## Chapter 10

# Food Safety, Environmental Hygiene, Agriculture and Fisheries

With more than 90 per cent of its food imported, Hong Kong devotes considerable efforts to safeguarding the wide variety of food available for sale. The government is committed to maintaining a clean and hygienic living environment and to protecting the public from threats of zoonotic disease.

## **Organisational Framework**

The Food and Health Bureau is responsible for drawing up policies on food safety, environmental hygiene, animal health and welfare, agriculture and fisheries, and for allocating resources to execute these policies. It works closely with the Food and Environmental Hygiene Department (FEHD), the Agriculture, Fisheries and Conservation Department (AFCD) and the Government Laboratory.

The FEHD ensures food sold in Hong Kong is safe and fit for consumption and that a clean and hygienic living environment is maintained for the people of Hong Kong.

The AFCD implements policies supporting the agricultural and fisheries industries and provides farmers and fishermen with infrastructural and technical support. The department also administers loans to them and advises the government on animal health and welfare matters.

The Government Laboratory provides testing services to support the regular food surveillance programme of the FEHD's Centre for Food Safety (CFS) and helps the centre handle food incidents.

## **Licensing of Food Premises and Other Trades**

The FEHD is the licensing authority for food businesses. It issues various food business licences; permits for the sale of restricted foods, including Chinese herb tea, milk, frozen confections, sushi and sashimi; permits for karaoke establishments; and licences for places of public entertainment, such as theatres, cinemas and entertainment machine centres. The department also licenses private swimming pools, commercial bathhouses, funeral parlours, undertakers of burials and factories engaged in offensive trades. It provides executive and secretarial support

to the Liquor Licensing Board, an independent statutory body that issues liquor licences, including those for clubs.

During 2016, the department issued 8,820 full, provisional and temporary food business licences, 909 permits for restricted foods (including 151 online restricted food permits issued since 22 February), 1,548 licences for places of public entertainment, 41 licences for other trades, 1,055 liquor and club liquor licences, and four permits for karaoke establishments in premises with restaurant licences.

The department accepts submissions of applications for food business/trade licences and permits through the internet.

## **Food Safety and Labelling**

The Centre for Food Safety under the FEHD is responsible for safeguarding food sold in Hong Kong, ensuring it is safe and fit for consumption. About 65,400 samples of food were taken at import, wholesale and retail levels for chemical, microbiological and radiological testing in 2016. The overall satisfaction rate of these tests was 99.8 per cent.

During the year, about 34,000 vehicles carrying vegetables, and 37,712 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. The station examined 2,083,055 live food animals and tested 8,499 blood and 50,741 urine, faecal and tissue samples for zoonotic disease and veterinary drug residues.

The nutrition labelling scheme requires pre-packaged foods, unless exempted, to carry labels that provide information about energy and specified nutrients, and also specifies the conditions for making nutrition claims. The scheme helps consumers make informed food choices, regulates misleading or deceptive labels and nutrition claims, and encourages food manufacturers to apply sound nutrition principles in formulating foods. In 2016, the centre conducted visual checks on 5,625 pre-packaged food products to ensure compliance with statutory '1+7' nutrition-labelling requirements¹ and took 518 food samples for chemical analysis to verify the nutrition information and nutrition claims. The overall compliance rate was 99 per cent.

The Food and Drugs (Composition and Labelling) (Amendment) (No 2) Regulation 2014 mandates the nutrition labelling of infant formula, follow-up formula and pre-packaged food for infants and young children under the age of 36 months, and regulates the nutritional composition of infant formula. The requirements governing infant formula came into operation on 13 December 2015, while those on follow-up formula and pre-packaged food for infants and young children took effect on 13 June 2016. The centre conducted checks on these food products to ensure compliance with the statutory nutrition-labelling requirements and took samples for chemical analysis to verify the nutrition information and composition.

Under the requirements, all pre-packaged food shall carry a label stating the amounts of energy and seven core nutrients; protein, carbohydrates, total fat, saturated fat, trans fat, sodium and sugars.

Since the Pesticide Residues in Food Regulation came into effect in 2014, the centre had taken more than 91,700 food samples at import, wholesale and retail levels to test for pesticide residues by the end of 2016. The overall satisfaction rate was more than 99.8 per cent.

To better protect Hong Kong from the threat of avian influenza, the amended Imported Game, Meat, Poultry and Eggs Regulations came into operation on 5 December 2015 to regulate the import of poultry eggs.

The government conducted public consultation exercises in 2015 on the regulation of nutrition and health claims for formula products and pre-packaged food for infants and young children under 36 months; and on the regulation of edible fats and oils and recycling of waste cooking oil. In 2016, the government continued the work of formulating specific regulatory proposals, taking into full account the views of stakeholders. It is also reviewing the levels of metallic contamination in food to align better with international standards. The government will continue to review and update other existing standards of food safety with reference to international practices and in view of the local situation.

#### **Public Markets and Cooked Food Markets**

The FEHD operates 101 public markets, including 25 free-standing cooked food markets. There are some 14,400 stalls selling fresh products, cooked food, light refreshments and household items and providing service trades. At the end of 2016, the overall occupancy rate at these markets was 90.9 per cent.

The department enhances the operating environment of the public markets by improving management, upgrading facilities, providing a more flexible mix of trade and carrying out promotional activities, such as thematic exhibitions, workshops and festive celebrations. Besides regular maintenance, the department started improvement works at 14 markets in 2016, such as refurbishing the cooked food centres and toilets and improving electricity and lighting systems and fire services installations, and completed six of them. It will take forward progressively the installation of air-conditioning in public markets if the projects are supported by tenants, technically feasible and cost-effective.

#### **Hawkers**

The FEHD regulates hawking in Hong Kong. As at end-2016, there were 5,496 hawkers carrying out business in licensed fixed-pitch stalls and 415 itinerant hawkers.

A five-year Assistance Scheme for Hawkers in Fixed-pitch Hawker Areas, launched in 2013, offers financial help to 4,300 hawkers in 43 fixed-pitch hawker areas to reduce fire risks in hawker areas. In 2016, all 499 fixed-pitch hawkers whose stalls were situated at building staircase discharge points or places that might obstruct the operation of fire engines were relocated. Up to the end of the year, the department had received 2,824 applications for relocation and reconstruction grants, and 627 hawkers had surrendered their licences.

## **Slaughterhouses**

The FEHD oversees the hygiene standards of licensed slaughterhouses in Sheung Shui, Tsuen Wan and Cheung Chau. Meat supplied by the slaughterhouses has to pass inspection by health officials before delivery to markets. During the year, 37,264 animal health certificates and 7,149 entry permits for local pigs were verified at the slaughterhouses, 48,186 samples of urine and tissue were taken from animals and tested for veterinary drug residues, and 1,527,319 pigs, 17,441 head of cattle and 3,315 goats were slaughtered.

The department's Intelligence Unit continued to track down vendors selling chilled meat as fresh meat and meat from illicit sources and, by exchanging intelligence with the Customs and Excise Department and working with the Centre for Food Safety, carried out 17 raids, launched 16 prosecutions and seized 0.68 tonnes of smuggled meat.

## **Public Cleaning Services**

The FEHD provides services for street cleansing, household waste collection and public toilets. All streets are swept one to eight times a day, depending on their conditions. For main thoroughfares, flyovers and high-speed roads, mechanised cleansing is provided. Depending on the conditions of different districts, public streets are washed daily or as and when there is a need. Additional cleansing services are provided where necessary to maintain environmental hygiene.

Household waste is collected all year round. In 2016, about 74 per cent of waste collection services was outsourced and about 5,660 tonnes of household waste were collected daily by the department and its contractors.

One new public toilet was constructed, two public toilets were reprovisioned and 11 public toilets were refurbished. Toilet attendant services are provided at heavily used public toilets.

The department takes enforcement action against littering, spitting and other unhygienic practices in public places. In 2016, it issued some 39,480 fixed penalty notices.

## **Abatement of Sanitary Nuisances**

In 2016, the department issued 8,337 nuisance notices requiring those responsible to stop sanitary nuisances such as refuse accumulation, dripping air conditioners and water seepage in private premises. It instituted 179 prosecutions against those who failed to comply with the notices.

#### **Pest Control**

Preventing the spread of pest-borne diseases is one of the FEHD's prime tasks. It reviews constantly the methodology and strategy for controlling the spread of pests.

Campaigns are carried out across Hong Kong annually to urge people to help stop the spread of rodents and mosquitoes. The department maintains close surveillance of the Aedes albopictus, a carrier of dengue fever and potential vector of the Zika virus. Anti-mosquito teams

conducted 898,169 inspections of likely mosquito breeding spots and eliminated 57,103 breeding places during the year.

Two imported cases of Zika virus infection were recorded in 2016, in addition to three and four local cases of dengue fever in 2015 and 2016 respectively. The department continued to deploy additional anti-mosquito teams to sustain mosquito control efforts and stepped up publicity to remind the public of the importance of mosquito control.

Additional resources were deployed to carry out intensive mosquito preventive and control exercises across the territory before the rainy season, and during and after the Olympics and Paralympics, to eradicate possibly infected mosquitoes of a whole generation. To prevent the spread of the Zika virus in Hong Kong, all samples collected under a dengue vector surveillance programme in port areas and in areas with an Area Ovitrap Index of at least 10 per cent will be tested for the Zika virus

#### Cemeteries, Crematoria and Columbaria

The department manages six government crematoria, 10 public cemeteries and eight public columbaria, and monitors the management of 27 private cemeteries.

To cater for the growing public demand for columbaria, the government adopts a three-pronged approach: increasing the supply of public niches, promoting green burial and regulating private columbaria.

Twenty-four potential sites in the 18 districts have been identified for columbaria development. In 2016, the Sha Tin, Kwai Tsing, Islands and Tsuen Wan district councils were consulted on six sites, at Shek Mun, Kwai Yue Street, Kwai Tai Road, Lai Chi Yuen Cemetery, the eastern end of Sham Shui Kok Drive and the western end of Sham Shui Kok Drive respectively. These six sites can provide about 135,300 new niches altogether.

The government promotes environmentally friendly and sustainable ways of handling ashes, including scattering them in the 11 Gardens of Remembrance managed by the FEHD or at sea. The department provides a free ferry service for scattering ashes at sea and an internet memorial service for the public to pay tribute to the deceased online. It has also stepped up publicity to promote green burial.

#### **Public Education**

To reduce the public's intake and lower the levels of salt and sugar in food, the government set up an International Advisory Panel on Reduction of Salt and Sugar in Food and a Committee on Reduction of Salt and Sugar in Food to advise the Secretary for Food and Health on the international experience and local considerations regarding salt and sugar reduction measures. The Centre for Food Safety also launched a series of activities under the theme, 'Hong Kong's Action on Salt and Sugar Reduction', promoting healthy eating to consumers and the food trade.

The centre works closely with the committee to implement a series of projects. These include plans to continue promoting reduced salt and sugar at preschools and schools, to continue implementing a calorie indication pilot scheme at the staff canteens of public hospitals, and to organise a slogan-cum-label design competition for a voluntary front-of-pack low-salt/low-sugar labelling scheme for pre-packaged food, which will help consumers identify low-salt, low-sugar products easily.

In 2016, the FEHD's Health Education Exhibition and Resource Centre in Kowloon Park organised 2,386 health talks for the public and target groups, including students and the elderly.

A mobile education centre disseminates food safety and environmental hygiene messages across the territory.

The CFS' Communication Resource Unit in Mong Kok organises food safety programmes and provides technical support to people in the food trade and the public. Fourteen food trade associations and 915 food premises and retail outlets subscribe to the centre's Food Safety Charter, which promotes best practices in handling food. During the year, the centre also conducted 186 health talks on food safety and deployed two vans to broadcast food safety messages in housing estates and markets.

## Measures against Avian Influenza

Government measures to keep avian influenza (AI) at bay include stringent monitoring of the poultry supply chain from farm to retail levels, vaccination of chickens against H5 AI and close surveillance of imported and local birds.

Under an agreement with the Mainland, all poultry, except pigeons, imported from registered farms must be vaccinated against H5 Al, commonly known as bird flu. Every live poultry consignment bound for Hong Kong must be tested negative for H5 and H7 Al before being released for sale. Government veterinarians also inspect registered farms on the Mainland to ensure their compliance with the bio-security requirements.

Hong Kong prohibits the keeping of chickens, ducks, geese, pigeons, quails and other poultry in backyards. Offenders are liable to a maximum fine of \$100,000. Owners of racing pigeons are required to hold exhibition licences. Pet bird traders are required to submit official animal health certificates to the health authorities, or documents such as invoices showing the places of origin of their birds, or the names and addresses of their suppliers. The sale of birds from unknown sources is prohibited. Bird traders must keep up-to-date records of their transactions and the number of birds in their possession.

All live poultry in public market stalls and fresh provision shops must be slaughtered by 8pm every day. Live poultry are not allowed in these premises between 8pm and 5am. Live poultry retailers must ensure people working at retail outlets wear protective clothing and must report any dead poultry immediately to the FEHD. They must not overstock live poultry on their premises and must affix acrylic panels to their poultry cages to prevent direct contact between customers and the poultry.

To monitor AI effectively, samples are collected regularly for testing from poultry farms, wholesale and retail markets; from healthy, sick or dead birds; from birds kept in recreation parks and pet shops; and from wild birds in wetlands and elsewhere. The government provides a round-the-clock service for collecting sick and dead wild birds or poultry. In 2016, the AFCD collected 10,115 wild bird or poultry carcasses and three of them were found carrying the H5 AI virus.

Other preventive measures against AI include taking faecal dropping and drinking water samples at live poultry retail outlets to test for the AI virus; conducting regular inspections of live poultry retail outlets to ensure compliance with the special licensing or tenancy conditions on AI control; cleaning common areas of FEHD markets thoroughly three times daily; cleaning live poultry market stalls after business hours daily, followed by further thorough cleansing and disinfection by FEHD contractors; maintaining the cleanliness of market stalls' ventilation systems; conducting regular inspections, washing and disinfection of public places where wild birds gather, and taking stringent enforcement action against the feeding of wild birds in public places.

The CFS collects swab samples from 30 poultry in each consignment of live poultry imported from the Mainland to conduct polymerase chain reaction (PCR) testing for influenza A, covering both H5 and H7 Al. In 2016, it took 11,179 samples from imported live poultry for the test. Since 2014, H7 serological testing has been in place to strengthen surveillance against Al.

The relevant measures are effective in preventing human infection of AI, as evidenced by the fact that there has been no locally infected human case of H5 or H7 AI virus after the first AI outbreak in Hong Kong in 1997.

#### **Control of Animal Diseases**

As Hong Kong's inspection and quarantine authority for animals, the AFCD regulates cross-boundary animal movements to prevent animal diseases from entering the territory. The department also assesses the risk of disease in imported animals and animal products on the basis of their species, intended use and the disease status of the place of origin, and formulates the corresponding quarantine measures to control the import of animals and animal products.

In 2016, 8,600 permits were issued for animal imports, which included dogs, cats, horses, birds, zoo animals and live food animals such as pigs and cattle.

## **Quarantine Detector Dog Programme**

The Quarantine Detector Dog Programme helps combat the illegal import of animals. The dogs are trained to detect live animals and animal products hidden in luggage at boundary control points, including Lok Ma Chau, Shenzhen Bay and Hong Kong International Airport. In 2016, more than 217,000 travellers, 780 vehicles and 30,000 parcels and pieces of luggage were screened.

## **Animal Welfare and Management**

The government's approach towards animal welfare and management includes strengthening public education, controlling animal trading properly, fostering close partnerships with animal welfare organisations, managing stray animals properly, and handling and preventing acts of animal cruelty.

Hong Kong has been rabies-free since the 1980s. In 2016, some 61,400 dogs were licensed and vaccinated against rabies. About 1,900 stray dogs and 870 stray cats were brought to the AFCD Animal Management Centres. The department runs a rehoming programme for the healthy and well-tempered ones.

All pet shops selling animals must be licensed by the department, which inspects these shops regularly to ensure compliance with the licence conditions. Pet shops are required to obtain dogs for sale only from approved sources. The department runs a programme to promote respect and care for animals. In 2016, 93 educational talks, four dog training courses, 25 thematic or roving exhibitions and three pet adoption events were held to promote responsible pet ownership and rabies prevention.

The department partners 15 animal welfare organisations in providing animal rehoming services, covering dogs, cats, rabbits, birds and reptiles. The organisations are invited to join forces with the department to hold Animal Adoption Day activities and to provide free desexing services for animals rehomed through them. The department also offers subventions for projects of these partner organisations which aim to enhance animal welfare and management.

To improve the handling of animal cruelty reports, an inter-departmental special working group involving the Society for the Prevention of Cruelty to Animals and relevant government departments, including the police, FEHD and AFCD, examines the government's work on handling animal cruelty cases, devises guidelines and ensures animal welfare is well protected.

In 2016, the government proposed amending the Public Health (Animals and Birds) (Animal Trader) Regulations to better regulate pet trading. The legislative proposals include introducing a new licensing scheme to tighten the regulation of dog breeders and sellers; increasing penalties under the law; and empowering the Director of Agriculture, Fisheries and Conservation to revoke animal trader licences under certain circumstances.

## **Primary Production**

Hong Kong's agricultural and fisheries industries are relatively small in scale. The government helps improve their output quality, productivity and competitiveness. In 2016, the combined output of the two industries, which employed some 18,300 people directly, was \$3.74 billion. Live poultry accounted for 95 per cent of local consumption; cut flowers, 39 per cent; seafood, 22 per cent; live pigs, 5.8 per cent; freshwater fish, 4 per cent; and local vegetables, 1.7 per cent.

## **Agricultural Industry**

The agricultural industry focuses mainly on producing quality fresh food crops through intensive land use. Less than 1 per cent of New Territories land, where most farming is done, is used for growing crops, comprising mainly vegetables and cut flowers, with a combined output in 2016 valued at about \$331 million. Pigs and poultry are the principal food animals reared. Locally reared pigs and poultry, including chickens and eggs, yielded earnings of about \$313 million and about \$400 million respectively.

The AFCD encourages crop farmers to tap niche markets and sharpen their competitiveness by cultivating safe and quality vegetables. To promote organic farming, the department provides organic farming support to 297 farms occupying 106.8 hectares of land. It also promotes the use of greenhouse technology for intensive high-value crop production. During 2016, three improved varieties of vegetable, namely the broad-shoulder bitter gourd, 'Seven Star' hairy gourd and 'Yanbu' autumn eggplant, were introduced to farmers for cultivation.

The department manages a voluntary Accredited Farm Scheme jointly with a statutory body, the Vegetable Marketing Organisation (VMO), to provide a stable supply of high-quality and safe vegetables. A total of 312 farms in Hong Kong, Guangdong Province and Ningxia Autonomous Region, spreading over 3,073 hectares of land, are accredited under the scheme.

Leisure farms are popular places for recreation. The department, in collaboration with the agricultural sector, provides information on these farms through its annual publication, *A Guide to Hong Kong Leisure Farms*, and its mobile application, Hong Kong Leisure Farms.

In 2016, the government announced it would implement a New Agriculture Policy to promote the modernisation and sustainable development of local agriculture. A \$500 million Sustainable Agricultural Development Fund was set up and started receiving applications to enhance the overall competitiveness of the industry. Other major measures under the policy include establishing an Agricultural Park, exploring the feasibility and merits of designating agricultural priority areas, providing better support to help farmers move up the value chain in areas such as product marketing and brand building, and developing leisure and educational activities related to agriculture. These measures will be implemented in stages.

### **Fisheries Industry**

Fresh fish is one of Hong Kong's most important primary products. In 2016, the amount of fish caught and fish reared in ponds and floating cages at sea totalled about 146,500 tonnes, with a value of \$2.7 billion.

Some 6,630 vessels were licensed as Class III vessels, meaning fishing vessels, under the Merchant Shipping (Local Vessels (Certification and Licensing) Regulation. These included larger vessels operating mainly in the South China Sea and smaller vessels in local waters. About 10,800 local fishermen and 4,600 Mainland deckhands worked on these vessels. The total catch weighed 142,775 tonnes, with an estimated wholesale value of \$2.6 billion. The capture fisheries industry provided some 44,000 tonnes of fish for local consumption.

During the year, 949 AFCD-licensed mariculturists operated in 26 designated fish culture zones, supplying consumers with some 1,030 tonnes of live marine fish valued at \$86 million.

Freshwater and brackish water fish are reared in fish ponds located mainly in the northwestern New Territories. In 2016, pond fish culture yielded some 2,540 tonnes of fish, or 4 per cent of local freshwater fish consumption.

All local fishing vessels operating in Hong Kong waters are required to register with the department under the Fisheries Protection Ordinance, to control the number of fishing vessels and maintain an appropriate level of fishing in local waters.

The department also combats destructive fishing practices, including trawling, to ensure sustainable development of the industry and to conserve fisheries resources in Hong Kong waters. Thirteen cases of illegal fishing were convicted in 2016.

At the same time, the department helps the industry cope with challenges, including providing credit facilities to fishermen, owners of fish-collecting vessels and fish farmers for sustainable development and general productive purposes. It also offers free training courses to fishermen during the annual fishing moratorium and at Chinese New Year. A \$500 million Sustainable Fisheries Development Fund, set up in 2014, helps fishermen adopt sustainable and high-value-added methods of operation, and subsidises programmes and research to enhance the overall competitiveness of the industry. By end-2016, among the 28 applications received, five on aquaculture and two on fisheries-related eco-tourism projects had been approved, involving a total commitment of about \$37 million.

To promote sustainable development of the aquaculture industry, the department conducts studies and provides technical support to fish farmers via various programmes. Under its Good Aquaculture Practices Programme and Fish Health Inspection Programme, the department helps fish farmers prevent, diagnose and contain fish disease, and collects water and fish samples for analysis during regular visits to the fish farms. Seminars are held to equip farmers with new techniques and good management practices. In addition, 118 farms take part in the department's voluntary Accredited Fish Farm Scheme, which tags their accredited fish for easy recognition. More than 12,670kg of accredited fish were sold under the scheme in 2016.

Specially designed artificial reefs known as biofilters are used to improve water quality and seabed conditions at fish culture zones at Yim Tin Tsai (East), Kau Sai, Sham Wan and Lo Tik Wan. Alternative biofilter designs are being explored to suit the conditions of different fish culture zones.

To meet public demand for recreational fishing and to help mariculturists diversify their business, 34 mariculturists in 11 fish culture zones have the department's approval to operate recreational fishing businesses on licensed fish culture rafts.

The department monitors red tides and issues red tide alerts through support groups at the fish culture zones and via its website and press releases, to reduce the impact of red tides on the mariculture industry. In 2016, 11 red tides were recorded in Hong Kong waters.

#### **Wholesale Markets**

Fresh food produce is sold in wholesale markets managed by the AFCD, VMO, Fish Marketing Organisation (FMO) and private sector. In 2016, government wholesale markets, namely the Western Wholesale Food Market, Cheung Sha Wan Wholesale Food Market, Cheung Sha Wan Temporary Wholesale Poultry Market and North District Temporary Wholesale Market for Agricultural Products, handled 238,669 tonnes of vegetables, 102,986 tonnes of fruit, 73,269 tonnes of eggs, 48,561 tonnes of freshwater fish and fish products and 8,080 tonnes of poultry, with a combined value of \$6.9 billion.

The VMO is a statutory body governed by the Agricultural Products (Marketing) Ordinance. It provides 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 ploughed back into farming development and scholarships for farmers' children. In 2016, the VMO handled 108,700 tonnes of vegetables valued at \$904 million.

The FMO is governed by the Marine Fish (Marketing) Ordinance. It provides wholesale marketing services at its seven wholesale markets. Revenue comes from commission charged on fish sales and fees charged for the use of market facilities. Surplus earnings are channelled back to the fisheries industry by way of low-interest loans to fishermen, outlay that improves market services and facilities, and training grants and scholarships for the fishermen and their children. In 2016, some 45,990 tonnes of marine fish valued at \$3.4 billion were sold through the FMO. The organisation also develops fish products at its processing centre to promote the quality of local products.

#### **Websites**

Agriculture, Fisheries and Conservation Department: www.afcd.gov.hk Food and Environmental Hygiene Department: www.fehd.gov.hk Food and Health Bureau: www.fhb.gov.hk Internet Memorial Service: www.memorial.gov.hk