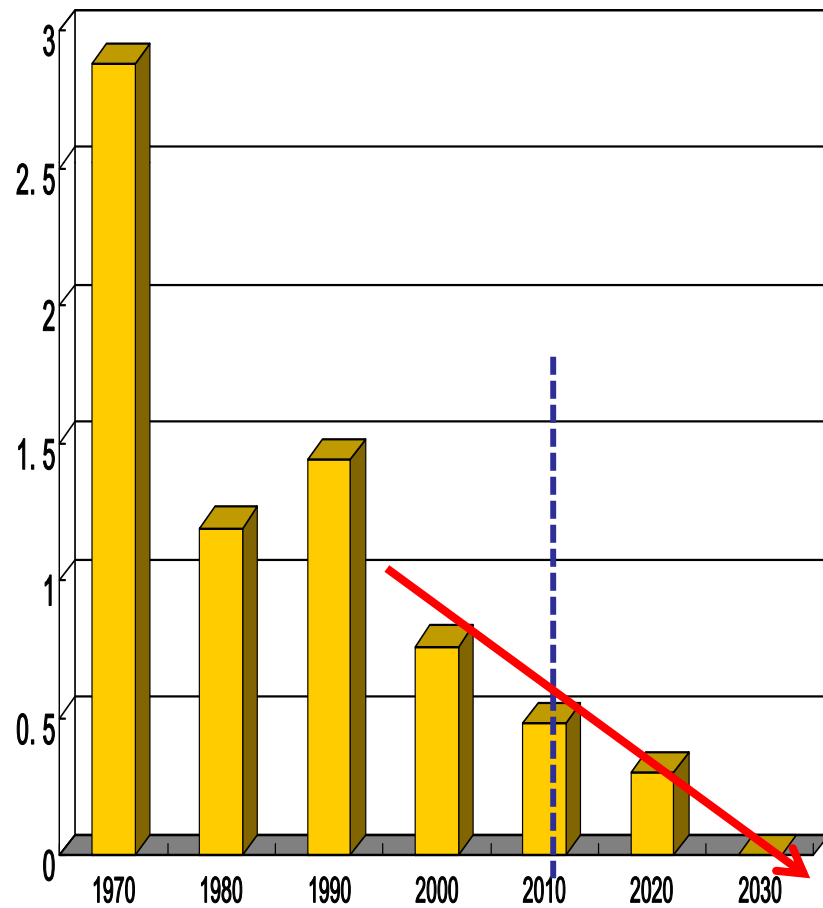




Views on China's Food Security and Trade

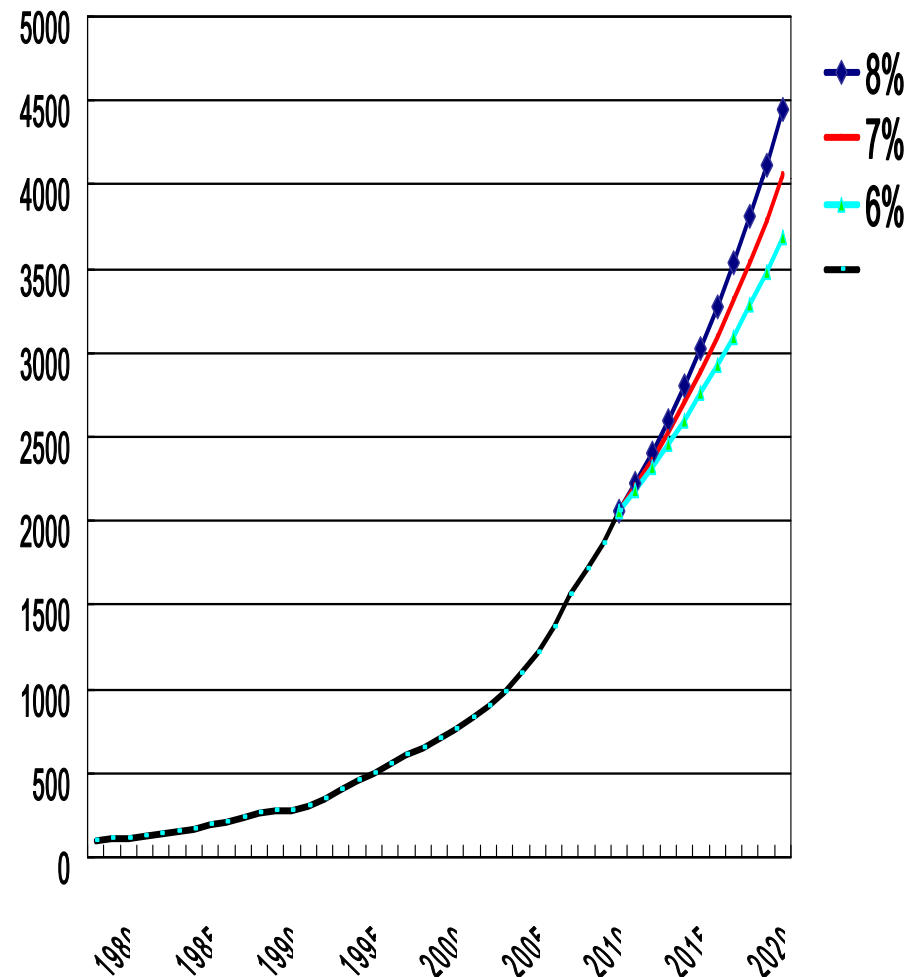
Jikun Huang
Center for Chinese Agricultural Policy
Chinese Academy of Sciences

China has 1.34 billion population, but its growth has been declining



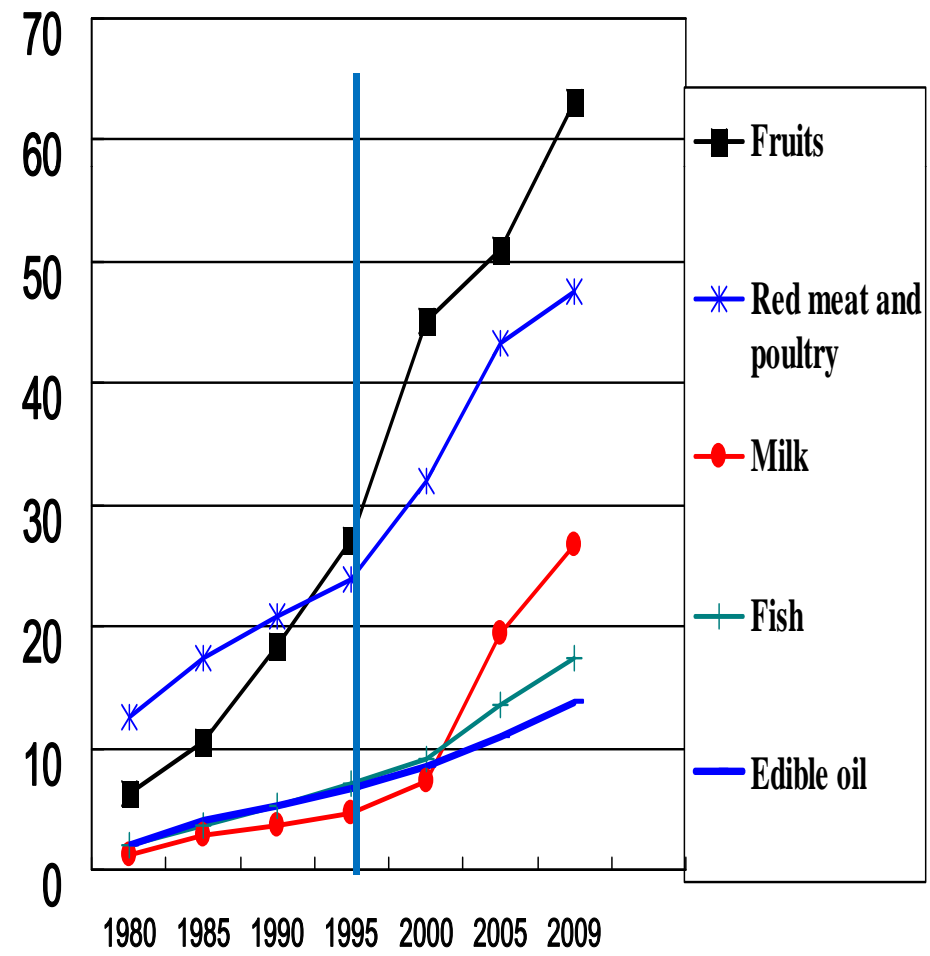
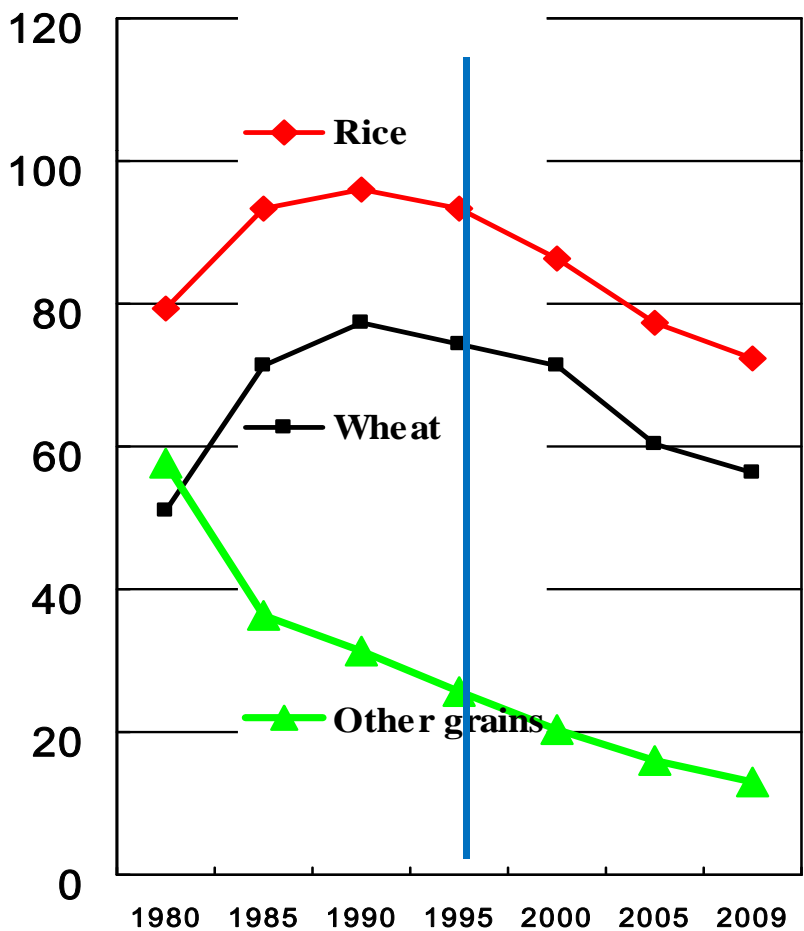
Economic growth will be a key driver of food demand

1980=100

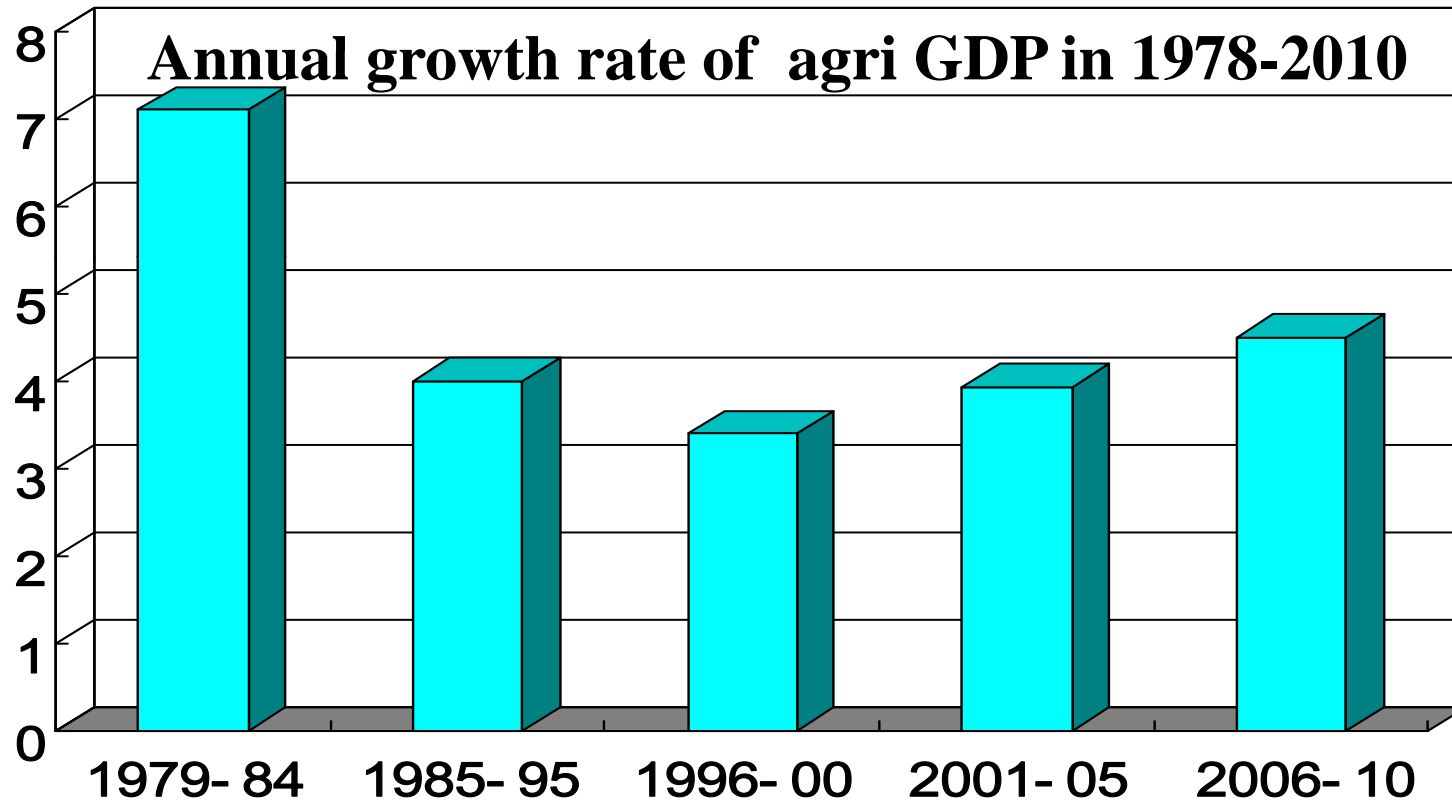


Food consumption: fall in food grain but rise in other food consumption since mid-1990s; Overall annual growth: +4%

Per capita food consumption (kg/person)



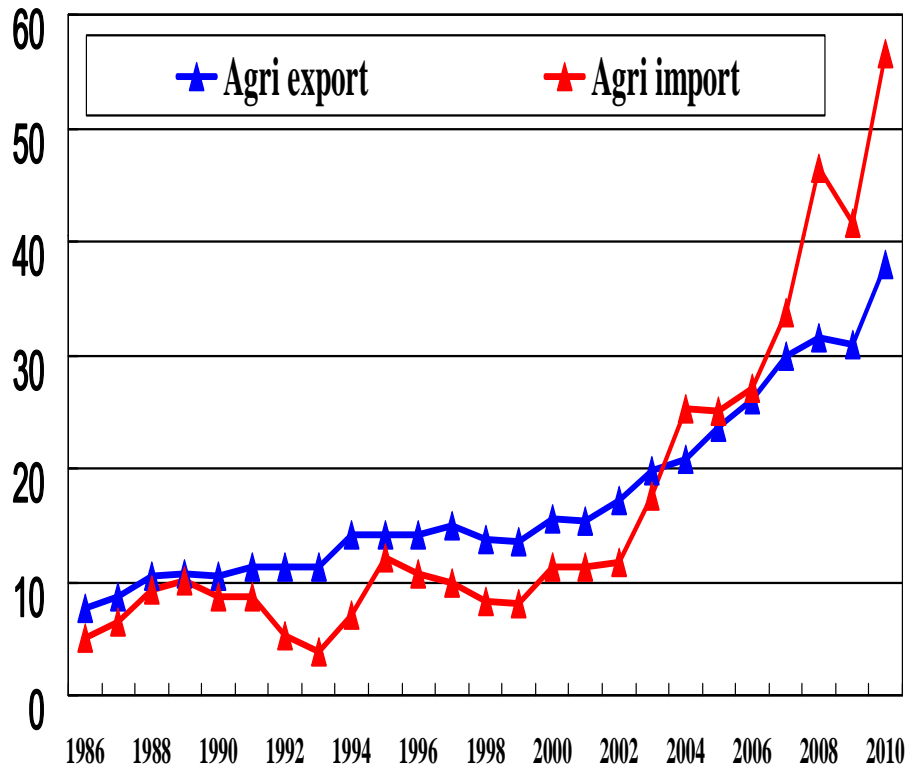
4.5% of annual growth rate of agri GDP in past 30 years



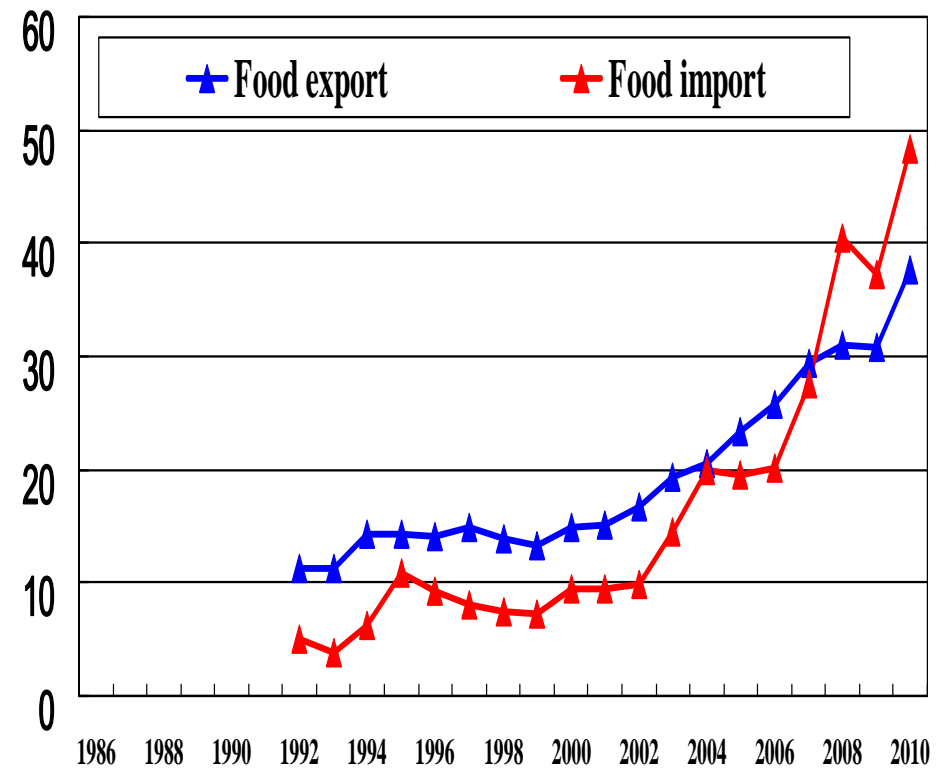
About 4 times of population growth rate

Agricultural and food Trade: export and import (billion US\$)

Agriculture

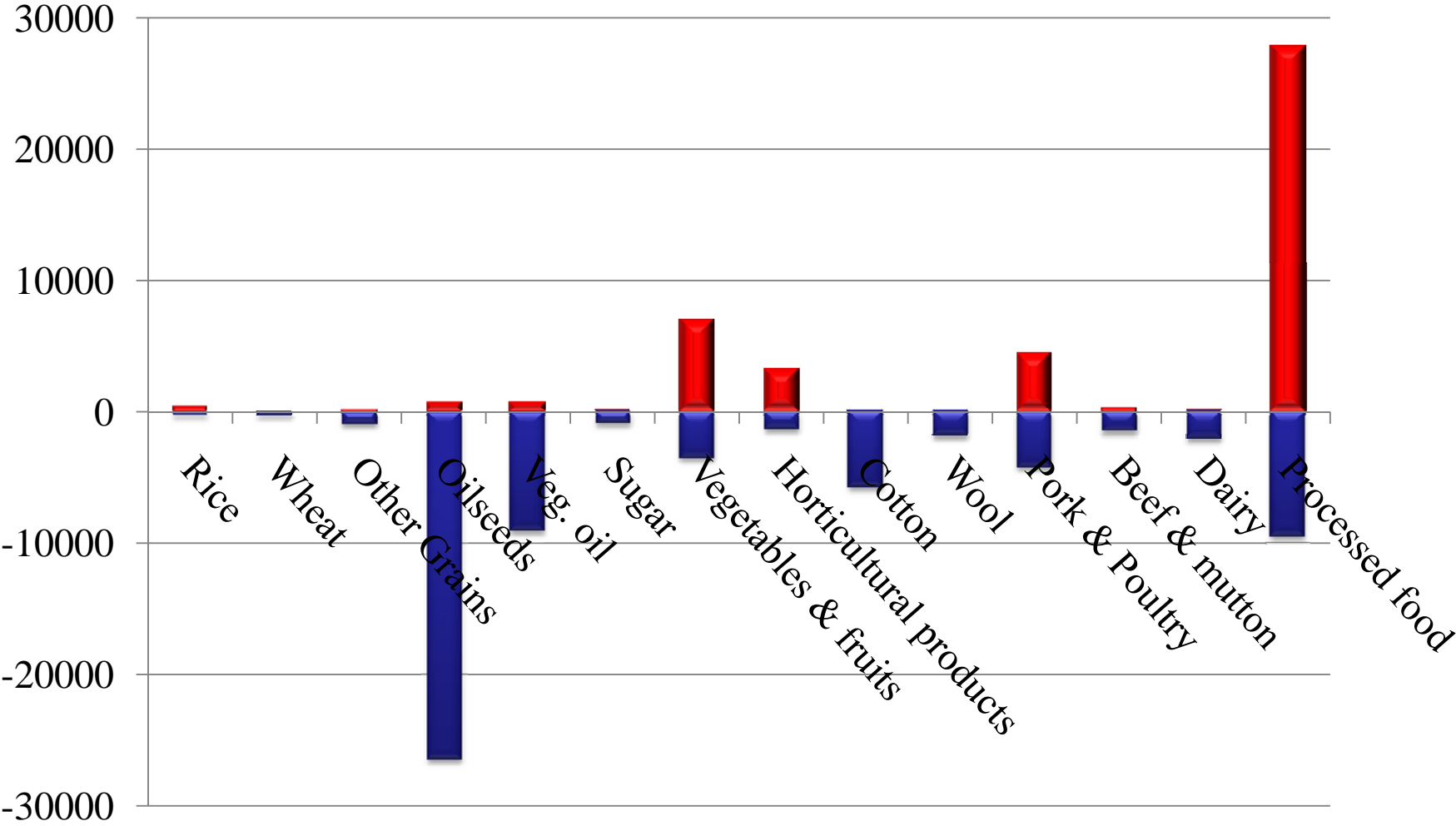


Food



China has been a net agri exporter in the past decades except in recent years. Food self-sufficiency in 2010: 98%

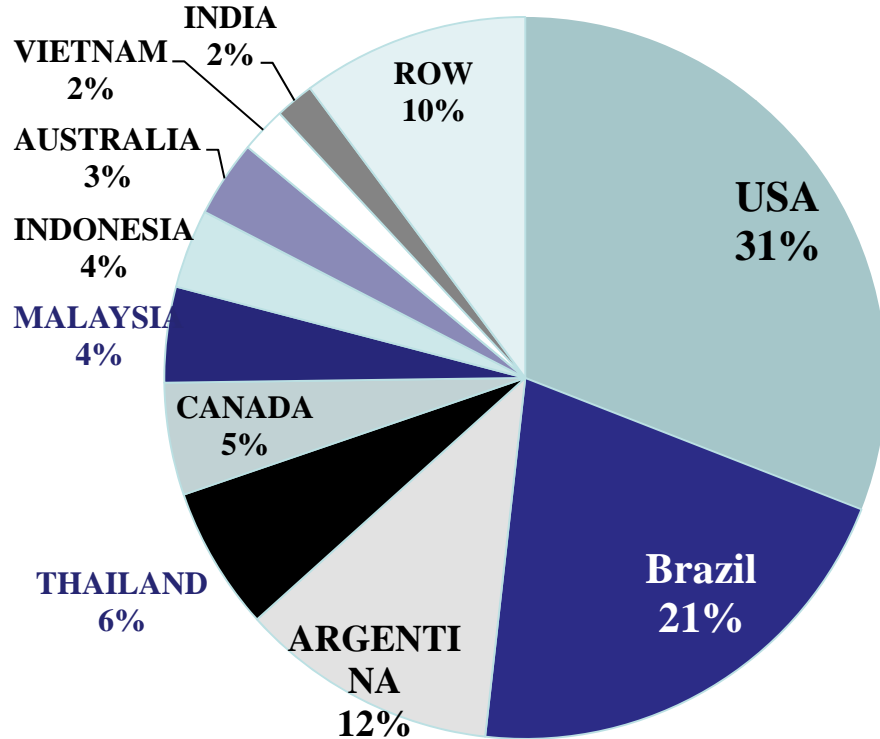
China's agricultural import and export in 2010 (million US\$)



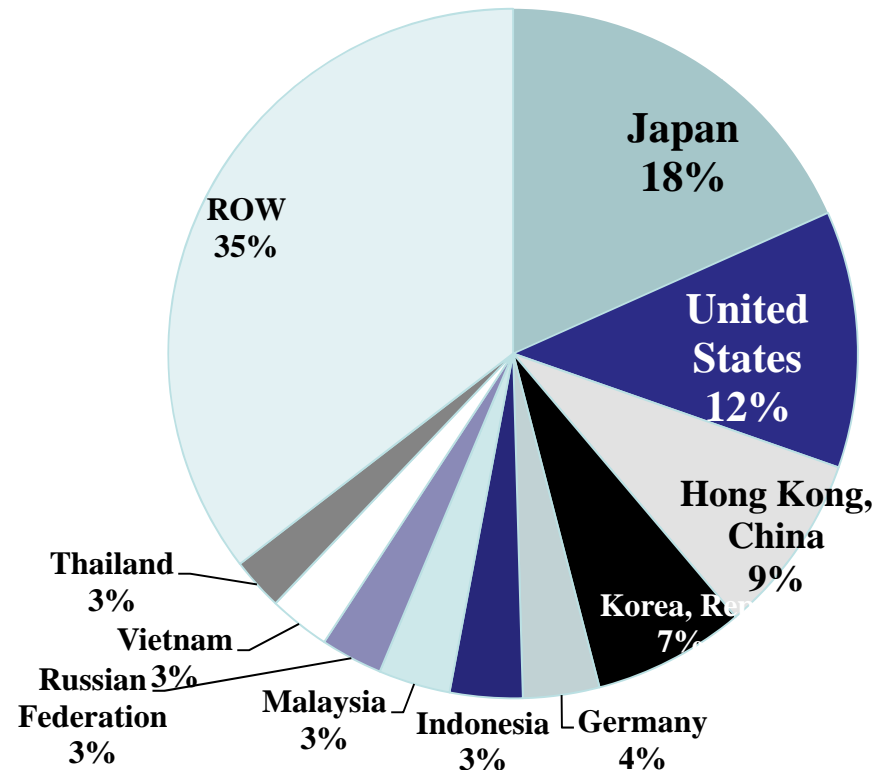
Source: Calculated based on UNCOMTRADE data

China's agricultural import and export by destinations in 2010

Import

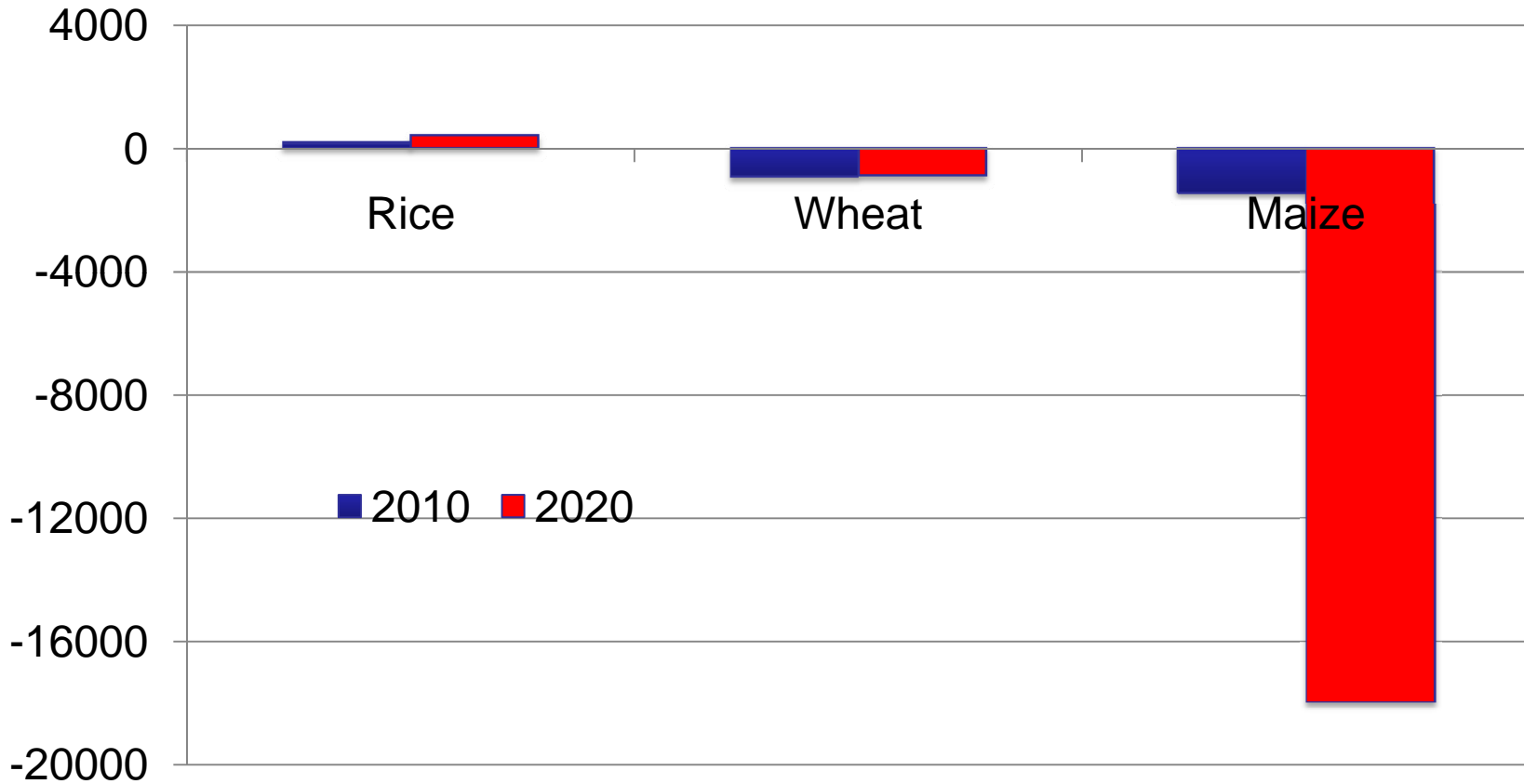


Export



Calculated based on WTO agri. Classification

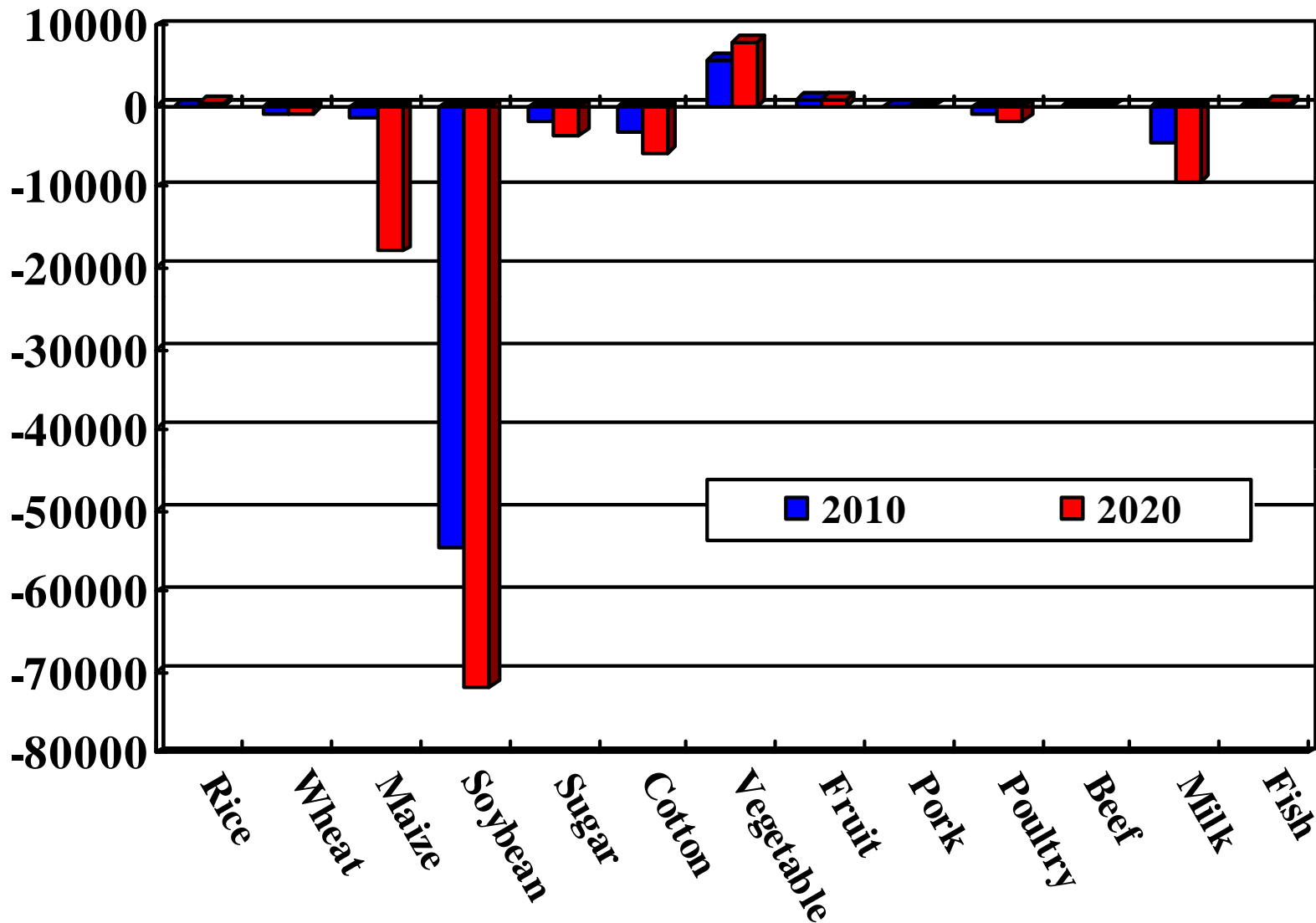
CCAP's projection: China's net export of cereals (1000 tons) under baseline in 2010-2020



Source: Simulation by CAPSiM model based on policy until 2008

Import maize: about 20 million tons

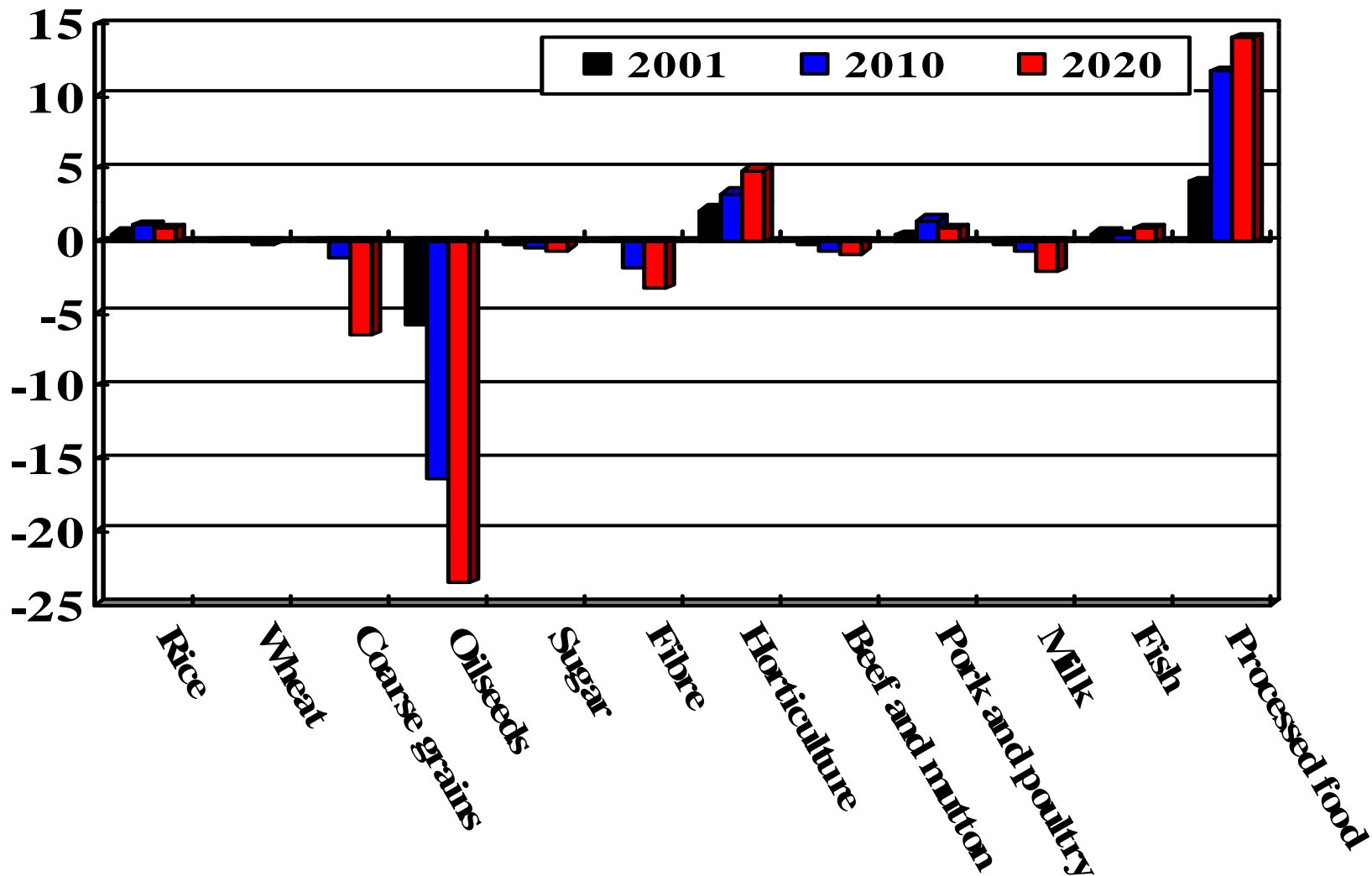
China's net export of agricultural commodities (1000 tons) under baseline in 2001-2020



Source: Simulation by CAPSiM model based on policy until 2008

China's net export of agriculture and food (billion USD) under baseline in 2001-2020

Self-sufficiency in 2020: Grain 87%; Food 96%



National goals and policies

- **Grain: 95% self-sufficiency**
- **Increase agri productivity** (given constraints of land and water):
 - **Invest in land/water**
 - **Invest in technology**
 - ...

Policy responses: Invest in water

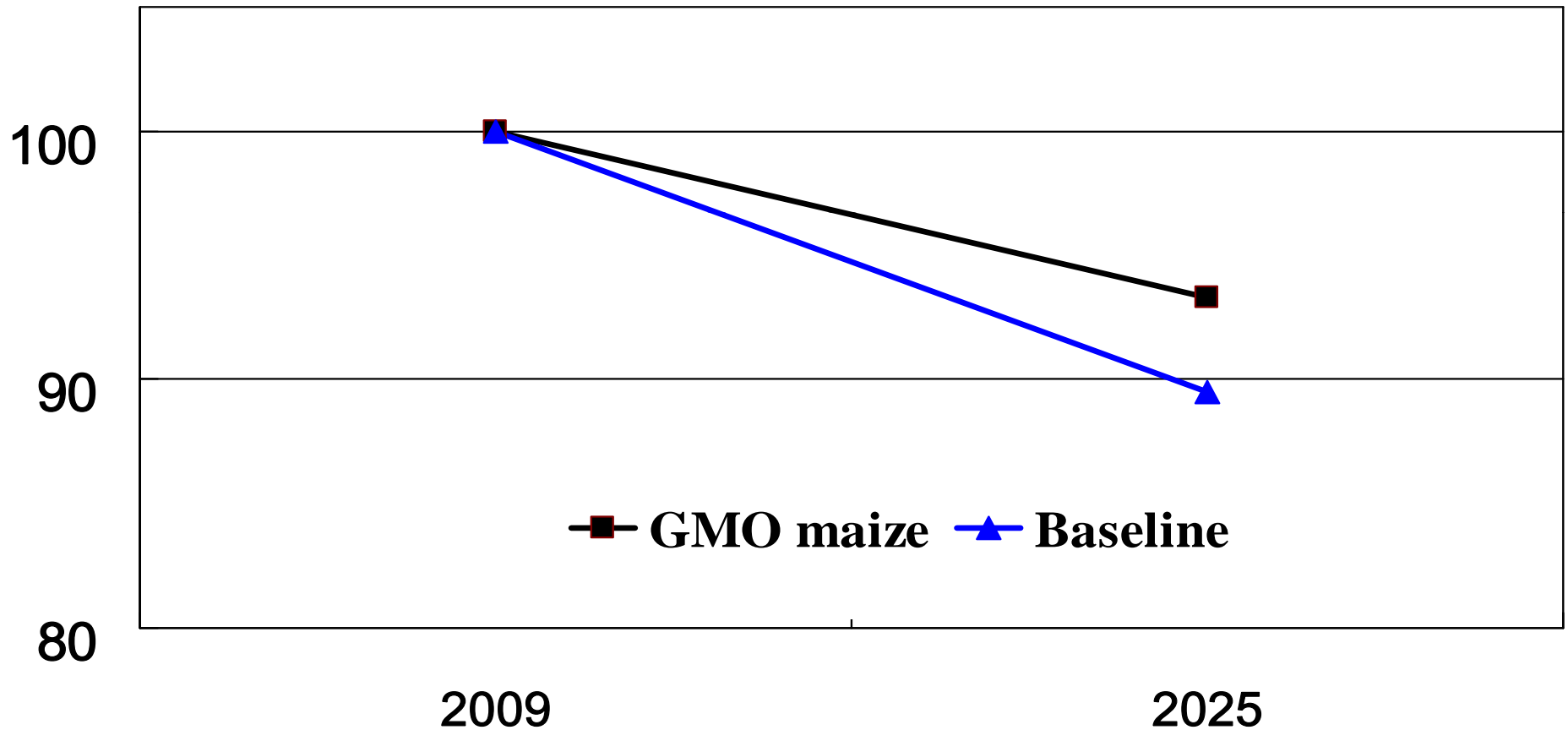
- **China's #1 policy document in 2011: Water Conservancy Reform and Development**
 - **Double investment in water conservancy: invest 4000 billion yuan (630 billion US\$) in next 10 years**
 - **Enhance water saving technology**
 - **...**

National Policy: “Promoting Agriculture by Applying Scientific and Technological Advances”

- **Annual growth rate in agri. R&D (public):**
 - 2000-2009: 16% in real term
 - 2010-2011: 20%
- **In 2008, China also initiated new agri GMO program with 3.8 billion US\$.**
- **China’s #1 policy document in 2012:**
 - New political commitment to invest in R&D, including agribiotech

Scenario: Impacts of biotech maize

Maize self-sufficiency (%) in 2009 and 2025

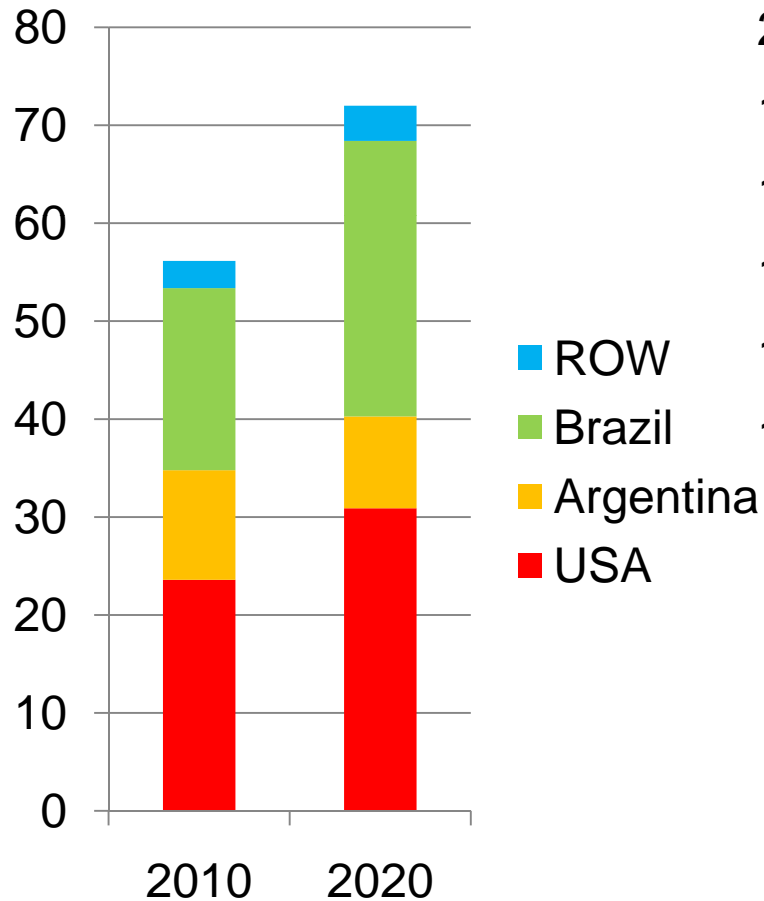


Major goals and policies

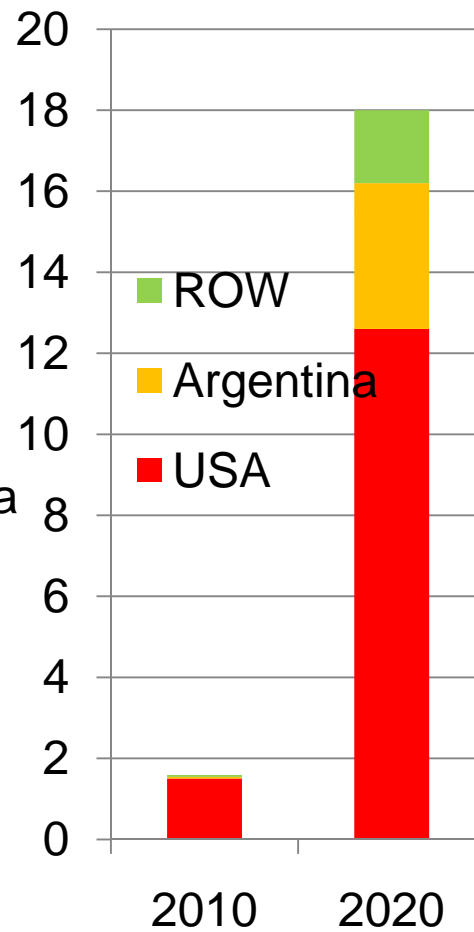
- Grain: 95% self-sufficiency
- Increase agri productivity:
 - Invest in water/land
 - Invest in R&D
 - **Subsidy** (income transfer, 4% agri GDP)
 - **Price stability:**
 - Reserve/stock and minimal price
 - **Trade and FDI/Tech** (e.g., in Africa)
 - **Export: vegetable; fruits; processed foods**
 - **Import: soybean; maize; cotton; milk**

China's import in 2010-2020

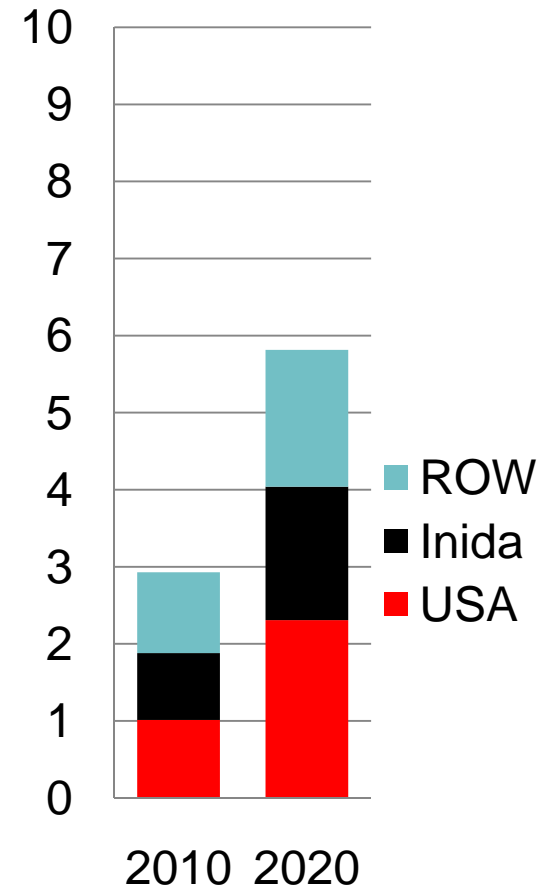
Soybean (million tons)



Maize (Million tons)



Cotton (Million tons)



Source: Simulation by CAPSiM model based on policy until 2008

Implications for China's free trade in agriculture: in APEC and other regions

- **Major gainers:** USA, Canada, South America, and Australia/New Zealand
- **Other gainers:** ASEAN countries, India, and African countries
- **Likely major loser:** East-Asia (e.g., Japan and Korea)

Views on TPP

- **Official views:**
 - Support multilateral FTA (WTO), and also any effort toward FTAs, including TPP
 - Examining pros and cons of TPP; no clear statement so far
- **Personal views:**
 - Could gains significantly from TPP in the long run
 - Depend on path of domestic reforms (e.g., STEs, investment policy in sensitive sector – biotech...)