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 health and 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 guarantine 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 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 2017, the department issued 7,909 full, provisional and temporary food business licences, 1,015 permits for the sale of restricted foods (including 146 online restricted food permits), 1,926 licences for places of public entertainment, 49 licences for other trades, 1,219 liquor and club liquor licences, and 10 permits for karaoke establishments in premises with restaurant licences

Food Safety and Labelling

The Centre for Food Safety safeguards food sold in Hong Kong, ensuring it is fit for consumption. It took about 67,000 samples of food at import, wholesale and retail levels for chemical, microbiological and radiological testing in 2017. The overall satisfaction rate of these tests was 99.8 per cent.

During the year, the Animal Inspection Station at Man Kam To inspected 37,808 vehicles carrying live food animals including pigs, cattle, goats and poultry. The station examined 1,552,902 live food animals and tested 819 blood and 560 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. The centre conducts visual checks on pre-packaged food products to ensure compliance with statutory nutrition-labelling requirements and takes food samples for chemical analysis to verify the nutrition information and claims.

The bureau and the centre review and update food safety standards and regulatory arrangements.

Since the Pesticide Residues in Food Regulation came into effect in 2014, the centre had taken more than 130,500 food samples at import, wholesale and retail levels to test for pesticide residues. The overall satisfaction rate was above 99.8 per cent by the end of 2017.

The amended Imported Game, Meat, Poultry and Eggs Regulations regulates the import of poultry eggs to better protect Hong Kong from avian influenza.

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 2017, the overall occupancy rate at these markets was 89.2 per cent. The department enhances the operating environment of the public markets by improving management, upgrading facilities such as electricity supply, lighting systems and fire services installations, providing a more flexible mix of trade, and carrying out promotional activities such as festive celebrations. Besides regular maintenance, programmes are in place to replace by phases aged lifts and escalators, and to retrofit air-conditioning

systems where the projects are technically feasible, cost-effective and sufficiently supported by tenants.

The department will start planning for new public markets in Tung Chung, Tin Shui Wai and Hung Shui Kiu. Consideration is being given to adopting new approaches to the design, construction and operation of such projects.

Hawkers

The FEHD regulates hawking in Hong Kong. As at end-2017, there were 5,341 licensed fixed-pitch hawkers and 399 licensed 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 2017, all 508 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 3,233 applications for relocation and reconstruction grants, and 739 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, 37,753 animal health certificates and 8,712 entry permits for local pigs were verified at the slaughterhouses, 48,319 samples of urine and tissue were taken from animals and tested for veterinary drug residues, and 1,558,729 pigs, 17,359 head of cattle and 3,250 goats were slaughtered.

The department's Intelligence Unit tracks down vendors selling chilled meat as fresh meat and meat from illicit sources. By exchanging intelligence with the Customs and Excise Department and working with the Centre for Food Safety, it carried out eight raids, secured eight convictions and seized 16.7kg of smuggled meat in 2017.

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 their conditions. Flyovers and high-speed roads undergo mechanised cleansing. Additional cleansing services are provided where necessary to maintain environmental hygiene.

Household waste is collected all year round. In 2017, about 77 per cent of waste collection services was outsourced and about 5,750 tonnes of household waste were collected daily by the department and its contractors.

Five new public toilets were constructed and seven public toilets were refurbished. Toilet attendant services are provided at heavily used public toilets.

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The department takes enforcement action against littering, spitting and other unhygienic practices in public places. In 2017, it issued some 44,840 fixed penalty notices.

Abatement of Sanitary Nuisances

In 2017, the department issued 9,228 nuisance notices requiring those responsible to stop sanitary nuisances such as refuse accumulation, dripping air conditioners and water seepage in private premises. It secured 96 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 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 917,842 inspections of likely mosquito breeding spots and eliminated 57,701 breeding places during the year. One imported case of Zika virus infection was recorded, in addition to one local case of dengue fever and five local cases of Japanese encephalitis.

The department deploys pest control roving teams to sustain mosquito prevention and control work. Additional resources are deployed 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. To prevent the spread of dengue fever and 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 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 cater for public demand for columbaria, the government works at 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. The relevant District Councils have given support for 14 projects, which account for about two-thirds of the overall planned number of new niches. The government will expedite the development of public columbaria on shortlisted sites across the territory.

The government promotes environment-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.

The Private Columbaria Ordinance introduces a licensing scheme to regulate the operation of private columbaria. It came into operation on 30 June, requiring the operation of a private columbarium to be covered by a specified instrument, namely a licence, an exemption or a temporary suspension of liability, except during the grace period as applicable. Only private columbaria that have obtained a licence may sell or newly let out niches. It is an offence to operate, keep, manage or control in any other way a columbarium without holding a valid specified instrument after the grace period as applicable has expired or if the niches are sold or newly let out during the grace period. Offenders are liable, at a maximum, to a \$5 million fine and seven years' imprisonment.

The Private Columbaria Licensing Board was appointed on 8 September. It regulates the operation and management of private columbaria, and handles applications for specified instruments. The Private Columbaria Affairs Office was set up to provide executive support to the licensing board and handle matters on the implementation of the ordinance. The licensing board started to receive applications for specified instruments on 30 December.

The Private Columbaria Appeal Board was appointed on 29 September. It is an independent quasi-judicial body to hear and determine an appeal lodged by an 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

To reduce the public's intake of salt and sugar and lower the levels of salt and sugar in food, a Committee on Reduction of Salt and Sugar in Food advises the Secretary for Food and Health on priority areas in reducing salt and sugar in food. The Centre for Food Safety works with the committee to implement a series of projects, including competitions for slogan writing and poster design, and for the design of labels under a voluntary salt and sugar label scheme for prepackaged food products, to help consumers identify low-salt, low-sugar products.

In 2017, 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 disseminates food safety and environmental hygiene messages across the territory.

The Centre for Food Safety's 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 1,415 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 conducted 185 health talks on food safety and deployed two vans to broadcast food safety messages in housing estates and markets.

Measures against Avian Influenza

In 2017, the government decided to maintain the sale of live poultry at retail level, having considered the recommendations of a consultancy study and the public views received.

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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 AI, commonly known as bird flu. Every live poultry consignment bound for Hong Kong must be tested negative for H5 and H7 AI 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 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 2017, the AFCD collected 11,014 wild bird or poultry carcasses and three of them were found carrying the H5 AI virus.

Other preventive measures against Al 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 Al virus; conducting regular inspections of live poultry retail outlets to ensure compliance with the special licensing or tenancy conditions on Al 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 Centre for Food Safety 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. H7 serological testing is 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 guarantine measures to control the import of animals and animal products.

In 2017, 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 and Hong Kong International Airport. In 2017, more than 235,000 travellers, 1,030 vehicles and 26,000 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 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 2017, it held 118 educational talks, five dog training courses, 33 exhibitions and one pet adoption event to promote responsible pet ownership and rabies prevention.

The department partners 19 animal welfare organisations to rehome dogs, cats, rabbits, birds and reptiles. It works with these organisations to hold joint Animal Adoption Days 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 licence conditions. Pet shops are required to obtain dogs for sale only from approved sources. In March, a new licensing scheme under the Public Health (Animals and Birds) (Trading and Breeding) Regulations came into effect to tighten the regulation of dog breeders and sellers and increase penalties.

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 2017, the two industries combined employed some 18,142 people directly and produced \$3.7 billion of output. Live poultry accounted for 99 per cent of local consumption; cut flowers, 28 per cent; seafood, 20 per cent; live pigs, 6.7 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. Most farming is in the New Territories for growing crops, comprising mainly vegetables and cut flowers, with a combined output in 2017 valued at about \$349 million. The principal food animals reared are pigs and poultry, which respectively yielded earnings of about \$314 million and about \$303 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 309 farms occupying 109 hectares of land. It also promotes the use of greenhouse technology for intensive high-value crop production. During 2017, two improved varieties of vegetable and fruit, namely the orange-yellow flesh watermelon and organic dragon fruit, 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 316 farms in Hong Kong, Guangdong Province and Ningxia Autonomous Region, spreading over 2,997 hectares of land, are accredited under the scheme.

Leisure farms are popular places for recreation. The department works with the agricultural sector to update *A Guide to Hong Kong Leisure Farms* regularly. Information on leisure farms is also available through an electronic mobile application, *Hong Kong Leisure Farms*.

The government is implementing a New Agriculture Policy to promote the modernisation and sustainable development of local agriculture. Under the policy, a \$500 million Sustainable Agricultural Development Fund is receiving 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 will be commissioned.

Fisheries Industry

Fresh fish is one of Hong Kong's most important primary products. In 2017, the amount of fish caught and fish reared in ponds and floating cages at sea totalled about 131,200 tonnes, with a value of \$2.7 billion.

Some 6,500 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 10,600 local fishermen worked on these vessels, which had a quota of 4,300 Mainland deckhands. The total catch weighed about 127,554 tonnes, with an estimated wholesale value of \$2.6 billion, and provided some 37,000 tonnes of fish for local consumption.

As at end-2017, 938 AFCD-licensed mariculturists were operating in 26 designated fish culture zones. They supplied consumers with some 1,000 tonnes of live marine fish valued at \$78 million during the year.

Freshwater and brackish water fish are reared in fish ponds located mainly in the northwestern New Territories. In 2017, pond fish culture yielded some 2,540 tonnes of fish, making up 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 illegal fishing practices, including trawling, to ensure sustainable development of the industry and to conserve fisheries resources in Hong Kong waters. Five cases of illegal fishing were convicted in 2017.

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-2017, six applications on aquaculture and two on fisheries-related eco-tourism projects had been approved, involving a total commitment of about \$41 million.

To promote sustainable development of the aquaculture industry, the department conducts studies and provides technical support to fish farmers. Under its Good Aquaculture Practices Programme and Fish Health Inspection Programme, the department helps fish farmers prevent, diagnose and contain fish disease; collects water and fish samples for analysis during regular visits to the fish farms; and holds seminars to equip farmers with new techniques and good management practices. The voluntary Accredited Fish Farm Scheme tags the accredited fish of 119 participating farms for easy recognition. More than 75,895kg of accredited fish were sold under the scheme in 2017.

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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, 48 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 the Short Message Service, to reduce the impact of red tides on the mariculture industry. In 2017, 15 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 2017, 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 240,617 tonnes of vegetables, 90,873 tonnes of fruit, 66,102 tonnes of eggs, 41,196 tonnes of freshwater fish and fish products and 8,029 tonnes of poultry, with a combined value of \$6 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 2017, the VMO handled 99,000 tonnes of vegetables valued at \$718 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 2017, some 45,020 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