# Chapter II

# Access to Environmental Information

# Category A: Environmental Emergency Information

## Introduction

### Rationales of the Indicators

An environmental emergency in this study means a situation crated by an accidental release or spill of hazardous chemicals that poses a threat to the safety of workers, residents, the environment, or property; or, any type of accident or event occurring through man-made causes or on a man-made site with the potential to harm human populations, biodiversity, or the environment. The meaning of "environmental emergency", therefore, covers health and other man-made emergencies.

Environmental emergencies or disasters affecting human health and the environment occur frequently. The existing statistical data indicated that the occurrence of environment emergencies has an upward trend following the urban growth and development level of the country. Disaster prevention experts have ranked disaster from hazardous chemicals and substances as the second most important disasters after road traffic accidents. The ranking was done based on the severity of emergencies affecting life and property of people (Disaster Prevention Promotion Bureau, Ministry of Interior, 2004).

The indicators in this category evaluate the effort of the related units in disseminating information about the health and environmental emergencies during and after the occurrence of an emergency. Information is very important and needs to be disseminated with a timely manner to the affected people so that they can take immediate action to protect their health or environment. For long-term prevention, it is essential to raise public awareness on the health and environmental impacts of environmental emergencies that frequently occur.

With regard to a large-scale impact of environmental emergency, in this case, the outbreak of avian influenza, popularly known as bird flu, the indicators are designed to assess the degree of government's efforts in disseminating information, managing and planning preparedness activities to handle with the next outbreaks, undertaking the rehabilitation after the outbreak or preventing the occurrence of the next outbreak. However, World Health Organization (WHO) warned the possible recurrence of the disease. Therefore, people have to be aware of it and closely follow up the bird flu information. The concerning agencies also need to make closer epidemiological surveillance. The only measure that effectively reduces bird flu infection is educating people on the outbreak, which is a basic measure. In this light, if people have knowledge and know how to prepare themselves, and the infection of bird flu will not happen (interview statement of Ms. Nittaya Chanruangmaharpol, spokesperson of Ministry of Public Health, Thai News Agency).

## Case Selection

1) Man-made incidents that caused severe impacts on human including property losses, health damage and life losses, and damage to the environment. The cases cover both national scale and local scale impacts.
2) The incidents happened in the last two years (2003-2004) with available information for analysis.
3) The incidents or cases that involve several government agencies in solving the problems.

The researchers selected the case studies corresponding to the extent of impacts as follows:

- Large-scale or national impact emergency
  1) Bird flu outbreaks, December 2003 to February 2005[7]
- Small-scale or local impact emergency
  1) Accident of a truck containing Nitric Acid on Bang Na-Trad Road, February 24, 2004.
  2) Illegal landfill of hazardous wasted at Pak Chong district, Nakhon Ratchasima province, September 8-9, 2004.

[7] As the bird flu outbreaks have recurred, the assessment limited its study period starting from the first outbreak until the period of writing the analysis (February 2005).

# Case Study: Bird Flu Outbreaks

## Introduction

### Case Selection

1) Bird flu is a flu, which spreads in poultry especially chicken, but it can also transmit to humans causing sickness and death as happened in Hong Kong in 1997 where 6 out of 18 patients died. In the beginning of 2004, there were reports on the bird flu outbreaks occurred in Vietnam causing 23 patients, 15 of them died and in Thailand resulting in 17 confirmed patients and 12 deaths.
2) The World Health Organization (WHO) and scientists researching on the bird flu pandemic expressed a similar opinion that the spread of the bird flu disease, which occurred in Asia in the beginning of 2004, may not be entirely eradicated and may recur anytime.
3) Even though there has been no conclusive evidence that the bird flu virus can be transmitted between humans, physicians and scientists believed that if the virus mutates because of a combination between its genetic information and a human flu (re-assortment), there is a chance that the mutant virus can be directly transmitted to other humans. Such an occurrence could trigger a global pandemic, which could result in millions of deaths.

Given the situation mentioned above, it can be said that the bird flu outbreak is one of critical problems of the country in the recent years (2004-2005). It is also an environmental problem, causing significant impacts to human health as seen from the death cases who had close contact with sick animals (the first outbreak caused 8 deaths out of 12 infected patients, and the second outbreak caused 4 out of 5 infected patients died), and the significant loss of poultry resulting from being infected and subsequently sick and died. There was also massive destruction of potentially exposed poultry as a result of control measures aimed at preventing spread to other farms.

The outbreak also caused great economic and social disruption. Since Thailand is the world's fourth-largest poultry exporter, with earnings last year of about US$1.2 billion (49 billion baht). The bird flu outbreak, therefore, had ruined Thailand's poultry industry, one of the lifelines for the country's economy. Furthermore, the outbreak had hit domestic poultry industries including poultry foods and medicine, poultry food manufacturing, and food service business serving poultry dishes as domestic consumers feared of infected poultry meat. These impacts could be translated to enormous economic losses. In addition, there are also social impacts including public health, mental impact of those who lost their family members, and those who lost their business. Therefore, responsible parties have to take action in mitigating and compensating the losses and recovering the affect people's way of life in a timely and sustainable manner (http://ttmp.trf.or.th).

The bird flu crisis showed that food safety should not be just a one-off public health campaign, but should instead be run on a continuous basis. The occurrence of the bird flu disease and its rapid spread resulted from intensive farming methods in export-orient industry with no concerns over the capacity of the environment. To increase poultry stocks, the poultry are raised in a tiny space. There is also an intensive use of chemicals for veterinary purpose including disinfectant solutions, antibiotics, and antiviral vaccines. Furthermore, the beaks of the chickens are cut in

order to avoid harms from their fights. Living in such poor conditions, the chickens become stressful, weak and easily infected by the disease.

## General Situation

The bird flu is a contagious disease in poultry caused by the avian influenza virus type A, the same family as Orthomyxoviridae, which has the RNA, which are the important surface antigen, that is, 15 elements of Hem agglutinin (H) and 9 elements of Neuraminidase (N). The avian influenza virus type A can be divided into 15 subtypes according to the differences of the H and N virus. Therefore, various and new kinds of the bird flu can be found and can transmit to humans and animals such as swine, horse, and poultry. In the last century, there had been a wide spread of the avian influenza virus type A, H5N2, in Italy, H7N4 in Australia, H7N3 in Chile in 2002, and H7N7 in the Netherlands in 2003.

However, only the avian influenza H5N1 can transmit from animals to humans. In 1997, it was reported for the first time that there were six peoples died from the influenza H5N1 in Hong Kong. Scientists presumed that the disease has its origin in migratory water fowl such as wild ducks and seagull where the virus lives in their intestine. They can carry the virus over great distances, and excrete it in their droppings. The risk that infection will be transmitted from wild birds to domestic poultry is greatest when domestic poultry use a water supply that might become contaminated by droppings from infected wild birds.

Even though the avian influenza virus type A can be easily destroyed by the disinfectant solutions, e.g. alcohol and chloroform, it is able to mutate, which makes it difficult to make a vaccine. The World Health Organization (WHO) also expressed a concern over the possible emergence of a completely new influenza virus resulting from exchanged genes between avian and human influenza viruses. If the new virus contains sufficient human genes, human-to-human transmission can occur.

After the first outbreak in Thailand, some experts presumed that migratory wild birds were the origin of the bird flu disease in Thailand, but there was no scientific evidence. The director of the Department of Livestock Development (DLD), Veterinarian Yukol Limlamthong, said that the concerning agencies could not identify the real cause of the bird flu epidemic in Thailand. Nevertheless, based on statistical data on the epidemics worldwide, it was observed that the bird flu disease occurs in countries that run across the bird's migration routes, such as the United States and Canada. For Thailand, the bird flu outbreak was found during the winter when migratory birds come in.

"In 2004, there were bird flu outbreaks around the world for example China had had an outbreak for 4 years, thereafter in the end of December 2003 to January 2004 in Korea, Japan, Thailand, and Laos, which all are along the routes of migratory birds," Linglamthong said.

The second outbreak in Thailand occurred in July 2004. This time, the Deputy Prime Minister (Jaturon Chaisang) announced the recurrence of the bird flu outbreak at a press conference. The bird flu epidemic was found in a chicken farm in Ayutthaya province. The return of the bird flu disease created an extensive discussion in the country when the government appeared keen to adopt poultry vaccination. An ad hoc committee has been established to specifically investigate on this issue (September 2004). Subsequently, the committee concluded that the government would not take the vaccination policy, but the stamping-out strategy as the best countermeasure to curb the disease. The decision stemmed from concerns that vaccination only

maintains the infected poultry from falling sick; it does not eliminate the disease resulting in hidden infection in vaccinated free-range poultry. Another reason of not taking the bird flu vaccines was derived from the warning of major poultry import countries especially the European Union (EU) to impose export bans on countries enforcing a vaccination policy as they were concerned over the unconfirmed residue of the vaccines on poultry products that could harm their domestic consumers.

The second outbreak had raised the country on high alert of the disease when a team of Thai physicians reported their investigation on the first possible case of human-to-human transmission. It was found that a female patient in Nonthaburi province with no background of having close contact with infected poultry might be infected with bird flu virus from her 11 year-old-daughter who earlier died of the disease after closely nursing her. Despite the high possibility, the doctors did not confirm that it was the case of human-to-human transmission.

Dr. Shigeru Omi, WHO Regional Director for the Western Pacific, stated that "the bird flu epidemic will become more severe in the world if we see from the history of the avian flu; its outbreak cycle has a period of every 20-30 years. This means it will happen again in the future. In addition, the disease does not limit its spread to particular animals, but exchange their genes. If a severe pandemic occurs, it can be projected that it will cause approximately seven million deaths of people."

The third outbreak of bird flu on 1 February 2005, Mr. Yukol Limlamthong, Director of the DLD said that the x-ray results of a nationwide examination of the bird flu in poultry, which had just started on that day disclosed the suspected cases of domestic fowls dying by the disease infection in a small area of four provinces: Suphan Buri, Udonthani, Phichit and Phitsanulok. Based on the test results of samples collected within 25 days nationwide, it was found that the worst-hit provinces included Suphan Buri, Nakhon Sawan, Kamphangphet, Angthong, Ayutthaya, and Nakhonratchasima. It was estimated that 31 provinces or 68.89% of total number of provinces had been repeatedly plagued by the virus (July-September 2004); however, when considering the affected areas, only 9.06% of which were the repeated plagued areas. The x-ray investigation also revealed the findings of new infected areas, which accounted for 31.11%. This showed that the bird flu has not yet been totally wiped out from Thailand as the Prime Minister's promise.

Avian Influenza (bird flu) in human situation 2004
(http://epid.moph.go.th/invest/ai/aimain.php)

1) Based on laboratory results, 17 patients were confirmed of their infection with influenza type A (H5N1), 12 of them subsequently died.
2) There was one patient suspected of having avian influenza infection who died.
3) There were 22 patients suspected of being infected with the bird flu died, 9 of them subsequently died.

Avian Influenza (bird flu) in human situation 2005

From the 1st to 27th of January 2005, the Provincial Office of Public Health and the Regional Bureau of Disease Prevention reported that there were 45 influenza or pneumonia patients who were under investigation.

1) There were 8 patients, two from Rayong, Suphan Buri, and Lopburi and one from Nakhonpathom and Uttaradit, who were under investigation in order to get additional data or information either clinical or contact history in risk area.
2) There were 37 patients who were excluded from the investigation as they were not compatible with the aforementioned definition or their laboratory results proved to be other causes.

# Table of Indicators

| **Indicators** | |
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| **II.A.1 Mandate to disseminate information about environmental and health impacts to the public during an emergency*** | |
| **Values** | **Explanation and Justification** |
| (0) Not applicable/not assessed<br><br>(i) There is no mandate that a government agency or responsible party disseminate information about environmental emergencies and accidents<br><br>(ii) <u>There is a mandate that a government agency or responsible party disseminate information about environmental emergencies and accidents, but mandate has vague or broad exceptions or restrictions (please specify)</u><br><br>(iii) There is a clear mandate (incl. means of dissemination) that a government agency or responsible party disseminate information about environmental emergencies and accidents, and mandate has clearly defined exceptions or restrictions | After reviewing relevant laws, regulations and measures (see appendix 1.2 and 1.3), it was found that there are provisions and measures requiring individuals and authorities to disseminate the information on the occurrence of the outbreak to the public. Several ministries have issued countermeasure to curb the disease, including the Ministry of Agriculture and Cooperatives (MOAC), Ministry of Public Health (MOPH), and Office of the Prime Minister. However, some observations can be made as follows.<br><br>1) Although the Animal Epidemic Act B.E. 2499 (1956) clearly states that an epidemic zone must be declared by the governor (Section 15) or the veterinarian in the area (Section 16) and the owner of the suspected case shall inform the authority within 24 hours counting from the day on which that premise is sick or dead, authorizing the officials to declare a control zone (the area within 50 km. radius from the infected farms) with no timeframe for such declaration (e.g. within a certain hour time or day) allows arbitrary uses of such authority. This can be seen from the events during the first outbreak (December 2003-January 2004) when the DLD had been slow in declaring control zones of the bird flu outbreak, despite having been reported of the sudden death of the entire poultry farm in Nakhon Sawan province since late November 2003 and subsequently in many provinces in the central region. Additionally, the governor of Suphan Buri province had even reported to the Prime Minister on large numbers of poultry deaths since 9 December 2003. Despite of these reports, the DLD announced Suphan Buri province as a control zone on 23 January 2004, one and a half month late. The consequent delay in warning the public and taking measures such as culling chicken populations has probably been a factor in enabling the disease to spread. It was seen that when |

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| | no control zones were announced, people, especially farmers and those who have direct contact with chicken, continued their daily activities (e.g., freely transferring their chicken) without taking the necessary precautions.<br><br>2) The control measures are sometimes too stringent and impractical. For example, poultry passport measure was unsuccessfully implemented as its code of conduct was too complicated to comply with. Up to now, few poultry has been issued the passports. In addition, the inspection measure (x-ray) in all areas, though in principle, a good idea that is likely to control the disease, it was ineffective in practice. It is seen that the distance between the affected area and laboratory as well as the period of testing the sample, which usually takes about 7 days, are major obstacle for effective surveillance and emergency response to the spread of the disease. Therefore, there is a gap between the written regulations and actual implementation. Factors that open the gap are differences in way of life, circumstances, and their understanding, which depends on the information received.<br><br>**Source**:<br>- Interview with local chicken farmers in Songpinong, Suphan Buri province on 31 February 2005<br>- News collected from mass media as well as web sites |
| **II.A.2 Quality of information provided in ex post investigation report*** | |
| **Values** | **Explanation and Justification** |
| (0) Not applicable/not assessed<br><br>(i) No report from ex post investigation was produced<br><br>(ii) Ex post investigation did not collect and report does not contain relevant information on or analysis of long-term environmental and health impacts<br><br>(iii) Ex post investigation report contains limited information on and analysis of long-term environmental and health | The quality of information about the bird flu outbreak is considered to be efficient because there are both active and passive surveillance systems for animals and humans. There are also daily surveillance data available on the official websites, as well as the information exchange among the DLD under the MOAC, the DDC under the MOPH and other concerning agencies.<br>Furthermore, the DLD has used the Geographic Information System (GIS) to follow the spread of avian flu, to control the poultry transfers, and to supervise poultry-slaughterhouses. The GIS was deemed to be firstly used in Suphan Buri province as it is the most infect area. Thereafter the use of GIS will |

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| impacts<br><br>(iv) Ex post investigation report contains relevant information on and analysis of long-term environmental and health impacts | be extended to nearby provinces. The use of such modern technology helps improve the quality of information.<br>Information disseminated to the public covered a wide range of topics including the health impact analysis on people viewed as consumers, producers and relevant individuals on a continuing term. The disseminated information also included the situation of the environment that is now at risk due to the existence of the bird flu virus. Confronting with the new risk on human health, the involving agencies had continuously convened meetings to discuss, analyze and update the situation.<br><br>**Source:**<br>-Reviews of news produced by the mass media and information available on the websites during the past year after the government agencies had confirmed the bird flu outbreak in Thailand (February 2004-February 2005). For the list of websites providing source information, see indicator II.A.3 and its attached footnote. |
| **II.A.3 Information about the emergency available on the Internet*** | |
| **Values** | **Explanation and Justification** |
| (0) Not applicable/not assessed<br><br>(i) No information on the environmental emergency could be obtained on government agency website or other websites<br><br>(ii) Information on the environmental emergency could be obtained after in-depth search or multiple links on government agency website or other websites<br><br>(iii) Information on the environmental emergency could be obtained immediately in search or on home page of | From the evaluation of the bird flu situation and information during the third outbreak, it was found that there had been a large volume of information on bird flu outbreaks on the internet. After using "bird flu" as key word, approximately 64,400 results were appeared on Google web search (www.google.com), as well as Thai search engine websites such as www.sanook.com, www.pantip.com, www.hunsa.com, and www.kapook.com<br>As for responsible agencies, rich information concerning bird flu in poultry situation, and its emergency response plans and controls, are available in the DLD website. A daily update of bird flu surveillance in humans as well as other related information can be found at the MOPH website (www.epid.moph.go.th).[8] |

[8] Official websites and hotlines providing information on the bird flu outbreaks include 1) Avian Influenza Information, the Government House (http://www.thaigov.go.th/avian/index.html) and hotline 1716, the Office of the Prime Minister tel. 02-791-1374 (office hour); 2) the Ministry of Public Health (http://www.moph.go.th/; http://www.ddc.moph.go.th) hotline: 02-590-3333 (24 hour) 3) the Ministry of Agriculture and Cooperatives (Department of Livestock Development) (http://www.dld.go.th/) hotline: 02-653-4444; 4) Bangkok (http://www.dld.go.th/) hotline: 1555 , 02-248-7417; and 5) Office of Standard of Agricultural Products and National Food**,** under the

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| government agency website or other websites | **Source:**<br>-Websites of concerning government agencies and webmasters. |
| **II.A.4 Information about an ex post investigation available on the Internet*** | |
| **Values** | **Explanation and Justification** |
| (0) Not applicable/not assessed<br><br>(i) No information about an ex post investigation could be obtained on government agency website or other websites<br><br>(ii) Information on the ex post investigation could be obtained after in-depth search or multiple links on government agency website or other websites<br><br>(iii) Information on the ex post investigation could be obtained immediately in search or on the home page of government agency website or other websites | Comprehensive information about bird flu outbreaks can be found at the DLD website under the MOAC and the DDC website under the MOPH, though the focal point of the two websites is different. The DLD website focuses on bird flu surveillance in poultry; while, the DDC website aims to provide information on bird flu surveillance in humans. Apart from these official websites, bird flu data and information can be found at websites of other health-related government agencies and other general websites.<br><br>**Source:** Information database on the internet. |
| **II.A.5.a Efforts to reach mass media during the emergency (the first outbreak)*** | |
| **Values** | **Explanation and Justification** |
| (0) Not applicable/not assessed<br><br>(i) The responsible agency/party did not issue statements and information to the media during the selected emergency<br><br>(ii) The responsible agency/party gave insufficient information to the media (produced only one statement, gave conflicting information, etc.) | During the first outbreak starting from late November 2003, there had been continuing reports on thousand deaths of poultry in the country. However, the DLD officials had denied the accusation of covering up the information and insisted on the absence of the disease. The DLD officials blamed other diseases as the cause of the chicken deaths. In contrary, a group of senators under the Public Health Committee had visited a suspected patient in Nakhon Sawan province and subsequently announced on January 19, 2004 that a suspected case was found and accused the |

Ministry of Agriculture and Cooperatives (monitoring the infected areas)(http://www.acfs.go.th/Bflu)

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| (iii) The responsible agency/party carried out a comprehensive outreach effort, including press releases, interviews, and press conferences reaching various media outlets (e.g., TV, radio, press, etc.) | government of covering up the bird flu outbreak for weeks.<br>On the following day, the Prime Minister and his cabinet ate chicken in front of the press in order to build up the public confidence that Thailand was free from bird flu. However, just three days later (23 January), a group of doctors from Siriraj Hospital and the Ministry of Public Health jointly announced at a press conference that two Thai boys were died of bird flu. On the same day, Mr. Somsak Thepsuthin, minister of the MOAC spoke out on the presence of the bird flu disease resulting from a discover of 1 infected sample out of 16,164 tested samples from the total of 100,000 samples collected from poultry farms nationwide. That one infected sample was taken from a farm in Suphan Buri province. Consequently, Suphan Buri was declared as the first bird flu control zone.<br><br>There is an observation on government reaction to the media. Based on the government statement that the said 100,000 samples were collected in such a short period (during January 16-23), the press asked the DLD officials on possible collected samples prior to January 16 with regard to their numbers, locations, and lab test results, no concrete answers provided. The officials only said that the investigation had been continuously undertaken.<br><br>By reviewing the order of events during the initial period, it can be concluded that the responsible agency (the MOAC) and the government did not make efforts to reach the media during the first outbreak. For the order of events of bird flu information in its initial outbreak and its relevant newspaper article (Matichon newspaper), please see Appendix 1, 1.4-1.6). |

| **II.A.5.b Efforts to reach mass media during the emergency (The second outbreak)*** | |
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| **Values** | **Explanation and Justification** |
| (0) Not applicable/not assessed<br><br>(i) The responsible agency/party did not issue statements and information to the media during the selected emergency<br><br>(ii) The responsible agency/party gave insufficient information to the media (produced only one statement, gave conflicting information, etc.)<br><br>(iii) <u>The responsible agency/party carried out a comprehensive outreach effort, including press releases, interviews, and press conferences reaching various media outlets (e.g., TV, radio, press, etc.)</u> | After the government had confirmed its first outbreak, the country was on high alert of the disease and its subsequent outbreaks. To educate the public on how to cope with a possible bird flu spread, handbooks totaling 1,100,000 copies were produced and freely distributed to the public. Apart from this, trainings were given to district public health officials and local volunteer in order to improve local capacities to conduct surveillance for possible infected animal and human cases and to educate people for necessary precautions.<br>These methods of providing information can reach people who are not able to access information available on the internet and other media outlets (TV, radio, press, etc.). The distributed handbook was found to be attractive and easy to understand as it was presented with many pictures and written in a simple language.<br>It was also observed that during the second outbreak, several education campaigns were broadcasted in all TV channels and radios on a daily basis. The campaigns provided information on how to take care of poultry, how to observe unusual symptoms (for poultry raisers) and how to safely consume poultry products (for consumers). There were also education spots given by some influential persons (e.g., ministers, direct-generals).<br>Disseminating information about the disease via newspapers was another channel that was used by concerning agencies. This was done through issuing press releases, conducting interviews, and arranging press conferences.<br>By receiving clear and sufficient information on the bird flu outbreak and preventive measures and guides, people have gained knowledge and less panic of the second and third outbreaks. This could be seen as a result of full-scale efforts of concerning agencies and committees in disseminating the information and educating people in a consistent manner. |

| **II.A.6 Efforts to reach mass media after the emergency*** | |
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| **Values** | **Explanation and Justification** |
| (0) Not applicable/not assessed<br><br>(i) The responsible agency/party did not issue statements and information to the media after the selected emergency<br><br>(ii) The responsible agency/party gave insufficient information to the media (produced only one statement, gave conflicting information, etc.)<br><br>(iii) The responsible agency/party carried out a comprehensive outreach effort, including press releases, interviews, and press conferences reaching various media outlets (e.g., TV, radio, press, etc.) | Press conferences were regularly convened by the DLD (bird flu surveillance in animals) and the DDC (bird flu surveillance in humans) under authority commands.<br>In the side of mass media themselves, they had been highly alerted with bird flu outbreaks. This is because the outbreaks had large-scale impacts on people and become one of the most public concerned issues. As the public had paid attention to the outbreak event, the media, especially reporters and columnists were keen to search for the information. The active effort of the media can be seen in the case of reporters from the Thai-language newspapers, Prachachart Turakij and Matichon, who has closely followed the bird flu outbreak from the outset.<br>Of particular note is the news reporting of Prachachart Turakij. The reporters have actively and continuously followed the bird flu outbreak in affected provinces since November 2004. Their news reports were straightforward based on the facts. They also provided the readers with analytical columns featured with orders of events, maps, and tables. At the meantime, they also acted as whistle-blowers by highlighting the hidden subject and analyzing impacts in all dimensions. The most challenging thing for them was to make the reported article more credible than government statement. This was done by searching for publicly acceptable data and facts to be used for their references amid the unfavorable atmosphere. They have encountered repeated attempts from several of their news sources to cover up the real situation and some academics also backtracked after speaking to her on the subject. However, their fact finding on the true situation of the disease has been continued until the time that people died of bird flu, which forced the MOPH officials to disclose the truth about the disease. The announcement of the MOPH contradicted with the persistent denial of the MOAC.<br>As a result of intensive seeking for the news sources and high quality of the news reports, the Best News Report was awarded to the editorial board of Prachachart Turakij for their story on disclosing the bird flu situation at the 2004 Isra Amantakul Awards (the awards were given out by the Journalist Association of Thailand and the Isra Amantakul Foundation). |

| **II.A.7 Quality of information accessible to the public during an emergency*** | |
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| **Values** | **Explanation and Justification** |
| (0) Not applicable/not assessed<br><br>(i) Information about immediate health and environmental impacts of selected emergency was not accessible to the public<br><br>(ii) <u>Incomplete or contradictory information about immediate health and environmental impacts of selected emergency was accessible to the public</u><br><br>(iii) Complete and consistent information about immediate health and environmental impacts of selected emergency was accessible, along with instructions and suggestions on how members of the public can protect themselves | The assessment of this indicator assigned value (ii) based on the excerpted interview statement of M.D. Kamnuan Eungchusak, Director of Division of Epidemiology, under the Ministry of Public Health, broadcasted on UBC Cable TV (Channel 7), 3 October 2004, 9 p.m. as follows.<br><br>"The bird flu does not transmit through consuming sick poultry but through the respiratory systems. The disease mainly travels through the nose. Therefore, the public perception that if we do not eat chickens and eggs, we will be free from the risk of contracting the disease is wrong. In fact, to control the outbreak, principally we need to destroy the infected animals to remove the source of the virus.<br>The reason why the first outbreak was under control is that we had destroyed 50 millions of sick and dead chicken. Thus, not eating chickens and eggs does not help control the outbreak.<br>Another factor that helped containing the disease is the increasing knowledge of the bird flu in the society. During the first outbreak, the knowledge was less clear. People misunderstood that having well-cooked chicken helps preventing the bird flu infection. The true reason of this campaign by the MOPH was that having raw meats could induce other diseases. People may die of other diseases such as cholera and dysentery. In the case of the infected cases that have been under investigation, they have direct contact with the infected poultry in daily lives or on a continuing period of time."<br><br>The researchers also made some interviews with ordinary people and restaurant owners and found that the information disseminated to the public was unclear as the interviewees feared of eating chickens or chicken products as they were afraid of getting infected by the disease through eating. This understanding is contrary to the fact that the bird flu disease is a respiratory disease (the virus passes through the nose). People become infected when they have direct contact with contaminated excretions or surfaces that are contaminated with excretions. |

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| | Moreover, there was unclear information in the public on whether sparrow, pigeon, and other birds are virus-carriers to humans. Based on the aforementioned information, the bird flu is a flu of almost all kinds of poultry especially waterfowl and migratory birds, which are believed to be the main source of spreading the virus to domestic poultry. However, humans will not get infected from those birds but from their poultry raised in the village because they have closer contact to them than to those in the nature. |
| **II.A.8 Quality of information accessible to the public about ex post investigation*** | |
| **Values** | **Explanation and Justification** |
| (0) Not applicable/not assessed<br><br>(i) Information about long-term health and environmental impacts of selected emergency was not accessible to the public<br><br>(ii) Incomplete or contradictory information about long-term health and environmental impacts of selected emergency was accessible to the public<br><br>(iii) Complete and consistent information about long-term health and environmental impacts of selected emergency was accessible, along with instructions and suggestions on how members of the public can protect themselves | After the third outbreak, the information and knowledge concerning the bird flu has become clearer. There is a consensus among all sectors on the conclusion that the chance of human-to-human transmission is possible. However, this conclusion has not had enough laboratory proofs due to insufficient excretions, e.g., saliva, nasal secretions, and feces, from the infected dead cases.<br><br>Moreover, the investigation of suspected patients needs to be undertaken in a timely manner. To date, the identification of human-to-human transmission is not possible as such case has not yet occurred. And even it occurred, further investigation needs to be made (Krungthep Turakij, 2 November 2004).<br><br>As for the MOPH efforts, the MOPH has laid a long-term strategy for preventing and controlling the disease, which will be in place until 2008. The urgent tasks include preventing and controlling the disease, increasing the effectiveness of surveillance networks, identifying infected patients by enhancing the knowledge of Village Health Volunteers to the extent that they will be able to educate people. The strategies also include vaccinating the two at risk groups, public health officials and veterinarians, in order to prevent mutation of the viruses (the greater the number of human victims, the higher the chances of a modified strain that can be directly transmitted to other humans). Another strategy is to develop laboratory capacities for timely analysis of bird flu virus in humans (Krunthep Turakij, 2 November 2004). |

# Analysis

The case of bird flu outbreaks suggests that in general, government agencies that handled the bird flu outbreak have clear information that is accessible by the public. Also the media themselves has been very active in finding and disseminating the information throughout the whole period of the outbreaks. However, there are some observations arising from the case as follows:

1) During the initial outbreak (early December 2003), the information of the bird flu provided by the authorities was ambiguous and limited, to the extent that a legal mechanism was exerted to force the government to disclose the information. It was seen that after several failed attempts to get the information from the government agencies, a columnist of Matichon newspaper exerted his right to access official information as guaranteed by the Official Information Act B.E. 2540 (1997) by lodging an appeal with the Official Information Board. The lack of full openness of the bird flu information has made the public confusing and ruined the public's faith in the authorities and their subsequently disseminated information (after admitting the presence of the bird flu). The public remained skeptical about the given information as they perceived that the government has sided with influential persons and business groups in denying the existence of the bird flu.

2) The alleged bird flu cover-up during the first outbreak has caused the public to distrust the government and to withhold their cooperation to contain the disease. Many farmers resisted the culling of their animals in the infected area because they believed that their animals were free from the disease. Also they were not sure whether they would receive reasonable compensations for culled chickens from the government. Lack of cooperative efforts from the public forced the government to handle the problem alone, making it more difficult to contain the disease. Although the government claimed that they deterred the announcement for fear of causing public panic, its thinking was opposite to global thinking about transparency as Bob Dietz of the World Health Organization advocated that "In an epidemic, when you have a well informed public you have a far greater chance that there will not be any panic and that they will do things to keep themselves healthy and slow the spread".

3) Given the recurrence of the outbreak which means fewer chances in entirely eliminating the disease, the Prime Minister's command of entirely wiping out the disease confused people. They are not sure what they should do, and how they use the information; should the information be used to prepare for or prevent the disease.

4) The success of the operation is not measured by the decreased number of infected sources but timely investigation of the disease and effective containment measures. Having fewer patients means the system effective. Although when the winter comes, there is no guarantee that the number of dead chicken will be smaller than the previous outbreak, the government and the people have increasingly gain knowledge from the past outbreaks.

5) Disseminating information through television broadcasting and the internet is suitable for people who have access to them. These groups of people are prone to the bird flu risk as they are consumers of the poultry products. In contrast, mostly affected people are those who work in agricultural sector, particularly poultry raisers and workers, with little access to the television broadcasting and the internet. Hence, effective means of information dissemination to reach these at risk people are radio broadcasting together with local volunteers involved in

local surveillance networks. Although these operations have already been in place, their effectiveness and efficiency need to be improved in order to prevent the emergence of new outbreaks.

6) The knowledge about the bird flu has been continuously evolved. There still are several unresolved issues. The controversial use of bird flu vaccines in poultry is one example. Although it was officially prohibited, there have been attempts to lobby the government to reconsider it. After, repeatedly considered of the issue, the government reversed its longstanding ban on bird flu vaccinating but vaccination is allowed for only fighting cocks and recreational birds. Another issue is the possibility of the human-to-human transmission (including transmission to other kinds of animals), which presently has no laboratory proofs. The problems include the spread of the bird flu in humans (as well as other kinds of animal) which is, presumably, possible but there is no confirm from the laboratories. All these issues require clear information to be disseminated to the public. There is also a discussion on appropriate poultry farming system, calling for pubic participation in decision-making. Therefore promoting public participation in decision-making affecting the environment and improving access to information must be undertaken simultaneously.

7) Controlling the bird flu virus in poultry is a difficult task. The disease might not be entirely eliminated. To contain the disease requires continuing efforts. From the view of scientists worldwide, the bird flu outbreak is a critical problem and needs to be handled seriously. However, they also reminded that people should not get panic which would weaken prevention efforts in handling with the disease. The Ministry of Public Health stressed the seriousness of the problem and called for collaborative actions from all sectors to tackle this problem.

8) The culling measure, an internationally standardized measure set by the Office International des Epizooties (OIE) or the world organization for animal health, in which poultry, infected or non-infected, are to killed either by burying or burning within 5 kilometers radius of the affected area, is a tragedy for farmers. During the initial outbreak, people were still confused with the control measure and doubted on the fair compensation from the government for their losses from compulsory poultry slaughter (interviews with farmers, Songpinong district, Suphan Buri province, 31 January- 3 February, 2005). There were still illegal movements of poultry out of the control areas, making the control measures inoperative due to the lack of cooperation from the public.

## Recommendations

- **For Thailand**

1) Given the recurrence of the bird flu outbreak, an expert team comprising experts from various fields including public health, environment and agriculture, should be established to jointly tackle the problem.

2) An information technology system that can deal with massive information should be established. Responsible agencies should ensure public access to that database with accuracy and timeliness. Information about cases as well as the development of the cases should also be recorded in the computer system so that the public can track the event from beginning to end.

3) Equipments generating quick results along with staff trainings to strengthen primary and secondary diagnoses should be provided.

4) During the operation, there was no evaluation of the preparedness. Therefore, responsible agencies should consider setting up emergency response plans and measures. To improve the effectiveness of the preparedness, the government should seek advice from countries that have experiences and experts, e.g., the United States, the Netherlands, and Italy etc.

5) The passive surveillance system prior to the bird flu outbreak has failed to contain the disease as seen in initial outbreak that the infected poultry were not identified. This surveillance system, hence, should be improved, particularly in terms of the accuracy of the information and the timeliness of operations. According to official records, there have been 161 bird flu outbreaks in Thailand (as of 9 February 2004) and approximately 24.6 million birds have died (either being infected or culled). Even though the date of the first outbreak can not be specified, the data from the active surveillance has revealed that the wide spread of the disease happened in late January 2004; hence, the first outbreak should occur in late November or beginning of December 2003.

- **For Development of the Indicators**

1) The government and relevant authorities should conduct public opinion surveys on the extent that the undertaken measures have had affected local people' ways of life, economic impact, living conditions, environment and physical impacts. These impacts determine the degree of their cooperation with the government to deal with the bird flu outbreaks. Therefore, additional indicators should be developed to assess the extent that the public can participate in reviewing governmental policies.

2) Since the disease has already been embedded in the environment, it can not be entirely eliminated. Therefore, the continuity and regularity of information dissemination are indispensable measures for disease controls. Therefore, there should be indicators that assess the continuity and regularity of information dissemination in each incident as shown in the diagram below.