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**Report Highlights:**

In 2023, Hong Kong did not have any policy changes to regulations pertaining to genetically engineered (GE) products. GE products are subject to the same food regulations of conventional foods. Hong Kong does not impose barriers on microbial biotech ingredients/foods; however, it does maintain production and import controls on living modified organisms. The Hong Kong government (HKG) continues to be supportive of agricultural biotechnology research and has facilitated several development projects.

## **Executive Summary:**

Hong Kong's rank as a top market for U.S. agricultural and related products climbed from 21<sup>st</sup> to 17<sup>th</sup> in 2023, with sales totaling \$1.7 billion. During the first seven months of 2024, U.S. exports of agricultural and related products increased 1 percent. During this period, the United States exported \$200,000 worth of soybeans, \$2.7 million of corn and \$58 million of cotton to Hong Kong, though most of the cotton was transshipped to other destinations.

The HKG does not impose any trade barriers to GE products. It also has not imposed any regulatory barriers on microbial biotechnology and derived products used as food or food ingredients. The HKG previously indicated an intention to launch a public consultation on a mandatory pre-market safety assessment scheme (PMSAS) for biotech events, but no action has emerged recently. In September 2021, the HKG submitted a paper to the Legislative Council concluding that Hong Kong does not need to launch a PMSAS because GE products commercially produced and sold internationally have generally passed safety assessments in other countries and regions.

Occasional calls by consumer groups and certain Legislative Council members for mandatory labeling of GE foods have not moved the government to further action. Instead, importers are encouraged to comply with voluntary [guidelines](#) introduced in 2006. The HKG has not announced plans for new developments for labeling requirements with respect to GE food products, though officials do closely monitor the international development and regulation of GE food products.

Hong Kong has implemented a Genetically Modified Organisms (Control of Release) Ordinance and a Genetically Modified Organisms (Documentation for Import and Export) Regulation in compliance with the Cartagena Protocol on Biosafety. Any product containing "Genetically Modified Organisms" (GMOs) intended for release into the environment must obtain approval prior to import into Hong Kong. Since the implementation of this regulation, there have not been any applications for release of "GMO" into the environment. The United States does not export living modified organisms to Hong Kong.

Regarding domestic production, Hong Kong has minimal GE crop production, which consists primarily of GE papayas grown for domestic consumption. The use of agricultural biotechnology in Hong Kong is otherwise limited to research carried out by academic institutions. Nevertheless, the HKG has been very supportive of re-industrialization and biotechnology research and development.

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## CHAPTER 1: PLANT BIOTECHNOLOGY

### Part A: Production and Trade

#### A) RESEARCH AND PRODUCT DEVELOPMENT

For all GE product development projects, work in Hong Kong is limited to laboratory research with field trials conducted in China. There is only one university in Hong Kong that has successfully partnered with Chinese academic institutions to conduct field trials in China. Hong Kong does not maintain any regulatory barriers discouraging development of GE products.

The Chinese University of Hong Kong houses a Partner State Key Laboratory of Agrobiotechnology research center approved by the Chinese government, that partners with research institutions in China for the development of plant biotechnology. In 2018, the Ministry of Science and Technology (MOST) of China approved renaming it as the [State Key Laboratory of Agrobiotechnology \(SKL\)](#). The [Centre for Soybean Research](#) is established under the Chinese University of Hong Kong. It partners with soybean breeders and researchers in China to develop stress-tolerant soybeans. The Centre successfully identified a novel salt tolerance gene in wild soybeans through whole-genome sequencing (see [Nature Communications 5:4340](#).) A few soybean cultivars have been field tested with satisfactory results.

The [Gansu Academy of Agricultural Sciences](#) (link in Chinese) is the key partner with the Centre for this soybean project. It is understood that the Centre for Soybean Research has not applied for patents and has allowed Gansu Academy to have free use of the research results. According to the center, the soybean seeds in question are not GE. Instead, these are the end products which have been subjected to a marker-assisted selection process.

The Centre has continued its research on soybeans development and in 2023, researchers have sent specimens of a soil bacteria to space on mainland China's Tianzhou 6 cargo craft, aiming to develop new strains through gene mutation that can improve the cultivation of soybeans. In 2024, Ming Pao Daily reported that Prof. Lam Hon-Ming, Director of the State Key Laboratory of Agrobiotechnology, is researching heat-resistant soybeans suitable for local cultivation in Pakistan.

## B) COMMERCIAL PRODUCTION

Aside from GE papaya, Hong Kong has no commercial production of GE crops and does not conduct field trials. Although Hong Kong does not ban the production of GE crops, prior approval from the Agriculture, Fisheries, and Conservation Department (AFCD) is required before any GE crops may be planted. The AFCD has not received any applications for the planting of GE crops. Therefore, the AFCD's online public register for the production of GE crops reflects no production of GE crops in Hong Kong. (Note: the planting of GE papayas is exempted from obtaining prior approval from the AFCD. For details, please refer to Part B: Policy –Exemptions to Genetically Modified Ordinance.)

## C) EXPORTS

As Hong Kong has very limited production of GE crops (GE papayas are not commercially grown), Hong Kong does not have any domestic GE crop exports. For processed products, Hong Kong's food import and export regulations do not distinguish between conventional and GE food products. Therefore, it is possible that Hong Kong may export some food products that contain imported GE ingredients, such as soy sauce and soymilk beverages.

## D) IMPORTS

The few major soybean users in Hong Kong generally require non-GE soybeans due to market-driven factors. For example, their processed products are exported to overseas markets demanding GE-free ingredients. Canadian Special Quality White Hilum (SQWH) grade soybeans are reportedly popular among Hong Kong buyers. In 2023, Canada held 83 percent (\$16 million) of the Hong Kong's soybean market. China held 13 percent of the market (\$3 million). The United States held 2 percent (\$407, 000) of the soybean market of Hong Kong.

Hong Kong's food import regulation does not differentiate GE products from conventional ones (except for living modified organisms, as discussed in Part B Policy). In addition, there is no mandatory labeling for GE food products. Therefore, there is no official record or data for food imports containing GE ingredients.

### *Survey Reflecting Importation and Production of GE Crops*

AFCD conducts annual surveys for the presence of GE products by drawing samples from various imported and locally-grown crops from local markets and farms in Hong Kong. However, the survey only includes foods that are under AFCD's regulatory portfolio. Processed products are not covered by the survey as they are not under the oversight of AFCD.

Since 2023, AFCD tested 404 samples from a variety of imported and local produce, animal feed, soybean, seeds, flowers, and fish for the presence of GE ingredients. Of all the samples tested, 109 samples (30 percent) reflected GE ingredients, with papayas (including imported and locally grown papayas and seeds) accounting for 96 percent of all GE detected samples. The result was similar to the prior year’s survey. The GE papayas sampled this year were reportedly sourced from China and the United States (Hawaii) as well as locally in Hong Kong. Of all local produce, papaya is the only category that tested positive for GE material.

**Table 1: Hong Kong - Survey for GE Products (2023-2024)**

	No. of Tested Samples	No. of GE Positive Samples	Species of Samples with Positive Result
<b>Animal Feed</b>	7	0	
<b>Flower and Fish</b>	21	4	Tetra Fish, Zebra Fish
<b>Imported Fruit</b>	51	14	Papaya
<b>Imported Vegetable</b>	41	0	
<b>Local Produce</b>	209	91	Papaya
<b>Other Imported Food and Feed</b>	15	0	
<b>Seeds</b>	54	0	
<b>Total</b>	404	109	Papaya, Tetra Fish, Zebra Fish

Source: Hong Kong Agriculture, Fisheries and Conservation Department -GMO Survey Result 2023-2024

As Hong Kong food laws do not distinguish between conventional and GE food products, no action was taken by AFCD relative to sampled products identified as containing GE ingredients.

**E) FOOD AID**

Hong Kong does not provide nor receive food aid.

**F) TRADE BARRIERS**

Presently, Hong Kong does not have any biotechnology-related trade barriers adversely affecting U.S. exports.

**Part B: Policy**

**A) REGULATORY FRAMEWORK**

The Environment and Ecology Bureau (EEB) determines policy and regulation for GE foods. The Food and Environmental Hygiene Department (FEHD) is the Bureau’s department for food safety, which administers programs through its Center for Food Safety (CFS). The administration of policies relating to agricultural production and import and export of animals and plants falls under the portfolio of AFCD within the Bureau.

### *Pre-Market Safety Assessment Scheme*

The HKG first indicated in 2013 that it would launch a public consultation on a mandatory pre-market safety assessment scheme (PMSAS) for GE events. According to the proposed regulatory framework, a GE developer would be required to register a GE event prior to the importation of a food product containing that GE event. Food manufacturers and importers would be responsible for ensuring that imported products contain only approved GE ingredients. If a GE event has previously been evaluated under a foreign regulatory scheme, then the applicant could provide approval certificates and safety evaluations for review by the CFS. A suitable transitional arrangement for GE food that is already on the market would be established should the pre-market safety assessment scheme become effective. However, this project had not been a priority for the government, and no further activity had taken place until recently. In September 2021, the HKG notified its latest position on PMSAS to the Legislative Council stating that Hong Kong does not need to launch the PMSAS because biotech events of GE products available in international trade have been approved by countries and regions with PMSAS. Thus, Hong Kong determined it does not need to duplicate efforts in evaluating such GE events.

### *Ordinance and Regulation Implementing the Cartagena Protocol on Biosafety*

<b>Legal Term</b>	<b>Laws and Regulations where term is used</b>	<b>Legal Definition</b>
genetically modified organism and GMO	Genetically Modified Organisms (Control of Release) Ordinance	means a living organism that possesses a novel combination of genetic materials obtained through the use of modern biotechnology
living organism	Genetically Modified Organisms (Control of Release) Ordinance	means a biological entity capable of transferring or replicating genetic materials, including sterile organisms, viruses and viroids, but does not include a human being
modern biotechnology	Genetically Modified Organisms (Control of Release) Ordinance	means the application of in vitro nucleic acid techniques (including recombinant deoxyribonucleic acid (DNA) and direct injection of nucleic acid into cells or organelles), or techniques involving the fusion of cells beyond the taxonomic family, that— (a) overcome natural physiological reproductive or recombination barriers; and

		(b) are not techniques used in traditional breeding and selection;
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Hong Kong implemented a Genetically Modified Organisms (Control of Release) Ordinance and the Genetically Modified Organisms (Documentation for Import and Export) Regulation in March 2011 to implement measures pursuant to China’s membership to the Cartagena Protocol on Biosafety. The Ordinance stipulates that the production and importation of “GMOs” to Hong Kong (except for exemptions provided by the Exemption Notice, discussed further below) that are intended to be released into the environment requires prior approval from AFCD. AFCD maintains a “GMO” online register which keeps non-confidential information received pertaining to the “GMO” approval applications. As of October 2024, the [AFCD online register webpage](#) does not show any application entries.

Under the law, documentation requirements are prescribed for all shipments containing “GMOs,” however, according to the law “specified forms for prescribed documents are not mandatory.” Thus, the law advised that “any documents, such as commercial invoices or import/export manifests, which contain the required information, could satisfy the documentation requirements under the Regulation. According to the subsidiary regulation, documentation is required for the following categories of “GMOs:”

- a) “GMOs” intended for direct consumption as food, feed, or for processing; (FFP)
- b) “GMOs” intended for contained use; and
- c) “GMOs” intended for release into the environment.

AFCD provides [guidelines on documentation requirements and documentation samples](#).

No adverse impact from these regulations has been reported by U.S. food and agricultural exporters to Hong Kong.

*Exemptions to GM Ordinance*

The Genetically Modified Organisms (Control of Release) (Exemption) Notice made under the Genetically Modified Organisms (Control of Release) Ordinance took effect June 23, 2012. The Notice exempts all varieties of GE papaya and any “GMO” that is contained in a veterinary vaccine (live recombinant veterinary vaccines) from the application of the Ordinance’s provision that a person must not knowingly cause a “GMO” to be released or maintain the life of a “GMO” in the environment.

The Notice also exempts two commercialized varieties of GE papaya (GE papaya with the unique identifier code of CUH-CP551-8 and GE papaya with the transformation event code of Huanong 1) and live recombinant veterinary vaccines from the application of the Ordinance’s provision that a person must not knowingly import a “GMO” that is intended for release into the environment.

There are reports that the market has available unexempted GM papaya seeds, the unapproved Taiwan strains (i.e. the TW-lines), which are widely used in China because they are more disease-tolerant than the approved strains. Given that legal actions against seed vendors can be initiated only when there is

proof suggesting that they have knowingly imported the unexempted GM papaya seeds, the Hong Kong government primarily takes educational rather than litigation measures to tackle the situation. Seed traders are reminded not to import seeds from unknown sources.

With the Exemption Notice, the HKG exempted local papaya growers from applying for approval to release GE crops into the environment. Most locally produced papayas are backyard crops for personal consumption with little commercial value. The HKG position is that the exempted “GMO” poses a low risk to the local biodiversity. According to a risk assessment conducted by the HKG, papaya is an exotic species with no close relatives in Hong Kong and is unlikely to pose a risk to local biodiversity. The inserted genes of GE papaya cannot pass on to local wild plants. The HKG conducted a second risk assessment in 2015 and the study yielded a similar result.

The exemption also caters to the need of the application of live recombinant veterinary vaccines in emergency situations such as an outbreak of a pandemic disease.

## B) APPROVALS/AUTHORIZATIONS

Prior approval is required for the production and importation of “GMOs” that are intended to be released into the environment (except for the exemptions mentioned above.)

## C) STACKED OR PYRAMIDED EVENT APPROVALS/AUTHORIZATIONS

No regulations pertain to stacked or pyramided event approvals.

## D) FIELD TESTING

No field tests are currently conducted in Hong Kong.

## E) INNOVATIVE BIOTECHNOLOGIES

No related regulations on regulating innovative biotechnologies exist. However, the HKG is monitoring the development for the definition and regulation of synthetic biology under the Conference of the Parties serving as the Meeting of the Parties (COP-MOP) to the Cartagena Protocol on Biosafety. The government’s position is that they will keep in view of decisions reached by COP-MOP on synthetic biology which might have an implication on Hong Kong’s implementation of the Genetically Modified Organisms (Control of Release) Ordinance (the Ordinance). In the meantime, Hong Kong follows the existing definition of “GMOs” in the Ordinance and will enforce the Ordinance if modified organisms of synthetic biology fall within the existing “GMO” definition in the Ordinance.

## F) COEXISTENCE

No rules in place or proposed on coexistence.

## G) LABELING AND TRACABILITY

*Labeling of GE Food Products - Voluntary Labeling Approach*



Mandatory labeling for GE foods or feeds is not required. In 2006, the CFS released guidelines for voluntary labeling of GE foods in response to public calls for consumer information. In 2008, the HKG announced there was no need for a mandatory labeling law in Hong Kong based on an evaluation of the voluntary labeling scheme and that there currently is no international consensus on mandatory labeling. The HKG reiterated its position not to adopt mandatory labeling in a paper submitted to the Legislative Council in 2021. The HKG chose to closely monitor international developments on this issue and promote the voluntary guidelines to the trade for more widespread adoption.

The guidelines were formulated by a working group established under CFS, with membership from various sectors including manufacturing, wholesale, retail, consumer groups, and government departments. The guidelines are only applied to prepackaged foods and are advisory in nature; they do not have legal effect. Adoption is voluntary and not binding. The guidelines are based on the following four principles:

- The labeling of GE food will comply with existing food legislation.
- The threshold level applied in the guidelines for labeling purposes is five percent, in respect to individual food ingredients.
- Additional declaration on the food label is recommended when significant modifications of the food, e.g. composition, nutrition value, level of anti-nutritional factors, natural toxicant, presence of allergen, intended use, introduction of an animal gene, etc., have taken place.
- Negative labeling, e.g. “GMO-free,” is not recommended and not encouraged where no GE counterpart of the respective product exists.

For products with negative labeling, the HKG may take the initiative to test the products for GE ingredients, and a zero tolerance will be adopted for testing purposes. If products are found to have misleading labeling, a retailer may be subject to prosecution under [Section 61 – False Labeling and Advertisement of Food or Drugs](#) of Chapter 132 Public Health and Municipal Services Ordinance.

If the trade chooses to apply negative labeling, the government advises to use less definite terms such as “sourced from non-GM sources” (which contains less than five percent of GM content) and to have documentation to substantiate such declaration. For more details, please refer to [GAIN Report HK#6026](#).

## H) MONITORING AND TESTING

AFCD conducts an annual survey for the presence of GE ingredients in various imported and locally-grown crops available in local markets and farms in Hong Kong. The randomly collected samples, which totaled around 400, do not include any processed food products outside the regulatory scope of AFCD. The results of the 2023-2024 survey are provided in Table 1 above. As Hong Kong food laws do not distinguish between conventional and GE food products, no action was taken by AFCD relative to sampled products identified as containing GE ingredients.

While the AFCD has oversight on agricultural production and the import and export of animals and plants, the Hong Kong Center for Food Safety (CSF) is the food safety regulatory authority. The CFS has in place a regular food surveillance program taking about 65,000 food samples annually for microbiological, chemical, and radiation level testing. This surveillance program does not cover the identification of GE ingredients in foods.

#### I) LOW LEVEL PRESENCE (LLP) POLICY

According to the voluntary labeling guidelines of GE food products, the threshold level applied for labeling purposes is five percent with respect to individual food ingredients. Details of the labeling guidelines may be found under Chapter 1, Part B, (G) Labeling.

In relation to the Genetically Modified Organisms (Control of Release) Ordinance and the Genetically Modified Organisms (Documentation for Import and Export) Regulation, the documentation requirements do not apply if:

- a) The “GMOs” are imported or exported in a lot together with other living organisms;
- b) The “GMOs” are unintentionally mixed with those other living organisms; and
- c) The percentage of the amount of the “GMOs” to the total amount of living organisms in the lot does not exceed the prescribed percentage.

The prescribed percentages are set as follows

1. 5 percent for “GMOs”-FFP;
2. 0 percent for “GMOs” intended for contained use; and
3. 0 percent for “GMOs” intended for release into the environment.

#### J) ADDITIONAL REGULATORY REQUIREMENTS

None

#### K) INTELLECTUAL PROPERTY RIGHTS (IPR)

While Hong Kong currently has no commercial plantings of GE crops, Hong Kong has intellectual property legislation covering patents, designs, copyright, trade descriptions; layout-design (topography) of integrated circuits and plant varieties protection.

#### L) CARTAGENA PROTOCOL RATIFICATION

China ratified the Cartagena Protocol on Biosafety in 2005, and its provisions were extended to Hong Kong on May 9, 2011, upon the implementation of the Genetically Modified Organisms (Control of Release) Ordinance and the Genetically Modified Organisms (Documentation for Import and Export) Regulation. Details of the Ordinance and Regulation may be found under Chapter 1, Part B, A) Regulatory Framework. This development has not impacted trade.

Hong Kong does not send any delegates to the CPB bi-annual Conference of the Parties serving as the Meeting of the Parties (COP-MOP). Representatives from AFCD have attended previous COP-MOPs as members of the Chinese delegation.

#### M) INTERNATIONAL TREATIES AND FORUMS

Hong Kong does not actively participate in discussions related to GE plants within international organizations. Hong Kong is a member of the World Trade Organization (WTO), Asia-Pacific Economic Cooperation (APEC) and the Pacific Economic Cooperation Council (PECC). In addition, Hong Kong has observer status on the Trade Committee of the Organization for Economic Cooperation and Development (OECD). Hong Kong's participation in CODEX Alimentarius, the World Health Organization (WHO), the World Organization for Animal Health (WOAH), and the Asia Pacific Plant Protection Commission is not as an individual member, but as part of the Chinese delegation.

Hong Kong, as a Special Administrative Region of China, is not necessarily subject to all international agreements under China's membership. Under Article 153 of the Basic Law, Hong Kong will be consulted prior to international agreements being extended to Hong Kong.

#### N) RELATED ISSUES

None

### **Part C: Marketing**

#### A) PUBLIC/PRIVATE OPINIONS

In recent years, public calls for mandatory labeling of GE products have diminished. The food industry generally opposes mandatory labeling of GE foods on the grounds that it would limit consumer choice, reduce the variety of food supplies to Hong Kong, and add a burden to both consumers and the industry. Additionally, multiple Hong Kong retailers have indicated they would not import any products that carry a GE label.

The HKG's response to the call for mandatory labeling has been to stress that there has been no international consensus on labeling of GE food products. Government officials have indicated that the safety of foods including GE foods is monitored by the prevailing food surveillance program. In short, in recent years, there have been relatively few voices asking for mandatory labeling of GE food products in Hong Kong.

#### B) MARKET ACCEPTANCE/STUDIES

Market analysts report that many Hong Kong consumers are generally not concerned about the existence of GE ingredients in local foods and are more focused on prices, food safety, and nutritional values. Organic food products are growing in popularity, but consumers do not necessarily understand that organic products may not contain GE ingredients.

## CHAPTER 2: ANIMAL BIOTECHNOLOGY

### Part D: Production and Trade

#### A) RESEARCH AND PRODUCT DEVELOPMENT

There is no genetic engineering or cloning in Hong Kong's limited livestock production.

#### B) COMMERCIAL PRODUCTION

None

#### C) EXPORTS

None

#### D) IMPORTS

Importation of transgenic animals is limited to insignificant levels of three types of aquarium fish: rice fish, zebra fish and tetra fish. The rice fish samples taken in AFCD's recent survey did not show any GE variety.

#### E) TRADE BARRIERS

None

### Part E: Policy

#### A) REGULATORY FRAMEWORK

The Environment and Ecology Bureau determines the policy direction of GE animals and products derived from these animals or their offspring. The Food and Environmental Hygiene Department (FEHD) is the Bureau's department for food safety that administers its programs through its Center for Food Safety (CFS). Administration of policies relating to GE animals and/or livestock clones falls under the portfolio of the AFCD within the Bureau.

#### Genetically Modified Organisms (Control of Release) Ordinance

<b>Legal Term</b>	<b>Laws and Regulations where term is used</b>	<b>Legal Definition</b>
Genetically modified organism and GMO	Genetically Modified Organisms (Control of Release) Ordinance	means a living organism that possesses a novel combination of genetic materials obtained through the use of modern biotechnology

Living organism	Genetically Modified Organisms (Control of Release) Ordinance	means a biological entity capable of transferring or replicating genetic materials, including sterile organisms, viruses and viroids, but does not include a human being
Modern biotechnology	Genetically Modified Organisms (Control of Release) Ordinance	means the application of in vitro nucleic acid techniques (including recombinant deoxyribonucleic acid (DNA) and direct injection of nucleic acid into cells or organelles), or techniques involving the fusion of cells beyond the taxonomic family, that— (a) overcome natural physiological reproductive or recombination barriers; and (b) are not techniques used in traditional breeding and selection;

With the implementation of Genetically Modified Organisms (Control of Release) Ordinance, the importation of live transgenic animals that are to be released into the environment, must obtain prior approval from the AFCD. If imported for contained use, prior approval is not required, though a declaration must be made on import documents.

The HKG maintains a Genetically Modified Organisms Registry which lists all imports of “GMOs” that are to be released into the environment. As of October 2024, the Registry remained empty.

The HKG does not have any specific regulation on food products derived from cloned animals. Regarding cloning animal technology, the HKG has no current plans to conduct a risk assessment.

## B) APPROVALS/AUTHORIZATIONS

Prior approval is required for the production and importation of “GMOs” that are intended to be released into the environment (except for the exemption mentioned above.)

## C) INNOVATIVE BIOTECHNOLOGIES

The Hong Kong government is monitoring the development of synthetic biology under COP-MOP and probably will adhere to its rulings relating to the definition and regulation, if any, in the context of the enforcement of the Genetically Modified Organisms (Control of Release) Ordinance.

#### D) LABELLING AND TRACEABILITY

None

#### E) ADDITIONAL REGULATORY REQUIREMENTS

None

#### F) INTELLECTUAL PROPERTY RIGHTS (IPR)

The HKG has not shown any signs that it is considering legislation to address intellectual property rights for animal biotechnologies.

#### G) INTERNATIONAL TREATIES AND FORUMS

Hong Kong participates in the World Organization for Animal Health (WOAH) as part of the Chinese delegation. Hong Kong does not actively participate in discussions related to animal biotechnology within international organizations.

Hong Kong was chosen to be the venue for the Second International Summit on Human Genome Editing which was held in November 2018. The three-day summit was co-hosted by the Academy of Sciences Hong Kong, the Royal Society of London, the U.S. National Academy of Sciences, and the U.S. National Academy of Medicine. The Summit aimed to continue the global dialogue on human genome editing in relation to questions and concerns pertaining to science, application, ethics, and governance of human genome editing.

#### H) RELATED ISSUES

None

### **Part F: Marketing**

#### A) PUBLIC/PRIVATE OPINIONS

Few discussions of GE animals and cloned animals or products from cloned animals take place in Hong Kong.

#### B) MARKET ACCEPTANCE/STUDIES

There is no urgency or calls to develop policy/legislation on the importation of cloned animals.

## **CHAPTER 3: MICROBIAL BIOTECHNOLOGY**

### **Part G: Production and Trade**

#### A) COMMERCIAL PRODCUTION

None

## B) EXPORTS

None

## IMPORTS

Impossible Burgers with leghemoglobin as an ingredient are allowed in Hong Kong.

In January 2021, a local company successfully partnered with Perfect Day and launched a range of ice creams that uses Perfect Day's whey protein. According to Perfect Day, the non-animal protein is developed by fermentation from the gene sequence of bovine whey protein and is identical to cow's milk on a molecular level.

More information can be found on ATO's [report](#): Microbial Food Ingredients Encounter No Regulatory Barriers in Hong Kong.

## C) TRADE BARRIERS

None

## Part H: Policy

### A) REGULATORY FRAMEWORK

Currently, Hong Kong does not have specific food regulations for microbial food ingredients. Microbial food ingredients that are not "GMOs" are subject to the same food regulations as conventional food. "GMOs" are subject to the regulatory framework as described in Part B above. Post is not aware of any HKG plans to stipulate new regulations targeting microbial food ingredients.

### B) APPROVALS/AUTHORIZATIONS:

Not applicable, as long as the product in question is not a "GMO".

### C) LABELING AND TRACEABILITY

There are no signs that the HKG is mapping out policies to regulate the traceability and labeling of microbial biotech-derived food ingredients. If food ingredients are not "GMOs" as defined in Hong Kong's Genetically Modified Organisms (Control of Release) Ordinance, they are subject to the same regulations as conventional food items.

The ice cream products in Hong Kong using Perfect Day's whey protein are marketed as dairy-free products and Impossible Foods highlights the plant-based nature of its products. There is no mentioning of any food ingredients being biotech driven in their promotional publications/labels.

### D) MONITORING AND TESTING

In connection with plant and animals, the Agriculture, Fisheries and Conservation Department conducts an annual survey for the presence of GE produce in the market (please refer above to Part B, Section H). The Food and Environmental Hygiene Department, which is the food safety regulatory agency, releases any food-related monitoring results. Post is not aware of any monitoring or testing of microbial-derived foods by the Hong Kong government.

#### E) ADDITIONAL REGULATORY REQUIREMENTS

None

#### F) INTELLECTUAL PROPERTY RIGHTS

Please refer above to Part B, Section K.

#### G) RELATED ISSUES

None

### **Part I: Marketing**

#### A) PUBLIC/PRIVATE OPINIONS

Post has not seen widespread discussion of microbial biotechnology in the media, though plant-based foods are slowly gaining popularity in the market. There is not much association of plant-based protein with biotechnology.

#### B) MARKET ACCEPTANCE/STUDIES

While the public may not be familiar with the concept of microbial biotechnology, Hong Kong is picking up the trend of healthy lifestyle with the growing popularity of organic, vegetarian, and vegan foods. In recent years, Hong Kong has witnessed the emergence of meatless meats. Hong Kong was the first overseas market that Impossible Foods launched its plant-based beef alternative in April 2018. In general, the public does not associate such products with biotechnology. Beyond Meat was introduced to Hong Kong in 2015 by an entrepreneur keen to promote plant-based products. The same entrepreneur has also introduced a plant-based pork alternative called Omnipork in the Hong Kong market.

In April 2018, *HKEX* launched a new listing regime (Chapter 18A) to allow pre-revenue biotech companies and new economy companies with non-standard share structures to raise capital in Hong Kong. This policy facilitates financing for biotech companies and strengthens Hong Kong's position as a leading funding hub for biotechnology.

#### **Attachments:**

No Attachments