

Chapter 9

Food Safety, Environmental Hygiene, Agriculture and Fisheries

Hong Kong imports some 95 per cent of its foodstuffs. It has in place a wide array of measures to ensure foods are safe for consumption. Environmental hygiene is also a round-the-clock undertaking to promote public health and to raise the standard of living.

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 in Hong Kong is safe for consumption and that environmental hygiene standards are high.

The AFCD is responsible for implementing policies governing the agricultural and fishery 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 veterinary matters.

Public Cleansing Services

The FEHD provides services for street cleansing, household waste collection and public toilets. Streets in all urban and rural areas are swept manually, sometimes eight times a day, depending on the area's needs. For main thoroughfares, flyovers and high speed roads, mechanised cleansing is provided. About 64 per cent of street cleansing services were outsourced to private contractors in 2007. For street washing, the FEHD maintains a fleet of 38 street washing vehicles to wash streets and flush heavily used pavements, hawker black spots and market areas.

Daily collection of household waste is carried out year round, including Lunar New Year's Day, a public holiday. About 5 300 tonnes of household waste were collected each day in 2007. About 61 per cent of waste collection services were outsourced in 2007. Apart from the services provided by private contractors, the FEHD mobilised a fleet of 164 refuse collection vehicles to collect household waste and bulky articles.

To meet growing public expectations, the FEHD continues to provide toilet attendants at heavily used public toilets. In 2007, about 60 per cent of public toilets were serviced by toilet attendants. Six public toilets and aqua privies were refurbished and 56 aqua privies were converted into flushing toilets in 2007 in an ongoing drive to improve such facilities.

The department took strong action against people who dirtied public places by discarding litter, spitting and other such anti-social acts. Some 27 000 fixed penalty notices were issued during the year.

Abatement of Sanitary Nuisances

To deal with sanitary nuisances such as the accumulation of refuse, 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 initiated against those who fail to comply with the Nuisance Notice. During the year, the FEHD issued 1 240 such notices and initiated 16 prosecutions.

Pest Control

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

The department continued its surveillance programme on *Aedes albopictus*, a major carrier of dengue fever in Hong Kong. Anti-mosquito squads conducted some 672 000 inspections of various places and eliminated some 68 600 mosquito breeding grounds during the year.

Cemeteries and Crematoria

As land is scarce in Hong Kong, the Government encourages cremation of the dead. Normally, 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 ashes, and also to help ease the shortage of niches, the Government promotes the scattering of cremated ashes at designated Hong Kong waters and in gardens of remembrance.

The FEHD operates six government crematoria, 11 public cemeteries and eight columbaria, and oversees 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 public entertainment places such as theatres, cinemas and entertainment machine centres. Additionally, it issues trade licences for private swimming pools, commercial bathhouses and factories that tan hides and process shark's fins, regarded as offensive trades. The FEHD also provides 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 received and processed 3 058 applications for food business licences, 1 209 permits for restricted foods, 1 098 licences for places of public entertainment, 37 licences for other trades, 854 liquor licences and club liquor licences, and 39 permits for karaoke establishments in premises with restaurant licences.

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

The FEHD executed seven closure orders against one food premises where pathogenic *Vibrio Cholerae* was identified in a sample of fish tank water, and six premises where food poisoning occurred.

Food Safety and Labelling

The FEHD is tasked with ensuring that food available for human consumption is safe and properly labelled. It has effective food control measures to do the job.

In May 2006, the Government set up a Centre for Food Safety (CFS) within the FEHD to further improve its monitoring of food. The department's Food Surveillance and Control Division and the Risk Assessment and Communication Division were brought under the CFS following the appointment of a controller for the centre.

Under the food surveillance programme, 65 206 samples of foodstuff were taken at import, wholesale and retail points in 2007 for chemical, microbiological and radiological testing as part of the work of ensuring food safety. In addition, 55 338 food labels were checked for compliance with legal requirements.

A total of 28 588 vehicles carrying vegetables, and 45 714 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 10 968 280 live food animals were examined and 97 010 blood and 58 774 urine, faecal and tissue samples were taken for testing for disease and veterinary drug residues.

The Government plans to table an amendment regulation on nutrition labelling for prepackaged food in the Legislative Council in April 2008. The CFS is also reviewing the standards of food additives/preservatives, pesticides, veterinary drugs

and colouring matters stipulated in the existing Public Health and Municipal Services Ordinance to make them consistent with the latest international practice and development.

The Government also plans to strengthen existing measures for safeguarding public health and consumer interests by introducing a food safety bill to give it better tools for ensuring food safety.

Enhanced Measures against Avian Influenza

Under an agreement between the Mainland and Hong Kong, all imported chickens from the Mainland must be vaccinated against H5 avian influenza (commonly known as bird flu). In addition, veterinarians from the FEHD will pay regular visits to the registered Mainland farms that export poultry to exchange information with Mainland authorities to ensure that all Mainland farms that export poultry are up to standard.

To prevent virus accumulating in retail outlets, the FEHD requires fresh provision shops (FPS) and market stall operators selling live poultry to observe a 'two rest days per month' rule. Before commencement of the rest days, all live poultry at these outlets have to be slaughtered. During the rest days, the operators are required to thoroughly cleanse and disinfect the stalls.

Furthermore, FPS and market stall operators selling live poultry are required to adopt practices such as the wearing of protective clothing at work, reporting dead poultry to FEHD staff once they are found, no overstocking of live poultry and reducing the risk of direct contact between humans and live poultry by requiring cages facing customers to have acrylic panels. It is also the responsibility of the operators not to allow customers to touch live poultry.

The FEHD conducts culling drills annually to test and assess the department's preparedness to carry out large-scale depopulation of live poultry should the need arise.

To reduce the number of live poultry retail outlets, the Government in July 2004 introduced a voluntary scheme to encourage live poultry retailers to surrender their FPS licences or stall tenancies in FEHD public markets for an *ex gratia* payment. A total of 333 live poultry retailers surrendered their licences or terminated their stall tenancies under the scheme which ended in August 2006. In 2007, there were 471 live poultry retailers in operation, including 261 in public markets and 210 operating as licensed fresh provision shops.

During the year, the AFCD suspended temporarily the importation of live birds from a number of countries, including Vietnam, Cambodia, Thailand, Laos, North Korea, Indonesia, Russia, Kazakhstan, Japan, France, Germany, United Kingdom, Cote d'Ivoire, Ribatejo Norte of Portugal and Canada following reports of avian flu outbreaks in those places. The restrictions will be lifted when conditions recommended by the World Organisation for Animal Health are met in each of those places. Imports of live birds from the Mainland are subject to their being vaccinated or to their having proper health certificates.

All live birds imported to Hong Kong have to be tested for avian influenza. Birds imported from places near infected areas are quarantined and examined before being released to their importers.

Hong Kong continues to observe strict rules to protect humans, local poultry farms, wholesale and retail markets from avian influenza. The measures include stepped-up monitoring of biosecurity in farms and markets, universal vaccination of chickens against the disease and intensive surveillance of all birds entering, or already, in Hong Kong.

Blood samples and/or faecal swabs are collected on a regular basis from birds in all poultry farms, wholesale and retail markets, regardless of whether they are healthy, sick or dead. This applies also to birds kept in recreation parks, pet shops, and wild birds in wetlands, country parks and elsewhere. PCR testing, a rapid real-time method, is used to speed up detection of the H5N1 virus. Since October 2005, the Government has provided a round-the-clock service for receiving birds brought in for examination, regardless of whether they are dead, or in a weak state.

In 2007, more than 8 700 wild bird carcasses and 6 600 pooled faecal samples from wild birds were tested under the programme. Among these, 22 dead wild birds were found to have the H5N1 virus. However, there was no avian influenza outbreak in local poultry farms or markets.

In addition, the Government introduced legislation in February 2006, banning the keeping of poultry, including chickens, ducks, geese, pigeons and quails, in backyards. Offenders faced fines of between \$50,000 and \$100,000. People keeping poultry as pets before the ban went into effect were required to apply for exemption permits to continue keeping those pets. Owners of racing pigeons were required to have exhibition licences.

In 2007, the Government completed the processing of all applications by poultry farmers and live poultry wholesalers, retailers and transporters to surrender their licences, or cease operation voluntarily in return for an ex gratia payment. This was to reduce Hong Kong's live poultry population and the accompanying risk of avian flu occurring in Hong Kong. A total of 140 poultry farmers — 97 chicken, 38 pigeon and five duck — and 15 wholesalers ceased operation. As a result, the total licensed rearing capacity of local chicken farms dropped to 1.7 million birds, a fall of about 54 per cent.

To prevent the spread of avian flu, AFCD introduced a number of new licensing conditions for pet bird traders who are now required to provide to the health authorities a copy of the health certificate issued by the veterinary authority of the place of origin of their birds, or documents such as invoices or receipts for birds obtained from other licensed traders. No selling of birds from an unknown source is allowed. Traders must also keep an up-to-date record of all transactions relating to the acquisition, selling, movement and the remaining number of birds in a register in a format prescribed by the AFCD.

During the year, AFCD continued to provide an annual internal training programme on poultry culling procedures for staff who may have to participate in culling operations. The department also conducted an exercise in 2007 to assess the effectiveness of the programme and the department's preparedness should it be called upon to cull a large number of birds in Hong Kong's poultry farms.

Public Markets and Cooked Food Markets

The FEHD runs 104 public markets, including 25 free-standing cooked food markets, providing some 11 383 stalls that sell commodities ranging from fresh food to household items.

Hawkers

The FEHD regulates hawking activities in Hong Kong. As at December 31, 2007, there were a total of 6 636 and 600 licensed fixed-pitch hawkers and itinerant hawkers respectively.

Slaughterhouses

At present, fresh meat in Hong Kong is supplied by three licensed slaughterhouses, namely Sheung Shui Slaughterhouse, Tsuen Wan Slaughterhouse and Cheung Chau Slaughterhouse. The FEHD is responsible for overseeing the operation of these slaughterhouses to ensure they meet the prescribed hygiene standards.

During the year, 40 694 animal health certificates and 22 010 entry permits for local pigs were verified at the slaughterhouses. To help ensure food safety and public health protection, 56 624 samples of urine and tissue were taken from animals at the slaughterhouses for testing for veterinary drug residues. A total of 1 766 916 pigs, 41 525 cattle and 12 311 goats were slaughtered and examined in the three slaughterhouses. Meat supplied by the slaughterhouses is subject to inspection by health inspectors and only meat fit for human consumption is released for sale.

The Intelligence Unit of the FEHD continued to carry out covert surveillance to track down sellers of chilled meat as fresh meat; and to carry out operations with the Customs and Excise Department and the Police to deter meat smuggling. In 2007, 41 large-scale raids on meat smugglers were carried out, resulting in 21 arrests and the seizure of 6.7 tonnes of smuggled meat. Three FPS licences and two market tenancies were terminated for fraudulent sale of chilled meat as fresh meat.

Public Education

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

During the year, 2 781 health talks were given to the general public and various target groups, including food handlers, school children, foreign domestic helpers, the

elderly and new arrivals to Hong Kong. A vehicle was also used as a mobile education centre to spread the word.

To encourage community involvement in keeping Hong Kong clean, the department channelled \$1.8 million to 18 District Councils to organise publicity campaigns.

Primary Production

Hong Kong's agriculture and fisheries industries are relatively small. The Government does not give direct subsidies to them or attempt to protect them from open market forces. Instead, the AFCD concentrates on helping them to improve the quality of their output and to enhance their productivity and competitiveness.

During the year, the combined output of the two industries was worth \$2.8 billion. The output accounted for three per cent of vegetables, 39 per cent of cut flowers, 18 per cent of live pigs, 50 per cent of live poultry, five per cent of freshwater fish and 23 per cent of seafood sold locally. Approximately 18 000 people were employed directly in the industries in 2007.

Agriculture Industry

Hong Kong's agricultural industry focuses mainly on producing quality fresh food crops through intensive land use. Farming is done largely in the New Territories but only 2 per cent of the land there is being used for growing crops which comprise mainly vegetables and cut flowers, with a combined output valued at about \$301 million in 2007. Pigs and poultry are the principal animals reared for food and the value of locally reared pigs was about \$487 million, while that of poultry, including chickens and pigeons, was \$303 million.

The local agricultural industry has to adapt to fast-changing market trends to achieve sustainable development, constrained by the limited supply of farm land and labour, competition from imports, the cost of maintaining high 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 organisations 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 100 farms located on about 40 hectares of land. The AFCD also promotes the use of greenhouse technology for intensive high-value crop production. During the year, four improved varieties of vegetable and fruit — red flesh rock melon, red seedless watermelon, silky gourd and Nang Feng mustard — were introduced to farmers for cultivation in Hong Kong.

The voluntary Accredited Farm Scheme managed by the AFCD and the Vegetable Marketing Organisation since 1994 is designed to provide a stable supply of high quality and safe vegetables. A total of 236 farms spread over 1 943 hectares of land

have so far been accredited under the scheme. The organisation continues to use a 'Good Farmer' cartoon logo to promote accredited produce.

In June 2006, the Government introduced a one-year voluntary surrender scheme for pig farmers and live pig transporters to reduce the number of local pig farms and environmental pollution caused by them. Under the scheme, pig farmers are granted ex gratia payments for surrendering their livestock licences and terminating their farm business. Pig transporters may apply for loans to convert their vehicles for other transport business. The scheme was closed for application on 31 May 2007. A total of 222 pig farmers joined the scheme. When all their farms cease operation, the total licensed rearing capacity of local pig farms will drop to 75 000 heads, a fall of about 82 per cent.

Fisheries Industry

Fresh fish is one of Hong Kong's most important primary products. In 2007, fish caught and fish reared in ponds and floating cages at sea amounted to about 154 150 tonnes and 3 660 tonnes respectively. Their combined value was \$1.66 billion.

The Hong Kong fishing fleet consists of some 4 010 vessels, manned by about 8 450 local fishermen and 4 800 Mainland deckhands. The predominant fishing method is trawling, which accounted for 81 per cent of fish caught, weighing about 125 170 tonnes. Other methods include lining, gill netting and purse-seining. The total catch weighed 154 150 tonnes and had an estimated wholesale value of \$1.5 billion. The industry provided some 40 748 tonnes of fish for local consumption during the year.

Under licence issued by the AFCD, 1 072 mariculturists operate in 26 designated fish culture zones. They supplied the market with 1 530 tonnes of live marine fish valued at \$99 million in 2007.

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 1 930 tonnes of fish, or 5 per cent of freshwater fish for local consumption in 2007.

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 2006-07, artificial reefs made from demolished concrete piers were installed in the Tung Ping Chau Marine Park to boost fish resources there and to conserve the ecology of the Marine Park.

In addition, the department continued to assist fishermen to switch to sustainable modes of operation. Credit facilities were provided to fishermen to help them 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.

The 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 the Hong Kong fisheries industry.

The AFCD conducts studies and provides technical services to fish farmers to strengthen the aquaculture industry's sustainability. A fish health management programme is being carried out to help fish farmers minimise losses caused by fish disease. AFCD staff visit farmers regularly to give advice on how to prevent and detect disease outbreaks in their farms. A diagnostic laboratory service is in place to examine the cause of disease outbreaks and to advise farmers on appropriate action to take in the event of such outbreaks. Improved techniques and good management practices are introduced to farmers through seminars, on-farm demonstrations and leaflets. The department also seeks to identify new fish species that have good market potential to introduce to local fish farmers.

The AFCD continues its voluntary Accredited Fish Farm Scheme to strengthen the aquaculture industry's competitiveness. Fish farms taking part in the scheme are required to adopt good aquaculture practices to raise their farms' hygiene standards and the quality of their cultured fish. Quality assurance tests, including analyses of drug residues and heavy metals in fish, are conducted to ensure that the cultured fish meet the required food safety standards before they are sold. Since the launching of the scheme in mid-2005, 70 fish farms have registered under the scheme. Together, they sold over 95 000 kilogrammes of the accredited fish, comprising Pompano, grey mullets and green groupers in 2007. The 70 participating farms occupy about 12 per cent of the total area used by the local fish farmers. The accredited fish carry tags bearing the scheme's name, 'Accredited Fish Farm Scheme', to distinguish them from other fish. The AFCD and the Fish Marketing Organisation work together to promote the marketing of this category of fish.

Following the successful completion of a trial in hatching imported jade perch fertilised eggs and in rearing fish fry in temperature-controlled tanks, the department introduced the technique to fish farmers and helped them produce a fresh batch of jade perch fry to maintain a stable supply of the species at a much lower price. Jade perch has been marketed under the Accredited Fish Farm Scheme and are well received by the public.

As a result of the promising findings of the study carried out in the Kau Sai fish culture zone where specially designed artificial reefs known as biofilters are used to improve the water quality and seabed there, the AFCD installed the same kind of biofilters in Sham Wan fish culture zone in 2007.

The department continues to monitor red tides to protect the mariculture industry. Preventive measures include phytoplankton monitoring which enables the detection of red tides as they begin to form and a quick assessment of the damage they might cause. Red tide warnings are issued to the mariculturists through the support groups at the fish culture zones. They are also posted on the AFCD's website

and disseminated through press releases. In 2007, a total of 13 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, the Government's wholesale markets handled 279 000 tonnes of vegetables, 28 000 tonnes of poultry, 49 000 tonnes of freshwater fish and fisheries products, 103 000 tonnes of fruit and 49 000 tonnes of eggs with a combined valued of \$4.8 billion.

The Western Wholesale Food Market and the Cheung Sha Wan Wholesale Food Market are the two largest market complexes managed by the department. Each contains several markets. The Western Wholesale Food Market, for example, accommodates markets for freshwater fish, vegetables, fruit, poultry and eggs, enabling customers to buy 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 set up under the Agricultural Products (Marketing) Ordinance to provide vegetable wholesale marketing facilities. It operates a vegetable wholesale market on a non-profit-making basis in Cheung Sha Wan. It charges commission on the vegetables sold, and in return provides trading facilities, transport, accounting and pesticide residue testing services to farmers and traders. Any surplus income is channelled back into the development of farming and the provision of scholarships for farmers' children. In 2007, the organisation handled 195 000 tonnes of vegetables valued at \$851 million.

The Fish Marketing Organisation is a statutory body established under the Marine Fish (Marketing) Ordinance. It provides orderly marketing services at its seven wholesale markets. Revenue comes from commissions from fish sales and from fees charged for the use of the market's facilities. Surplus earnings are funnelled back to the industry by way of providing low-interest loans to fishermen, improving the markets' services and facilities and providing training grants and scholarships for the fishermen and their children. During the year, 53 000 tonnes of marine fish valued at \$1.6 billion were sold through the organisation. The organisation continues to develop quality fisheries products at its processing centre to help promote and market local products.

Veterinary Services and Animal Management

The European Union recognises Hong Kong as a rabies-free territory, and since 2004 has allowed Hong Kong's non-commercial pet animals, with health certificates, to enter the European Union. As a result, the number of cats and dogs entering the European Union from Hong Kong has continued to grow.

In order to increase public awareness of the need to be alert to the dangers of rabies, an Announcement in the Public Interest was introduced for broadcast in

February 2007. A total of 53 000 dogs were licensed and vaccinated against rabies during the year. Over 1 300 dogs and 60 cats which bit people were put under observation, but all proved to be rabies-free.

In 2007, about 13 000 dogs and 5 800 cats were found straying in public places, or were surrendered to the AFCD. Of these, 540 dogs and 100 cats were subsequently given new homes.

The AFCD promotes kindness to animals through its continued public education and publicity campaigns. A roving exhibition on proper treatment of animals and responsible pet ownership — entitled ‘respect life, treat them well’ — was held from January to June 2007. To step up cooperation between the AFCD and the Society for the Prevention of Cruelty to Animals (SPCA) on surveillance of cruelty acts and effective collection of information of suspected cases, a joint campaign to combat animal abuse was carried out in January 2007. The AFCD also provided training to SPCA staff on how to assist in daily monitoring of cruel acts against animals, on gathering evidence, conducting decoy operations and at court proceedings against people charged with cruelty to animals.

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