

# Issues and Solutions of Fresh Fruit Export in Thailand

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## Major fresh fruit for export

Durians  
Longans  
Mangosteens  
Mangoes  
Bananas  
Rambutans and  
Pineapples



## Importing countries

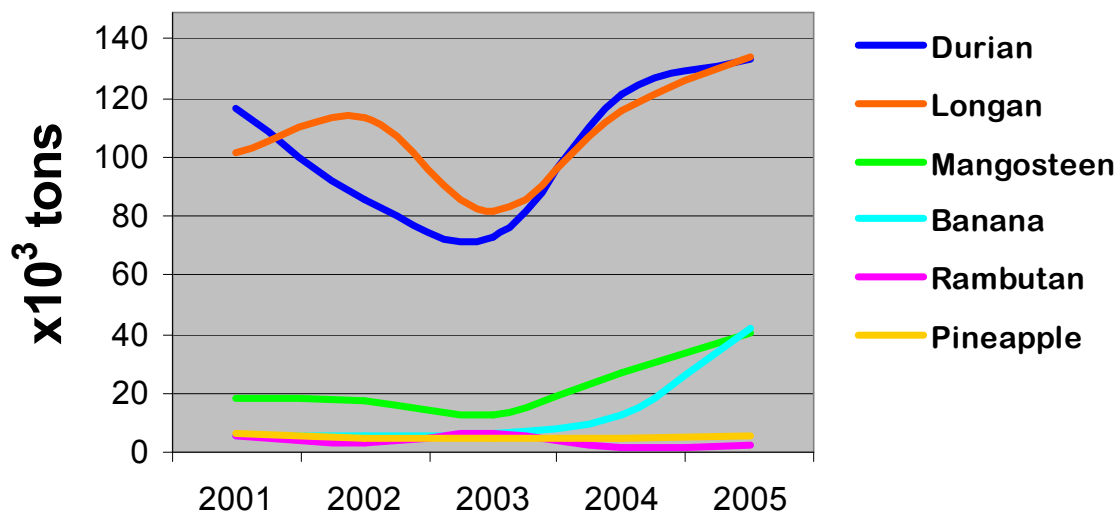
China  
Hong Kong  
Taiwan  
Japan  
Malaysia  
Singapore



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# Export volume



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## Quality and Chemical residue problem

**Quality:** harvest immature fruit for durian

**Chemical residue:**  $\text{SO}_2$  and pesticide residue



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# Food Safety Program

- Food safety project from 2003
- Framework guidelines for inspection and certification
- Food Safety Year 2004
- Public Relation Campaigns



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## MOAC's Food Safety Strategies

1. Inputs Quality Control
2. Improvement and Certification of Standardized Farms
3. Improvement and Certification of Standardized Manufacturers
4. Outputs Quality Control



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# ROAD MAP OF FOOD SAFETY

Import

Farm Level

Facilities/Entrepreneur

1. Inspect imported inputs

2. Inspect raw materials and imported processed foods

1. Register and certify standardized farms

2. Inspect and follow up on the use of input in standardized farms

1. Inspect/certify manufacturing facilities for processed foods for export

2. Inspect raw materials

3. Inspect/certify the facilities

4. Inspect/certify slaughter

5. Inspect port/fish

landing facilities

6. Inspect/certify the processing

7. Advisor for food

8. Entrepreneurs improve the quality of manufactory /port/fish



Implement the traceability procedures

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# ROAD MAP OF FOOD SAFETY

Outputs

Outcomes

1. Inspect /certify export commodities

2. Inspect commodities in domestic market which are produced for export

3. Inspect/certify commodities for domestic markets

Market

Foreign Market

1. Negotiations on technical problem solving

Domestic Market

1. Caution for fresh food/processed food/made to order food

2. Sanitary caution at distributing points

1. Maintain the level of agricultural commodities and food for export at 15,000 million USD/year

2. Reduce quarantine problem destroy agricultural commodities valued at 730 million USD/ year

3. Improve the quality of life for Thai people by decreasing the number of consumers falling ill from consuming contaminated food



Implement the traceability procedures

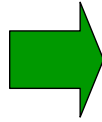
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# Food safety project

Plants and  
plant  
products



Department of  
Agriculture  
(DOA)



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## Mandates

- **Research and development**
- **Services on  
analysis,  
inspection,  
quality certification and  
advices**
- **Transfer technologies**
- **Implementation of programs**



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# Organization (DOA)

**Cluster 1: Administration**

**Cluster 2: Basic and applied R&D**

**Cluster 3: Production R&D**

**Cluster 4: Regional R&D**



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# Organization Chart

## Department of Agriculture

### Cluster 1

- Office of the Secretary
- Personnel Division
- Finance Division
- Planning and Technical Division
- Office of Agricultural Regulation
- Technical One Stop Service Center

### Cluster 2

- Plant Protection R&D Office
- Agricultural Production Sciences R&D Office
- Post-harvest and Processing R&D Office
- Biotechnology R&D Office
- Plant Varieties Protection Division

### Cluster 3

- Field Crops Research Institute
- Horticulture Research Institute
- Rubber Research Institute
- Agricultural Engineering Research Institute

### Cluster 4

- Office of Agricultural R&D (Regions 1-8)



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# Food Safety on Crops Strategies

## 1. Strategy on inputs and raw materials (control of input)

- **Inspect agricultural inputs and raw materials**
- **Register pesticide retailers**
- **Reduce pesticide ports of entry**
- **Monitor pesticides in the market and take necessary actions**
- **Cooperate with private sectors and granting Q-Shop to retailers selling quality pesticides**



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## • **Control of Pesticides**

### **Retailer Inspection by OAR and OARD for**

- **Product registration**
- **Licensing**
- **Certified supervisor**
- **Sampling**



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# Food Safety on Crops Strategies

## 2. Strategy on production at farm level under GAP protocol (standardized farm)

- **Develop GAP protocol and guidelines**
- **Encourage farmers to register**
- **Inspect and certify farms**
- **Inspect and follow up on the use of inputs in certified farms**



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# Food Safety on Crops Strategies

## 2. Strategy on production at farm level under GAP protocol (continued)

- **Set up training programs for inspectors, advisors, and private sector**
- **Introduce GAP certified farms to exporters for contract farming system**



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# GAP Principles

- Water source
- Growing area
- The use of agricultural toxic substances
- The application method, storage and transportation of agricultural produces in the farm
- Record keeping
- Produces free from pests
- Production process for quality produces
- Harvesting and post-harvest handling



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PC1

# GAP Program

- \* To ensure that food crops produced in Thailand are safe, wholesome and meet standards and requirements of the country.
- \* Maintain consumer confidence in food quality and safety
- \* Safe practices for growers
- \* Minimize negative impacts on the environment



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# Farms

- **Registration and GAP certification of farms by OARD region 1-8**
- **Inspection and follow up on the use of inputs in GAP farms by OARD region 1-8**



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## Food Safety on Crops Strategies

### 3. Manufacturing facilities certification (standardized manufacture)

- **GMP/HACCP Inspection and certification of packing houses, processing plants, and fumigation plants**
- **Set up training programs on GMP, HACCP to concerned private sectors and government agencies**



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- **GMP/ HACCP Inspection and certification of manufacturing facilities by PPRDO**

**(Codex: General Principle of Food Hygiene CAC/RCP 1-1969, Rev.3-1997, Amd.1999)**



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## **DOA's GMP Guideline**

- **Premises**
- **Equipment**
- **Process control**
- **Maintenance and sanitation**
- **Personnel**
- **Transportation and storage**
- **Record keeping**



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code = GAP farm,  
GMP  
pack house



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## Food Safety on Crops Strategies

### 4. Products Certification (output control)

- Analysis of pesticide residue in fruits and vegetables
- Residue trials and monitoring data for MRLs establishment



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# Exported Products

## Sampling by

- TOSS
- OARD 1-8
- LCFA

## Pesticide residue

### Analysis by

- APSRDO
- OARD 1-8
- LCFA

LCFA = Laboratory Center for Food and Agricultural Products Co.,Ltd.



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# Exported produces under food safety project

- ▶ Longan
- ▶ Durian
- ▶ Lychee
- ▶ Mangosteen
- ▶ Tamarind
- ▶ Mango
- ▶ Pummelo
- Asparagus
- Ginger
- Okra
- Baby corn
- Chili



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# Importing countries

**EU**  
**Hong Kong**  
**Japan**  
**Malaysia**

**P.R. China**  
**Singapore**  
**USA**



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## Durian

- Harvested from registered GAP farm
- Packed by registered packing house
- Exported by **registered durian exporters**
- Dry matter (DM) >32% and
- Chemical residue analysis (CRA) not exceed MRL



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# Durian

## Labeling

- Exporter
- Common name of fruit
- Registration no. of the orchard
- Registration no of pack house
- Packing date
- Export date
- Reefer container number**
- Exporter must provide CRA and DM certificate to the customs for further process.



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# Longan

- Harvested from registered GAP orchards
- Packed by registered packing house
- Exported by **registered longan exporters**
- **Chemical residue not exceed MRL**
- **SO<sub>2</sub> residue in flesh ≤ 50 ppm**
- **Fruit must be clean, no leaves and stem**



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# Longan

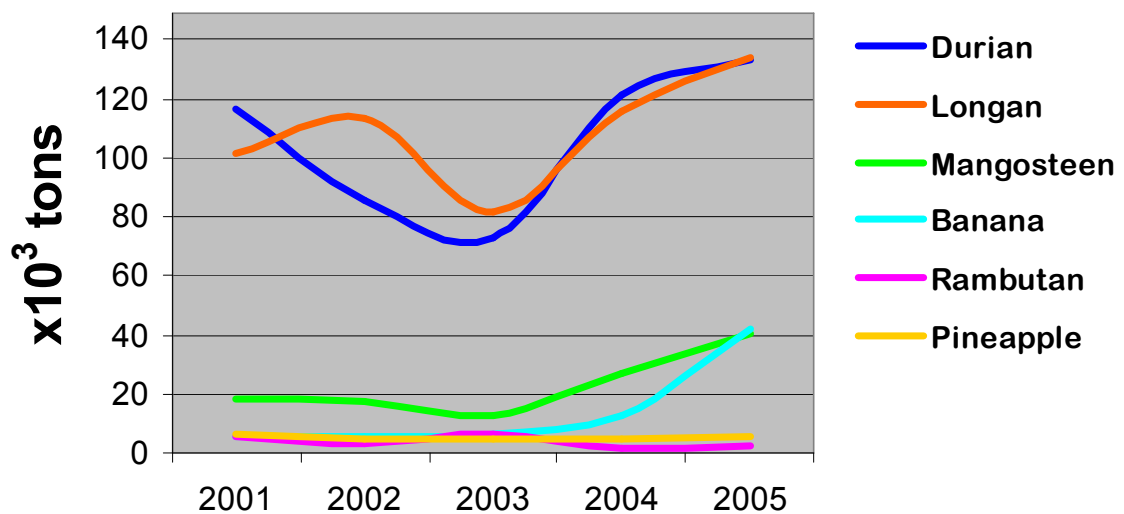
- **Labeling**
  - Exporter
  - Common name of fruit
  - Registration no.of the orchard
  - Registration no of pack house
  - Packing date
  - Export date
- Exporter must provide CRA and SO2 certificate to the customs



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## Export volume



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# Thank you



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