

# Regulatory Framework for Pesticide Residues in Food – An Overview

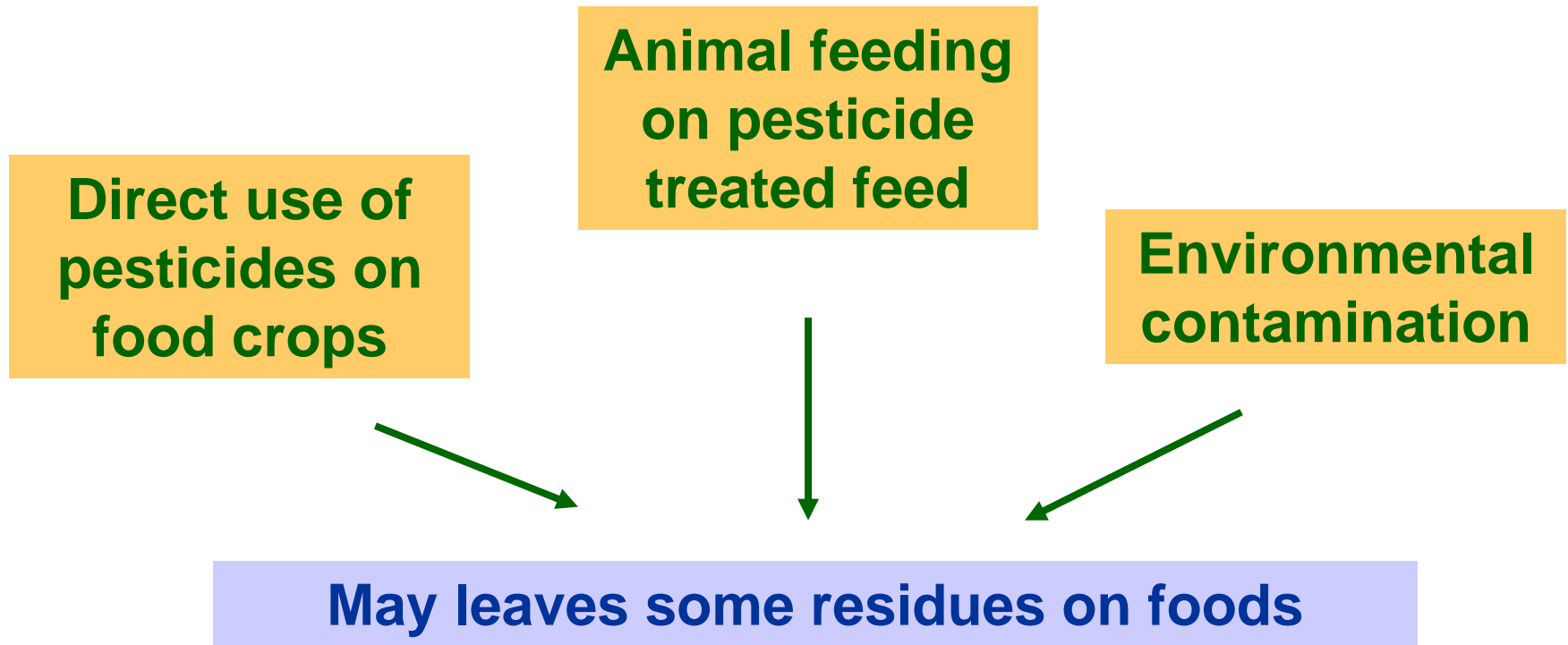
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# Background

# Why would pesticide residues appear in food?



# Effects of pesticide residues on health

- ✿ Depend on the nature of the pesticide, as well as the amount and duration of exposure
- ✿ Possible adverse effects due to excessive intake of pesticide residues :
  - ✿ Acute effects : Methamidophos may affect nervous system
  - ✿ Chronic effects : Lindane may affect the kidney and liver of animals, dicofol may affect foetal development

# Food supply in Hong Kong

- ✿ Mainly imported from different countries
- ✿ Locally produced fresh vegetables (2009)
  - ✦ accounted for ~2% of fresh vegetables consumed in Hong Kong
- ✿ Percentage of fresh and semi-processed fruits, vegetables and cereals imported from different countries (2009)

✦ Mainland China	– 34%
✦ Thailand	– 34%
✦ USA	– 10%
✦ Other countries	– < 5%



# Current regulation of pesticides in Hong Kong (1)

- ✿ The Pesticides Ordinance (Cap. 133) –  
The Agriculture, Fisheries and Conservation Department
  - ✦ regulate the import, manufacture, formulation, distribution, sale and supply of all pesticides in Hong Kong
- ✿ The Public Health and Municipal Services Ordinance (Cap. 132) –  
Food and Environmental Hygiene Department
  - ✦ all food on sale must be wholesome, unadulterated and fit for human consumption
  - ✦ there is no specification on the levels of pesticide residues allowed in food

# Current regulation of pesticides in Hong Kong (2)

- ✿ Regulatory and Enforcement Problems
  - ✿ Require case by case consideration and risk assessment



# The Proposed Regulatory Framework for Pesticide Residues in Food in Hong Kong

# Objectives

- ✿ better protect public health;
- ✿ facilitate effective regulatory control; and
- ✿ promote harmonisation between local and international standards.

- ✿ The maximum residue limits for pesticides in food in the new legislation are established based on the application of Good Agriculture Practice (GAP) to reduce the use of pesticides
- ✿ When it comes to the application of pesticides approved by the relevant government authorities for effective and reliable pest control at any stage in the production, storage, transportation, distribution and processing of food and animal feed, effort should be made to ensure pesticide residues are limited to the lowest possible level
- ✿ If the proposed new legislation is passed and comes into effect, all food produced locally and imported are required to comply with the prescribed standards of pesticide residues

# Time table for key future works

- ✿ First half of 2011: Technical meetings with stakeholders
- ✿ Mid 2011: Public consultation
- ✿ End 2011: Submit the legislation to LegCo

# Salient Features of a Regulatory Framework

# Salient features of a regulatory framework

1. Definitions of “pesticides” and related terms
2. Classification of foods
3. A specific list of residue limits
4. A list of “exempted substances”

# 1. Definitions of “pesticides” and related terms

- ✿ Definitions for terms such as pesticide, pesticide residue, maximum residue limit (MRL), extraneous maximum residue limit (EMRL)
- ✿ Facilitate trade partners to have a better understanding of the scope of regulation
- ✿ Facilitate the selection of appropriate MRLs and EMRLs for relevant pesticides in the new legislation

## 2. Classification of foods

- ✿ For uniform nomenclature among international trade
- ✿ Facilitate the selection of appropriate MRLs and EMRLs for relevant pesticides in the new legislation



# 3. A specific list of residue limits (1)

- ✿ MRLs/EMRLs for specified “pesticide-food” pairs
  - ✿ in terms of mg/kg (ppm)
- ✿ Pesticide residue definition (i.e. pesticide and its related substances)

# 3. A specific list of residue limits (2)

- ✿ The list of residue limits will adopt the MRLs and EMRLs of individual pesticides recommended by Codex as the backbone. In the absence of relevant standard from Codex, it will be supplemented by related standards of the Mainland and other major exporting countries to Hong Kong (the USA and Thailand).
- ✿ Risk assessment studies will be conducted using internationally accepted methods to assess whether the proposed MRLs and EMRLs are adequate to protect public health in the local setting

# 3. A specific list of residue limits (3)

- ✿ Hong Kong depends heavily on imported food. Besides Mainland China, the USA and Thailand are major exporting countries of fresh and semi-processed fruits, vegetables and cereals to Hong Kong. The proposed principle to determine MRLs and EMRLs is reasonable
- ✿ Other than the exempted substances, food should not contain pesticide without specified MRLs, unless risk assessment indicates that the detected level is not dangerous or prejudicial to human health, otherwise it will contravene the law
- ✿ As new pesticides and new applications on crops keep emerging, the specific residue limits will be updated regularly

## 4. A list of “exempted substances”

- ✿ The concerned substance must fall within the definition of pesticide
- ✿ Other exemption criteria :
  - ✦ the use of the pesticides do not result in residues occurring in food,
  - ✦ the residues are identical to or indistinguishable from natural food components,
  - ✦ the residues are of no toxicological significance or public health concern

# Thank you