

**China – After Accession to WTO:  
California's Customer or Cutthroat  
Competitor?**

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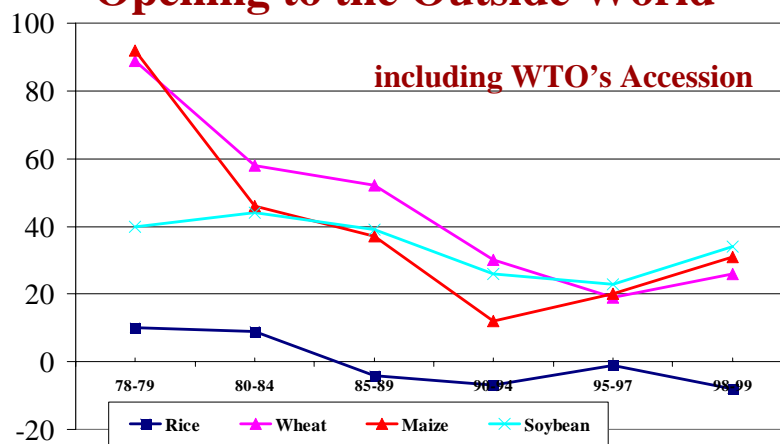
**China's Accession to the WTO  
and Impact on Horticulture  
Supply, Demand and Trade**

- **Complicated**
- **Little work done in this area (most on major grains and other staple crops)**
- **Horticulture economy is changing as fast as China is ...**

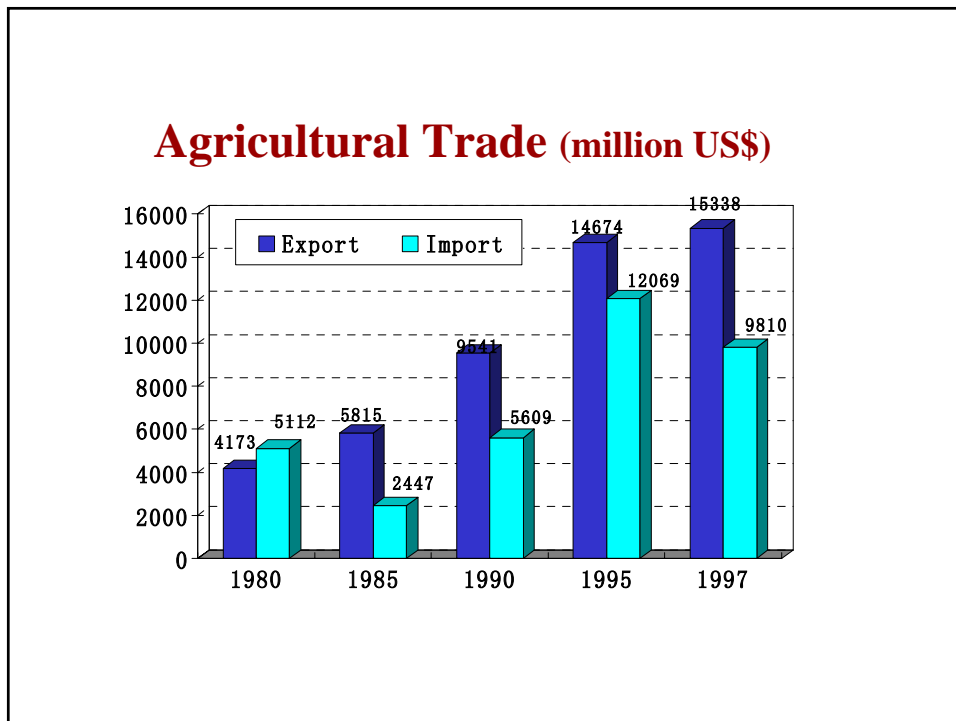
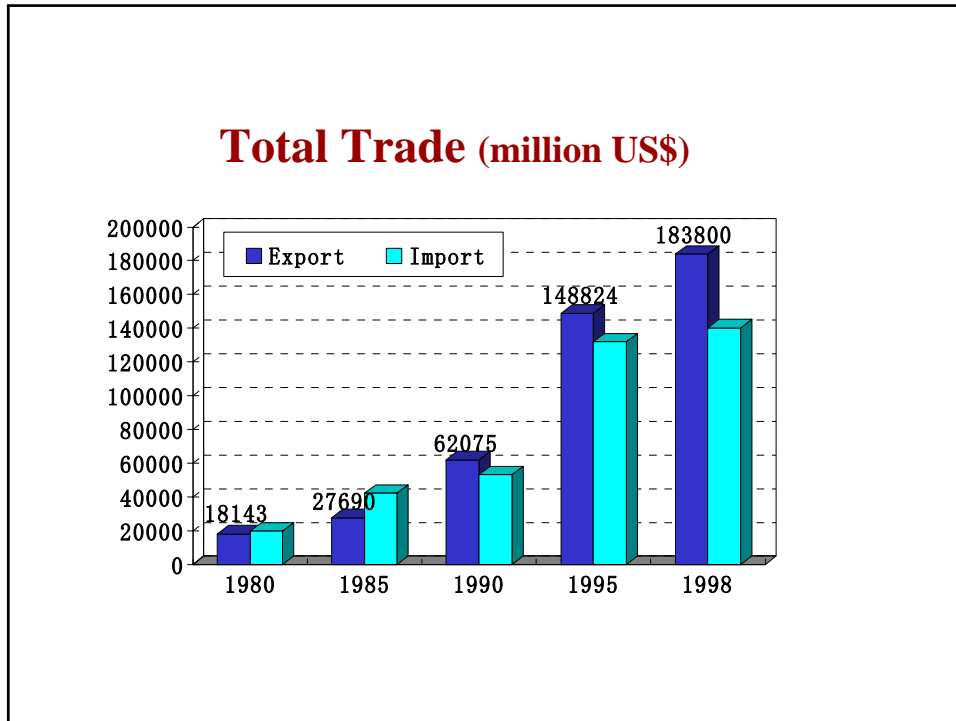
**... because: China is in the Midst of Wrenching Changes**

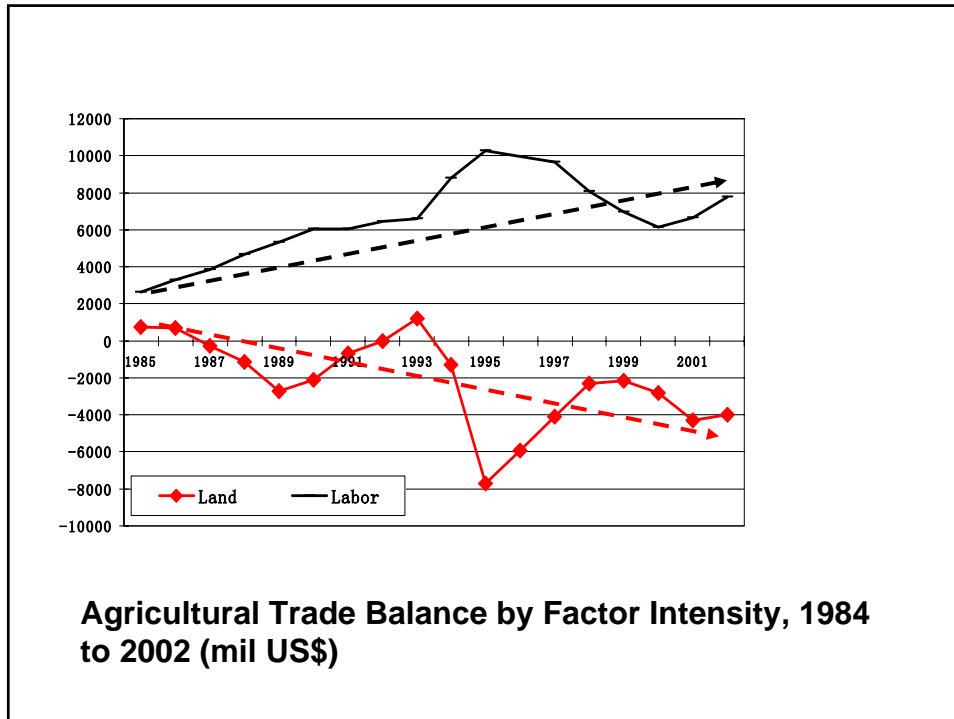
- **Industrializing**
- **Urbanizing**
- **Marketizing**
- **Becoming wealthier**
- **Western-izing**

**... and: Falling Barriers and Opening to the Outside World**



Huang, 2001



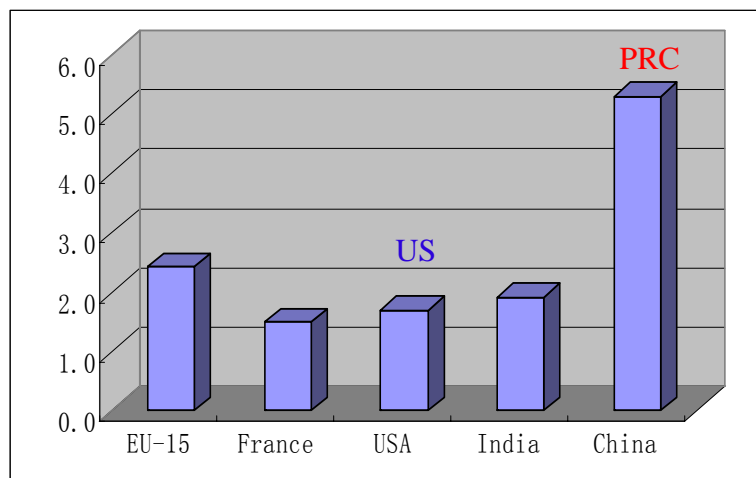


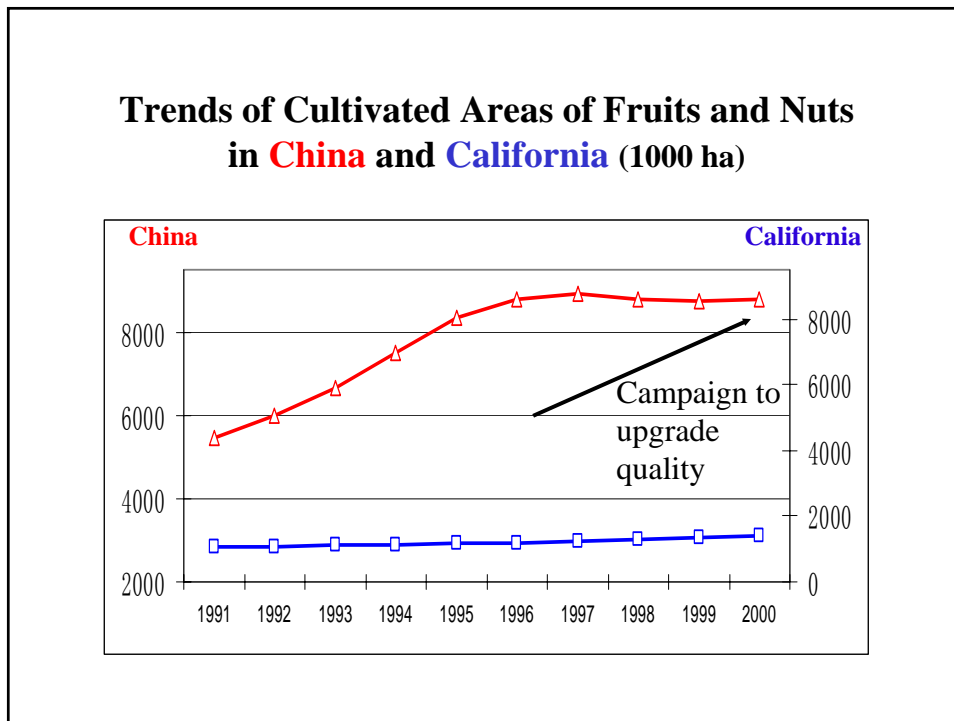
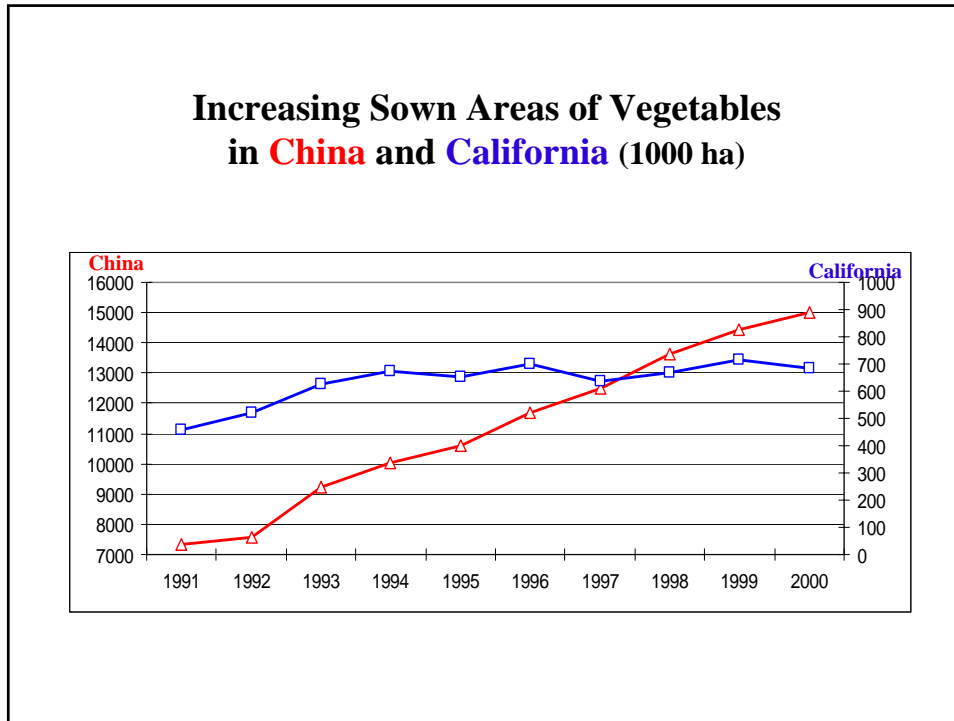
### **Outline of Presentation**

- **Horticulture Facts: Supply, Demand and Trade**
- **Relative Competitiveness: China vs. California**
- **What Can California Do?**

## Horticulture Facts: Supply, Demand and Trade

### China has Higher Share of Land in Orchards than Most Other Countries

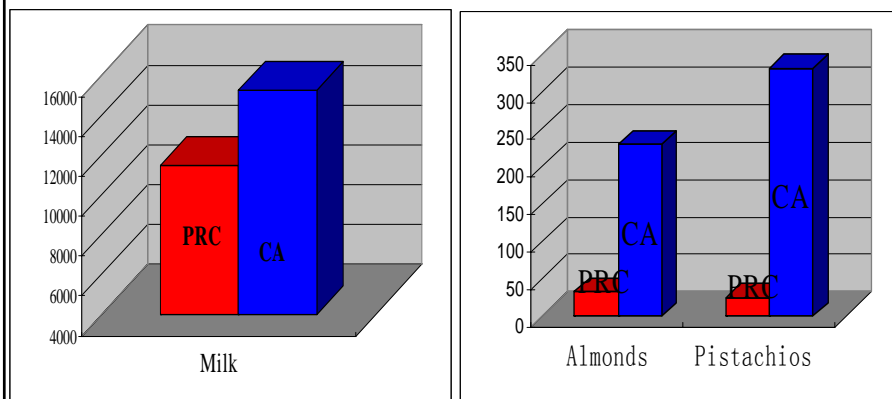




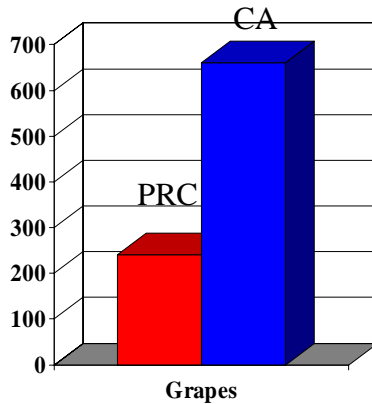
**California’s Top 20 Ag. Products vs. China**

Products	\$ Million	Rank	Products	\$ Million	Rank
Almonds	3704	1	Lettuce	682	11
Cotton	2836	2	Raisins	537	12
Wine	2247	3	Plums, Dried	471	13
Grapes, Table	1484	4	Strawberries	362	14
Milk and Cream	1267	5	Tomatoes, fresh	347	15
Oranges	951	6	Broccoli	346	16
Tomatoes, processed	898	7	Peaches, etc	310	17

**Milk, Almonds and Pistachios – Commodities Dominated by California, 2000 (1000 mt)**

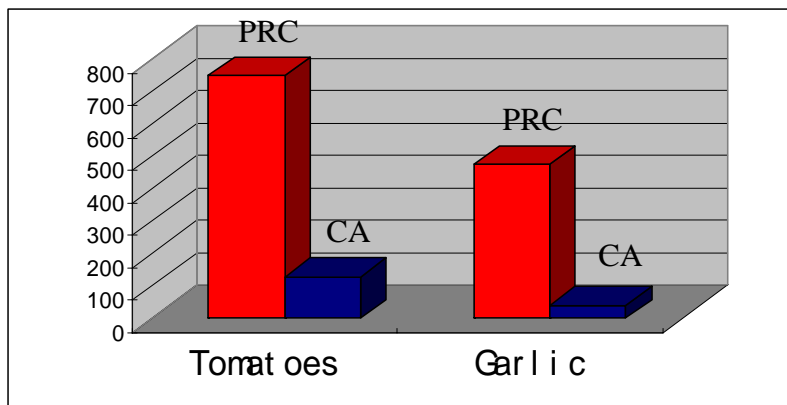


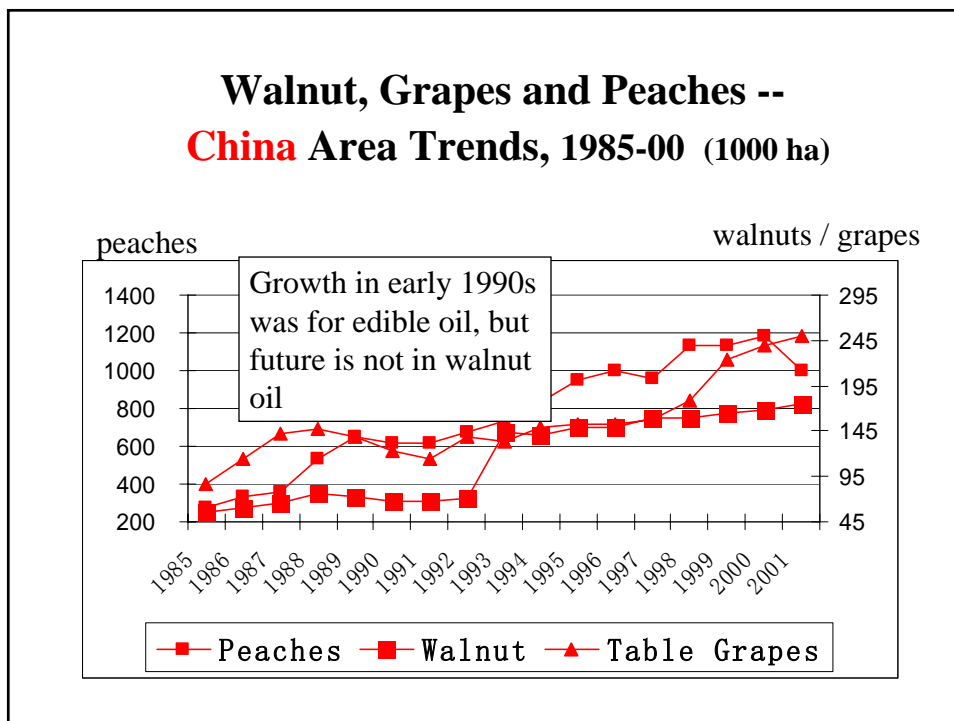
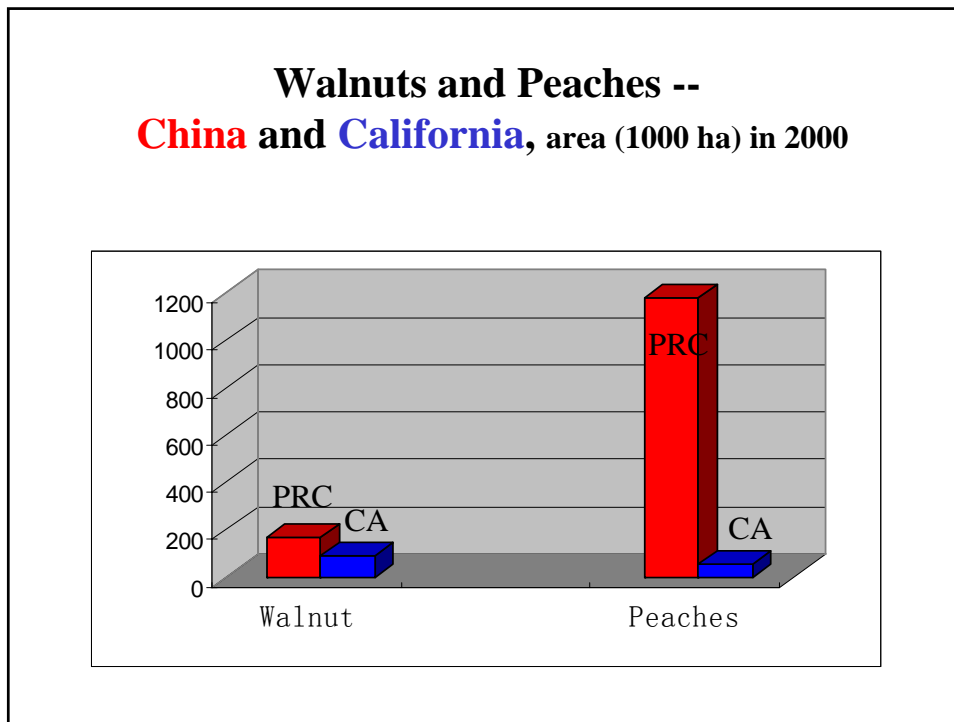
### Grapes in **China** and **California**, (in 1000 ha), 2000

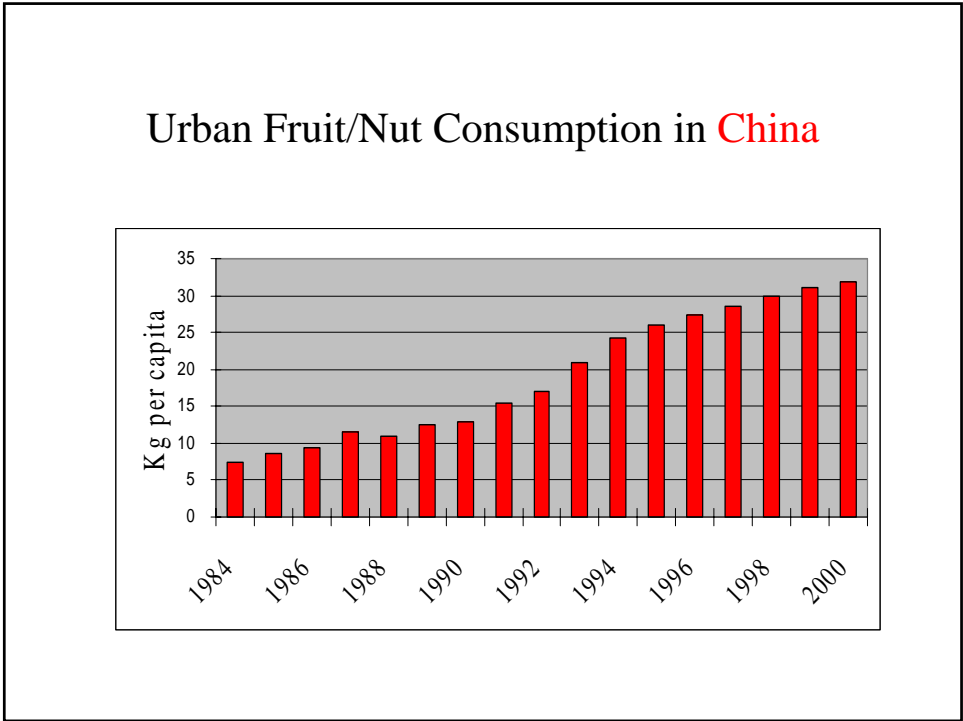


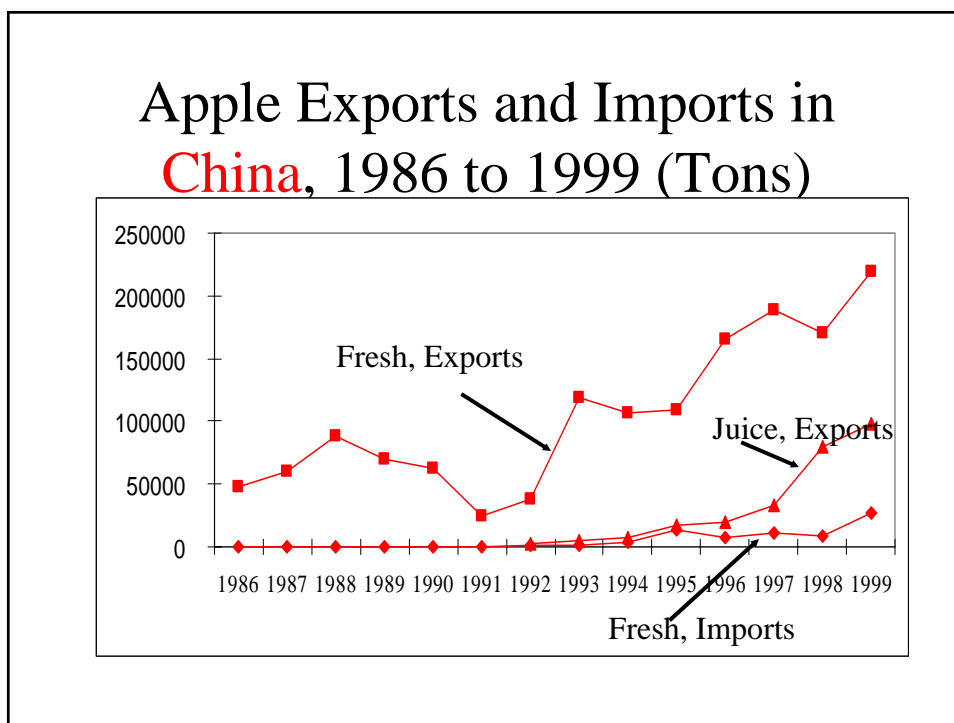
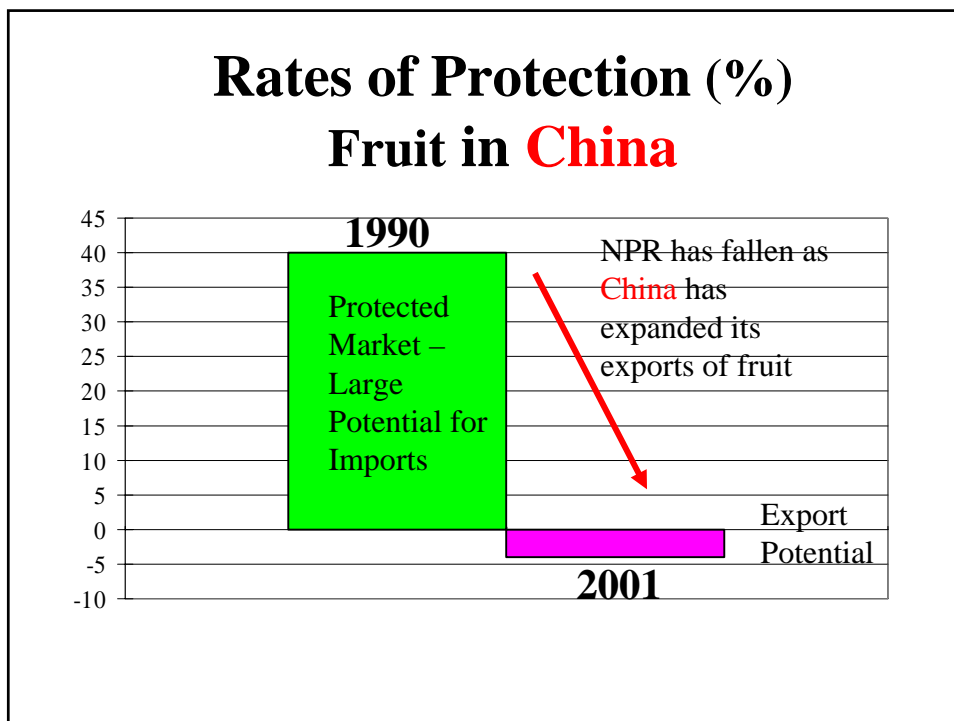
- But, currently Australia is in China on a large, state-backed push on the wine industry

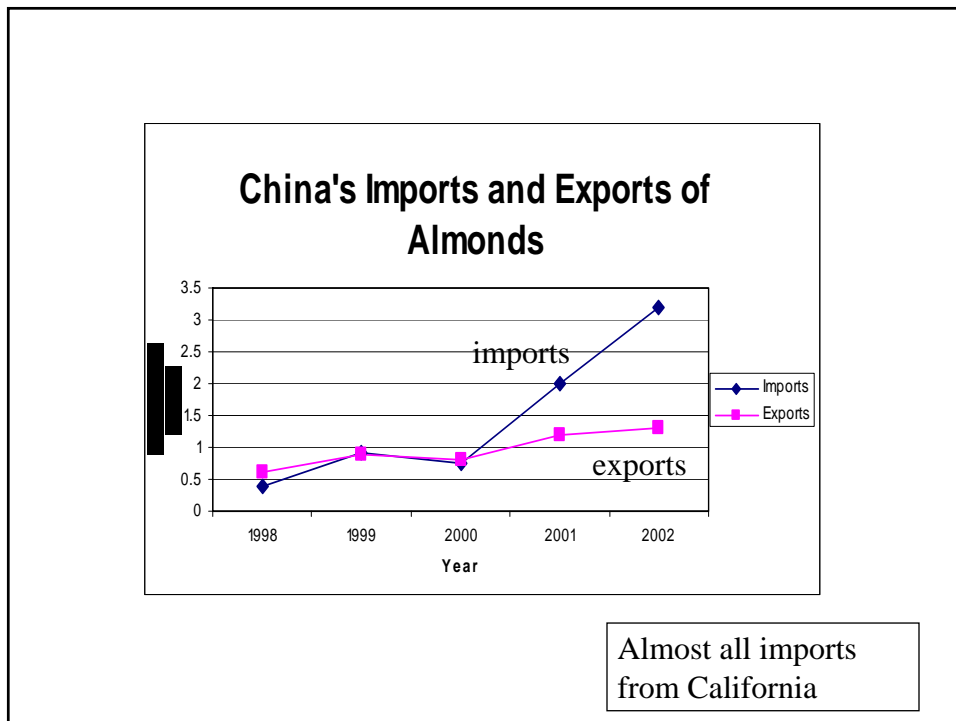
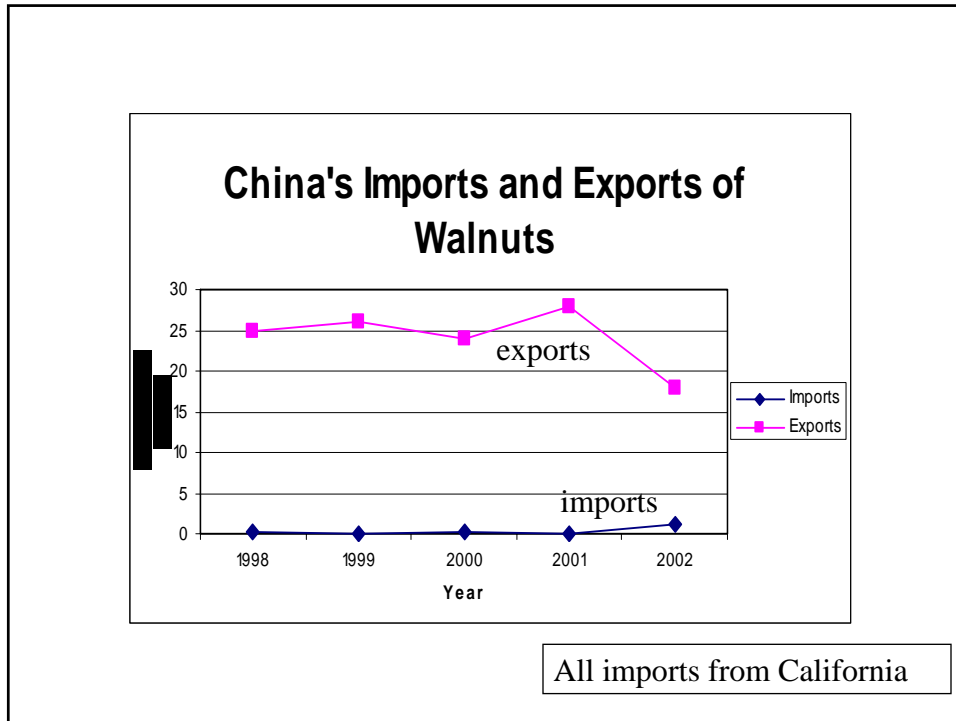
### Tomatoes and Garlic – Commodities dominated by **China**, 2000 (1000 ha)

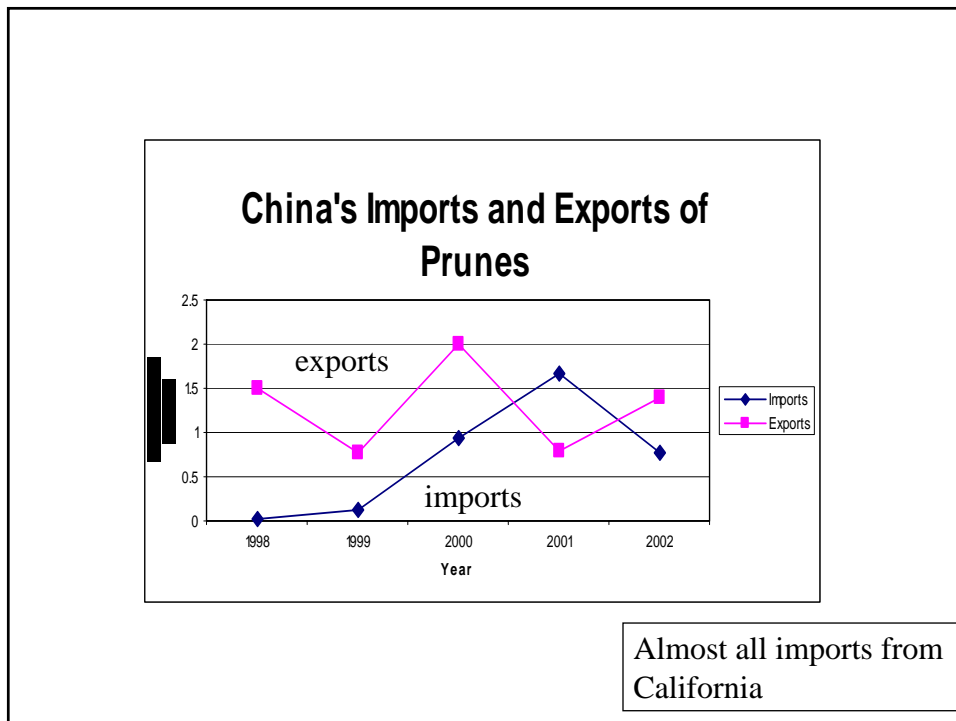
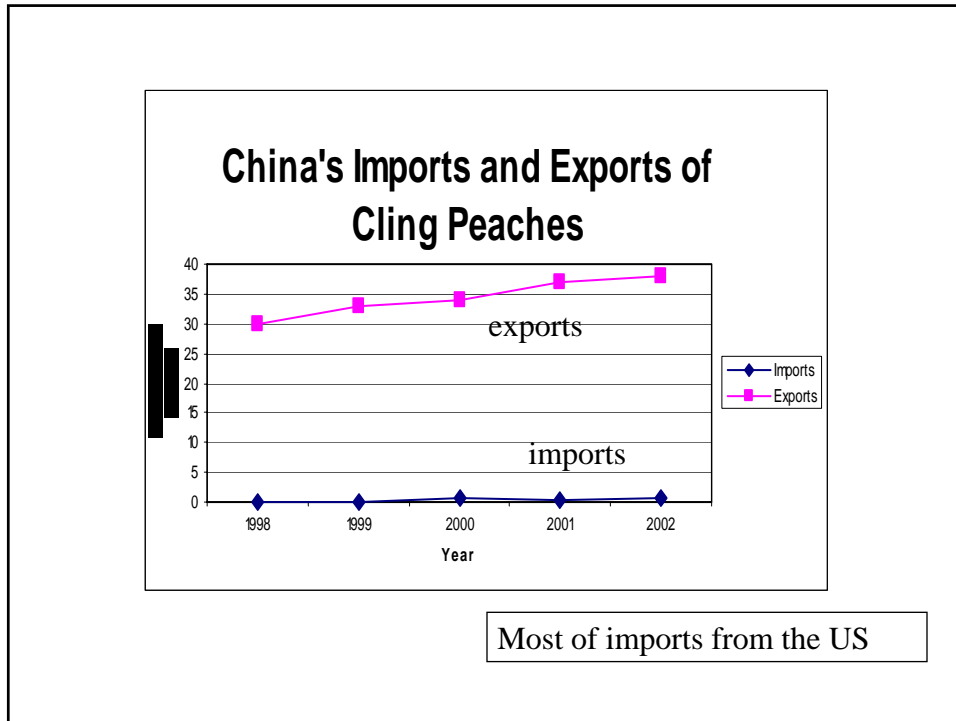


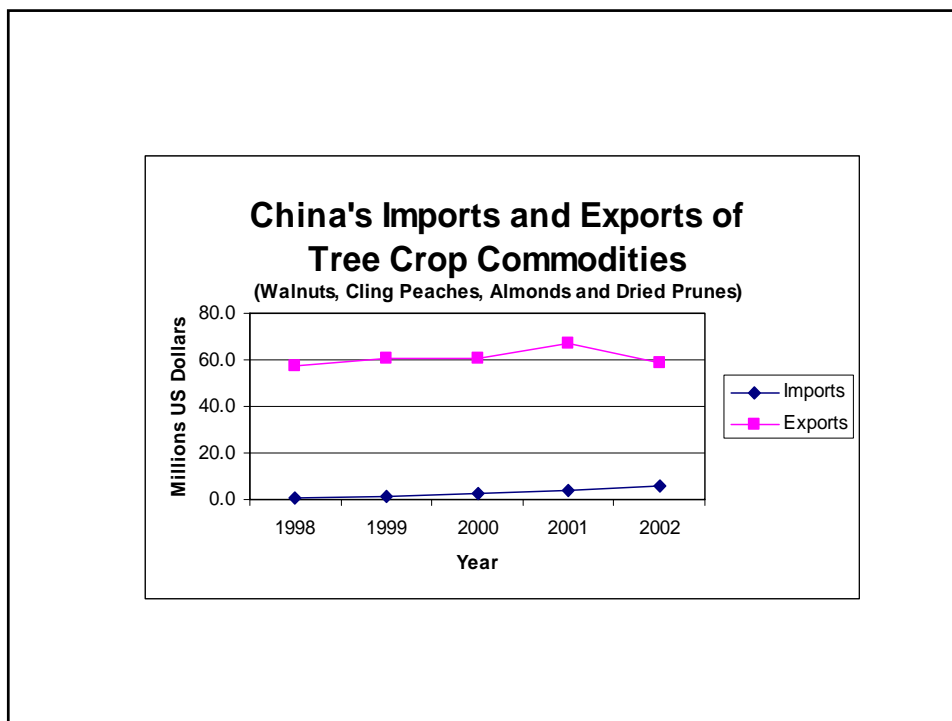












## Pattern of Fruits and Vegetables Industries in China

- Significant percentage of ag. land used in horticultural products (more than US and more than California)
- Rising sown area and production in many (not all) of horticultural products grown in California
- Although demand growing fast, production growing faster → lower prices → falling NPR → growing exports
- What is future hold? Race: Supply vs. Demand!

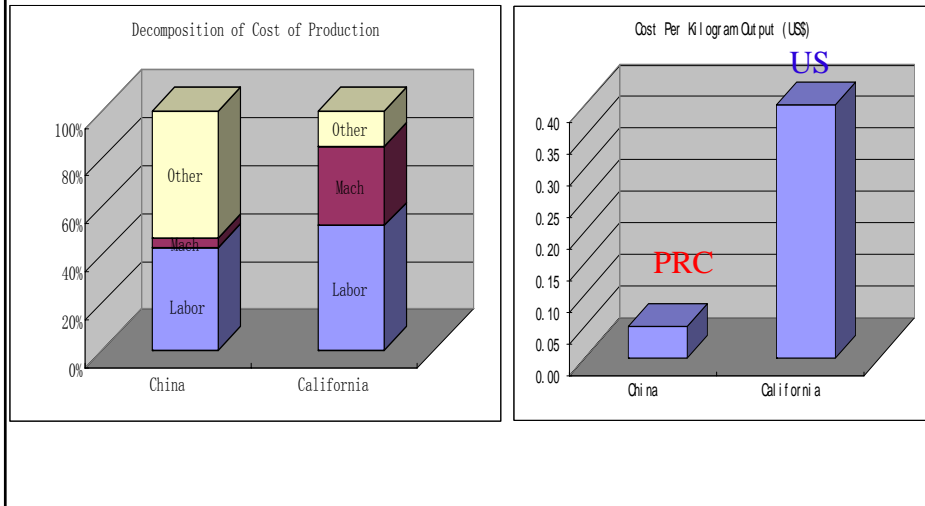
## Relative Competitiveness: China versus California

- Comparing the Level of Cost of Production of Major Agricultural Commodities in China and California

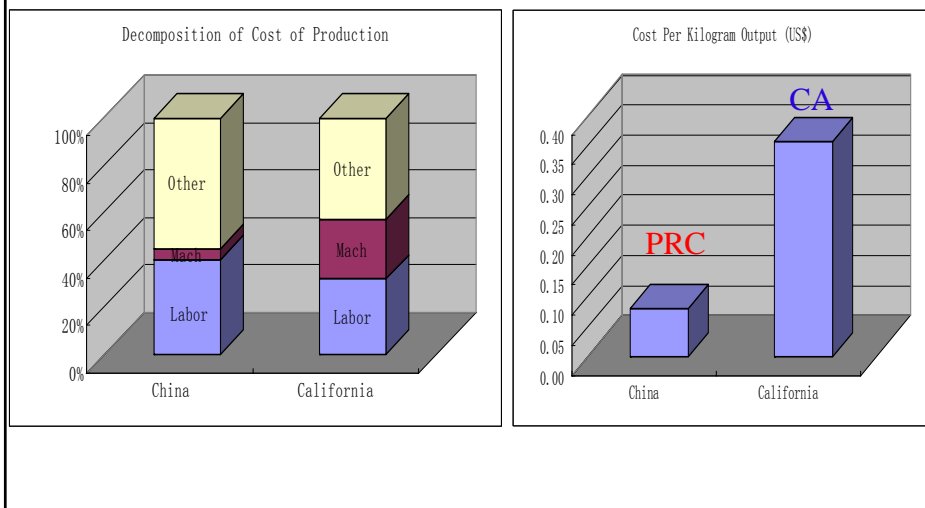
### Cost of Production of *Fresh Tomatoes* in China & California, 2000 (\$1=8.3 RMB)

Costs	China	California
Seeds	119	245
Fertilizer	502	210
Chemicals	284	326
Irrigation	72	304
Machinery Costs	44	3983
Labor Costs	1186	6254
Overhead & Management	77	17
Other Variable Costs	412	734
Fixed Cost	52	30
Total Costs Per Hectare	2748	12103
Per kilogram cost (\$/kg)	<b>0.05</b>	<b>0.4</b>
% of labor cost in total	<b>43%</b>	<b>52%</b>
% of machinery cost in total	<b>4%</b>	<b>33%</b>

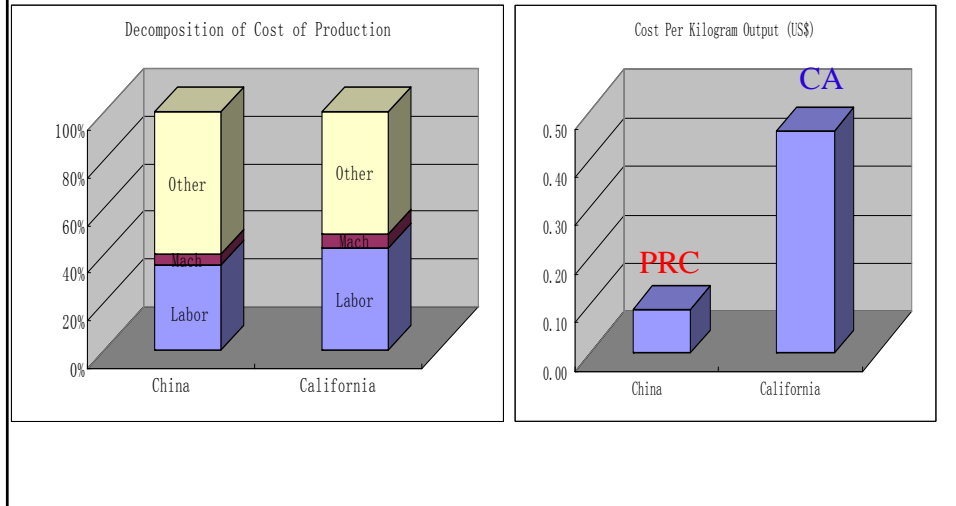
**Cost of Production of *Fresh Tomatoes***  
**China and California**



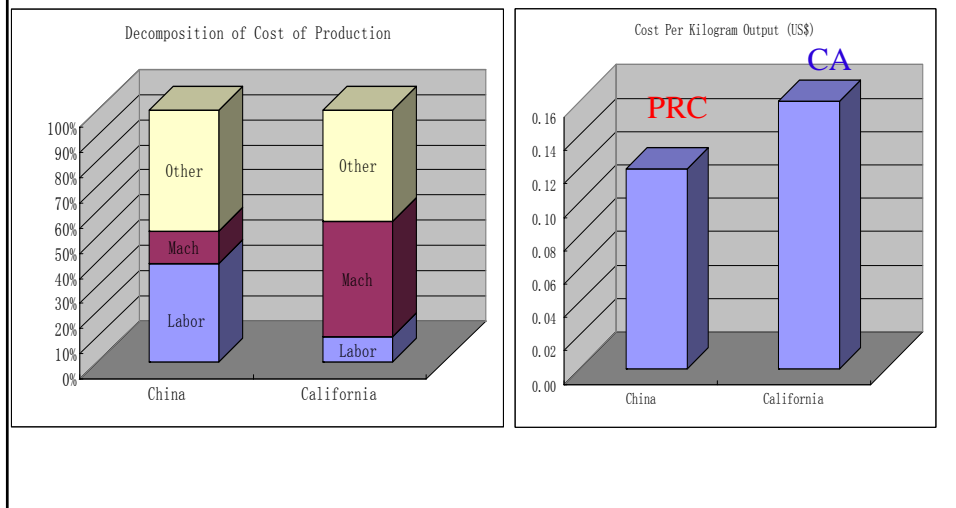
**Cost of Production of *Peppers***  
**China and California**



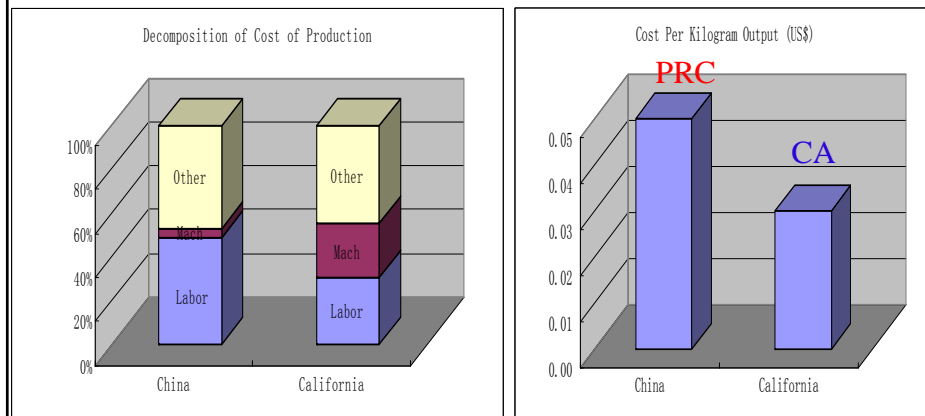
**Cost of Production of *Oranges (Navels and Valencias)*: China and California**



**Cost of Production of *Japonica Rice* China and California**



### Cost of Production of *Processing Tomatoes* China and California



### Summary -- Competitiveness

- When labor can make up a large part of a crop in China, it has a huge cost advantage ... these are some of the crops that have grown the fastest ...
- When land (rice) or land and capital (processing tomatoes), costs are more similar ... China is investing aggressively in technology and capital-intensive / logistic intensive research and infrastructure

## Conclusions

- China's agriculture has been transforming at an incredible rate ... more open; more towards comparative advantage; more efficient
- China has great potential to continue growing in this direction
- Biggest advantage in low production costs of labor intensive commodities

## Conclusions

- California is due for tough competition for many crops ...
- Competition: first, in third markets (Japan; Hong Kong; Korea; Taiwan) ... later, directly in CA(?)
- Extent of competition will depend on:
  - rate of improvement of quality and marketing (but this is improving fast!)
  - growth of China's domestic demand
  - how California and other competitors or collaborators perform

## What can California do?

- Strategy ONE: “Ignore what is going on”  
[but can only adopt this strategy if buy into 1 or more of several assumptions]

### *China is not a threat*

- today's presentation should be evidence this is not so on its own, China is developing VERY FAST ... but there is time
- China also has several important regulatory advantages (but California has other advantages)

### *China will implode:*

- there are severe water problems
- infrastructure is so poor, can not compete

## What can California do?

- Strategy TWO: “Raise Protection”

Because China is entering WTO as a “non-market economy,” it is easy to file and win dumping cases ...

garlic

honey

apple juice concentrate

But, these are almost surely a function of the way the laws are written ... China is NOT dumping ... in longer run, politics and WTO appeals will *probably* limit effectiveness of this strategy

## **What can California do?**

- Strategy THREE: “Compete”
  - Research
  - Promote and Differentiate California's  
Products
  - Invest and Become Partners