

Chapter 9

Food Safety, Environmental Hygiene, Agriculture and Fisheries

Hong Kong has in place a broad range of tools, facilities and strict rules to ensure that food consumed in the city is safe — vital safeguards for a city that imports 95 per cent of its foodstuffs.

Environmental hygiene is also a round-the-clock effort to protect public health and to improve living quality.

Organisational Framework

The Food and Health Bureau is responsible for drawing up policies on food safety, environmental hygiene, animal health, and matters concerning agriculture and fisheries in Hong Kong. It also allocates resources for carrying out these policies.

In the areas of food safety and environmental hygiene, the bureau works closely with two departments: the Food and Environmental Hygiene Department (FEHD) and the Agriculture, Fisheries and Conservation Department (AFCD).

The FEHD is tasked with ensuring that food sold in Hong Kong is safe for human consumption and that environmental hygiene standards are high.

The AFCD is responsible for implementing policies governing the agricultural and fisheries industries and for helping them to stay competitive by providing them with infrastructural and technical support such as market facilities and animal disease diagnostic services. The department also administers loans to them and advises the Government on animal health matters.

Public Cleansing Services

The FEHD provides services for street cleansing, household waste collection and public toilets. All streets are swept between one and eight times a day, depending on practical needs. For main thoroughfares, flyovers and high-speed roads, mechanised cleansing is provided. In 2009, about 71 per cent of street cleansing services were outsourced. The FEHD and its contractors provide regular washing and flushing services for heavily used pavements, hawker black spots and market areas.

Collection of household waste is carried out all year round. In 2009, about 72 per cent of waste collection services were outsourced and about 5 220 tonnes of household waste were collected daily by the FEHD and its contractors.

The FEHD provides toilet attendants at heavily used public toilets. In 2009, about 48 per cent of public toilets were serviced by toilet attendants. 13 public toilets and five aqua privies were refurbished and 77 aqua privies were converted to flushing toilets in an ongoing drive to improve such facilities.

The FEHD and six other departments continue to take vigilant enforcement action against people who dirty public places by littering and spitting, as well as other unhygienic practices. In 2009, some 34 000 fixed penalty notices were issued.

To combat the spread of human swine influenza, the Finance Committee of the Legislative Council approved the funding of around \$300 million for seven departments: the FEHD, the Leisure and Cultural Services Department, the Social Welfare Department, the Drainage Services Department, the Home Affairs Department, the AFCD and the Marine Department, to adopt a series of special measures to improve environmental hygiene. These measures include stepping up cleansing of hygiene black spots, providing one-off clean-up services to common areas of private tenement buildings that do not have management organisations and enhancing cleansing and disinfection services in public markets, public toilets, busy streets, rear lanes in the vicinity of licensed food premises, leisure and cultural venues as well as welfare service units. In addition, relevant departments held a series of events, including district clean-up days, building cleansing campaigns and talks on environmental hygiene to provide local residents with information on environmental hygiene and tips on warding off human swine influenza.

Abatement of Sanitary Nuisances

To deal with sanitary nuisances such as refuse accumulation, water dripping from air-conditioners and water seepage in private premises, the FEHD issues Nuisance Notices requiring responsible parties to take necessary action to stop the nuisances. Prosecutions are taken out against those who fail to comply with the notices. During the year, the FEHD issued 4 218 such notices and initiated 132 prosecutions.

Pest Control

Preventing the spread of pest-borne diseases is one of FEHD's prime tasks. The department reviews constantly the methodology and strategy for controlling the spread of pests. Anti-rodent and anti-mosquito campaigns are carried out across Hong Kong annually to urge people to help stop the spread of these pests.

The department continued close surveillance of *Aedes albopictus*, a major carrier of dengue fever in Hong Kong. Anti-mosquito teams conducted about 705 650 inspections of likely mosquito breeding spots and eliminated about 76 520 spots during the year.

Cemeteries and Crematoria

As land is scarce in Hong Kong, the Government encourages cremation of the dead. Human remains in public cemeteries are exhumed after six years for cremation or re-interment in urn cemeteries.

To provide more alternatives for the disposal of cremated ash, the Government encourages scattering it at designated Hong Kong waters and in gardens of remembrance.

The FEHD operates six government crematoria, 11 public cemeteries and eight columbaria, and monitors the management of 28 private cemeteries.

Licensing of Food Premises and Other Trades

The FEHD is the licensing authority for food businesses. It also issues permits for the sale of restricted foods, including Chinese herb tea, milk, frozen confections, sushi and sashimi, as well as licences for places of public entertainment such as theatres, cinemas and entertainment machine centres. It also issues other trade licences such as licences for private swimming pools, commercial bathhouses and factories that tan hides and process shark fins (regarded as offensive trades). The FEHD provides logistical support to the Liquor Licensing Board, an independent statutory body that issues liquor licences (including club liquor licences). The Chief Executive appoints members of the board who meet about four times a month to consider licence applications.

During the year, the department handled 3 673 applications for food business licences, 1 040 permits for restricted foods, 1 219 licences for places of public entertainment, 68 licences for other trades, 874 liquor and club liquor licences, and 46 permits for karaoke establishments in premises with restaurant licences.

The department continues to streamline licensing procedures in line with the Government's policy of facilitating business operations in Hong Kong.

The FEHD executed a closure order against one unlicensed food premises during the year.

Food Safety and Labelling

The Centre for Food Safety (CFS) within the FEHD is responsible for ensuring food sold in Hong Kong is safe for human consumption.

Under the food surveillance programme, about 64 000 samples of food were taken at import, wholesale and retail points in 2009 for chemical, microbiological and radiological testing as part of the work to ensure food safety.

A total of 28 656 vehicles carrying vegetables, and 44 459 vehicles carrying live food animals including pigs, cattle, goats and poultry were inspected at the Food Control Office and Animal Inspection Station at Man Kam To during the year. A total of 5 361 178 live food animals were examined and 46 409 blood and 55 198 urine, faecal and tissue samples were tested for disease and veterinary drug residues.

In 2009, the CFS continued the review on the regulatory framework for the control of pesticide and veterinary drug residues in food.

The regulation governing nutrition labelling will come into force in July 2010 after a two-year grace period. By then, most prepackaged foods will have to provide nutrition labels which include information on energy and seven specified nutrients. Apart from nutrition labels, the regulation also specifies the conditions for making nutrition claims.

The Government is also working on a Food Safety Bill to introduce new food safety control tools, including a mandatory registration scheme for food importers and distributors and requirement for food traders to maintain proper transaction records to enhance food traceability.

The CFS worked closely with the 2009 East Asian Games (Hong Kong) Limited and related catering service providers to ensure food safety throughout the Hong Kong 2009 East Asian Games. The arrangements included conducting tests on food samples, stepping up enforcement inspections, setting up a dedicated Food Safety Advisory Team to ensure compliance with food safety guidelines by caterers and organising publicity and education activities.

Measures against Avian Influenza

Hong Kong implements a series of measures to keep avian influenza at bay to protect public health. These include stringent monitoring of farms and markets, vaccination of chickens and close surveillance of foreign and local birds in Hong Kong.

Under an agreement between the Mainland and Hong Kong, all poultry (except pigeons) imported from the Mainland are required to be vaccinated against H5 avian influenza (commonly known as bird flu). Government veterinarians also pay regular visits to registered Mainland farms to ensure that the poultry they export to Hong Kong are healthy.

Keeping of chickens, ducks, geese, pigeons, quails and other poultry in backyards is prohibited. Offenders are liable to a maximum fine of \$100,000. People who kept poultry as pets before the ban are required to have exemption permits to continue keeping them. Owners of racing pigeons are required to have exhibition licences.

Licensing conditions require pet bird traders to submit to the health authorities official health certificates, or documents such as invoices showing the places of origin of their birds, or the names and addresses of their suppliers. Sale of birds from unknown sources is prohibited. Bird traders must also keep up-to-date records of their transactions and the number of birds in their possession.

To prevent virus from accumulating in retail outlets, the Government introduced a new law in July 2008 that prohibits the keeping of live poultry overnight in retail premises.

The Food Business (Amendment) Regulation 2008 states that all poultry in public market stalls and fresh provision shops must be slaughtered by 8 pm every day and that live poultry are not allowed in those premises before 5 am the next day.

Live poultry retailers are also required to observe a set of strict safety rules. They must ensure that people working at their outlets wear protective clothing and report any dead poultry to the FEHD immediately when a dead bird is found. They must not overstock live poultry in their premises and must affix acrylic panels to their poultry cages to prevent direct contact between customers and the poultry. They are also responsible for preventing customers from touching live poultry.

All live poultry consignments entering Hong Kong have to be tested for avian influenza before being released to their importers.

During the year, the Government suspended temporarily the importation of chilled or frozen poultry meat and poultry products from a number of places, including the Fraser Valley Regional District of the province of British Columbia in Canada, Vendée Département and Deux-Sèvres Département in France, Province of Thuringen and Province of Nordrhein Westfalen in Germany, Aichi Prefecture in Japan, Spain, Edmonson County of Kentucky State and Meeker County of Minnesota States in the United States, Cholla Namdo Province, Chungchong-Namdo Province and Chung Chong Bukdo Province in the Republic of Korea following reports of avian influenza outbreaks in those places. The suspension will be lifted when the Government is satisfied with the control and management measures taken in those places and that they have regained their Notifiable Avian Influenza-free status.

Blood samples and, or faecal swabs are collected regularly from poultry farms, wholesale and retail markets, from healthy, sick or dead birds. The same is done with birds kept in recreation parks, pet shops, and wild birds in wetlands and elsewhere. A quick, real-time method of testing samples for avian influenza, known as Real-Time Polymerase Chain Reaction (PCR), is used in Hong Kong. The Government provides a round-the-clock service for receiving birds brought in for examination, regardless of whether the birds are dead, or in weak condition. To enhance the capability and performance of avian influenza testing, a new annex to the AFCD Tai Lung Veterinary Laboratory started operation in July 2009.

Following the outbreak of H5N1 avian influenza in a chicken farm in Yuen Long in December 2008, the AFCD took immediate action to prevent the spread of the disease and tightened further biosecurity measures at poultry farms after adopting the recommendations made by the Investigation Group on Epidemiological Study on the incident.

Some of the long-term precautionary measures require poultry farms to keep proper farm management records, enhance cleaning and disinfection facilities, segregate the functions relating to the rearing of breeder flocks and broiler flocks, and to install metal nets to prevent small birds from entering farm sheds.

After the implementation of the Government's 'buyout scheme' in 2008, the number of chicken farms fell to 30 and the chicken rearing capacity dropped to 1.3 million birds.

The AFCD runs a training programme for staff who carry out poultry culling, while the AFCD and FEHD conduct culling drills annually.

Human swine influenza in pigs

The Government watches closely the occurrence of human swine influenza (pandemic influenza A H1N1) in pigs, monitoring any possible genetic reassortment, or unusual disease patterns. In 2009, some local and imported live pigs were found infected by the human swine influenza virus. Under the influenza surveillance programme, the AFCD stepped up inspection of local pig farms and the monitoring of the health of pigs raised there. Local pig farmers were reminded to stay vigilant and to implement strictly biosecurity measures and to maintain proper farm and personal hygiene. The FEHD also stepped up inspection of imported live pigs and reminded slaughterhouse staff and people who might have contact with live pigs to pay attention to personal hygiene, and to wear masks and appropriate protective gear while at work.

Public Markets and Cooked Food Markets

The FEHD operates 104 public markets, including 25 free-standing cooked food markets, providing some 14 700 stalls that sell commodities ranging from fresh, cooked food to household items.

To improve the management of public markets and enhance their vibrancy, FEHD conducted utilisation and customer opinion surveys and held consultation forums and district retreats in 2009 to gauge the views of market patrons, tenants and trader associations on positioning, functions, usage as well as improvement measures.

FEHD also worked on the alignment of tenancy agreements to modernise public market management and to remove inconsistencies in the tenancy terms applicable in the urban districts and the New Territories. It also put forward proposals to address the historical issue of transfers of market tenancies in a pragmatic manner.

To enhance the vibrancy of public markets, the FEHD introduced service trades, snack shops and bakeries to certain markets with vacant stalls, subject to planning permission. New measures were also implemented to promote the leasing of stalls that had been vacant for a long time.

Hawkers

The FEHD regulates hawking activities in Hong Kong. At end of 2009, there were 6 513 hawkers carrying out business in licensed fixed pitch stalls and 535 itinerant hawkers.

Upon completion of the hawker licensing policy review, the FEHD issued new itinerant (Frozen Confectionery) Hawker Licences to on-street ice-cream vendors,

released adjacent vacant fixed hawker pitches for use by front row licensees and made preparations for the allocation of remaining vacant pitches to members of the public interested in joining the hawking trade. It also relaxed the licence succession of Dai Pai Tongs and the transfer restrictions on them to help preserve them as part of Hong Kong's local heritage, subject to the support of the relevant District Councils. In addition, FEHD after consulting the District Council concerned, issued hawker licences to eight bootblack hawkers in Central to meet public demand.

Slaughterhouses

The FEHD oversees the hygiene standards of licensed slaughterhouses in Sheung Shui, Tsuen Wan and Cheung Chau respectively.

During the year, 42 133 health certificates and 8 974 entry permits for local pigs were verified at the slaughterhouses, and 52 422 samples of urine and tissue were taken from animals for the monitoring of veterinary drug residues at the three slaughterhouses. A total of 1 679 454 pigs, 28 434 cattle and 11 631 goats were slaughtered at the three facilities. Meat supplied by the slaughterhouses has to pass inspection by health officials before delivery to markets.

The FEHD's Intelligence Unit continued to track down vendors selling chilled meat as fresh meat and joined forces with the Customs and Excise Department and the Police regularly to curb meat smuggling. In 2009, they carried out a total of 36 raids; made nine arrests and seized 1.6 tonnes of contraband meat. The crackdown also resulted in cancellation of two Fresh Provision Shop licences.

Public Education

The FEHD runs a Health Education Exhibition and Resource Centre in Kowloon Park in Tsim Sha Tsui, and a Communication Resource Unit at the Fa Yuen Street Municipal Services Building in Mong Kok to promote food safety and environmental hygiene.

During the year, 2 779 health talks were given to the general public and various target groups, including food handlers, school children, the elderly, foreign domestic helpers and new arrivals to Hong Kong. A vehicle was also used as a mobile education centre to hammer home the message about food safety and environmental hygiene.

To pool community efforts in motivating the public to adopt good food safety practices, the CFS invited food trade associations and operators of licensed food premises to become signatories to the Food Safety Charter 2009 to promote and practise the 'Five Keys to Food Safety', namely, Choose, Clean, Separate, Cook and Safe Temperature. A total of 21 food trade associations and over 1 700 licensed food premises, supermarkets and convenience stores signed the Charter in 2009.

In 2008, the CFS launched a three-year publicity and education campaign on nutrition labelling to prepare the public for a new Nutrition Labelling Scheme that will come into force in July 2010. A wide range of communication tools was used to stress the benefits of the scheme to the public.

Primary Production

Hong Kong's agriculture and fisheries industries are relatively small. They do not receive Government subsidies, but are assisted by the Government in improving the quality of their output, their productivity and competitiveness.

The combined output of the two industries in 2009 was worth \$2.7 billion. Vegetables' share of the total consumption was 3 per cent; cut flowers, 34 per cent; live pigs, 6 per cent; live poultry, 54 per cent; freshwater fish, 4 per cent; and local seafood, 30 per cent. Some 15 400 people were employed directly in these industries in 2009.

Agricultural Industry

Hong Kong's agricultural industry focuses mainly on producing quality fresh food crops through intensive land use. Farming is done mostly in the New Territories, but only 2 per cent of New Territories land is being used for growing crops, comprising mainly vegetables and cut flowers. Their combined output in 2009 was valued at about \$227 million. Pigs and poultry are the principal animals reared for food. In 2009, locally reared pigs earned about \$145 million, while poultry, including chickens and chicken eggs, earned about \$171 million.

To stay in business, Hong Kong's agricultural industry has to adapt to fast changing market trends as it is constrained by the limited supply of farm land and labour, competition from imports, high cost of maintaining environmental standards and calls for improved farm hygiene and safe produce.

The AFCD encourages crop farmers to tap niche markets and to sharpen their competitiveness by cultivating safe, good quality vegetables. The department works with local organic farming groups and the Vegetable Marketing Organisation to promote organic farming and to develop a market for organic vegetables.

The department provides an organic farming support service to some 135 farms located on about 58 hectares of land. The AFCD also promotes the use of greenhouse technology for intensive high-value crop production. During the year, three improved varieties of vegetable and fruit — cabbage, little yellow flesh water melon and orange flesh rock melon — were introduced to farmers for cultivation in Hong Kong. The voluntary Accredited Farm Scheme managed by the AFCD and the Vegetable Marketing Organisation have been providing a stable supply of high quality and safe vegetables since 1994. A total of 270 farms, spread over 2 102 hectares of land, have been accredited under the scheme so far.

Fisheries Industry

Fresh fish is one of Hong Kong's most important primary products. In 2009, fish caught and fish reared in ponds and floating cages at sea amounted to about 163 000 tonnes. Their combined value was \$2.18 billion.

Hong Kong's fishing fleet consists of some 3 660 vessels, manned by about 7 600 local fishermen and 5 000 Mainland deckhands. The predominant fishing method is trawling, which accounted for 83 per cent of fish caught, weighing about

132 200 tonnes. Other methods include lining, gill netting and purse-seining. The total catch in 2009 weighed 159 000 tonnes and had an estimated wholesale value of \$2.04 billion. The industry provided some 54 000 tonnes of fish for local consumption during the year.

Under licence issued by the AFCD, 1 043 mariculturists operate in 26 designated fish culture zones. They supplied the market with about 1 440 tonnes of live marine fish valued at \$92 million in 2009.

Freshwater and brackish water fish are reared in fish ponds, most of which are located in the northwestern part of the New Territories. With the increasing urbanisation of the New Territories, commercial production of pond fish has gradually declined. Pond fish culture yielded some 2 105 tonnes of fish, or 4 per cent of local freshwater fish consumption in 2009.

The AFCD continued to pursue a number of fisheries management and conservation measures, and stepped up action against destructive fishing practices to promote sustainable development of the fishing industry and to conserve fish resources in Hong Kong waters. In 2009, some 6 700 cubic metres of artificial reefs were used to boost fish resources and to conserve the ecology of Hong Kong waters.

In addition, the AFCD continued to assist fishermen to switch to sustainable modes of operation. Credit facilities were provided for fishermen to switch to sustainable fisheries, or related operations, and for fish farmers to develop their aquaculture business. The department also helped fishermen cope with the annual fishing moratorium in the South China Sea imposed by the Mainland authorities by providing them with technical support, liaison services and credit facilities.

A Committee on Sustainable Fisheries was established in late 2006 to advise the Government on the long-term goals, direction, and strategy for the sustainable development of Hong Kong's fisheries industry.

The AFCD conducts studies and provides technical services to fish farmers to strengthen the aquaculture industry's sustainability. The department continues to implement a fish health management programme to help fish farmers prevent, diagnose and contain fish disease to minimise loss.

The AFCD implements a 'Good Aquaculture Practices Programme' to enhance fish farm management. Under it, AFCD staff visit fish farms regularly to collect water and fish samples for analysis. Seminars are held for farmers to learn new techniques and good management practices. The department also continues searching for new fish species that have market potential to introduce to local fish farmers.

The AFCD's Accredited Fish Farm Scheme continues to work well. It is a voluntary scheme set up in 2005 to strengthen the aquaculture industry's competitiveness. Participants are required to adopt good practices to raise their farms' hygiene standards and fish quality. Tests, including analyses of drug residues and heavy metals in fish, are conducted to ensure the cultured fish are safe to eat before they are sold. Eighty-eight farms have joined the scheme so far.

Together, they sold over 25 000 kilogrammes of the accredited fish, comprising pompano, grey mullets and green groupers in 2009. The accredited fish carry tags bearing the scheme's label, 'Accredited Fish Farm Scheme', for easy recognition. The AFCD works with the Fish Marketing Organisation to encourage the industry to develop quality brand names.

The AFCD set up an experimental fish hatchery in Ta Kwu Ling in 2008 to help farmers rear fish more efficiently. In 2009, the department conducted a large-scale study on live feed production for marine fish fry in conjunction with a Mainland fisheries development centre. A training workshop on live feed production and a study tour to a Mainland fisheries development centre and fish hatchery in Guangdong were organised in August 2009 for fish farmers. The department also held a training workshop on induced spawning and fry production of Jade Perch in August 2009 to help fish farmers acquire the necessary techniques.

Specially designed artificial reefs known as biofilters are used to improve water quality and seabed conditions at the fish culture zones. There are biofilters at these zones at Kau Sai, Sham Wan and Lo Tik Wan.

The department continues to monitor red tides to protect the mariculture industry. It is now able to detect these tides as they start to form and take early action to deal with them. Red tide warnings are disseminated through support groups at the fish culture zones. Warnings are also posted on the AFCD's website and conveyed through press releases. In 2009, a total of 16 red tides were recorded in Hong Kong waters.

Wholesale Markets

Fresh food produce is sold in wholesale markets managed by the AFCD, the Vegetable Marketing Organisation, the Fish Marketing Organisation and the private sector. During the year, Government wholesale markets handled 280 000 tonnes of vegetables, 12 000 tonnes of poultry, 45 000 tonnes of freshwater fish and fish products, 95 000 tonnes of fruit and 62 000 tonnes of eggs with a combined valued of \$4.9 billion.

The Western Wholesale Food Market and the Cheung Sha Wan Wholesale Food Market are the two largest composite wholesale food markets managed by the department. The Western Wholesale Food Market, for example, accommodates markets for freshwater fish, vegetables, fruit and eggs, enabling customers to purchase a wide range of fresh foods under one roof.

The AFCD also manages two temporary wholesale markets, in the North District for fresh vegetables, and in Cheung Sha Wan, for live poultry.

The Vegetable Marketing Organisation is a statutory body governed by the Agricultural Products (Marketing) Ordinance. It provides orderly wholesale marketing services for the sale of vegetables. It charges a commission on the vegetables sold, and in return provides trading facilities, transport and pesticide residue testing services to farmers and traders. Surplus income is channelled back into farming

development and scholarships for farmers' children. In 2009, the organisation handled 173 000 tonnes of vegetables valued at \$867 million.

The Fish Marketing Organisation is also a statutory body governed by the Marine Fish (Marketing) Ordinance. It provides orderly wholesale marketing services at its seven wholesale markets. Revenue comes from commissions from fish sales and from fees charged for the use of the market facilities. Surplus earnings are channelled back to the fisheries industry by way of providing low-interest loans to fishermen, improving market services and facilities and providing training grants and scholarships for the fishermen and their children. During the year, some 52 000 tonnes of marine fish valued at \$1.7 billion were sold through the organisation. The organisation continues to develop quality fish products at its processing centre to help promote local products.

Control of Animal Diseases

As Hong Kong's inspection and quarantine authority for animals, the AFCD carries out a number of measures to effectively prevent and control outbreak of animal diseases.

Animal Management

The AFCD adopts various animal management measures to control animal diseases, regulate the selling of animals, and promote respect and care for animals.

Rabies is controlled effectively in Hong Kong, which has been rabies-free since the 1980s. In 2009, some 62 000 dogs were licensed and vaccinated against rabies. About 12 000 dogs and 4 900 cats were brought to the AFCD Animal Management Centres during the year. Most were strays but some were surrendered by their owners. New homes were found for about 650 healthy dogs and 90 healthy cats.

All pet shops selling animals must be licensed by the AFCD which inspects these shops regularly to ensure they do not contravene any of the licence conditions laid down to protect public health and safety as well as the safety, health and welfare of the animals.

The AFCD runs a comprehensive programme for promoting respect and care for animals. It uses a broad range of communication tools to get the message across. These include posters, radio and television announcements, press releases and exhibitions. An exhibition marking Annual World Rabies Day 2009 was held in September. Three other roving exhibitions were held at different venues during the year to promote responsible pet ownership and rabies prevention.

Websites

Food and Health Bureau: www.fhb.gov.hk

Food and Environmental Hygiene Department: www.fehd.gov.hk

Agriculture, Fisheries and Conservation Department: www.afcd.gov.hk