop into a human strain and cause an outbreak. WHO Director General Dr. Lee Jong-wook has said he believes a global pandemic is inevitable. We can hope, of course, that he is wrong, but the alarm bells are ringing and it is clear the world faces an unprecedented challenge.

THE BEGINNINGS OF INTERNATIONAL ACTION

Countries across the globe, as well as international groups such as the WHO, are beginning to take action and an emerging model of international cooperation in the face of a potential health crisis has yielded considerable benefits in terms of information sharing and preparedness.

In China, Indonesia and Thailand, the countries with some of the most serious outbreaks, steps have been taken to quarantine, immunize and in some cases cull domestic poultry stocks. Early warning systems and educational initiatives are being put in place, and these countries have sought the support and guidance of the WHO.

In those countries where H5N1 has not yet been documented or where the extent of the disease is minimal, early warning and response systems are being set up to help prevent and control the spread of H5N1. The United States, Brazil and Britain, for example, have all sketched out national strategies focusing on public health preparedness such as inoculation, emergency printing of banknotes (in the event currency use spikes in the immediate wake of an epidemic), and remote working arrangements via the Internet to lessen human-to-human contact without unduly impacting the economy.

A number of global conferences on the prevention and control of H5N1 have also been held. Since late 2005, world leaders and health experts have met on a range of issues in Ho Chi Minh City, Copenhagen, Ottawa, Geneva, Tokyo, Beijing, Singapore, Kigali and Bangkok. Aside from prevention and control, aid strategies and financing have been on the various agendas.

Recognizing that no country can effectively prevent H5N1 on its own, the international community has reached a common understanding that concerted action is the way forward. Developed nations have also realized that the

most economical and effective way of prevention is to focus on the origins of the epidemic in developing countries that are most vulnerable, particularly those in Southeast Asia.

The United States and Britain, along with other developed countries, and multilateral organizations like the World Bank have worked hard to provide material and technical support to countries affected by H5N1. All of these have met with a degree of success. The International Partners Meeting on Avian and Human Pandemic Influenza, held in Geneva, Switzerland, in November 2005, pledged US\$1 billion for a global action strategy on H5N1. The International Pledging Conference on Avian and Human Pandemic Influenza, held in Beijing in January 2006, raised an additional US\$1.9 billion aid fund for H5N1 prevention.

In late 2005, the U.S. set aside US\$380 million to contain the spread of H5N1 in Southeast Asia. The Asian Development Bank pledged US\$580 million to help countries in the Asia-Pacific region combat the disease. Singapore and Indonesia decided in 2006 to cooperate on pilot prevention programs in a region near Jakarta that is home to 1.5 million people. The U.S., Australia and Japan, along with the World Bank, the WHO and the World Organization for Animal Health, have all supported these programs. The Swiss drug firm Roche, manufacturer of the anti-viral drug Tamiflu, continues to supply the drug to warehouses in Asia. A number of other relief organizations have pledged to accelerate deployment of aid to help Asia deal with the threat.

All of these measures have had an unmistakable impact. One obvious sign so far is the effective interdiction of the mutation and spread of the disease, so that human infection so far has been effectively controlled and the disease

Avian flu is an example in which governments must learn to rise above narrow definitions of national interest in order to resolve new security challenges.

Recognizing that no country can effectively prevent H5N1 on its own, the international community has reached a common understanding that concerted action is the way forward.

has not yet developed to the point of human to human transmission. In addition, of course, the network of cooperation now in place has laid the foundation for future efforts to contain H5N1 and other global infectious diseases.

**DESPITE SUCCESS,
SERIOUS PROBLEMS REMAIN**

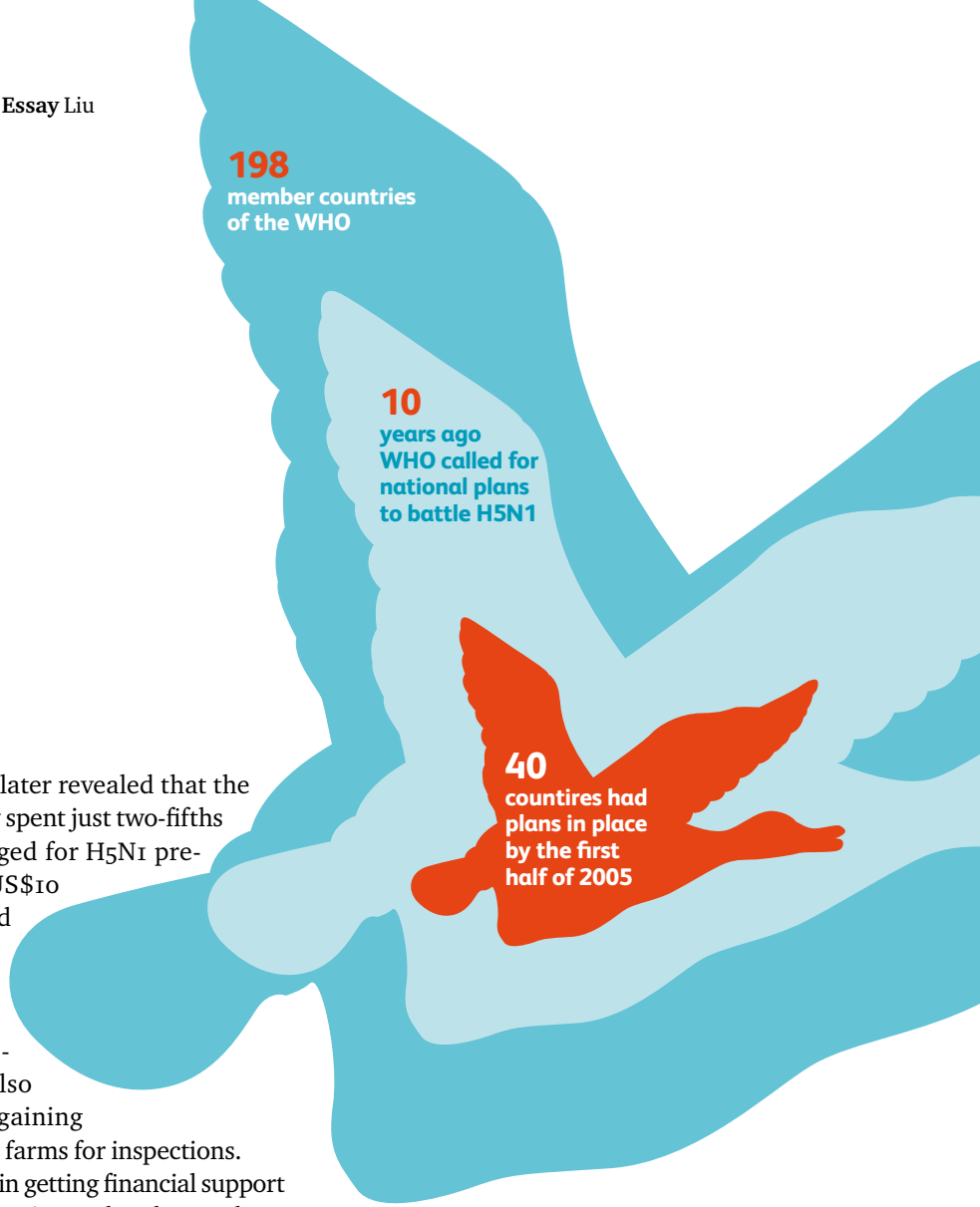
There are still problems that have to be worked out, particularly in the area of international cooperation in disease prevention and control. Once principles have been set down, barriers inevitably arise on the question of implementation and how concrete tasks should go forward.

Although developed countries have provided aid and assistance to areas affected by H5N1, their motivation has largely been self-interest. Dealing with H5N1 requires resolution of two issues. The first is prevention of the disease itself; the second is dealing with the social ramifications and root causes of H5N1. On the first point, the international community has reached consensus. On the second question, however, while all nations agree in principle, achieving tangible results has proven much harder, especially on the question of aid. Those countries directly impacted by epidemics, especially developing nations, hope to leverage global attention to H5N1, and the multinational nature of the

response to it, to their own ends, garnering as much assistance as possible.

This aid not only minimizes for them the cost of disease prevention but potentially enables them to tackle nagging internal political or social problems by applying funds to improving the facilities of the state itself. Those countries providing aid, meanwhile, hope affected countries can limit the spread of the epidemic and prevent it from having a direct impact on themselves, but want to make sure aid recipients, particularly those who aren't strategic partners, do not apply the funds to other purposes, such as building up national power. Each side eyes the other with suspicion and some verbal pledges of assistance have stopped short of action. Aid providers often lack confidence in aid recipients and both sides are at an impasse.

Indonesia is an example. In October 2005, Indonesia disregarded pleas from the United Nations to carry out a comprehensive culling of domestic poultry in a region where H5N1 had been documented. Jakarta said the cost of compensating its farmers was too high. Efforts to vaccinate poultry in many provinces were similarly stymied, so that coverage fell below minimum effective levels. Indonesian officials argued that they had inadequate funding and little scientific know-how. But an official in charge of animal



health in Indonesia later revealed that the country had actually spent just two-fifths of what it had pledged for H5N1 prevention. Roughly US\$10 million earmarked for this purpose had been returned to the state treasury, he said. WHO representatives have also reported difficulty gaining access to Indonesian farms for inspections.

There is a problem in getting financial support from developed countries to the places where it is most needed. In February 2005, the U.N.'s Food and Agriculture Organization (FAO) appealed to various nations to provide US\$100 million to fight avian flu in Asia. By October of that year, only US\$30 million of the money pledged had actually arrived.

At the international pledging conference in Beijing in January 2006, 33 countries pledged US\$1.9 billion, but it remains to be seen how those funds will be allocated and used. The first question is whether the money will actually arrive, and the second is how the recipients will use it. The second question is a cause of great concern to donor countries and organizations. Unfortunately, those concerns are warranted by past experience.

More than 10 years ago, the WHO called on all countries to draft national strategies for the prevention and control of avian flu. By the first half of 2005, however, less than 40 had done so. By the end of 2005 only 120 had emergency strategies

of any kind in place. Of those that had strategies, most stopped short of implementation.

Many countries have also reached an impasse on the production and distribution of medicines and vaccines with some plainly using H5N1 as a pretext for violating intellectual property rights. There are news reports, for example, suggesting that India and Taiwan might have given domestic pharmaceutical manufacturers the green light to produce generic versions of the anti-viral drug Tamiflu without first obtaining the rights from Roche Pharmaceuticals, which holds the patent through 2016. Roche has repeatedly issued warnings about this.

There have also been obstacles to international cooperation in the distribution and sharing of flu vaccines. When Thailand and Mexico proposed at a meeting in Ottawa in October 2005 that wealthy nations share five to 10 percent of



their vaccine stockpiles with developing countries, they failed to get support.

A further problem has been the exaggerated sense of alarm generated by the media about the threat of H₅N₁. The fallout in wealthier countries has been a spike in medicine stockpiles at the expense of countries with a more pressing need. On the economic front, some countries have employed extreme quarantine measures on imports, in some cases even issuing blanket bans on the import of any animal products. These steps are not only illogical and a violation of global trade agreements, they also negatively impact the world economy and the economies of poultry exporting countries, adding to the misery of areas already impacted by H₅N₁.

A NEW WAY OF THINKING ABOUT HUMAN SECURITY

All of the various points of friction in achieving cooperation I have mentioned arise from narrow calculations of national interest. Many governments focus on their interests as national entities and on more pressing perceived security threats. They see a zero-sum game rather than mutual concerns. Resolving a challenge like epidemic disease requires the international community to change its approach to security questions and see these issues through the concept of human security.

Human security was systematically outlined in the 1994 Human Development Report of the United Nations Development Program. Unlike traditional notions of security, its key contribution lay in holistic and inclusive underlying concepts. It brought a host of new factors under the umbrella of security, including public health threats, food security, human rights and development disparities. It addressed many aspects of security – economics, food, the environment, health, personal safety, community and political security. It even broadened the political agenda to include non-national actors. What was most salient about the report was its support for several novel ideas: that the basic focus of security should not be the nation, but the individual; that the various aspects of security supplement one another; that human development, not military might, is the route to human security and that the achievement of security depends not on competition but cooperation.

The concept of human security has begun to shift the focus of international cooperation. Its emergence promises to transform the way we see political, military and economic relationships between nations. It should be emphasized, however, that while the concept of human security is simple, it represents a clear departure from traditional notions of national security, which argue that security demands vary from country to country. In America, for example, the notion of national security is global in scale, while for smaller nations, national security may simply mean staving off outside aggression from a

neighboring state. Human security, by contrast, is universal. Whether nations are big or small, rich or poor, they are all influenced by human security. As organisms, human beings have a range of needs, from food, clothing and health to social harmony, democracy and freedom.

Traditional notions of national security tend to focus on zero-sum relationships, so that the security needs of one country come at the expense of another. During the Cold War, the U.S. and the Soviet Union battled for supremacy. If one side gained the upper hand militarily, the other side felt jeopardized. Human security, though, emphasizes interdependence, the belief that if the security of people in any region is threatened, this potentially harms other countries and populations. We saw this clearly with the epidemic of Severe Acute Respiratory Syndrome in 2003, and with the Asian Tsunami in 2004. Turbulent events in one country can potentially send ripples across the globe.

Human security also focuses on early prevention of disease. For infectious diseases like HIV-Aids and H5N1, prevention is more effective and economical. And, of course, human security places the human being at the very center of policy making because it is most concerned with how people live, their opportunities for equality and whether they are in harmony or conflict (see box at right).

The spread of H5N1 has presented the international community with an opportunity for reflection on a number of key points:

1. Avian flu has made people consider new definitions of security. As H5N1 spreads silently to all corners of the globe, people have begun to realize the most severe threats to our security are not, first and foremost, about international relationships or questions of military security – they are hiding in our communities and in our commerce. Even if

we avoid war or conflict we have no guarantee of security. Security, then, must begin with human beings rather than abstract notions of the state or community. It must begin with daily lives, not with military affairs. We have to talk about protecting the security of the family, the workplace, the local community, and the natural environment.

2. The regional and international cooperation resulting from the H5N1 crisis has laid the groundwork for further action on security.

In the past, intractable regional issues in East Asia, such as the nuclear standoff on the Korean Peninsula, have defined security debates. The tone of cooperation, where there has been cooperation, has been strongly nationalistic, and the parties – as in the Six-Party Talks – have approached negotiations with narrow national interests in mind. As a result, these talks have yielded only the most superficial of results. H5N1, on the other hand, which touches a range of needs, has brought greater cooperation. Nation-states have not been the only actors. Non-profit organizations, non-governmental organizations and civil society groups have all participated in the process and promoted cooperation. The 2005 Asia Pacific Economic Cooperation (APEC) Leaders' Meeting, held in Busan, South Korea, developed a strategy for combating H5N1 and called for collective, transparent measures to exchange expertise and information. The strategy covered pandemic response exercises, cooperation on vaccine research, and greater coordination on economic and technical aid as well as containment. One resolution to come out of that forum was the need to build a disease control center to help coordinate the fight against avian flu. The cumulative effect has been to develop a framework for future cooperation and coordination.

Case study

Avian Flu crisis as a human security issue

Looking at the H5N1 crisis through the lens of human security, we notice the following:

- **The threat of H5N1 is unlike any we have faced before. The disease threatens not only life and health, but interlinked concerns related to food security, economic security and environmental security.**
- **Those impacted by H5N1 are not limited to any one region, country or community. Everyone in the world is threatened, rich or poor.**
- **To deal with this non-traditional threat, we must apply a human security approach. We must seek mutual security through cooperation, sustainable security through development, and cost-effective security through prevention. We need a notion of security that places “people” at the center.**

It goes without saying that H5N1 poses the most direct threat to human health. It has already claimed 141 lives and many have estimated that a full human outbreak could claim millions of lives. Any way you choose to look at it, this is an extremely serious health threat affecting all levels of society. Aside from the direct impact on human health, a pandemic would decimate the global domestic poultry sector, resulting in massive unemployment and related economic insecurity. These would, in turn, bring food and health security issues into the picture.

For many developing nations affected by avian flu, domestic poultry products are staple agricultural exports, and any impact on the industry would have deeply-felt social and economic consequences. The raising of poultry

in many of these countries is a way of life as well as a source of income. In China, for example, animal husbandry accounts for roughly one-third of total agricultural production. Measures such as the culling of poultry, changes in production methods or closing off domestic or international markets as preventive measures can have drastic consequences. The economic effects of H5N1 also extend beyond the domestic poultry to impact retail, food service, travel, leisure and other industries.

3. We must pay attention to environmental security and the related problems of population, economic security and food security. By looking at avian flu within a bigger picture we see that this crisis has its origins in a range of social and environmental issues. Many people have pointed out that as environmental problems grow more severe, wetlands and other natural bird habitats have vanished, putting birds and humans in more immediate contact and increasing the risk of diseases spreading between birds and humans. Some have suggested that by providing better habitats for wildlife we might mitigate the threat of pandemic influenza. They have pushed for practical measures for habitat protection, particularly in developing countries where the environment is especially exposed to destructive development.

Solving environmental problems is, of course, much easier said than done. These issues are tied to more immediate problems such as poverty, food security, and population growth.

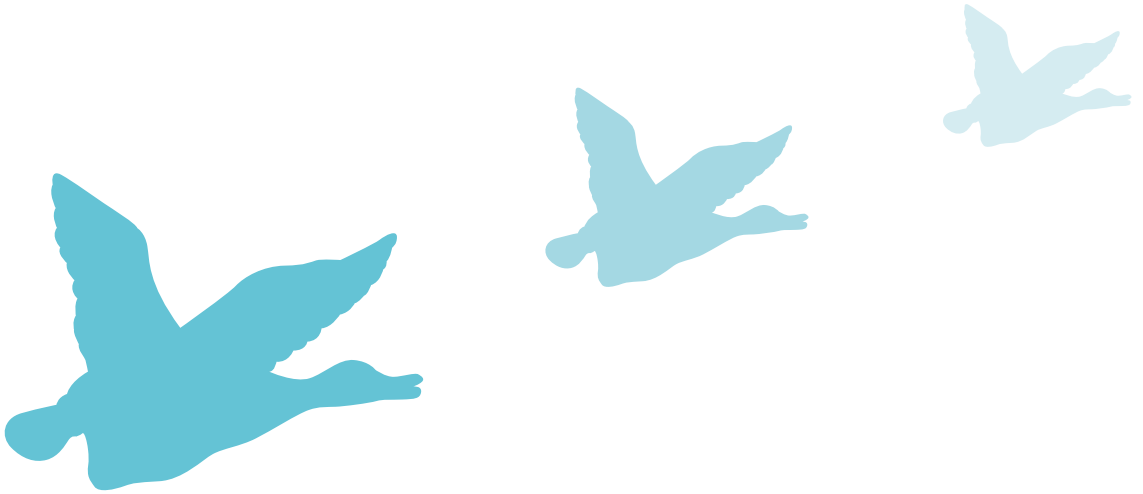
People living in poverty cannot be expected to put the needs of the environment before their own survival. It's inevitable that regions with rapidly growing populations will look to the natural environment to meet their immediate needs. So solving environmental problems isn't simply about environmental protection. We have to begin by tackling the problem of population growth and looking critically at the ways in which we use the environment to meet our survival needs. On the one hand, we have to control the rate of population growth; on the other, we need to seek alternative means of sustenance for human populations. If we look at the problem of population in many countries, we find the root lies not in economic security but in traditional modes of sustenance, inefficient labor and a lack of sufficient social security mechanisms.

Resolving new security challenges like epidemic disease requires the international community to change its approach to security questions. The time has come to see these issues through the concept of 'human security.'

The continued reliance in these societies on regeneration of the family workforce puts the environment under ever growing pressure. Non-industrial modes of sustenance-- for example, raising domestic poultry in backyards or letting them range freely in the village--put Asian populations, in particular, at much greater risk of epidemic influenza. This form of stock-raising has, of course, already been identified as one of the leading causes of H5N1 in southern China and in Southeast Asia.

The important point is that we need to pay attention to basic needs as we make social development policies. Only by first resolving questions of economic and food security can we address larger security issues.

4. H5N1 has helped us realize the importance of human development in promoting human security. If the subsistence mode of one particular group is destructive to the global environment, victimizing that group for the good of others, even if they are the majority, is not the most appropriate or effective response. There are still many people who can only meet their



most basic physical needs. If they are deprived of their subsistence to prevent the spread of influenza or other epidemic diseases, we are obligated to do our utmost to provide alternative means for them to live in dignity. The most important thing we can do is improve their capacity for development, beginning with what Professor Amartya Sen has called “capability.” This means, first, raising the health, knowledge and technical levels of the poor and increasing their “empowerment” by addressing those aspects of their subsistence lifestyles that are unsustainable, thereby lessening their vulnerability. The key is to address problems at their origin. We have to focus not on the narrow goal of economic development, but on the comprehensive goal of “human development.” This way, we tackle issues such as health, education and democracy as well as economic prosperity. Comprehensive human development is ultimately the most effective and least costly way of preventing health crises.

The obstacles we have faced as we deal with the crisis of avian influenza have prompted us to think in new ways about security and development. If we want to achieve true security, we must pay urgent attention to non-traditional forms of security that directly touch ordinary people - including health, economic, food and environmental security. Resolving threats to this broader field of security requires moving beyond economic growth and development to the overarching question of “human development,” which encompasses education, sanita-

tion, democracy and environmental protection. Only in this way can we ensure both sustainable development and security.

Not much more than a decade ago, the world was locked in the struggles of the Cold War. Since then, regional, religious, cultural and national tensions have replaced the bipolar world, leading to the spread of such threats as global terrorism. As we open a new millennium, it’s time we throw off these age-old struggles. Avian influenza and other non-traditional security threats have encouraged new progress in international cooperation and coordination, and on thinking about security and development strategies. They have pushed us to break through our traditional mental blocks. The door to peace and sustainable development has cracked open. Whether we throw that door wide open, or shut it once again, is now entirely up to us.

Dr. Liu Zhijun is a Lecturer in the Department of Sociology, Zhejiang University, and a Visiting Research Fellow at the Institute for International Research at the Hopkins-Nanjing Center for Chinese and American Studies.

Article translated by David Bandurski.