CONTROLLING OFFICER'S REPLY

(Question Serial No. 2216)

Head: (49) Food and Environmental Hygiene Department

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

Programme: (2) Environmental Hygiene and Related Services

Controlling Officer: Director of Food and Environmental Hygiene (Ms Irene YOUNG)

Director of Bureau: Secretary for Environment and Ecology

Question:

As regards mosquito control, please advise this Committee of:

1. the number of mosquito complaints received in each of the past 3 years, with a breakdown by District Council district;
2. the technological applications employed by the Food and Environmental Hygiene Department for enhancing mosquito control in each of the past 3 years, with a breakdown of expenditure by application; and
3. the number of the existing large ultra-low volume foggers and the number of fogging operations conducted to kill adult mosquitoes in the past year, with a breakdown by District Council district.

Asked by: Hon YANG Wing-kit (LegCo internal reference no.: 21)

Reply:

1. The number of mosquito complaints received by the Food and Environmental Hygiene Department in each of the past 3 years (2021 to 2023), with a breakdown by District Council district, is provided at **Annex 1**.

2. The information on the technological applications employed by the Department for enhancing mosquito prevention and control in the past 3 years (2021 to 2023), with a breakdown of expenditure by application, is provided at **Annex 2**.

3. There are currently 18 large ultra-low volume (ULV) foggers available for use in all districts. The number of fogging operations conducted by the Department to kill adult mosquitoes in the past year, with a breakdown by District Council district, is provided at **Annex 3**.

Annex 1

Number of mosquito complaints received by the Department

District	2021	2022	2023
Central and Western	311	231	278
Wan Chai	282	233	116
Eastern	311	236	280
Southern	198	103	142
Islands	325	269	202
Yau Tsim Mong	330	235	236
Sham Shui Po	175	153	101
Kowloon City	233	108	117
Wong Tai Sin	89	64	83
Kwun Tong	150	132	137
Kwai Tsing	293	412	359
Tsuen Wan	251	191	174
Tuen Mun	367	263	340
Yuen Long	993	867	1 042
North	369	248	323
Tai Po	353	396	400
Sha Tin	331	288	340
Sai Kung	495	391	453
Whole territory	5 856	4 820	5 123

Annex 2

Technological applications for mosquito control and the expenditures incurred

Technological application for mosquito control	Effectiveness	Expenditure		
		2021	2022	2023
New mosquito trapping device	The Department tested the new mosquito trapping device in Tuen Mun and Tsim Sha Tsui in 2019. Test results showed that the new mosquito trapping device was 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 $640,000	Around $640,000	Around $200,000
Use of gravidtraps to monitor *Aedes albopictus*	The gravidtrap was tested in the laboratory and 10 districts from 2019 to 2020. Test results showed that the gravidtrap was effective in attracting and capturing adult *Aedes albopictus* 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 *Aedes albopictus*.	N.A.[Note]	Around $250,000	Around $210,000
Large ULV fogger	The large ULV fogger was tested in Yuen Long District between April and July 2020. Test results showed that the large ULV fogger was suitable for conducting ULV space treatment over a large area, and its spray range was longer than the knapsack sprayer being used. The fogger was more effective in killing adult mosquitoes in the fogging treatments conducted in scrubby areas. The Department	N.A.[Note]	N.A.[Note]	N.A.[Note]

Technological application for mosquito control	Effectiveness	Expenditure		
		2021	2022	2023
	has introduced the use of large ULV foggers in its regular anti-mosquito work in the same year.			
Robotics fogger	Field trials were conducted in Yuen Long, Sha Tin and Sai Kung Districts between April and November 2021. The vehicle, with the robotics fogger installed, was driven to designated places to spray pesticides. Test results showed that it was safe, effective and user-friendly. The range of the sprayer was wider than that of the knapsack sprayer being used. The robotics fogger could facilitate fogging operations in large areas and was particularly useful in killing adult mosquitoes in places that were difficult for workers to reach, such as well-vegetated hill sides. The Department has introduced the use of robotics foggers in its regular anti-mosquito work since 2022. The technology has been recommended to other departments, and on-site demonstrations on the operation of robotics foggers have also been arranged.	N.A.[Note]	Around $1.19 million	Around $490,000

Note: The Department did not procure the equipment in the year.

Annex 3

Number of fogging operations conducted by the Department to kill adult mosquitoes

District	2023
Central and Western	1 882
Wan Chai	1 612
Eastern	3 511
Southern	1 813
Islands	1 415
Yau Tsim Mong	199
Sham Shui Po	2 863
Kowloon City	3 869
Wong Tai Sin	1 344
Kwun Tong	1 020
Kwai Tsing	780
Tsuen Wan	1 695
Tuen Mun	2 916
Yuen Long	2 261
North	498
Tai Po	683
Sha Tin	1 919
Sai Kung	4 001
Whole territory	34 281

- End -