The AFCD will facilitate and support projects for provision of veterinary services to local livestock and fish farms including disease diagnosis, treatment, prevention and management and sourcing veterinary medications by the non-government veterinary sector. This will lead to the



development of tailor-made disease management plans which will help individual farms address AMR issues;

- The "veterinary prescription-only medication supply" policy, whereby antimicrobials can be administered to food animals only by farmers with prescriptions from registered veterinary surgeons, will be implemented by the AFCD when proper support and veterinary services are available to the local food animal production sector in respect of disease prevention and treatment;
- Educational seminars for local food animal farmers are organized and surveys are conducted to respectively improve and assess their knowledge, attitude and practice (KAP) towards AMR issues;
- Publicity activities are organized to raise awareness and provide the public with updated information on AMR issues.

The way forward

The ultimate goal of the AFCD's action in combating AMR on local food animal farms is to achieve better disease control through enhanced farm management and biosecurity, thereby promoting responsible and prudent use of antimicrobials and minimizing the development of AMR.



AFCD <FIGHT AMR> TEAM



Chic-Ken

obbies: Travel around the world and

discuss with international experts the effective action

against AMR

nbition: Tackle the issues of

AMR under the principles

of "One Health"



Captain Piggy

Hobbies: Follow the latest news and

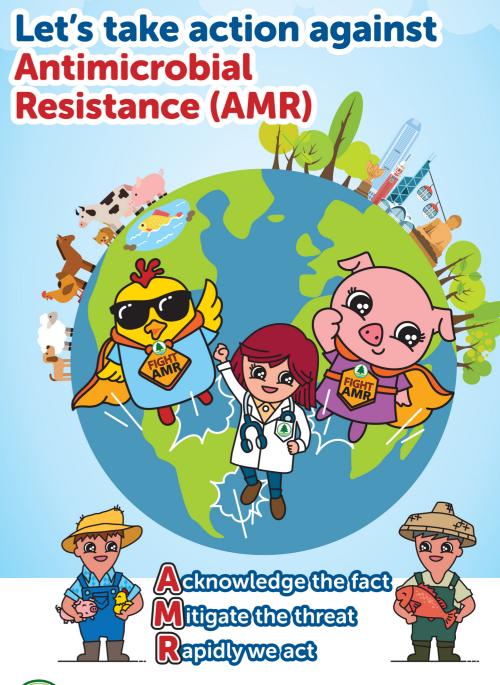
information on AMR

Ambition: Promote "responsible and prudent

use of antibiotics"











What is the significance of antimicrobial resistance (AMR) to local food animal farms and animal and human health?

AMR impacts animal health and welfare as well as food safety and security. Not only may antimicrobial-resistant bacteria (AMR bacteria) on livestock and fish farms make it harder to treat bacterial diseases in animals in the future, but they may also reach humans through food, the environment (i.e. water, soil and air) or direct human-animal contact. Similar to the case in animals, if these AMR bacteria cause diseases in humans, options for treatment using antimicrobials may be limited, have greater side effects, be more expensive and, in some cases, ineffective. Besides, the occurrence of diseases caused by AMR bacteria on livestock and fish farms will negatively influence food animal production, decreasing the supply and quality of all foods of animal origin.

Current situation of surveillance of antimicrobial usage (AMU) and AMR on local food animal farms in Hong Kong

There are currently 43 pig farms, 29 chicken farms and 938 mariculture farms in Hong Kong which are supervised by the Agriculture, Fisheries and

Conservation Department (AFCD) under licensing conditions, while 324 pond fish farms are monitored under a voluntary registration scheme. At present, preliminary measures have been put in place to monitor AMU and the occurrence of AMR bacteria on local food animal farms.

Local livestock farmers generally use antimicrobial medications to treat and prevent bacterial diseases of food animals, which is necessary for safeguarding animal health and welfare when animals become ill. As regards local fish farms, the use of antimicrobials is not common as bacterial infection is not a major threat to the local aquaculture production. In view of the threat of AMR to public health, investigations of local farms are conducted by the AFCD to collect information on AMU such as the types of antimicrobials in stock, the quantities of antimicrobials used, the purpose of usage and the manner in which antimicrobials are administered. An AMU record form has also been devised and distributed to farmers for reporting relevant AMU data to the AFCD at regular intervals. Samples of livestock and fish feed, Chinese medicinal products (such as Chinese herbs) for use in livestock animals and livestock excreta will be collected and tested for the presence of antimicrobials or their residues.

Besides, in order to promote responsible and prudent use of antimicrobials, local farmers have been receiving relevant training and advice from the AFCD. Preliminary measures to monitor the occurrence of AMR bacteria on

local livestock and fish farms involve the collection of biological samples for bacterial culture and antimicrobial sensitivity testing. Samples are taken from both healthy and diseased animals to monitor AMR in bacterial commensals and pathogens. Laboratory results will be collated in a database for analysis.



Once long-term active surveillance programmes are established in the near future, the AFCD will collect more comprehensive data and samples for statistical analysis and laboratory testing to monitor both AMU and AMR on local food animal farms in a systematic fashion. Taking into consideration the information derived from the surveillance programmes, the AFCD will devise and implement further actions and measures to support local farmers and enhance farm disease prevention and management so as to ensure proper AMU in food animals and contain the problem of AMR at the level of food animal farms.



How will the problem of AMR be controlled on local food animal farms?

The Hong Kong Strategy and Action Plan on Antimicrobial Resistance 2017-2022 was launched in July 2017, detailing the Hong Kong Special Administrative Region Government's commitment to controlling AMR. At the level of local food animal farms, the AFCD is taking the following actions to combat AMR:

- A 15-month consultancy study was commissioned in October 2017 to devise and establish the aforementioned long-term active surveillance programmes for AMU and AMR on local livestock and fish farms. The AFCD will use this system to monitor and measure the changes in AMR patterns as well as the progress in reduction of AMU on local food animal farms;
- Domestic guidelines for local livestock farmers on the proper use of antimicrobials, particularly those critically important in human medicine, are being developed by the AFCD by taking into consideration the local situation as well as standards adopted by international organisations, including the World Organisation for Animal Health (OIE) and the World Health Organisation (WHO);