

## **GMOs (Control of Release) Expert Group**

### **Confirmed Minutes of the 5<sup>th</sup> Meeting**

Date : 19 April 2018 (Thursday)  
Time : 2:30 p.m. – 4:55 p.m.  
Venue : Room 701, Agriculture, Fisheries and Conservation Department,  
7/F, Cheung Sha Wan Government Offices, 303 Cheung Sha Wan  
Road, Kowloon

#### **ATTENDANCE**

##### Chairman

Professor LAM Hon-ming

##### Members

Dr. CHAN Mo-chee, Charles

Professor CHENG Hon-Ki, Christopher

Professor CHOW King-lau

Mr. LAM Chun-hong, Dominic

Ms. LEUNG Sin-man, Rachel

Dr. LO Sze-chung, Clive

Ms. WONG Pik-yan, Nicole

Dr. WONG TAAM Chi-woon, Vivian, J.P.

Mr. YIP Wing-kui

Dr. YU Yuen-ping, William

Mr. CHAN Kin-fung, Simon

Assistant Director (Conservation),  
Agriculture, Fisheries and  
Conservation Department (AFCD)

Dr. CHEUNG Yung-yan, Terence

Principal Medical and Health  
Officer, Department of Health (DH)

Ms. CHAN Wai-yan, Vivian

Senior Administrative Officer  
(Nature Conservation),  
Environmental Protection  
Department

##### Secretary

Ms. LUK In, Michelle

Conservation Officer / Special  
Duties 2, AFCD

## **IN ATTENDANCE**

Dr. YIP Yin, Jackie

Senior Conservation Officer  
(Biodiversity), AFCD

## **ABSENT WITH APOLOGIES**

Ms. AU Sin-lun, Catherine

Dr. AU Wai-ting, Doris

Dr. CHEN Xue-ping

Professor WONG Kam-bo

## **WELCOME MESSAGE**

1. The Chairman welcomed all members to the first meeting of the term (2017-2019) of the Genetically Modified Organisms (Control of Release) Expert Group (the Expert Group).
2. The Chairman informed members that, as an established practice to facilitate the taking of meeting minutes, sound recording would be made during the meeting. The audio records would be destroyed after the meeting minutes had been confirmed.
3. The Chairman reminded members about the declaration of interests and transparency measures adopted by the Expert Group. Members were requested to follow the declaration of interests and transparency measures.

## **AGENDA ITEMS**

### **I. Confirmation of Minutes of the Last Meeting held on 21 February 2017**

4. The Chairman reported that the draft minutes of the last meeting held on 21 February 2017 was circulated on 22 May 2017 and no comments were received. As members had no further comments in the meeting, the draft meeting minutes were

confirmed.

## **II. Survey on GMOs in Hong Kong during 2016-17 and 2017-18**

(Discussion paper: GMO/01/2018)

5. The Chairman invited Ms. Michelle LUK to brief members on the discussion paper (GMO/01/2018) that summarised the findings of the survey conducted during 2016-17 and 2017-18 on genetically modified organisms (GMOs) in local markets and farms.

6. A member enquired on the justifications for not exempting Papaya Ringspot Virus-resistant GM papaya of TW-lines 16-0-2 and 18-2-4 (“TW-lines”) from section 7 (restrictions on import of GMOs intended for release into environment) of the Genetically Modified Organisms (Control of Release) Ordinance (the Ordinance). Dr. Jackie YIP replied that the exemption proposal was discussed in the first meeting of the Expert Group in 2011 and members at that time agreed GM papayas were already widely grown in Hong Kong and unlikely to pose any adverse biosafety impacts in the local environment. She added that as the commercial production of TW-lines papayas was not yet approved in Taiwan at the time of Expert Group’s discussion, it was decided not to exempt TW-lines and any other new GM papaya varieties from section 7 of the Ordinance as a precautionary measure. The Expert Group had no adverse comments on Government’s exemption proposal then.

7. In response to a member’s enquiry on whether AFCD was responsible for assessing the safety of GM food for human consumption, Dr. Jackie YIP indicated that this was not under the purview of AFCD. Mr. Simon CHAN supplemented that the Ordinance is in line with the requirements in the Cartagena Protocol on Biosafety on shipment for GMOs which are intended for direct consumption as food or feed, or for processing (FFP) or contained use. The GMO shipment should be accompanied by prescribed documents to enable easy identification of GMOs and to provide information on contact points. AFCD distributed leaflets to FFP traders regularly to remind them the above requirements.

8. A member suggested that more effort be needed to educate the public about the threats to local biodiversity through mercy release activities. Dr. Jackie YIP responded that AFCD had had communications with religious groups and had been conducting

public education programmes concerning mercy release. Regarding GM fluorescent fishes in aquarium shops, AFCD would continue to conduct the regular inspection and communicate with shops owners to remind customers about preventing the fish from escaping to the environment. Another member proposed providing a printed notice to aquarium shops selling GM fluorescent fish to inform customers about the possible offence for releasing such fish into the natural environment.

### **III. Review of the Exemption of Live Recombinant Veterinary Vaccines**

(Discussion Paper: GMO/02/2018)

9. The Chairman invited Ms. Michelle LUK to take members through the discussion paper (GMO/02/2018) on the findings of risk assessment of commercially available live recombinant veterinary vaccines (LRVVs), and sought members' views and comments on the review of the exemption of LRVVs.

10. A member sought clarification on the definition of LRVVs, Dr. Jackie YIP affirmed that isolated biological materials such as DNA vaccines (e.g. vaccines for horses, pigs), recombinant protein vaccines and stem cells were not regulated under the Ordinance as they could not be regarded as “*a living organism that possesses a novel combination of genetic materials obtained through the use of modern biotechnology*” according to the Ordinance's definition on a GMO.

11. Regarding a member's question on regulation on pharmaceutical products containing non-living organisms such as recombinant protein for animals and GM human vaccines, Dr. Terence CHEUNG advised that such pharmaceutical products are under the control of Pharmacy and Poisons Ordinance and applications for registration are reviewed by the Pharmacy and Poisons Board of Hong Kong. Dr. Jackie YIP further confirmed that human vaccines are not regulated under the Genetically Modified Organisms (Control of Release) Ordinance.

12. As regards a member's enquiry on the pathogenicity and virulence of the assessed LRVVs, Ms. Michelle LUK explained that the conclusions drawn under section 13 “Evaluation of the Consequences should the Adverse Effect be Realised” in the risk assessment report (GMO/02/2018) were based on the overall summary of evaluations of the nine types of GM vaccines assessed in the recent risk assessment.

13. Another member asked how the authorities could monitor and report latest information on GMOs development. Dr. Jackie YIP answered that AFCD constantly reviewed the updates in the Biosafety Clearing-House under Cartagena Protocol on Biosafety, and would seek advice from members on technical issues if necessary. Members were welcomed to provide information about latest development of GM technology to AFCD at any time. The Chairman agreed that the current mechanism on GMO-related updates should be maintained between AFCD and members and it was important to keep the public informed about the issues.

14. Members noted the review on the exemption of LRVVs. Members supported the recommendation of the discussion paper (GM/02/2018) that the current control and exemption under the Ordinance should be maintained, subject to regular reviews.

#### **IV. Review of the Exemption of Genetically Modified Papayas**

(Discussion Paper: GMO/03/2018)

15. The Chairman invited Ms. Michelle LUK to take members through the discussion paper (GMO/03/2018) on the findings of risk assessment of GM papayas and sought members' views and comments on the review of the exemption of GM papayas.

16. In response to a member's enquiry on the awareness of GM crop products in Hong Kong, Dr. Jackie YIP explained that GM crops were not a widely shared concern among the public as farming was not a major industry in Hong Kong. The Government was aware of the concern from green groups in the first meeting of the Expert Group about GM contamination on locally grown papayas. To address the concern, the Government would continue to monitor the latest progress and development of GM crops and keep the public informed. The Chairman believed that the local farmers would only opt for non-GM papayas if the papayas were proven to be naturally anti-virus. Although organic farming is out of the scope of the Ordinance, the Chairman reported that some green groups attempted to promote organic papayas to local farmers by one-to-one exchange scheme which had not yet achieved success. Mr. Simon CHAN added that, following the suggestion of the Expert Group in the first meeting, AFCD had implemented several measures to step up the publicity on organic farming and non-GM papayas in the territory, such as helping local farmers to source virus-resistant organic

papaya seeds. A member and the Chairman appreciated the work of AFCD for promoting organic farming in Hong Kong.

17. As regards a member's concern on how the Government handled new GM inventions in the future, the Chairman suggested that the Government seek advice from the Expert Group when considering any future application for release of GMOs.

18. Upon a member's enquiry on GM prevention policy in the territory, Mr. Simon CHAN stated that AFCD followed the general policy framework of free market and provided basic infrastructure and technical support to farmers. In this connection, the Government did not intervene the farmers' decision on adopting GM-free farming practice. In response to the question of why GM papayas were not commonly found on the islands in the recent survey, Ms. Michelle LUK explained that the survey covered mainly the rural areas in New Territories.

19. A member asked whether organic papayas were found GM contaminated via pollen transmission in previous years. Ms. Michelle LUK replied that the data concerned was not available. She supplemented that a few papaya samples obtained from certified organic farms were found to be GM in the survey. The respective farm owners were informed about the findings.

20. In response to a member's enquiry on the implication of European Union's recent disapproval on certain GM maize production to the Ordinance, Dr. Jackie YIP replied that AFCD was aware of the concerns by other countries on GM crops in the COP-MOP meetings to the Convention on Biological Diversity. She also pointed out that papaya was the only type of GM crops found in previous market surveys in Hong Kong.

21. Another member questioned about the source of statistical data and representativeness of the risk assessment in the discussion papers, Ms. Michelle LUK answered that the risk assessment of GM papayas was based on the requirements under the Cartagena Protocol on Biosafety and applied in the context of Hong Kong. Mr. Simon CHAN added that the requirements of GM crops' risk assessment were laid out in the Ordinance and the recent risk assessment summarised the findings from relevant literature and research results. The Chairman commented that it was not possible for Hong Kong to conduct a comprehensive GM crops risk assessment involving

experiments and field trials due to the geographical and resource constraints.

22. As regards a member's enquiry on the possibility of exempting all GM papaya seeds under section 7 of the Ordinance, Dr. Jackie YIP said that according to previous GMO market surveys, there was only a small amount of GM papaya seeds imported to Hong Kong. It was estimated that the risk to biosafety as compared to other means such as private farming using seeds from consumed papayas would be similar. Mr. Simon CHAN supplemented that the exemption of additional GM papaya varieties would involve amendment of the Ordinance. The Government would keep in view the status of GM papaya in Hong Kong and consider amendment of the Ordinance on appropriate occasions. The Chairman anticipated the exemption of additional GM papaya varieties would benefit only a small group of stakeholders and the extra effort involved could not be justified. He suggested that AFCD review the GM technology development regularly and initiate any revision of the Ordinance if necessary.

23. In conclusion, the Expert Group considered the review of the exemption acceptable. Members did not have adverse comments on the recommendation of the discussion paper (GMO/03/2018) and so the current control and exemption of GM papayas should be maintained, subject to regular reviews.

## **V. Any Other Business**

### **Development of Modern GM Technology**

24. The Chairman suggested including the recent development of GM technology, such as synthetic biology and genome editing, in future meetings. Dr. Jackie YIP agreed the advice from academics and industry practitioners was critical for the implementation of the control of GMO. In this connection, AFCD planned to hold a technical sharing later this year by inviting representatives from relevant sectors to provide advice on GM technology development and its application in the industry.

25. A member commented that it was important to address the purpose of the regulation on environmental release of GMOs having adverse impacts on biodiversity. The Chairman concurred and reckoned that the Government should keep in view of development of GMOs and the related risk assessment criteria for any potential

application for release of GMOs. Another member also suggested preparing a list of potential GMOs as a pre-emptive measure.

26. A member reminded that the Government should consider the possible impacts of GMOs on health. The Chairman commented that the representative from DH should take note of the suggestion.

### **Pre-market Safety Assessment on GM Food**

27. The Chairman invited Dr. Jackie YIP to brief members on Food and Environmental Hygiene Department and Centre for Food Safety (CFS)'s proposal to implement a mandatory pre-market safety assessment scheme (PMSAS) for GM ingredients to assess the risk of GM food. Dr. Jackie YIP advised that, under the proposed PMSAS, GM food developers were required to submit product details, safety assessment and detection methods to CFS for evaluation. Although GM food is out of the scope of the Ordinance, the PMSAS might provide additional information on prescribed documents when importing GM food. AFCD would keep in view the progress of the PMSAS and communicate with CFS for any updates.

28. The Chairman stated that the proposal was an initiative to conform to the global trend of revealing more GM information. He added that the Government should also consider the criteria for future safety assessment of GM food under the new proposal, such as maintaining the existing practice of adopting assessment results from literature on GM technology. It was important to maintain conversation with the Mainland on the standards in controlling the import of GM food.

29. A member pointed out that it would be necessary for GM food traders and manufacturers to declare GM ingredients as appropriate to ensure the public's right to know. Another member proposed involving green groups or other experts in educating the public on GM food safety knowledge. The Chairman noted the comments and recommended that the Government could review additional resources required related to GM food labelling and consider cross-disciplinary discussion on GM food safety and risk assessment of environmental release in the future. Dr. Jackie YIP clarified that the PMSAS covered GM food only and is not within the scope of the Ordinance.



30. There was no other issue to discuss.

#### **VI. Date of Next Meeting**

31. The Chairman said that members would be informed of the meeting date in due course.

32. The meeting adjourned at 4:55 p.m.

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