Tipping Points
Perpetually on the Verge

The Road to 2050: the China Factor
14 June 2012, Shanghai
IFAMA

A World of Food Solutions
China’s impressive 30+ year growth curve

USD Trillions (constant 2000 USD)

- China
- India
- Indonesia
- Brazil
- Thailand
- Japan
- Germany
No less impressive has been the growth in agricultural output.

**China’s grain and oilseed output**
Source: China Statistics Yearbook

**China’s animal protein output**
Source: China Statistics Yearbook

- **3% CAGR**
- **+6% CAGR**

- **Corn**
- **Wheat**
- **Rapeseed**
- **Soybeans**
- **Rice**

- **Beef**
- **Pork**
- **Broiler**
This has made China the world’s largest local protein market (today)

**Pork**
- 6% of global production traded
- 50 MMT
- China 49%
- ROW 51%

**Poultry**
- 12% of global production traded
- 12.6 MMT
- China 17%
- ROW 83%

**Beef**
- 12% of global production traded
- 5.6 MMT
- China 10%
- ROW 90%

However, China is significantly land constrained which will require choices for resources.
"In China, for China" strategy from the start

Nearly 25 years of operational excellence in Greater China

OSI in Asia-Pacific

Meat Processing (Halal Certified)
Vegetable Processing

Poultry Vertical Integration (Halal certified)

Meat Processing
Vegetable Processing

Poultry Vertical Integration
Diversified Food Processing

Vegetable Processing

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This is of particular note considering average farm sizes

China’s farm size by province (acres / person)

Source: China Statistics Yearbook
Demographics of rural China changing more than we realize

Age of China’s rural half
Source: United Nations

713 million “rural” inhabitants

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>&lt;15</td>
<td>17%</td>
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<tr>
<td>15&lt;30</td>
<td>28%</td>
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<tr>
<td>30&lt;40</td>
<td>14%</td>
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<td>40&lt;60</td>
<td>32%</td>
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<td>&gt;60</td>
<td>9%</td>
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China’s population breakdown
Source: China Statistics Bureau

<table>
<thead>
<tr>
<th>Year</th>
<th>Rural</th>
<th>Unclassified urban</th>
<th>Urban</th>
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<tbody>
<tr>
<td>2000</td>
<td>36.2%</td>
<td>15.8%</td>
<td>48.0%</td>
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<tr>
<td>2010</td>
<td>47.0%</td>
<td>14.8%</td>
<td>38.3%</td>
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<tr>
<td>2020</td>
<td>55.4%</td>
<td>13.9%</td>
<td>30.7%</td>
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</table>
Shifting demand & farmers’ planting decisions

Cultivated land and rural laborers
Source: China Statistics Yearbook

Harvested acreage by crop
Source: China Statistics Bureau

- Policy driven
- Profit driven
Urban consumers are evolving at a faster pace than production agriculture

And capturing the attention of China’s rural youth

**Producers**
- 40% of the labour force

**Consumers**
- 55% of GDP

1. 2012 GDP growth of 8%
2. CPI at 4% (3% in '10)
3. Food safety

**Producers' Goals**
1. Double farmers incomes by 2020
2. Grain self sufficiency
3. Arable land no less than 120 mln hectares

**Consumer Welfare**
- Rural welfare
- Consumer welfare
Urbanization will transform the supply chain

China’s urban population boom and coming changes in consumer channels

Source: United Nations, OSI

Urban population by city size

- Million inhabitants

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>&lt;750TH</th>
<th>5-10M</th>
<th>750TH-1M</th>
<th>&gt;10M</th>
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<tr>
<td>1950</td>
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<tr>
<td>2020</td>
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Pork

- 2010: 48.9MMT
- 2020: 59.6MMT

- Organized retail: 17%
- QSR: 4%
- HoReCa: 15%
- Wet market: 67%

Poultry

- 2010: 15.7MMT
- 2020: 21.0MMT

- Organized retail: 8%
- QSR: 7%
- HoReCa: 15%
- Wet market: 45%

Beef

- 2010: 5.4MMT
- 2020: 7.3MMT

- Organized retail: 2%
- QSR: 4%
- HoReCa: 20%
- Wet market: 76%
And further strain existing resources

22% of the world’s population on 7% of the world’s arable land.
Tipping points...the next 30 years

**What worked in the past won’t necessarily work in the future**

- Food safety, quality and security clear focus
- Fragmented production base part culprit for food safety issues
- Labor and land not answer to China’s future productivity q’s
- Genetics and rightly applied fertilizers are key, but that’s not all...

- Farm scale significant part of ability to activate
  - Generational transformation is opportunity

- Important elements of sustained local productivity
  - Capital!
  - Infrastructure (equip, storage and drying)
  - Risk management (transparency, crop insurance)
  - Property rights
  - Water!
Clear direction (but flex enforcement)

**3rd Five Year Plan**
1966-1970

Spare no efforts to develop agriculture, solve problems concerning people's food...

In order to support agriculture, to enhance infrastructure, continue to improve production quality, increase production variety and quantity, to build an economy of self-reliance, and to develop transportation, commerce, culture, education and scientific research.

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**12th Five Year Plan**
2011-2015

1. Urbanization rate reaching 51.5%
2. Value-added output of emerging strategic industries accounting for 8% of GDP
3. Inviting of foreign investment in modern agriculture, high-tech, and environment protection industries
4. Moving coastal regions from being the “world’s factory” to hubs of research and development, high-end manufacturing, and the service sector
5. Increased momentum for large-scale hydropower plants in southwest China
6. Length of high-speed railways reaching 45,000 km
7. Length of highway networks reaching 83,000 km
8. 36 million new affordable apartments for low-income people

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**2015 annual meat output target**

<table>
<thead>
<tr>
<th>Category</th>
<th>Output (million tons)</th>
<th>Percentage (%) among total</th>
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<tbody>
<tr>
<td>Pork</td>
<td>53.6</td>
<td>63%</td>
</tr>
<tr>
<td>Poultry</td>
<td>17.8</td>
<td>21%</td>
</tr>
<tr>
<td>Beef</td>
<td>6.9</td>
<td>13.9%</td>
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<tr>
<td>Mutton</td>
<td>5</td>
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</tr>
<tr>
<td>Others</td>
<td>1.7</td>
<td>2.1%</td>
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As per the National Meat Development Plan released by the State Council under China’s 12th 5 Year Plan

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China has nearly 3,000 country-level districts

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Not all categories will be supported

Soy beans
Soy meal
Soy oil
Rapeseed
Sunflower oil
Palm oil

X1000 metric tons

(*) Only trade flows per region larger than 1 mln MT are illustrated.

Source: Oilworld
While others will – and we agree

Modern broiler farms

Modern feedmill
In China...
Brady Sidwell
VP, Corp. Development & Strategy

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