



Agriculture and Fisheries

AGRICULTURE

Geographically Hong Kong consists largely of steep, hillside. Only 7 square kilometres of land are actively farmed. Farms are generally small in size and they produce mainly leafy vegetables, pigs or poultry.

Consumption: In round figures, the daily fresh food consumption by Hong Kong's population of more than seven million is 913 tonnes of rice, 2 270 tonnes of vegetables, 4 580 head of pigs, 53 head of cattle and 34 tonnes of poultry in 2013. Much of this is imported, but Hong Kong's primary producers help to satisfy some of the demand.

Local Production: The gross value of local agricultural production totalled \$776 million in 2013. 2 per cent of the vegetables Hong Kong people consumed, together with 60 per cent of the live poultry and 7 per cent of the live pigs, come from local farms. Local production is geared to complement rather than compete with other major market suppliers. Production efforts are aimed mainly at high-value fresh foods.

Principal Crops: The value of crop production amounted to \$256 million in 2013. Vegetable and flower production account for about 93 per cent of the total value, being \$238 million in 2013.

Vegetable crops grown all year round include Chinese white cabbage, flowering Chinese cabbage, lettuce, Chinese kale, radish, leaf mustard, spring onion and chive. Spinach, watercress and Chinese wolfberry are produced in the cooler months. Yard-long bean, water spinach, Chinese spinach, cucumber and several species of Chinese gourd are produced in summer. A wide range of temperate vegetables including tomato, sweet pepper, cauliflower, carrot and celery is grown in winter.

Flower cultivation has gained importance in recent years. Gladiolus, lily and chrysanthemum are grown in winter; and ginger lily and lotus flower in summer. Peach blossom is grown especially for the Lunar New Year.

A wide range of fruit is grown on the lower hill slopes, the main types being lychee, longan, wampei, local lemon, orange, tangerine, guava, papaya and banana.

Animal Husbandry: There were 43 local pig farms and 29 local poultry farms in 2014. In the first half of 2014, local pig production was valued at \$119 million and local poultry production including eggs was valued at \$154 million.

To reduce the public health and environmental pollution problems associated with livestock keeping, the government introduced a Voluntary Surrender Scheme for Poultry and Pig Farms in 2005 and 2006 respectively as well as a Buyout Scheme for Poultry Farms in 2008. These schemes encourage livestock keepers to surrender their Livestock Keeping Licence (LKL) and cease their

farm operation permanently in return for exgratia payment. Under these schemes, 162 poultry farmers and 222 pig farmers had surrendered their LKL.

Hong Kong has only one licensed dairy farm located in Sha Tau Kok, New Territories.

Agricultural Development: The Agriculture, Fisheries and Conservation Department (AFCD) and its closely related marketing organisations provide infrastructural support and technical services to the various primary industries.

The department's crop specialists undertake studies into practical problems in pest control, crop husbandry and soil management. They also investigate specific production technologies to enhance the efficiency and economic benefits of the industry. This work is carried out in an experimental station in Sheung Shui and results are made available to farmers by the department's advisory service.

Agricultural advisory activities are aimed at assisting farmers to improve productivity through the introduction of new and improved produce varieties and production techniques, backed up by adequate credit facilities and efficient and orderly marketing services.

Promotion of adaptive greenhouse and organic production technology for local farms are currently being undertaken.

Examples of well-received new produce varieties are: supersweet corn, milky pak choi, rock melon, strawberry and white bitter cucumber.

Loans issued to farmers in 2013 amounted to \$7.2 million and the total value of loans issued up to December 31, 2013 (under three separate loan funds administered by AFCD) was \$619 million. These loans are granted to cover farm production and development purposes.

Agricultural development also includes improvement of basic infrastructure, rehabilitation of fallow land and studies in farm management problems. Infrastructural work concentrates on the maintenance and improvement of communal irrigation and drainage facilities.

An Accredited Farm Scheme for protecting the environment and consumers against residues of agricultural pesticides was introduced in 1994. Accredited farms are strictly monitored and supervised on uses of pesticides and produce is further checked for pesticide residue before they are sold at accredited retail outlets. At the end of 2014, a total of 305 farms in Hong Kong and the mainland of China were accredited, supplying about 58 tonnes of accredited produce daily.

AFCD has been providing technical support to local organic farmers since December 2000. AFCD introduces to farmers the organic production standards and requirements, and helps farmers to resolve the problems on integrated pest management, horticultural practices and soil management. At the end of 2014, a total of 248 farms in Hong Kong joined the

service, supplying about 5.5 tonnes of organic vegetable daily.

AFCD also launched the Local Vegetable Farms Voluntary Registration Scheme in July 2006. As at December 31, 2014, a total of 1 927 vegetable farms had been registered. The department provided technical assistance and agricultural services to registered farmers to enhance their awareness of safe production, good farming techniques and produce quality.

To comply with environmental protection legislation, all livestock farms are required to be licensed and must install appropriate livestock waste treatment systems.

Sporadic outbreaks of foot-and-mouth disease and swine fever are kept under control by vaccination, and the department's veterinary services are equipped to investigate and combat all major animal diseases.

FISHERIES

Capture and aquaculture fisheries make an important contribution to Hong Kong by maintaining a steady supply of fresh fish to local consumers. The total capture fisheries and marine fish culture production is equivalent to about 28 per cent of seafood consumed in Hong Kong, while pond fish farmers produce about three per cent of the freshwater fish eaten.

Capture Fisheries: Hong Kong's fishing fleet comprises about 4 000 vessels, almost all are mechanised. About 33 per cent of the vessels are over 15 metres in length. They are mainly trawlers, liners and gill netters engaged in fishing mainly outside Hong Kong waters along the northern continental shelf of the South China Sea. The remaining 67 per cent of the vessels are mainly gill netters, liners, purse seiners and cage trappers operating mainly in the coastal waters around Hong Kong. In 2013, the estimated production was about 170 000 tonnes, valued at \$2.3 billion. Major species of fish caught were hairtail, mackerel, scad, big-eye, pomfret and croaker.

Aquaculture Fisheries: Fish ponds in use total 1 150 hectares and are located mainly in the north-western New Territories. The majority of fish farms are engaged in carp polyculture (bighead carp, silver carp, common carp and grass carp) in combination with tilapia or grey mullet. Other cultured species include jade perch, seabreams and spotted scat. Total fish pond production in 2013 amounted to 2 187 tonnes, valued at \$44 million.

About 990 licensees units are engaged in marine fish culture in the 26 fish culture zones designated under the Marine Fish Culture Ordinance. Common species cultured include green grouper, brown-spotted grouper, Russell's snapper, mangrove snapper, cobia and pompano. Total marine fish culture production in 2013 amounted to 1 005 tonnes, valued at \$94 million.

Development and Services: To promote sustainable development of the fishing industry and to conserve fisheries resources in Hong Kong waters, AFCD continues to pursue a number of fisheries conservation and management measures. Apart from strengthening enforcement against destructive fishing practices, the department has deployed 668 units of artificial reefs with a total volume of 179 000 cubic metres in Hong Kong waters with a view to enhancing the fisheries resources. Results of underwater monitoring survey revealed that the deployed artificial reefs supported a higher diversity and abundance of fish species as compared with the nearby natural habitats. Over 220 species of fish, including many high-valued species such as groupers, breams, snappers and sweetlips, are using the reefs for feeding, shelter and as spawning and nursery areas. Besides, continuous emphasis is placed on assisting fishermen to switch to sustainable fisheries and other related operations through provision of technical advice, training, liaison services,

grants and credit facilities. In 2013, AFCD organised fourteen free-of-charge training courses for fishermen to enhance their knowledge of sustainable fisheries development and management, and provided training allowance to eligible participants.

To alleviate the manpower shortage of the fishing industry, the department continues to operate the Mainland Fishermen Deckhands Scheme to allow Mainland deckhands to enter Hong Kong to help fishing vessels operators to unload their catches at wholesale fish markets. In 2013, some 4 800 deckhand quota have been issued to about 860 vessel operators.

AFCD continues to implement the voluntary Accredited Fish Farm Scheme in a bid to enhance the environmental hygiene standards of local fish farms and the quality of cultured fish. Participating fish farms under the scheme are required to adopt a set of good aquaculture practices. Quality assurance tests including analyses of drug residues and heavy metals in fish are conducted to ensure that the cultured fish meet the food safety standards before marketing. The accredited fish are marked with specially designed fish tags under the 'Accredited Fish Farm Scheme' brand name to enable easy recognition by the public. In 2013, 112 fish farms have been accredited under the scheme.

AFCD conducts aquaculture studies and provides technical services relating to the development of efficient fish culture methods and husbandry techniques. Following the introduction of jade perch for local culture, the department has successfully produced jade perch fry with a view to helping fish farmers secure a stable supply of fish fry at lower costs.

AFCD continues to promote the development of local fish hatchery and nursery. AFCD organises training programmes for fish farmers on various aspects of fish hatchery.

To assist fish farmers in preventing and managing fish diseases, AFCD has put in place a fish health management programme. Regular farm visits are conducted to facilitate early detection of disease outbreaks and to train fish farmers on disease prevention measures. The department also provides fish disease diagnosis and viral screening services.

'Good Aquaculture Practices Programme' aims to promote modern fish farm management. Under the programme, regular farm visits are arranged to collect water and fish samples for analysis. The department also introduces modern farm management techniques and practices to fish farmers via workshops and seminars. In 2013, 17 seminars were conducted.

AFCD continues to implement the red tide reporting network and the proactive phytoplankton monitoring programme with a view to providing early red tide warnings to mariculturists, thereby minimising the impact of red tides on mariculture. In 2013, eight red tide incidents were recorded in Hong Kong waters.

AFCD continues to administer various loan funds for fishermen and fish farmers for production and development purposes. In 2013, some 280 loans amounting to \$88 million were provided. In January 2014, the Government also set up a fund to provide grants to help the local fishing community move towards sustainable or high value-added operations so that the trade can enhance its overall competitiveness and cope with new challenges.

The department administers the Fish Marketing Organization which is a non-government, non-profit-making corporation vested in the Director of Marketing (currently the Director of Agriculture, Fisheries and Conservation) to provide orderly fish marketing services to both the fishermen and fish traders. The Organization currently runs seven wholesale fish markets in Cheung Sha Wan, Aberdeen, Castle Peak, Shau Kei Wan, Kwun

Tong, Tai Po and Sai Kung. Revenue comes from charging commission on the proceeds of sales and fees for using the market facilities. Surplus earnings are channelled back into the industry through the provision of low-interest loans to fishermen, improved services and facilities in the markets and scholarships for fishermen and their children. It also helps promote the marketing of the local fisheries products through its marketing network and participation in trade fairs and exhibitions.

The ban on trawling in Hong Kong waters has come into effect on December 31, 2012 to restore our seabed and the depleted fisheries resources. To alleviate the impact of the ban on the livelihood of trawler fishermen, the Government has introduced a one-off assistance package to eligible trawler fishermen. AFCD also introduced a special training programme to the affected

trawler fishermen and local deckhands with a view to equipping them with the skill and knowledge for switching to other sustainable fishing operations. Affected fishermen may also apply to the Fisheries Development Loan Fund for low interest loans for the purpose.

To complement the trawl ban and bring local fisheries industry back to a sustainable path, the Government implemented other fisheries management measures through legislative amendments to the Fisheries Protection Ordinance. These measures include: (1) setting up a registration system for local fishing vessels; (2) limiting new entrants to control the number of fishing vessels and fishing effort; (3) restricting fishing activities of non-fishing vessels and prohibiting fishing activities of non-local fishing vessels; and (4) designating fisheries protection areas.