

## Agriculture and Fisheries

### BLUEPRINT FOR THE SUSTAINABLE DEVELOPMENT OF AGRICULTURE AND FISHERIES

In order to promote the upgrading and transformation, modernisation and sustainable development of the agriculture and fisheries industries, the Environment and Ecology Bureau and the AFCD work hand in hand with the industry to formulate the Blueprint for the Sustainable Development of Agriculture and Fisheries (Blueprint) which was published in December 2023. The Government has rolled out a series of measures in phases under the Blueprint so as to enhance the quantity, quality and value of local produce. Relevant works include developing deep sea mariculture at Wong Chuk Kok Hoi and Mirs Bay new fish culture zones, conducting preparatory work for the Agricultural Park Phase 2 development, implementing urban farming strategy in New Development Areas, facilitating the livestock sector to construct modernised and environmentally-friendly multi-storey livestock farms and promoting leisure farming and fisheries.

### AGRICULTURE

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

**Consumption:** The daily fresh food consumption by Hong Kong's population of seven million in 2024 included 717 tonnes of rice, 2 332 tonnes of vegetables, 3 073 heads of pigs, 25 heads of cattle and 21 tonnes of poultry. Many of the above were imported, but Hong Kong's primary producers helped satisfy some of the demand.

**Local Production:** The gross value of local agricultural production was \$928 million in 2024. Local production accounted for two per cent of fresh vegetables, 100 per cent of live poultry and 9 per cent of live pigs consumed in the territory. Food production in Hong Kong aims to complement rather than compete with other major market supply sources. Therefore, Hong Kong focus on producing high-value and fresh food products.

**Principal Crops:** The value of crop production amounted to \$385 million in 2024. Vegetable and flower production accounted for about 96 per cent of the total value, totalling \$369 million.

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 matrimony vine 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, chrysanthemum and orchid are grown in winter; and ginger lily and lotus flower in summer. Peach blossom is grown especially for the Chinese New Year.

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

**Animal Husbandry:** There were 43 local pig farms and 29 local poultry farms as of 2024. In 2024, local pig production was valued at \$279 million and local poultry production including eggs was valued at \$264 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 operations permanently in return for ex gratia payment. Nevertheless, the government continues to formulate codes of practice for those livestock farmers who choose to continue operation, and provide technical and financial assistance to help them meet relevant biosecurity and hygiene standards.

Hong Kong has two licensed dairy farms located in Sha Tau Kok and Tai Po, New Territories.

**Agricultural Development:** The Agriculture, Fisheries and Conservation Department (AFCD) and Vegetable Marketing Organization have been providing infrastructural and technical support services to farmers.

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 services.

Agricultural advisory activities aim to assist farmers in improving 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 smart greenhouses, hydroponics and organic production techniques to local farms are currently being undertaken.

Examples of well-received new produce varieties include supersweet corn, mini watermelon, strawberry, white bitter cucumber, cherry tomato and sprouting broccoli.

Loans issued to farmers for farm production and development purposes in 2024 amounted to \$6.49 million. As

of December 31, 2024, the total accumulated deposits under three separate loan funds administered by the AFCD amounted to over \$53.62 million.

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 residues before they are sold at accredited retail outlets. As at the end of 2024, a total of 305 farms in Hong Kong and the mainland of China were accredited, supplying about 9 tonnes of accredited produce daily.

The AFCD has been providing technical support to local organic farmers since December 2000. The AFCD introduces the organic production standards and requirements to farmers, and helps farmers resolve the problems in integrated pest management, horticultural practices and soil management. By the end of 2024, a total of 384 farms in Hong Kong had joined the service, supplying about 6 tonnes of organic vegetables daily.

The department launched the Local Vegetable Farms Voluntary Registration Scheme in July 2006. As at December 31, 2024, a total of 1 858 vegetable farms have been registered. The department provides technical assistance and various agricultural services to registered farmers to enhance their awareness of safe production, good farming techniques and quality produce.

In June 2024, the AFCD launched the “Agri enJoy” Scheme to facilitate farms engaged in commercial agricultural production to operate agriculture-related ancillary businesses, so as to increase their income and promote their agricultural products. Members of the public will also get a chance to experience and learn more about agricultural production. As at December 31, 2024, 64 farms have successfully joined the scheme.

The Government will continue to implement the New Agriculture Policy (NAP) to promote the modernisation and sustainable development of local agriculture. A \$500 million Sustainable Agricultural Development Fund was launched in December 2016, to enhance the overall competitiveness of the agricultural industry. To further support the development of the industry in terms of application of advanced technology and intensification of production, and to help them seize the opportunities arising from the Greater Bay Area development, the Government further injected \$500 million to the Fund and appropriately expanded its coverage in 2022 to increase resources to support the sustainable development of the industry. Other major measures under the NAP include establishing the Agricultural Park; exploring the feasibility of designating agricultural priority areas; providing better support and assistance to help farmers move up the value chain; enhancing food safety and marketing as well as brand-building of local farm produce; facilitating development of hydroponics and agro-technology; and developing leisure and educational activities related to agriculture. The supportive

measures under the NAP will be implemented by the Government progressively in stages.

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 diseases in pigs, such as foot-and-mouth disease and porcine reproductive and respiratory syndrome, are kept under control by good biosecurity and vaccination in local pig farms. In response to the threat of African Swine Fever (ASF) in the Asian continent since 2018, the AFCD has implemented a number of measures to mitigate the ASF transmission risk, such as banning swill feeding in local pig farms, enhancing cleansing and disinfection for local pig conveying vehicles in slaughterhouses, stepping up routine local pig farm inspection and collecting samples routinely to check for potential ASF infection. Extensive avian influenza prevention and control measures are also in place for local poultry farms to safeguard animal and public health. The AFCD's veterinary services are equipped not only to investigate and combat major livestock diseases, but also to contain the threat of antimicrobial resistance (AMR) in livestock in Hong Kong. With the increasing threat of AMR globally, the Government launched the Hong Kong Strategy and Action Plan on Antimicrobial Resistance (2023 – 2027) (Action Plan) in November 2022. This is the second Action Plan on AMR that maps out response strategies towards AMR threat for the next five years. The Action Plan details the relevant measures to be implemented by the AFCD in the local livestock production sector. The relevant measures are aimed at developing appropriate sustainable systems for the surveillance of antimicrobial usage (AMU) and AMR at the local livestock farm level. The AFCD will also facilitate and support the development of projects for the provision of veterinary services to local livestock farms while enhancing the knowledge, attitude and practice of relevant stakeholders towards the problem of AMR through educational and publicity activities. Through relevant measures, the Government hopes to closely monitor the AMR situation, thus reducing AMU in the local livestock production sector and alleviating the development of AMR.

## 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 accounts for about 20 per cent of seafood consumed in Hong Kong, while pond fish farmers produce about four per cent of the freshwater fish eaten.

**Capture Fisheries:** Hong Kong's fishing fleet comprises about 5 050 vessels, almost all of which are mechanised. About 80 per cent of the local fishing vessels are sampans using multiple fishing gears and other smaller non-trawler vessels (such as gill netters, long liners, purse seiners, etc.) which operate mainly in the coastal waters around Hong Kong. The remaining 20 per cent of the vessels are trawlers and other larger non-trawlers generally operating in the adjacent waters of the South China Sea. In 2024, the estimated production was about 92 300 tonnes, valued at \$2.4 billion.

Major species of fish catch include hairtail, threadfin bream, squid, mullet and sardine.

**Aquaculture Fisheries:** Fish ponds in use total 1 119 hectares and are located mainly in the northwestern 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 2024 amounted to 1 349 tonnes, valued at \$37 million.

912 licensees are engaged in marine fish culture in the 28 fish culture zones designated under the Marine Fish Culture Ordinance. Common species cultured include green grouper, hybrid grouper, Russell's snapper, mangrove snapper, cobia and pompano. Total marine fish culture production in 2024 amounted to 626 tonnes, valued at \$66 million.

**Development and Services:** To promote sustainable development of the fishing industry and conserve fisheries resources in Hong Kong waters, the AFCD pursues a number of fisheries conservation and management measures. The ban on trawling in Hong Kong waters came into effect on December 31, 2012 to restore the seabed and the depleted fisheries resources. The department has strengthened enforcement against trawling activities and other destructive fishing practices. To complement the trawl ban and bring local fisheries industry back to a sustainable path, the Government has implemented other fisheries management measures including setting up a registration system for local fishing vessels; limiting new entrants to control the number of fishing vessels and fishing effort; and prohibiting fishing activities of non-local fishing vessels. To combat its adverse impact on the local fisheries resources, the AFCD regulated the use of snake cages for fishing in 2022 as well. The department is also preparing for the designation of fisheries protection area to protect important fish spawning and nursery grounds.

The AFCD has deployed more than 600 units of artificial reefs with a total volume of about 180 000 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 200 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.

The department has increased its efforts on assisting fishermen to transition to sustainable fisheries and other related operations through the provision of technical advice, training, liaison services, grants and credit facilities.

To alleviate the manpower shortage of the fishing industry, the AFCD operates the Mainland Fishermen Deckhands Scheme to allow Mainland deckhands to enter Hong Kong to help fishing vessels operators unload their catches at wholesale fish markets. As at December 2024, 4 110 deckhand quotas have been issued to vessel owners and their corresponding fishing vessels in 634 applications.

The AFCD introduced the voluntary Accredited Fish Farm Scheme (AFFS) in 2005 to enhance the environmental hygiene standards of local aquaculture farms and the quality of aquaculture products. Participating aquaculture 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 AFFS products are conducted to ensure that food safety standards are met prior to marketing. AFFS products are marked with specially designed tags under the "Accredited Fish Farm Scheme" brand name to enable easy recognition by the public. To enhance consumer confidence in AFFS products, a unique and traceable QR code is printed on these tags. By scanning the QR code, consumers can obtain information of the relevant aquaculture farm and food safety test results of the aquaculture product consignment. In 2024, 175 aquaculture farms have been accredited under the AFFS.

The AFCD conducts aquaculture studies and provides technical services for efficient fish culture methods and husbandry techniques. Techniques on pond fish water quality monitoring, over-wintering installation, aeration by venturi nozzles and oyster depuration are being transferred to the fish farmers. The AFCD continues to promote the development of local fish hatcheries and nurseries by conducting training workshops, providing on-farm technical support and offering live feed stock cultures to the interested fish farmers. To help the industry adopt a modern and sustainable aquaculture operation, the AFCD has established a steel truss mariculture training farm as a modern and scientific aquaculture training platform at the Tung Lung Chau fish culture zone. The implementation and demonstration of the project encourage fish farmers to adopt modern and sustainable aquaculture operation. The training farm is equipped with the latest automated aquaculture equipment, enabling fish farmers to learn new aquaculture techniques, and providing practical training to current fish farmers and new entrants.

With a view to enhancing biosecurity measures and surveillance of AMR in aquaculture, "Good Aquaculture Practices Programme" aims to promote modern fish farm management and monitor AMU and AMR at the local fish farm level. Under the programme, the AFCD conducts regular farm visits to collect water and fish samples for analysis, and AMR-related information to facilitate early detection of disease outbreaks. The AFCD introduces modern fish farm and health management techniques and practices to fish farmers via seminars and on-site demonstration. The department also provides fish disease diagnosis and viral screening services.

The AFCD has strengthened the red tide reporting network and the phytoplankton monitoring programme with a view to providing early red tide warnings to mariculturists, thereby minimising the impact of red tides on mariculture. In 2024, 11 red tide incidents were recorded in Hong Kong waters.

With a view to creating room for the mariculture sector to grow further and to promote the upgrading and transformation, modernisation and sustainable development of the industry, the AFCD designated new fish culture zones at Wong Chuk Kok Hoi, Outer Tap Mun, Mirs Bay and Po Toi (Southeast), with a total area of some 590 hectares, for the development of deep sea mariculture. The Wong Chuk Kok

Hoi and the Mirs Bay fish culture zones commenced on 13 December 2023. Deep sea cages and steel truss cages, which are more efficient in fisheries production, more durable and can withstand much stronger wind and wave action when compared to traditional wooden fish rafts, will be adopted for the culture operation.

The AFCD administers various loan funds for fishermen and fish farmers for production and development purposes. In 2024, 152 loans and at the amount totalling \$69.1 million were issued. The Government has also set up a \$1 billion Sustainable Fisheries Development Fund to provide grants to help the local fishing community move towards sustainable or high value-added operations. As at December 2024, 895 applications had been approved, involving a total commitment of about \$280 million.

The department administers the Fish Marketing Organization which is a non-government, non-profitmaking 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.