Advisory Council on Food and Environmental Hygiene

Minutes of the 81st Meeting held at 10:00 a.m. on Tuesday, 30 April 2024, in Room 1801, 18/F, East Wing, Central Government Offices, 2 Tim Mei Avenue, Tamar, Hong Kong

Prof Kenneth LEUNG Mei-yee, JP (Chairman)

Ms Kelly CHAN Kwan-yee

Mr CHEUNG Ki-tang

Dr Crystal FOK Lo-ming

Dr Vivian HUI Chi-ching

Dr Kenneth LAM Ka-ho

Dr Clive LO Sze-chung

Ms NGAI Oi-ling

Dr Stanley TAM Kui-fu

Dr WONG Ka-hing

Miss Vivian LAU Lee-kwan, JP Permanent Secretary for

Environment and Ecology (Food)

Ms Irene YOUNG Bick-kwan, JP Director of Food and

Environmental Hygiene

Mr Mickey LAI Kin-ming, JP Acting Director of Agriculture,

Fisheries and Conservation

Dr Kellie SO Pui-sheung Principal Medical and Health

Officer (Disease Prevention)

Ms Anna CHOR Kin-lan Principal Assistant Secretary for

Environment and Ecology (Food) 3

(Secretary to ACFEH)

Absent with Apologies

Hon CHAN Hak-kan, B.B.S., J.P. Prof CHEN Sheng

Ms CHIANG Lai-yuen, J.P. Dr Jill CHIU Man-ying

Mr Sam CHONG Yan-kit Mr Rayman CHUI Man-wai

Dr Peter LEE Wai-man Miss Jennifer LIU Wai-fun

Prof WONG Man-sau

In Attendance

Environment and Ecology Bureau (EEB)

Ms Ivy LAW Chui-mei Deputy Secretary for Environment

and Ecology (Food) 1

Ms Wendy AU Wan-sze Principal Assistant Secretary for

Environment and Ecology (Food) 2

Ms Natalie YING Yan-chung Assistant Secretary for Environment

and Ecology (Food) 4

Ms Sibyl WONG Hoi-ching Assistant Secretary for Environment

and Ecology (Food) 7

Mr Barry KWOK Lap-hei Assistant Secretary for Environment

and Ecology (Food) SD1

Mr Chris FUNG Ho-lam Assistant Secretary for Environment

and Ecology (Food) SD4

Food and Environmental Hygiene Department (FEHD)

Mr Arsene YIU Kai-cheuk Deputy Director (Environmental

Hygiene)

Mr Peter POON Ping-yeung Assistant Director (Operations) 3

Mr Gabriel TSANG Wing-lok Assistant Director (Operations) 1

Mr Wilson NG Kwok-lun Senior Superintendent (Cleansing

& Pest Control) 2

Mr LEE Ming-wai Pest Control Officer in-charge

Opening Remarks

The <u>Chairman</u> welcomed members and Government representatives to the 81st meeting of the Advisory Council on Food and Environmental Hygiene (ACFEH). He extended a warm welcome to new members Ms Kelly CHAN Kwan-yee and Dr Vivian HUI Chi-ching, and said he looked forward to working in close partnership with them.

Agenda Item 1: Confirmation of the Minutes of the Last Meeting

2. The minutes of the last meeting on 7 July 2023 were confirmed.

Agenda Item 2: Matters Arising from the Last Meeting

3. There was no matter arising from the last meeting.

Agenda Item 3: New Rodent Surveillance Programme of the Food and Environmental Hygiene Department (ACFEH Paper 1/2024)

4. The Chairman remarked that the working group on application

of new technology for improvement of environmental hygiene was established under ACFEH two years ago. The Secretariat would arrange to convene a meeting this year and invite new members to join the working group if interested. The Chairman then invited Mr Wilson NG to brief the meeting on the agenda item.

- 5. <u>Mr Wilson NG</u> briefed the meeting with a PowerPoint presentation on FEHD's new rodent surveillance programme the Rodent Activity Survey (RAS) which was based on the data collected by thermal imaging cameras with artificial intelligence (AI) technology for calculating the Rodent Absence Rate (RAR).
- 6. <u>Ms NGAI Oi-ling</u> enquired what range of RAR would be considered a good indicator of rodent absence.
- 7. <u>Dr Kenneth LAM</u> suggested the Government obtain data of similar surveillance programmes worldwide, such as from Singapore, Japan, and Taiwan, for comparison and analysis.
- 8. Mr CHEUNG Ki-tang complimented the Government on its efforts to tackle hygiene black spots, and said that there had been noticeable improvement in environmental hygiene lately. He enquired whether data from RAS would be shared with District Councils in order to keep District Councilors informed of the latest progress. He further remarked that collaboration across districts, departments, and organizations was required for joint efforts in eliminating rodent.
- 9. The <u>Chairman</u> remarked that to effectively tackle the rodent problem, fundamental survival conditions of rodents, namely food, harborage and passages, had to be eliminated. He said that rodent infestation was not only prominent at markets, but also at refuse collection points of residential estates/areas.
- 10. Mr Peter POON responded that it was hard to achieve a 100% RAR, and RAR of the first five districts where surveys commenced ranged between around 87% to 96%. He added that so far no overseas places had a rodent surveillance programme as well-developed as that of Hong Kong. Singapore once considered using thermal imaging cameras, but its

approach was less systemic. He said that FEHD had invited an expert recommended by the World Health Organization to offer advice on Hong Kong's rodent control operations and the expert also recommended that the camera-based surveillance system should be rolled out. As regards data dissemination, the RAR for each district would be published on FEHD's website. FEHD would consider reporting them to District Councils as appropriate.

- Ms Irene YOUNG added that FEHD's measures in combating the rodent problem had been fruitful. In 2022, 45 400 rodents were captured, while in 2023, 63 300 rodents were captured, which represented a 40% increase. FEHD had been refining its rodent control strategies and techniques for better outcomes. For instance, it noted that setting rodent cages at night time was more effective, and had therefore allocated more resources for that. FEHD would continue to refine its approach based on experience to optimize performance.
- 12. <u>Dr Crystal FOK</u> noted that the district with the highest RAR in the first five districts where surveys commenced, achieved a RAR of 96%. The public would associate this with the effectiveness of rodent elimination measures, and would then have high expectations of the Government's anti-rodent work. She further enquired whether the frequency of thermal image capturing could be increased (at present, two thermal images would be captured at every two-minute interval).
- 13. The <u>Chairman</u> shared Dr Crystal FOK's remarks and enquired whether the frequency of setting the two-minute interval was based on trial.
- 14. <u>Mr LEE Ming-wai</u> explained that technically the thermal imaging system could capture images at every one to two seconds. That said, as the average duration of a "food foraging trip" of rodents was about two minutes based on literature review, FEHD considered the two-minute frequency was reasonable taking into consideration the food foraging patterns of rodents and the efficiency of image analysis.
- 15. <u>Dr Clive LO</u> remarked that the rodent infestation situation in different parts of each district, which covered a large geographical area, would vary. He enquired how best the current methodology, which was

based on the findings at localized areas, could generate RAR that reflected the rodent infestation of the whole district.

- 16. <u>Mr LEE Ming-wai</u> responded that the findings were in line with past experience, that rodent infestations were found at localized areas within districts. He further explained that with reference to distribution of rodent complaints and rodent control statistics collected from regular disinfestation operations carried out by FEHD, a list of locations over various districts that were prone to risks of rodent infestation would be compiled as the sampling frame for installing thermal cameras.
- 17. <u>Dr Stanley TAM</u> enquired whether the public could propose alternative spots on top of the around 300 spots identified as sampling frame.
- 18. <u>Mr LEE Ming-wai</u> responded that complaint data had already been taken into account in selecting these spots.
- 19. The <u>Chairman</u> advised that data and trial results were useful in explaining why thermal images were captured at two-minute intervals. He enquired whether the number of images with/without rodent appearance had correlation with the rodent count in the images. He further enquired whether the timing of capturing thermal image, such as day or night time or seasonal difference would affect the effectiveness of RAS.
- 20. The Chairman also remarked that members of the public were used to seeing indices that measured the seriousness of the problem, hence psychologically might find it hard to understand the RAR which measured the absence of the problem instead. If so, FEHD might consider adopting a more conventional index which would give a higher number when the rodent situation became worse.
- 21. Mr Peter POON responded that if rodent count was adopted, it would exaggerate the rodent situation as the rodent count measured by the thermal camera would unnecessarily increase if a rodent kept running to and fro or stopped in front of the camera. As far as the correlation between number of images with/without rodent appearance and actual count of rodent in the images was concerned, it was found that the higher

the rodent count, the longer the period of rodent appearance (i.e. more images with rodent appearance) in general. Regarding the decision of adopting RAR (the higher the better) as the indicator, FEHD considered that measuring the absence of rodent was a more positive presentation (i.e. being rodent-free most of the time) to encourage improvement. FEHD would closely monitor the data collected and allocate resources to districts/areas with more pressing rodent problems as appropriate. He added that it was difficult to predict whether rodents would appear at specific locations, only by installing cameras at various locations could FEHD better understand the spatial distribution of rodent appearance.

- 22. <u>Mr LEE Ming-wai</u> added that seasonality was not commonly seen in rodent appearance. In case of extreme weather, thermal image capturing timeframe would be pushed back. He supplemented that the goal of FEHD's rodent surveillance programme was not for cross-district comparison, but for assessment of a particular district's rodent situation to identify problematic areas for targeted rodent control actions.
- 23. The <u>Chairman</u> further suggested FEHD set a "triggering level", say RAR at or below 90%, under which certain follow up actions would be taken.
- 24. <u>Dr Crystal FOK</u> suggested and <u>the chairman</u> agreed that the raw data collected by the thermal cameras could provide useful information for FEHD's further analysis.
- 25. <u>Ms Kelly CHAN</u> enquired whether data collected by the AI technology would be double checked to ensure accuracy.
- 26. Mr Peter POON responded that apart from the analysis conducted by the contractor, FEHD would also analyze the data collected for quality assurance purpose. For example, if a certain district had a particularly low RAR, FEHD would obtain the video footage of the thermal cameras for in-depth analysis. He added that the contractor was required to submit the video footage or photos together with data collected for checking of AI accuracy. So far, the error rate was low.
- 27. Mr LEE Ming-wai supplemented that FEHD did explore the

possibility of using total or maximum count of rodents within a specific period or within a particular photo as an indicator for seriousness of rodent infestation, but the counts were found to have shortcomings, e.g., an index making use of maximum counts of rodents showed no significant variation and would produce a very similar result for every district. As positive correlation was found between RAR and various rodent control statistics, the use of RAR as an index to indicate rodent infestation situation was considered more feasible than other parameters. He further considered that the public would find RAR easy to understand as it reflected the situation of how frequent rodents were absent in the district.

28. The <u>Chairman</u> remarked that Hong Kong was the first place to make use of thermal imaging cameras systematically for rodent surveillance; and this was an achievement worth publicizing.

Agenda Item 4: Enhancing the Food Business Licensing Regime (ACFEH Paper 2/2024)

- Mr Gabriel TSANG briefed the meeting with a PowerPoint presentation on FEHD's enhancements to the food business licensing regime, including expanding the scope of the Professional Certification System (PCS), introducing a "Composite Permit", setting more lenient food business licence terms for farms engaged in commercial agricultural production, issuing e-licences, publishing "DIY Application for Food Business Licences", and waiving application for Bakery Licence for licensed restaurants and documents on use of communal toilet facilities.
- 30. <u>Ms Irene YOUNG</u> supplemented that the enhancement measures were initiated by FEHD, with a view to increasing transparency, doing away with unnecessary procedures and fees, and most importantly for business facilitation.
- 31. <u>Dr Stanley TAM</u> welcomed FEHD's efforts in enhancing the food business licensing regime. Regarding waiving application for a Bakery Licence for restaurants selling their bakery products, he enquired whether other requirements would be in place to ensure food safety.

- 32. Mr CHEUNG Ki-tang supported FEHD's enhancements to the food business licensing regime and remarked that such streamlining measures would lower the barriers for entering the industry, and could drive economic development. He enquired whether FEHD would consider incorporating AI elements into the enhancement measures, such as by introducing an AI chatbot for FAQ regarding licence application.
- 33. <u>Mr Gabriel TSANG</u> explained that, for effective regulatory control, the bakery area had to be part of the same licensed restaurant in order to qualify for a bakery licence waiver, and both the restaurant itself and the bakery area would still be subject to requirements/conditions of the respective food business licence.
- 34. <u>Miss Vivian LAU</u> reiterated that the bakery licence waiver would only apply to restaurants where the bakery was located inside the same restaurant. There was no change to the requirements of relevant restaurant licences; hence food safety would not be compromised.
- 35. Regarding incorporation of AI, <u>Mr Gabriel TSANG</u> noted that the AI element was worth exploring.
- 36. <u>Dr Crystal FOK</u> enquired about the publicity plan for promoting the enhancement measures. She added that such enhancement measures should be made known to the trade, consultants, and those interested in entering the catering industry.
- 37. <u>Mr Gabriel TSANG</u> replied that FEHD had made public announcement regarding the enhancement measures and relevant information could also be found on FEHD's website. FEHD also had organized briefings for interested parties.
- 38. <u>Miss Vivian Lau</u> supplemented that with the "DIY Application for Food Business Licences" video, potential licence applicants should find it easier to apply for a licence on their own. Regarding incorporation of AI elements, it was worth exploring whether AI could assist the potential applicants to understand the type of licence(s) they should apply for under different scenarios.

- 39. <u>Ms Irene YOUNG</u> added that various measures were implemented to facilitate easier understanding of the rules by the potential applicants. A notable example was the newly rolled out video "DIY Application for Food Business Licences". FEHD would explore the usage of FAQ and AIs for provision of easy-to-understand and accessible information.
- 40. <u>Dr Crystal FOK</u> further suggested FEHD provide case studies or sample scenarios as reference for potential applicants.
- 41. Mr CHEUNG Ki-tang remarked that information provided to applicants were often too wordy and not easy to understand. He believed that applicants would prefer simpler information, and seconded the suggestion of making use of case studies or sample scenarios. He also suggested strengthening publicity upon rolling out new measures and organizing briefing sessions.
- 42. The <u>Chairman</u> enquired about the trade's response towards these enhancement measures. Regarding the PCS, he enquired about the criteria and the number of qualified professional in Hong Kong. On setting more lenient food business licence terms for farms engaged in commercial agricultural production, he remarked that while facilitating business was commendable, food safety should not be compromised.
- 43. <u>Mr Gabriel TSANG</u> responded that the trade had all along been supportive towards the enhancement measures. As for the PCS, an authorized persons' register was kept under Buildings Ordinance, Cap. 123. It was understood that there were abundant authorized persons in the market.
- Mr Mickey LAI remarked that the objective of setting more lenient food licence terms for farms engaged in commercial agricultural production as their main business was to help those farmers to offer leisure farming activities as ancillary business. Only simple preparation/cooking methods of the farms' own produce would be allowed. Farms would need to be registered under AFCD's Accredited Farm Scheme or Organic Farm Support Service before they were eligible for the leisure farm scheme. AFCD's existing monitoring programmes for these two Schemes would

cover farms participating in the leisure farm scheme.

- 45. The <u>Chairman</u> enquired whether the licencing conditions would specify the cooking methods allowed.
- 46. <u>Mr Gabriel TSANG</u> responded that actual needs of the trade would be taken into account when formulating the licencing conditions.
- 47. The <u>Chairman</u> further enquired whether "farm-to-table-fare" (農家菜) would be allowed.
- 48. <u>Mr Mickey LAI</u> responded that farms engaged in commercial agricultural production as their main business were the target of the enhancement measure. As for those which offer "farm-to-table-fare", agricultural production was unlikely to be their main business operation.
- 49. <u>Miss Vivian LAU</u> supplemented that the Countryside Conservation Office (CCO) had been assisting interested parties to explore developing different business, including "farm-to-table-fare" in Lai Chi Wo. <u>Mr Gabriel TSANG</u> further explained that as part of the initiative to promote local tourism, the CCO had been carrying out work at Lai Chi Wo for promotion of Hakka farms. Food and beverage elements were involved in certain activities. As those Hakka farms were located in remote areas, it was hard for them to fulfill certain criteria concerning electricity, water, town gas, and provision of toilets. FEHD had been working with the CCO to draw up appropriate food business licence terms for the concerned farms.
- 50. <u>Ms Kelly CHAN</u> supported the enhancement measures especially the more lenient food licence terms for farms engaged in commercial agricultural production. She believed that with more lenient food business licence terms in place, the time needed and procedures involved for commercial farms to obtain a food business licence could be significantly reduced.
- Mr Gabriel TSANG remarked that AFCD would provide FEHD with a list of farms engaged in commercial agricultural production and participated in the leisure farming scheme. Farms on the list could then apply for a food business licence with more lenient terms from FEHD. Public announcement was scheduled for around end May or June. FEHD

and AFCD would continue to engage the trade to understand their needs and to inform them of the more lenient terms, such as relaxing the requirement for permanent structures and grid electrical installation.

- 52. Mr Mickey LAI supplemented that briefing sessions would be organized for farmers, and AFCD would also inform the farmers of the enhancement measure via various channels.
- 53. The <u>Chairman</u> remarked that the meeting was glad to see such facilitative measures and suggested the Government to step up publicity.

[Post-meeting note: The Agri-enJoy Farm (農+ 樂農場) Scheme was launched on 25 June 2024.]

Agenda Item 5: Any other business

- 54. The <u>Chairman</u> remarked that ACFEH would organize site visits every year. Members visited the Hong Kong International Airport on sampling procedure for imported food and the Garden of Remembrance at Tsang Tsui for green burial last year. The Chairman hoped that a variety of experiences could be provided to members as well this year.
- Miss Vivian LAU noted the Chairman's suggestion and asked FEHD and AFCD to come up with suitable locations. She cited the pilot project on modernized urban farming in Ma On Shan Sai Sha Road Garden as one possible location. She remarked that the site visit would likely be organized in the second half of this year. Members would be consulted once more details were ready.
- 56. There being no further business, the meeting was adjourned at 11:40 a.m.

Secretariat

Advisory Council on Food and Environmental Hygiene July 2024