

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 ensuring the safety of the wide variety of food available for sale. The government's policy is to maintain a clean and hygienic living environment and to protect the public from threats of zoonotic disease.

The Food and Health Bureau draws up policies on food safety, environmental hygiene, animal welfare, agriculture and fisheries, and allocates resources to execute these policies. It works closely with the Food and Environmental Hygiene Department (FEHD), Agriculture, Fisheries and Conservation Department (AFCD) and 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, provides farmers and fishermen with infrastructural and technical support, and administers loans and funding schemes to support the industries' sustainable development. The department also oversees quarantine and animal welfare matters.

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

Licensing of Food Premises and Other Trades

The FEHD is the licensing authority for food businesses. It issues licences for food businesses and permits for the sale of restricted foods. It also issues permits for karaoke establishments and licences for places of public entertainment, private swimming pools, commercial bathhouses, funeral parlours, undertakers of burials and 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 2018, the department issued 8,938 full, provisional and temporary food business licences; 1,145 permits for the sale of restricted foods, including 203 online restricted food

permits; 2,173 licences for places of public entertainment; 42 licences for other trades; 1,189 liquor and club liquor licences; and eight permits for karaoke establishments in licensed restaurants.

Food Safety and Labelling

The Centre for Food Safety safeguards food sold in Hong Kong. It took about 66,000 samples of food at import, wholesale and retail levels for chemical, microbiological and radiological testing in 2018. The overall satisfaction rate of these tests was 99.8 per cent. The Government Laboratory is responsible for most of the testing of food samples, including supervising tests outsourced to private laboratories.

During the year, the Animal Inspection Station at Man Kam To inspected 38,545 vehicles carrying live food animals including pigs, cattle and goats, and examined 1,488,825 live food animals.

Pre-packaged food, unless exempted, has to carry a nutrition label that provides information about energy and seven specified nutrients. Nutrition claims can be made if the food satisfies the claim conditions of the Nutrition Labelling Scheme.

The bureau and the centre make reference to the food safety standards of the Codex Alimentarius Commission and other economies, and take into account local dietary practices and risk assessment results, to update Hong Kong's food safety standards and regulatory arrangements in a timely way on the basis of scientific evidence.

Public Markets and Cooked Food Markets

The FEHD operates 97 public markets, including 23 free-standing cooked food markets, and carries out promotional activities to boost the vibrancy of the premises. There are some 14,100 stalls selling fresh provisions, cooked food, light refreshments and household items as well as providing service trades.

At the end of 2018, the overall occupancy rate at these markets was 89 per cent. The department is implementing a 10-year Market Modernisation Programme to improve the operating environment of the markets through a major overhaul for some and minor improvement works at others. The department is also conducting a comprehensive review of its public markets and will formulate specific improvement measures for both the facilities and their management in a systematic manner.

The department is planning for new public markets in Tung Chung Town Centre and New Town Extension, Tin Shui Wai, Tseung Kwan O, and the Kwu Tung North and Hung Shui Kiu new development areas. New approaches to the design, construction and operation of such projects are under consideration.

Hawkers

The FEHD regulates hawking in Hong Kong. As at end-2018, there were 5,148 licensed fixed-pitch hawkers and 383 licensed itinerant hawkers.

A five-year Assistance Scheme for Hawkers in Fixed-pitch Hawker Areas, launched in 2013, offered financial help to 4,330 hawkers in 43 fixed-pitch hawker areas to reduce fire risks in hawker areas. Under the scheme, all 508 fixed-pitch hawkers whose stalls were situated at building staircase discharge points or places that might obstruct the operation of fire engines have been relocated. As at 2 June 2018, the end date of the scheme, the department had received 3,424 applications for relocation and reconstruction grants, and 854 hawkers had surrendered their licences for ex gratia payment, meaning nearly 99 per cent of the licensed hawkers had joined the scheme.

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 before delivery to markets. During the year, 38,545 movement permits for imported livestock and 8,950 entry permits for local pigs were verified at the slaughterhouses, 47,687 samples of urine and tissue were taken from animals and tested for veterinary drug residues, and 1,573,139 pigs, 17,128 head of cattle and 3,245 goats were slaughtered.

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 and are washed regularly, from daily to fortnightly or whenever the need arises, depending on the conditions of individual locations. Flyovers and high-speed roads undergo mechanised cleansing. Between 2017 and 2018, the department put on trial the use of mini mechanical sweepers in Tai Po and Yuen Long to serve roads with low traffic, and introduced pressure washer surface cleaners in all street cleansing contracts to remove stubborn stains on roads speedily.

Household waste is collected all year round. In 2018, about 77 per cent of waste collection services were outsourced and about 5,920 tonnes of household waste were collected daily by the department and its contractors.

Seven new public toilets were constructed and 14 public toilets were refurbished during the year. Refurbishment works for four public toilets at major tourist spots were completed. 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 2018, it issued some 49,680 fixed penalty notices. The department started installing internet protocol cameras at 96 illegal refuse deposit black spots in June to support its enforcement action against fly-tippers and curb the illegal deposit of refuse.

Abatement of Sanitary Nuisances

The department issues nuisance notices requiring those responsible to stop sanitary nuisances such as refuse accumulation, dripping air conditioners and water seepage in private premises. In 2018, it issued 8,843 such notices and secured 77 convictions 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 mosquitoes and rodents. The department maintains close surveillance of the *Aedes albopictus*, a carrier of dengue fever and potential vector of the Zika virus, and the *Culex tritaeniorhynchus*, a carrier of Japanese encephalitis. Anti-mosquito teams conducted 909,247 inspections of likely mosquito breeding spots and eliminated 63,635 breeding places during the year. Twenty-nine local cases of dengue fever were recorded.

The department deploys pest control teams to sustain mosquito prevention and control work. Additional resources are utilised to carry out intensive exercises across the territory before the rainy season, so as to suppress the adult mosquito population and eradicate possibly infected mosquitoes. 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 are tested for dengue fever and 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 cope with the long-term public demand for facilities and services that handle the cremated ashes of the deceased, the government adopts a three-pronged strategy, namely increasing the supply of public niches, promoting green burial and regulating private columbaria.

The government promotes a district-based columbarium development scheme to increase the supply of public niches. Apart from two completed projects in Wong Tai Sin and Cheung Chau, three columbarium projects in Wan Chai, Tsang Tsui and Wo Hop Shek are scheduled for completion in 2019, providing about 208,000 niches to be allocated in phases. The government will expedite the development of public columbaria on shortlisted sites across the territory.

The government promotes green burial, encouraging environment-friendly and sustainable ways of handling ashes, such as by scattering them in gardens of remembrance or at sea. The department provides a free ferry service to scatter ashes at sea and, through its mobile application, an internet memorial service for the public to pay tribute to the deceased online.

Under the Private Columbaria Ordinance, a specified instrument, namely a licence, an exemption or a temporary suspension of liability, must be obtained to operate a private

columbarium, except during the grace period as applicable. A private columbarium must obtain a licence before it sells or newly lets out niches.

Any person who operates, keeps, manages or has control of a private columbarium in contravention of the requirements under the new legislation is liable to prosecution and, on summary conviction, to a fine of \$2 million and imprisonment for three years or, on conviction on indictment, to a fine of \$5 million and imprisonment for seven years.

The Private Columbaria Licensing Board regulates the operation and management of private columbaria, and handles applications for specified instruments. As at end-2018, it was processing about 340 applications for specified instruments submitted by 141 private columbaria. The FEHD conducts inspections and takes enforcement action to combat the illegal operation of private columbaria. During the year, it carried out about 530 inspections and investigated about 70 cases of suspected contravention of the ordinance.

The Private Columbaria Appeal Board is an independent quasi-judicial body to hear and determine an appeal lodged by the applicant or holder of a specified instrument aggrieved by a decision made on the licensing of private columbaria, an enforcement notice or an ash disposal plan.

Public Education

In 2018, the FEHD's Health Education Exhibition and Resource Centre in Kowloon Park organised 2,375 health talks for the public and target groups, including students and the elderly. A mobile education centre also disseminates food safety and environmental hygiene messages across the territory.

Fourteen food trade associations and 1,423 food premises and retail outlets subscribe to the Centre for Food Safety's Food Safety Charter, which promotes best practices in handling food. The centre holds an annual signature Food Safety Day, conducts health talks on food safety and deploys 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 and H7 AI and close surveillance of imported and local birds.

Hong Kong prohibits the keeping of poultry in backyards. Offenders are liable to a maximum fine of \$100,000. Owners of racing pigeons are required to hold exhibition licences, while pet bird traders must submit official animal health certificates to the 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.

Live poultry are allowed to be sold at retail level. 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 and wholesale and retail markets; from healthy, sick and 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 the collection of sick and dead wild birds and poultry. In 2018, the AFCD collected 10,777 wild bird and poultry carcasses and found two of them carrying the H5 AI virus.

Other preventive measures against AI include taking samples of faecal droppings and drinking water as well as swabs from defeathering machines and chopping boards 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 measures are effective in preventing human infection of AI, as evidenced by the total absence of any locally infected human case of H5 or H7 AI virus after the first AI outbreak in Hong Kong in 1997.

Antimicrobial Resistance

The Hong Kong Strategy and Action Plan on Antimicrobial Resistance (2017-22), launched in July 2017, tackles the increasing threat of antimicrobial resistance to public health. The action plan details measures to be implemented by the AFCD in the local food animal production sector, including livestock and fish, so as to alleviate the development of antimicrobial resistance and safeguard animal and public health.

In 2018, the department put in place preliminary measures to monitor antimicrobial usage and antimicrobial resistance, such as regular inspections of local food animal farms to collect data and samples including animal feed and health care products to evaluate antimicrobial usage, as well as biological samples for bacterial culture and antimicrobial sensitivity testing, in order to understand the situation and develop a long-term surveillance programme.

The department supports the development of veterinary services to local food animal farms and enhances stakeholders' awareness of the problem of antimicrobial resistance through campaigns. During the year, it held educational seminars for local food animal farmers to promote responsible and prudent use of antimicrobials, and to convey the message of preventing disease through good farm management practices and effective biosecurity measures.

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, the 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 2018, about 8,300 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, Hong Kong International Airport and the airport's Air Mail Centre. In 2018, more than 189,000 travellers, 730 vehicles and 18,900 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 is rabies-free. All dogs over five months old must be licensed and vaccinated against rabies. Stray dogs and cats are brought to the AFCD animal management centres, and healthy and well-tempered ones are rehomed.

The department encourages care and respect for animals. In 2018, it held 86 educational talks, eight dog training courses, 35 exhibitions, two dog adoption carnivals and a pet adoption day to promote responsible pet ownership and rabies prevention.

The department partners with 17 animal welfare organisations to rehome dogs, cats, rabbits, birds and reptiles. It works with these organisations to hold joint animal adoption events and to provide free desexing for animals rehomed through them. The department also subvents these organisations in carrying out animal welfare and management projects.

A working group involving the AFCD, FEHD, police and the Society for the Prevention of Cruelty to Animals seeks to improve the handling of animal cruelty reports by examining the government's work on handling cruelty cases, devising guidelines and ensuring animal welfare is well protected.

All pet shops selling animals must be licensed by the department, which inspects these shops regularly to ensure compliance with the licensing conditions. Pet shops are required to obtain dogs for sale only from approved sources. Dog breeders and sellers are subject to tightened

regulations and penalties have been increased according to the amended licensing scheme, which took effect in 2017, under the Public Health (Animals and Birds) (Trading and Breeding) Regulations.

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 2018, the two industries combined employed some 17,911 people directly and produced \$3.9 billion of output. Live poultry accounted for 100 per cent of local consumption; cut flowers, 23 per cent; seafood, 18 per cent; live pigs, 6.7 per cent; freshwater fish, 4 per cent; and local vegetables, 1.8 per cent.

Agricultural Industry

The agricultural industry focuses mainly on producing quality fresh food crops through intensive land use. Most farming is in the New Territories for growing crops, comprising mainly vegetables and cut flowers, with a combined output in 2018 valued at about \$348 million. The principal food animals reared are pigs and poultry, which respectively yielded earnings of about \$349 million and about \$337 million, inclusive of eggs.

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 306 farms occupying 105 hectares of land. It also promotes the use of greenhouse technology for intensive high-value crop production. During 2018, two improved varieties, namely the mini wax gourd and Chinese white cabbage, 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 quality and safe vegetables. A total of 311 farms in Hong Kong, Guangdong Province and Ningxia Autonomous Region, spreading over 2,717 hectares of land, are accredited under the scheme.

Leisure farms are popular places for recreation. The department works with the agricultural sector to update the information of Hong Kong's leisure farms regularly and uploads the information to a mobile application, Hong Kong Leisure Farms.

Under the New Agriculture Policy, the government promotes the modernisation and sustainable development of local agriculture. A \$500 million Sustainable Agricultural Development Fund accepts applications to enhance the industry's overall competitiveness and an Agricultural Park is being planned for Kwu Tung South. A consultancy study to explore the feasibility and merits of designating agricultural priority areas was commissioned in late 2018.

Fisheries Industry

Fresh fish is one of Hong Kong's most important primary products. In 2018, the amount of fish caught and fish reared in ponds and floating cages at sea totalled about 127,800 tonnes, with a value of \$2.9 billion.

Some 6,510 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 10,200 local fishermen worked on these vessels, which had a quota of 4,250 Mainland deckhands. The total catch weighed about 124,300 tonnes, with an estimated wholesale value of \$2.8 billion, and provided some 34,000 tonnes of fish for local consumption.

As at the year end, 931 AFCD-licensed mariculturists were operating in 26 designated fish culture zones. They supplied consumers with some 850 tonnes of live marine fish valued at \$71 million during the year.

Freshwater and brackish water fish are reared in fish ponds located mainly in the north-western New Territories. In 2018, pond fish culture yielded some 2,540 tonnes of fish, making up 4 per cent of local freshwater fish consumption.

The Fisheries Protection Ordinance requires all local fishing vessels operating in Hong Kong waters to register with the department, so as to control the number of fishing vessels and maintain an appropriate level of fishing in local waters.

The department combats illegal fishing practices, including trawling, to ensure sustainable development of the industry and to conserve fisheries resources in Hong Kong waters. Seven cases of illegal fishing were convicted in 2018.

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 offers free training courses to fishermen during the annual fishing moratorium and 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 industry's competitiveness. By end-2018, eight applications on aquaculture, two on fisheries-related eco-tourism projects and one on supporting the improvement of fisheries equipment had been approved, involving a total commitment of about \$59 million.

To promote sustainable development of the aquacultural industry, the department conducts studies and provides technical support to fish farmers. It visits fish farms regularly to promote good aquacultural practices, to provide support on fish health management including on-site health checks and disease diagnosis, and to promote prudent and responsible use of antimicrobials. The voluntary Accredited Fish Farm Scheme tags the accredited fish of 122 participating farms for easy recognition. More than 79,000kg of accredited fish were sold under the scheme in 2018.

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.

To meet public demand for recreational fishing and to help mariculturists diversify their business, 53 mariculturists in 10 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, press releases and text messaging. In 2018, 12 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 2018, 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 252,022 tonnes of vegetables, 87,222 tonnes of fruit, 62,964 tonnes of eggs, 43,468 tonnes of freshwater fish and fish products and 8,129 tonnes of poultry, with a combined value of \$6.5 billion.

The VMO is a statutory body governed by the Agricultural Products (Marketing) Ordinance. It provides farmers and traders with wholesale marketing services, including trading facilities, transport and pesticide residue tests, in return for a commission on the vegetables sold. Surplus income is ploughed back into farming development and scholarships for farmers' children. In 2018, the VMO handled 88,600 tonnes of vegetables valued at \$713 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 the 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 2018, some 43,825 tonnes of marine fish valued at \$3.7 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