

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 (FHB) 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 in licensed restaurants 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 2020, the department issued 6,809 full, provisional and temporary food business licences; 1,264 permits for the sale of restricted foods, including 471 online restricted food permits; 1,672 licences for places of public entertainment; 38 licences for other trades; 870 liquor and club liquor licences; and 16 permits for karaoke establishments in licensed restaurants.

Food Safety

The Centre for Food Safety safeguards food sold in Hong Kong. It tested about 66,600 samples of food at import, wholesale and retail levels for chemical, microbiological and radiological examination in 2020. The overall satisfaction rate of these tests was 99.9 per cent. The Government Laboratory is responsible for most of the testing of food samples.

During the year, the Animal Inspection Station at Man Kam To inspected 18,581 vehicles carrying live food animals including pigs, cattle and goats, and examined 654,193 live food animals.

The FHB and the centre, making reference to the food safety standards of the Codex Alimentarius Commission and other economies, and taking into account local dietary practices and risk assessment results, update Hong Kong's food safety standards and regulatory arrangements in a timely way based on scientific evidence. The Food Adulteration (Metallic Contamination) (Amendment) Regulation 2018, which stipulates updated standards for metallic contamination in food, aims to enhance regulatory control, better protect public health and align Hong Kong with international standards. The amendments took full effect for all kinds of food from 1 November. In December, the government launched a public consultation on proposed amendments to the Harmful Substances in Food Regulations to better ensure food safety.

Public Markets and Cooked Food Markets

The FEHD operates 98 public markets, including 23 free-standing cooked food markets. There are some 14,000 stalls mainly selling fresh provisions, cooked food, light refreshments and household items. As at 31 December, the overall occupancy rate at these markets was 87 per cent.

Six new public market projects in Tin Shui Wai, Tung Chung Town Centre, Tseung Kwan O, Kwu Tung North New Development Area, Tung Chung New Town Extension and Hung Shui Kiu New Development Area are at different stages of planning, and the FEHD Skylight Market in Tin Shui Wai opened in December.

In addition, the first phase of the FEHD's 10-year Market Modernisation Programme includes the overhaul of four markets and minor refurbishment or improvement works at around 10 other markets.

Hawkers

The FEHD regulates hawking in Hong Kong. As at 31 December, there were 5,246 licensed fixed-pitch hawkers and 348 licensed itinerant hawkers.

The FEHD invited applications in September 2019 for allocation of 435 vacant hawker pitches and issue of new licences. Out of 14,126 applications received, 12,788 applicants were found eligible. By the end of 2020, 431 hawker pitches had been selected according to priority drawn through an open ballot and 407 hawker licences had been issued.

Slaughterhouses

The FEHD oversees the hygiene standards of licensed slaughterhouses in Sheung Shui and Tsuen Wan. Meat supplied by the slaughterhouses has to pass inspection before delivery to markets. During the year, 18,581 movement permits for imported livestock and 10,962 entry permits for local pigs were handled at the slaughterhouses, 32,208 samples of urine and tissue were taken from animals and tested for veterinary drug residues, and 756,669 pigs, 14,657 head of cattle and 1,446 goats were slaughtered.

Public Cleaning Services

The FEHD provides street cleansing services, household waste collection services 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 are cleansed by mechanical sweepers.

Household waste is collected all year round. In 2020, about 78 per cent of waste collection services were outsourced and about 6,100 tonnes of household waste were collected daily by the department and its contractors.

Toilet attendant services are provided at heavily used public toilets. During the year, 51 public toilets were refurbished, of which three were at major tourist spots. To improve the air quality and hygiene of public toilets, the department has introduced several trial schemes that make use of technology, such as atomised ozonated water technology, nano bubble technology, germ-repellent toilet seat technology and microalgae greenwall technology.

The department takes enforcement action against littering, spitting and other unhygienic practices in public places. In 2020, some 46,700 fixed penalty notices were issued. To support enforcement action against fly-tippers, internet protocol (IP) cameras have been installed at illegal refuse dumping black spots, greatly improving hygiene conditions. As at end-2020, about 220 illegal refuse dumping black spots were installed with IP cameras. The scheme will be extended to cover over 300 locations.

To enhance public cleansing services through technology, the department has launched trial schemes using mechanised and automatic cleansing technology and equipment such as solar-powered auto-sensored aluminum refuse collection points and mini mechanised street sweepers.

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 2020, it issued 9,375 such notices and secured 199 convictions against those who failed to comply with the notices.

Pest Control

Preventing vector-borne diseases is one of the FEHD's prime tasks. It constantly reviews the methodology and strategy for controlling the spread of pests. Campaigns are carried out annually to urge people to help stop the spread of mosquitoes and rodents.

The department maintains close surveillance of mosquito vectors for dengue fever, Zika virus infection, Japanese encephalitis and malaria. *Aedes albopictus* mosquitoes collected are tested for dengue and Zika virus. One local case of dengue fever was recorded in 2020.

The department deploys pest control teams to sustain mosquito prevention and control work. Resources are added to start intensive exercises across the territory before the rainy season, so as to suppress the adult mosquito population. Anti-mosquito teams conducted 820,324 inspections of likely mosquito breeding spots and eliminated 69,771 breeding places in 2020.

On rodent prevention and control, the department conducts two phases of a territory-wide campaign, and two other rounds in target areas to strengthen rodent disinfection and control at the district level. In 2020, the department filled 12,347 rat holes, collected 31,988 dead rodents, caught 28,872 live rodents and handled 10,331 complaints. In 2020, the FEHD conducted field trials of thermal imaging cameras with artificial intelligence analytic function at a number of locations to assist targeted deployment of rodenticides and traps and evaluate the effectiveness of rodent control operations.

Cemeteries, Crematoria and Columbaria

The department manages six government crematoria, 10 public cemeteries, 12 gardens of remembrance and 10 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 seeks to increase the supply of public niches, promote green burial and regulate private columbaria.

The government promotes a district-based columbarium development scheme to provide public niches. Columbarium projects in Tsang Tsui and Wo Hop Shek were completed in 2020, providing about 208,000 new niches, of which 21,926 were allocated in 2020. 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 by scattering them in gardens of remembrance or at sea.

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 ordinance 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 31 December, it had issued six licences and one exemption; given approvals in principle for two licence applications, one exemption application and nine temporary suspension of liability applications; and refused 26 applications for specified instruments. The board was processing about 238 applications submitted by 99 private columbaria. The FEHD conducts inspections and takes enforcement action against the illegal operation of private columbaria. During the year, it carried out about 250 inspections and investigated about 50 cases of suspected contravention of the ordinance.

Public Education

In 2020, the FEHD's Health Education Exhibition and Resource Centre in Kowloon Park organised 639 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 held its annual Food Safety Day in June, emphasising specific ways for consumers to improve food safety and safer ways to prepare high-risk foods.

Guarding against African Swine Fever

While African swine fever is not a zoonotic disease and poses no food safety risk, its virus is tough and fast-spreading, and can cause widespread deaths among pigs within a short time. Biosecurity is enhanced at pig farms, boundary checkpoints and slaughterhouses to minimise the transmission risk of the disease.

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, compulsory vaccination of chickens against H5 and H7 AI and close surveillance of imported and local birds.

Hong Kong bans 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.

Samples are collected for testing from poultry farms, wholesale market and retail outlets; 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 2020, the AFCD collected 9,311 wild bird and poultry carcasses and none of the samples were found to carry the highly pathogenic H5/H7 AI virus.

Other preventive measures against AI include inspecting live poultry retail outlets to ensure compliance with special licensing or tenancy conditions on AI control; cleaning common areas of FEHD markets thoroughly three times a day; 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 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) tackles the increasing threat of antimicrobial resistance to public health. The plan details AFCD measures in the food animal production sector, including livestock and fish, to alleviate the development of antimicrobial resistance and safeguard animal and public health.

The AFCD monitors antimicrobial usage and resistance in food animal farms. It inspects food animal farms to collect data and samples to evaluate antimicrobial usage, as well as biological samples for bacterial culture and antimicrobial sensitivity testing. The data helps the department identify control points and devise appropriate control measures.

In 2020, the AFCD reduced the permitted antimicrobials listed on the Antibiotics Permits issued to livestock farmers. The eventual goal is full withdrawal, so that prescriptions from registered veterinary surgeons will then be required for farmers to purchase and use antimicrobials.

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 quarantine measures to control the import of animals and animal products.

In 2020, about 7,700 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 2020, more than 12,000 travellers, 570 vehicles and 5,800 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. It promotes responsible pet ownership and animal welfare through educational talks, roving exhibitions and dog training courses, as well as advertisements placed through various media.

The department partners with 18 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, and subvents these organisations in carrying out animal welfare and management projects.

A working group involving the AFCD, FEHD, police and 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 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 increased penalties under the Public Health (Animals and Birds) (Trading and Breeding) Regulations.

Following public consultation in 2019 on its proposals to amend the Prevention of Cruelty to Animals Ordinance to further safeguard animal welfare, the government is now drafting legislation. Proposed amendments include introducing a positive duty of care on persons responsible for animals, as well as enhancing the provisions for prevention of animal cruelty.

With the establishment of a veterinary school at the City University of Hong Kong, the government proposes to expand the current scope of exemptions under the Veterinary Surgeons Registration Ordinance to allow veterinary students to perform a wider variety of veterinary surgery acts under suitable supervision as part of their clinical training. Following public consultation on the proposed amendments in November, the government aims to submit the relevant subsidiary legislation to the Legislative Council in 2021.

Primary Production

Hong Kong's agricultural and fisheries industries are relatively small in scale. The government helps improve their output quality, productivity and competitiveness. The two industries combined employed some 17,750 people directly and produced \$4.47 billion of output during the year. Live poultry accounted for 100 per cent of local consumption; cut flowers, 36 per cent; seafood, 21 per cent; live pigs, 16 per cent; freshwater fish, 4 per cent; and vegetables, 1.6 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 2020 valued at about \$368 million. The principal food animals reared are pigs and poultry, which respectively yielded earnings of about \$843 million and about \$456 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 326 farms occupying 103 hectares of land. It also promotes the use of greenhouse technology for intensive high-value crop production.

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 313 farms in Hong Kong, Guangdong Province and Ningxia Autonomous Region, occupying 2,717 hectares of land, are accredited under the scheme.

The Controlled Environment Hydroponic Research and Development Centre, a joint set-up between the AFCD and VMO at Cheung Sha Wan Wholesale Vegetable Market, studies the application of state-of-the-art hydroponic cultivation techniques to the agricultural sector, to enhance the output of local vegetable production. The technology utilises limited space to produce high-value crops indoors all year round under a completely controlled environment without weather disruptions.

Leisure farms are popular places for recreation. The department works with the agricultural sector to update information about Hong Kong's leisure farms 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 was set up to enhance the industry's overall competitiveness. In July, the government obtained funding approval from the Legislative Council's Finance Committee for the first phase of an Agricultural Park at Kwu Tung South, with works expected to be completed in phases from the end of 2021. A consultancy study is also being conducted on the feasibility of designating agricultural priority areas.

Fisheries Industry

Fresh fish is one of Hong Kong's most important primary products. In 2020, the amount of fish caught and fish reared in ponds and floating cages at sea totalled about 119,400 tonnes, with a value of \$2.8 billion.

As at 31 December, some 6,390 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. There were about 10,150 local fishermen in the industry, with a quota of 4,380 Mainland deckhands. The total catch weighed about 116,100 tonnes, with an estimated wholesale value of \$2.7 billion, and provided some 37,000 tonnes of fish for local consumption.

As at 31 December, 925 AFCD-licensed mariculturists were operating in 26 designated fish culture zones. They supplied consumers with some 690 tonnes of live marine fish valued at \$52 million during the year.

Freshwater and brackish water fish are reared in fish ponds located mainly in the northwestern New Territories. In 2020, pond fish culture yielded some 2,520 tonnes of fish, valued at \$60 million.

The AFCD combats illegal fishing practices, including trawling, to ensure sustainable development of the industry and to conserve fisheries resources in Hong Kong waters. In 2020, a dedicated enforcement team was set up, and there were convictions in 14 cases of illegal fishing.

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. 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.

The voluntary Accredited Fish Farm Scheme tags fish from 136 participating farms for easy recognition. More than 85,000 kilograms of accredited fish were sold under the scheme in 2020.

To help the industry adopt modern and sustainable aquaculture, the AFCD has established a demonstration mariculture farm as a training centre at Tung Lung Chau fish culture zone. The centre provides practical training using the latest aquaculture equipment, allowing fish farmers to learn new aquaculture techniques.

The AFCD plans to designate new fish culture zones at Wong Chuk Kok Hoi, Outer Tap Mun, Mirs Bay and Po Toi and has commissioned consultants to undertake the necessary environmental impact assessments for these zones.

To meet public demand for recreational fishing and to help mariculturists diversify their business, 59 mariculturists in 10 fish culture zones have the department's approval to operate recreational fishing businesses on licensed fish culture rafts.

Eight red tides were recorded in Hong Kong waters in 2020. The AFCD is testing a newly developed Real-time Phytoplankton Species Monitoring System to improve early warning of red tides.

Wholesale Markets

Fresh food produce is sold in wholesale markets managed by the AFCD, VMO, Fish Marketing Organisation (FMO) and private sector. In 2020, 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 254,245 tonnes of vegetables, 67,707 tonnes of fruit, 65,669 tonnes of eggs, 43,585 tonnes of freshwater fish and fish products and 8,476 tonnes of poultry, with a combined value of \$6.57 billion.

The VMO is 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 2020, the VMO handled 76,954 tonnes of vegetables valued at \$659 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 2020, some 39,520 tonnes of marine fish valued at \$2.8 billion were sold through the FMO. The organisation also develops fish products at its processing centre to promote the quality of local products. The FMO and VMO have collaborated to launch the 'Local Fresh' app, enabling customers to purchase local fish products online, and to set up a store promoting premium local fish 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