China Agriculture Products Imports

- In 2009, China’s total import of agriculture products was $44B, corresponding to 7.1% of global agriculture product trade, ranked #3 import country for agriculture products;

- Top 10 Countries exporting agriculture products to China:

![Countries exporting ag prods to China](image-url)

- United States of America
- Brazil
- Malaysia
- Thailand
- Argentina
- Indonesia
- Australia
- Canada
- New Zealand
- France
China Agriculture Products Exports

- In 2009, China’s total export of agriculture product was $15B, corresponding to 2.5% of global agriculture product trade, ranked as #12 export country for agriculture products;
- Top 10 Countries importing agriculture products from China:

Countries importing ag prods from China

Percent of China Export %
## China Agriculture Imports from US and Export to US

### Top 10 items (China Import from USA)

<table>
<thead>
<tr>
<th>items</th>
<th>value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soybeans</td>
<td>$10.08 B</td>
</tr>
<tr>
<td>Cotton lint</td>
<td>$0.98 B</td>
</tr>
<tr>
<td>Chicken meat</td>
<td>$0.86 B</td>
</tr>
<tr>
<td>Maize</td>
<td>$0.79 B</td>
</tr>
<tr>
<td>Hides Wet Salted Cattle</td>
<td>$0.67 B</td>
</tr>
<tr>
<td>Wheat</td>
<td>$0.37 B</td>
</tr>
<tr>
<td>Food Prep Nes</td>
<td>$0.31 B</td>
</tr>
<tr>
<td>Dregs From Brewing;Dist.</td>
<td>$0.15 B</td>
</tr>
<tr>
<td>Crude Materials</td>
<td>$0.14 B</td>
</tr>
<tr>
<td>Tobacco, unmanufactured</td>
<td>$0.14 B</td>
</tr>
</tbody>
</table>

Total value of China import from USA: $16.38 B

### Top 10 items (China export to USA)

<table>
<thead>
<tr>
<th>items</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude Materials</td>
<td>$0.33 B</td>
</tr>
<tr>
<td>Apple juice, single strength</td>
<td>$0.32 B</td>
</tr>
<tr>
<td>Fruit Prp Nes</td>
<td>$0.32 B</td>
</tr>
<tr>
<td>Pet Food</td>
<td>$0.27 B</td>
</tr>
<tr>
<td>Food Prep Nes</td>
<td>$0.20 B</td>
</tr>
<tr>
<td>Sugar Confectionery</td>
<td>$0.12 B</td>
</tr>
<tr>
<td>Vegetables Dehydrated</td>
<td>$0.11 B</td>
</tr>
<tr>
<td>Vegetable Frozen</td>
<td>$0.10 B</td>
</tr>
<tr>
<td>Canned Mushrooms</td>
<td>$0.06 B</td>
</tr>
<tr>
<td>Garlic</td>
<td>$0.06 B</td>
</tr>
</tbody>
</table>

Total value of China Export to USA: $2.83 B
Chinese VP pledges to deepen China-U.S. agricultural cooperation
MRLs Framework in China
Background and Issues

✓ Before 2009, MOH led the process of MRL setting, MOA in a supporting role

✓ Issues:
  ✓ Not enough MRL standards (National Standards containing 478 MRLs for 136 pesticides and Industry Standards containing 329 MRLs for 118 pesticides)
  ✓ Unsound risk assessment system
  ✓ Insufficient fundamental information and data on MRL setting
Challenges of Food/Pesticide Regulation/System

- Industry Development
- Safety/Health/Environment
- Economic Policy/Strategy
- Globalization/Regulatory Harmonization
- Customers/Society
- Free Trade
  - Economy globalization

- Living Standard
- Environmental & Food Safety
Food Safety Law – issued in Feb. 2009

- Article 20 requires that “food safety standards shall specify pesticide residues.”
- Article 21 requires that “the Health department and Agricultural department authorized by the State Council shall be responsible for establishing pesticide residue limits and related inspection methods.”
- In Sep. 2009, MOH and MOA issued a joint opinion on administration of Standards for Pesticide and Veterinary Drug Residues in Food. It was clearly stipulated that MOA is responsible for establishing standards on pesticide and veterinary drug residues, and the standards will be published jointly by MOA and MOH.
Pesticide Industry and Food Safety

- After issuing of Food Safety Law, the national pesticide residue standard committee was established which consists of experts of agriculture, Chemical, medical, food industry and nutrition. This committee focuses on building up pesticide residue standard system and establishing MRLs.

- More strict regulations/policy are issued or will be issued, such as phase out of highly toxic pesticides

- New Pesticide Act to be issued in 2012 will enhance market inspection and supervision on management of illegal, fake and inferior products. In addition, Pesticide Sales Permit in the new law will be helpful to regulate the market.

- More efforts are made to train farmers on pesticide application technique to minimize the food safety problem due to misuse.
Legal Basis

Regulations on the Control of Agricultural Chemicals

Pesticide Registration

Data requirements for Pesticide Registration (residues)
Metabolic mechanism in plants and animals (depends)
Analytical Methods
Field trial, GAP
Storage stability
Research of processing (depends)

Pesticide Registration Label
Number of applications and PHI

Food Safety Law

Pesticide Residue Standards

Data requirement:
Toxicology
Residue Chemistry
National dietary data

Law on Quality and Safety of Agricultural Products

Issuance of standards on Residue Limits and Inspection Methods
Current MRL Framework

Organization

✓ National Review Committee on Pesticide Residue Standards was established in Mar 2010, consisting of secretariat (ICAMA) and three expert groups (toxicity, residue chemistry and analytical method)

Framework for pesticide residue standard

✓ MRLs Standard, analytical method & procedures

Technical guideline

✓ Guideline for crop grouping issued in Nov. 2010
✓ Guidance for Risk Assessment of Pesticide Residues in Food to be issued soon
✓ Guidance for Establishing MRLs in Food to be issued soon
Steps of Establishing Standards

1. Planning of standard project
2. Approval of standard project
3. Draft of standard
4. Comments
5. Review
6. Review
7. Inform WTO
8. Undertaking departments
9. Undertaking departments
10. Jointly issued by MOH and MOA, Standard Code assigned by Standardization Administration
11. MOA, AQSIQ and MOC
12. Review Committee on National Food Safety Standards
13. National Review Committee on Pesticide Residue Standards
Procedure for pesticide assessment and establishment of MRLs

Residue chemistry
- Evaluation of metabolism test, metabolites, GAP trials, and stability studies
- Recommendation of STMR and HR

Toxicological evaluation
- Evaluation of pesticide toxicological data: toxicokinetics and toxicological tests
- Recommendation of ADI and ARfD

National Estimated Daily Intake (NEDI)
- National Estimated Short-Term Intake (NESTI)
- Recommended (MRL)

Dietary Intake Evaluation

6/11/2012
Current Practice

- ICAMA/MOA use established MRLs in other countries as reference and together with local data to set national MRLs.

- Relatively conservative when choosing MRLs from other countries, usually prefer the lowest level.

- Integrated with the actual situation of agriculture production and dietary pattern in China, protecting both the industry and consumer safety.
Progress on MRLs setting

Issued MRLs
✓ Released National Standard for 315 MRLs for 146 pesticides (GB25193-2010, GB26130-2010, GB28260-2011)

Re-evaluation of old MRLs
✓ Re-evaluated the old MRLs issued before the Food Safety Law, and the 1851 MRLs for 197 pesticides is under the approval process

MRLs exemption list
✓ Exemption list including 41 pesticides

Adoption of CODEX MRLs
✓ Evaluating 2700 MRLs for 158 pesticides from Codex to set local residue standard. Have finished the evaluation for 600 MRLs for 45 pesticides and has initiated evaluation for another 2100 MRLs for 113 pesticides

Total MRLs issued or will be issued: 4866 MRLs (without the exemption list)
## MRLs of CAC, EU, USA and Japan

<table>
<thead>
<tr>
<th>Organization or country</th>
<th>Pesticide</th>
<th>MRL</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAC</td>
<td>245</td>
<td>3,615</td>
</tr>
<tr>
<td>EU</td>
<td>471</td>
<td>145,000</td>
</tr>
<tr>
<td>USA</td>
<td>358</td>
<td>11,000</td>
</tr>
<tr>
<td>JAP</td>
<td>579</td>
<td>51,600</td>
</tr>
</tbody>
</table>

CAC – CODEX MRL
China Objectives

- Build up the pesticide residue standard system in 3-5 years from 2009 (Food Safety Law)

- Establish 7,000 MRLs by 2015
Future MRLs Framework in China

- National MRLs Standard (GB)
- Provisional MRLs Standard
  - When ADI is temporary
  - When no complete or reliable dietary data is available,
  - When no monitoring and analytical methods for residue meets the requirements,
  - When a pesticide or pesticide crop combination is not registered or when international trade or import inspection necessitates,
  - In case of emergency, when a pesticide is approved to be used on unregistered crops, an emergency MRL standard shall be established, and its scope and period of validity shall be defined,
  - When other data do not meet the full requirements of evaluation procedure.
- MRLs exemption list
- LOQ (0.01ppm)
Future Direction

✓ Keep alignments and consistency between MRLs and registrations
✓ Continue to establish and enhance MRL system
✓ Increase transparency and participation in the MRLs setting process
✓ Strengthen communication with other countries and international organization
Thank You!
谢谢