

CONTROLLING OFFICER'S REPLY

FHB(FE)108

(Question Serial No. 0809)

Head: (49) Food and Environmental Hygiene Department

Subhead (No. & title): (-) Not specified

Programme: (1) Food Safety and Public Health

Controlling Officer: Director of Food and Environmental Hygiene (Miss Diane WONG)

Director of Bureau: Secretary for Food and Health

Question:

It is mentioned in Matters Requiring Special Attention in 2021-22 under the Programme that the Food and Environmental Hygiene Department will “continue to take forward initiatives to enhance pest control services, particularly in respect of mosquitoes and rodents, to strengthen response to vector-borne diseases and vector surveillance programmes”. Please advise this Committee of:

- a. the Government expenditure on enhancing pest control services in the past 3 years; and
- b. the projects implemented by the Government on the application of technologies to enhance pest control services in the past 3 years and the expenditure involved in each project.

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 74)

Reply:

- a. The expenditure incurred by the Food and Environmental Hygiene Department on pest control services in 2018-19, 2019-20 and 2020-21 was \$630 million, \$663 million and \$726 million (revised estimate) respectively.
- b. From 2018 to 2020, the projects implemented by the Department with regard to the application of technologies to pest control services and the expenditure involved in each project are as follows :

Pest control method/technology	Effectiveness	Expenditure
Rodent control		
Using a non-poisonous bait having flavours of food for the Rodent Infestation Rate surveys	The bait was tested in public rear lanes in 10 districts between February and September 2018. The results were unsatisfactory.	Around \$60,000
Rodent trapping device driven by pressurised gas	The rodent trapping device was tested in 4 public markets of the Department between October 2018 and June 2019. The devices installed failed to catch any rodents.	Around \$60,000
Night-vision camera surveillance system	The system was tested in public markets in Kowloon City District and rear lanes in Mong Kok District between April and July 2019. The results have shown that the system with artificial intelligence function is capable of identifying rodents in night-vision images and tracing their movements. It can be employed to monitor the areas and extent of rodent activities and is therefore conducive to quantifying and enhancing the effectiveness of anti-rodent measures.	Around \$760,000
Using a poisonous bait having flavours of food for rodent disinfection	The bait was tested in the laboratory and public rear lanes in 7 districts respectively for its attractiveness to rodents and poisoning efficacy between October 2019 and July 2020. The results have shown that the poisonous bait is effective in attracting the consumption of rodents and poisoning them. The Department will introduce the use of the bait in its regular anti-rodent work.	Around \$1,000
New design snap trap	The snap trap was tested in 5 districts and 6 markets respectively between January and June 2020. The results have shown that the new design snap trap is effective in catching rodents. The Department will introduce the use of the snap trap in its regular anti-rodent work.	Around \$3,000
Using a transparent plastic rodent trapping device to catch rodents	The rodent trapping device was tested in public places in 3 districts between September 2020 and February 2021. The results have shown that the rodent trapping device is not as effective as traditional cage traps in catching rodents.	Around \$4,000

Rodent control		
Placing poisonous baits in a T-shaped bait box	The bait box was tested in Kwun Tong District between October and November 2020. The results have shown that the T-shaped bait box is more effective in attracting rodents to enter and consume the baits than ordinary rectangular bait boxes. The Department will introduce the use of the T-shaped bait box in its regular anti-rodent work.	Around \$1,000
Thermal imaging camera surveillance system	The Department conducted field trials on thermal imaging cameras with artificial intelligence analytical function in rear lanes in Kowloon City District and 9 target areas of the first round of anti-rodent operation in designated target areas in 2020. Both tests have shown that the new technology is quite effective in identifying places where rodents frequently visit and the time and pattern of rodent activities, as well as assessing and quantifying anti-rodent work. The Department installed thermal imaging cameras at the selected locations of all target areas during the second round of anti-rodent operation in designated target areas in November 2020. The Department plans for a wider use of thermal imaging cameras at suitable locations in all districts across the territory in the future (including during the anti-rodent operations in designated target areas) with a view to increasing the effectiveness of the operations, and will recommend the technology to other departments.	Around \$3.96 million
Mosquito control		
New mosquito trapping device	The new mosquito trapping device was tested in Tuen Mun and Tsim Sha Tsui between May and September 2019. The results have shown that the new mosquito trapping device is effective in minimising the nuisance caused by Aedes mosquitoes. The Department has introduced the use of the device in its regular anti-mosquito work and recommended the technology to other departments.	Around \$1.31 million

Mosquito control		
Using gravidtraps to monitor <i>Aedes albopictus</i>	The gravidtrap was tested in the laboratory and 10 districts between May 2019 and February 2020. The results have shown that the gravidtrap is effective in attracting and collecting adult <i>Aedes albopictus</i> mosquitoes, reducing the time required for surveillance, as well as providing a quantitative density index. Starting from April 2020, the gravidtrap has completely replaced the ovitrap previously used for monitoring <i>Aedes albopictus</i> .	Around \$840,000
Large ultra-low volume (ULV) fogger	The large ULV fogger was tested in Yuen Long District between April and July 2020. The results have shown that the large ULV fogger is suitable for conducting ULV space treatment over a large area, and its spray range is longer than the existing back-carried sprayer. The fogger is more effective in killing adult mosquitoes in scrubby areas by conducting fogging treatment. The Department has introduced the use of large ULV foggers in all districts.	Around \$1.4 million

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