

Advisory Council on Food and Environmental Hygiene

Enhanced Measures for Prevention of Avian Influenza Outbreak

Purpose

This paper briefs Members on (i) the enhanced measures implemented for preventing avian influenza outbreak; and (ii) the latest progress of the buyout scheme launched to the live poultry trade in late July 2008.

Existing Preventive and Surveillance Programme

2. Since 1998, we have put in place a comprehensive preventive and surveillance programme to reduce the risk of avian influenza outbreaks in Hong Kong. The measures included tight biosecurity measures at local farms, enhanced import control, market rest days, stringent hygiene requirements on wholesale and retail markets, etc. In 2003, we introduced a vaccination programme for all local chicken farms and we also required all imported live chickens to be vaccinated against the disease. The World Health Organization (WHO) has publicly commented that the preventive and surveillance programme of Hong Kong is one of the most advanced systems that they have seen.

3. However, these measures are not foolproof, as seen from the repeated avian influenza outbreaks in the past ten years. There remains a risk that the virus may infect humans, especially given that the public can have close contacts with live poultry, which are sold in retail outlets in Hong Kong. The crowded living environment in Hong Kong further amplifies the risk. Although our chickens have been vaccinated against H5 avian influenza, vaccination itself cannot totally remove the risk of any H5N1 avian influenza virus re-assorting or mutating to the extent that it may pose a threat to public health. On the other hand, the virus may also re-assort with other human influenza to produce a lethal human pandemic strain. Recent avian influenza outbreaks in the Mainland, Southeast Asia and other countries, such as Korea and Pakistan, indicated an increasing threat of the avian influenza virus in the

region. As at 19 June 2008, WHO reported 122 cases of human infection of H5N1 since January 2007, of which 85 cases were fatal.

Detection of the H5N1 Virus in Public Markets in June 2008

4. On 7 June 2008, some faecal samples taken from cages of three poultry stalls in Po On Road Market in Sham Shui Po during the regular surveillance of the Agriculture, Fisheries and Conservation Department (AFCD) conducted on 3 June were tested positive of the H5N1 avian influenza virus. Subsequently on 11 June, the environmental samples of three more retail markets (namely Luen Wo Hui Market in North District, Yan Oi Market in Tuen Mun District and Ap Lei Chau Market in Southern District) taken on 7 June, as well as samples from one more stall of the Po On Road Market, were tested positive of H5N1 avian influenza.

5. As more than one market were found to have samples tested positive of H5N1 avian influenza virus, the virus might have the possibility of accumulating and spreading. To prevent the possible spread of the virus, the Director of Agriculture, Fisheries and Conservation declared on 11 June all retail outlets where live poultry were sold as infected places and ordered the culling of all poultry in these retail outlets. By the end of the operation on 11 June, about 5 200 live poultry were culled and disposed of, along with over 4 700 dressed poultry and 12 700 chilled poultry surrendered by the retailers.

6. We also decided to suspend temporarily live chicken imports from the Mainland for 21 days with effect from 11 June, with reference to the guidelines of the World Organisation for Animal Health. At the same time, local farms stopped dispatching chickens to the market.

7. The above detection of H5N1 avian influenza virus in environmental swabs taken from four local retail markets indicates that despite all the preventive and control measures that we have put in place, they are inadequate in totally containing the public health risks posed by avian influenza, especially at the retail level. The location of these four retail markets all over the territory (viz. in Fanling, Tuen Mun, Sham Shui Po and Ap Lei Chau) further suggests that the virus may have a propensity to spread. There is therefore an imperative need to enhance our ability to arrest any possible spread of avian influenza virus in Hong Kong in future by introducing new measures at all levels of the supply chain, especially the retail

level.

Prohibition of Overnight Stocking at Retail Outlets

8. With a view to improving our current surveillance system and enhancing our ability to arrest any possible future spread of avian influenza virus in Hong Kong, we tabled an amendment regulation in the Legislative Council on 2 July 2008 to prohibit the overnight stocking of live poultry at all retail outlets beginning from the resumption of live chicken business on 2 July 2008. Any unsold chicken at the end of a day will be slaughtered and the cages can be thoroughly cleansed and disinfected to avoid accumulation of virus in the environment of the retail outlets. The prohibition of overnight stocking of live poultry at retail level also makes it easier for the Administration to monitor whether there are smuggled chickens at the retail level. This new measure discourages the retailers to sell smuggled chickens as any unsold chicken at the end of a day has to be slaughtered and the value of a dressed chicken is much diminished. So far, this new measure of no overnight stocking of chicken at the retail level has been functioning smoothly and effectively since its implementation on 2 July. The average number of chickens which need to be slaughtered at the end of a day is less than 1.5 chickens per retail stall¹.

9. We have considered other alternatives, such as increasing the market rest days from two per month to once every week. However, we consider that such a measure is inadequate in arresting the possible spread of avian influenza. In the avian influenza incident in June 2008, the second market rest day in May was 25 May 2008 whereas the first batch of environmental samples tested H5N1 positive were collected on 3 June 2008, i.e. just one week after the market rest day. This indicated that merely increasing the number of market rest days to once per week might not be able to significantly reduce the amount of virus load in the environment. Besides, when a chicken is infected by avian influenza virus, it may only take a couple of days or less for the virus to multiply. The close proximity between the chickens at the retail outlets and their excreta allows the rapid spread of avian influenza from one infected chicken to others. Similar incremental arrangement of increasing market rest days, for example even to twice a week, would not be sufficient to prevent the spread of avian influenza.

¹ Based on the figures obtained from 6 July to 31 July.

10. Apart from prohibiting the overnight stocking of live poultry, we have also enhanced other preventive measures at the retail end. These include requiring the retailers to thoroughly cleanse and disinfect the retail premises including slaughter equipment and chicken cages every night, as well as strict enforcement of existing measures like requiring retailers to wear protective gears. Not observing these requirements could result in cancellation of the permission to sell live poultry. In the wholesale market, we are closely monitoring its daily throughput and have stepped up the biosecurity and disinfection measures including assisting wholesalers to cleanse their premises everyday and conduct thorough disinfection in the market twice a week.

The Buyout Scheme

11. When we announced in June 2008 our decision to implement no overnight stocking of live poultry at the retail level with effect from 2 July, the poultry retail trade considered that it would be very difficult to adapt to the new operating environment and expressed their strong wish for the Government to buy out their business so that they can leave the live poultry trade for good. Given the retailers' resistance in operating under the new measures, the other traders in the live poultry trade would inevitably be affected. We therefore proposed, and the Finance Committee of the Legislative Council approved on 14 July, to allocate \$1123 million to fund a buyout package for the farmers, wholesalers, retailers, transporters and workers of the live poultry trade provided that a substantial majority of the number of retailers would join the scheme and leave the trade permanently. As at June 2008, there were 52 poultry farmers (including 50 chicken and two pigeon farmers), 71 wholesalers, 468 retailers and around 250 transporters remaining in the live poultry trade. The number of affected workers was estimated at around 2 550. A summary of the buyout package is at **Annex**.

12. By the application deadline for retailers on 24 July 2008, we have received a total of 339 applications (viz. around 72% of the retailers) including 161 from fresh provision shops and 178 from market stalls. The total number of live poultry stalls will be reduced from 468 to 129. We envisage that the number of poultry, particularly chickens in Hong Kong, will be reduced from the pre-June number of about 40 000 down to 11 000 to 15 000 per day. Taking into account the substantial reduction of live chickens at the retail level and hence the significant reduction of the risk of transmission of

avian influenza to humans in our markets, we decided to launch the buyout scheme to the entire live poultry trade.

13. With a view to allowing more time for the remaining retailers to consider the buyout package, we have extended the deadline for retailers to 24 September, same as the deadline offered to the farmers, wholesalers and transporters. All retailers who opt for the buyout package are required to cease business by 24 September.

14. For those who choose to stay in the live poultry trade, we shall make clear to them that they will bear the risks of any further avian influenza outbreaks in Hong Kong. No EGP or financial assistance, other than the statutory compensation (i.e. a maximum of \$30 per bird slaughtered), will be provided to them as well as those transporters and workers who subsequently enter into the live poultry trade, if any, in the event of disruption of business arising from an avian influenza outbreak in future.

Way Forward

15. We will assess if the number of imported live chickens from the Mainland would need to be adjusted in a bid to meet the market demand and the future retail capacity after 24 September 2008.

16. In the long term, we shall explore whether there are other legislative or administrative means to achieve our policy objective of separation of live poultry and humans. We are reconsidering the need for a large scale poultry slaughtering and processing plant in Hong Kong and the suitable mode of central poultry slaughtering, taking into account the decrease in consumption of live chickens in recent years and the anticipated shrinkage of the live poultry trade. Before the implementation of central slaughtering in Hong Kong, we will continue the measure of prohibiting the overnight stocking of live poultry at the retail level.

Food and Health Bureau
August 2008

Summary on 2008 Buyout Scheme to Live Poultry Trade

Poultry Farmers																
Ex-gratia payment (EGP)	<ul style="list-style-type: none"> ● The calculation broadly follows the current formulae for calculating ex-gratia allowances for poultry farmers and farm buildings affected by land resumption and clearance for public work projects. ● The amount of EGP payable to each farmer depends on the sizes of various farm structures such as chicken sheds, storage, etc. and cage areas. To adopt more lenient factors for calculating the EGP as in the Voluntary Surrender Scheme (VSS) in 2005, we would – <ul style="list-style-type: none"> (a) assume that all poultry farm structures are fully enclosed so that a higher EGP for fully (as compared with partially) enclosed farm structures would result in the farm structure component; (b) assume that all farm structures are new so that the highest modification factor (i.e. 0.75) currently adopted in public development clearances could be used; and (c) include in the EGP calculation a component accounting for the average installation cost of metallic chicken-rearing cages which are devices required by the Government to facilitate cage disinfection and prevent the harbouring of pathogens in chicken farms. ● An additional lump sum payment would be offered to chicken and pigeon farms to account for the overall infrastructure and facilities in relation to biosecurity. The lump sum for each pigeon farm is \$150,000 and that for each chicken farmer is based on the licensing capacity of the farms – <table style="margin-left: 40px; margin-top: 10px;"> <thead> <tr> <th style="text-align: center;">Licensed rearing capacity of chicken farms (no. of chickens)</th> <th style="text-align: center;">No. of farms</th> <th style="text-align: center;">Lump sum payment on biosecurity facilities (\$ million)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Up to 30 000</td> <td style="text-align: center;">30</td> <td style="text-align: center;">1.5</td> </tr> <tr> <td style="text-align: center;">Above 30 000 - 60 000</td> <td style="text-align: center;">13</td> <td style="text-align: center;">1.9</td> </tr> <tr> <td style="text-align: center;">Above 60 000 - 90 000</td> <td style="text-align: center;">4</td> <td style="text-align: center;">2.4</td> </tr> <tr> <td style="text-align: center;">Above 90 000</td> <td style="text-align: center;">3</td> <td style="text-align: center;">2.8</td> </tr> </tbody> </table> 	Licensed rearing capacity of chicken farms (no. of chickens)	No. of farms	Lump sum payment on biosecurity facilities (\$ million)	Up to 30 000	30	1.5	Above 30 000 - 60 000	13	1.9	Above 60 000 - 90 000	4	2.4	Above 90 000	3	2.8
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	<ul style="list-style-type: none"> No ceiling is set as the maximum EGP amount payable to farmers. The EGP payable to each chicken farmer ranges from around \$1.74 million to \$17.40 million. For pigeon farms, an enhancement of \$100,000 per licence is added to the EGP amount derived from the formulae provided that the total amount of EGP payable per licence will not exceed \$350,000. 										
Relief for chickens over marketable age	<ul style="list-style-type: none"> The local poultry farms could not sell their chickens when all retail outlets selling live poultry were declared as infected places for three weeks following 7 June 2008. Around 400 000 chickens on farms had passed the average marketable age of 84 days when the retail outlets re-opened on 2 July 2008. We have offered all chicken farmers \$30 per chicken for these 400 000 chickens to provide some relief, no matter whether they will accept our proposed buyout package eventually. 										
Relief for poultry to be culled (if any)	<ul style="list-style-type: none"> If a live poultry farmer chooses to accept our proposed buyout package but has genuine difficulty in disposing of his stock through normal sale channels by the time his licence is cancelled, we will consider arranging culling operation for all the remaining stock of poultry in that particular farm if necessary. In that case, we would provide relief according to the number of eggs and poultry at the following unit rates – <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="2" style="text-align: center;">Unit rate (\$)</th> </tr> </thead> <tbody> <tr> <td style="padding-left: 40px;">Hatching eggs</td> <td style="text-align: right;">5</td> </tr> <tr> <td style="padding-left: 40px;">Chicken of 30 days old or below</td> <td style="text-align: right;">20</td> </tr> <tr> <td style="padding-left: 40px;">Chicken of above 30 days old</td> <td style="text-align: right;">42</td> </tr> <tr> <td style="padding-left: 40px;">Pigeon</td> <td style="text-align: right;">18</td> </tr> </tbody> </table>	Unit rate (\$)		Hatching eggs	5	Chicken of 30 days old or below	20	Chicken of above 30 days old	42	Pigeon	18
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Live Poultry Transporters											
EGP	<ul style="list-style-type: none"> The EGP for each vehicle with monthly car parking tenancy at the wholesale market is \$0.2 million whereas for those without is \$0.15 million. 										
Live Poultry Workers											
One-off grants	<ul style="list-style-type: none"> All eligible local workers of the live poultry farm, wholesale, retail and transport industry (including vehicle drivers, if they are not the owner of the vehicle, and porters) who would leave the trade as a result of cessation of business of their employers would each be offered a one-off grant of \$35,000. 										

Live Poultry Wholesalers

EGP ● The EGP for wholesalers is calculated on the basis of the previous VSS rate and the size of stalls, with some further overall enhancement -

Size of stalls (m ²)	Estimated no. of stalls	Lump sum payment (\$)	EGP per wholesale stall (\$) (including the lump sum payment)
Up to 50	40	480,000	1,649,102
Up to 50 (stalls equipped with better facilities)	23	630,000	1,799,102
Above 50 – 100	-	-	-
Above 100 – 150	1	150,000	3,181,004
Above 150 – 200	-	-	-
Above 200	7	280,000	5,331,674

Live Poultry Retailers

EGP ● The EGP for retailers is calculated on the basis of the previous VSS rate and the size of stalls, with some further overall enhancement –

Size of retail stalls as assessed by FEHD (m ²)	Estimated no. of stalls	EGP per retail stall (\$)
Up to 15	38	800,000
Above 15 – 25	251	956,000
Above 25 – 35	107	1,163,000
Above 35 – 45	26	1,436,000
Above 45 – 55	19	1,826,000
Above 55 – 65	8	2,144,000
Above 65 – 75	8	2,461,000
Above 75 – 90	8	2,779,000
Above 90	4	3,209,000