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The China Puzzle – The Technology Imperative

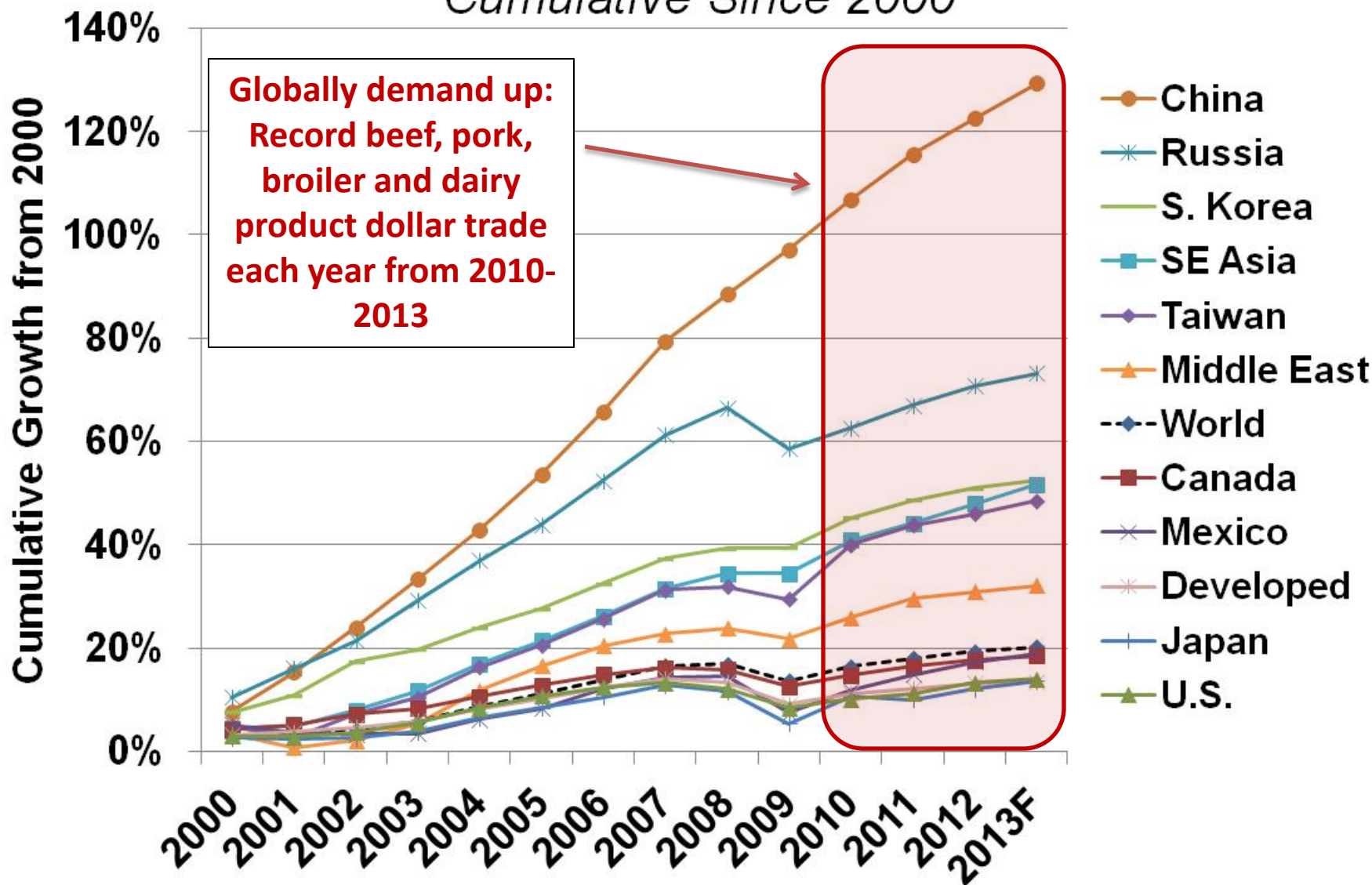
USDA Agricultural Outlook Forum – 2014 February 20

Dennis L. Erpelding



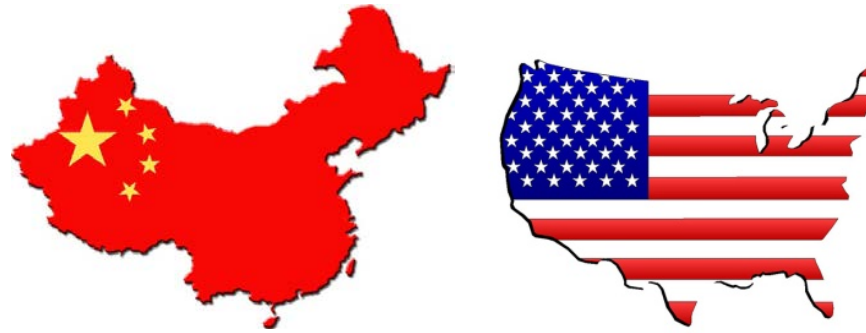
GDP / Capita Annual Growth:

Cumulative Since 2000



Global Food Security Opportunity

- ✓ 20% world's population
- ✓ 10% world's arable land
- ✓ 7% world's fresh water
- ✓ #2 economy



Complementary

- ✓ 4% world's population
- ✓ 12% world's arable land
- ✓ 21% world's fresh water
- ✓ #1 economy



Supporting China's 12th 5 Year Plan

- Increasing food security and farm income
- Modernizing rural agriculture
- Globally engaging
- 100s millions moving to the middle class
- Plant to animal protein
 - Milk
 - Meat



2014 – China's No. 1 Document: Agriculture

- Improving the national food security system
- Strictly observing red line for arable land and constantly raising country's agricultural production capacity
- Make good use of international markets for agricultural products as a complement to domestic supply

Xinhuanet China World Business Entertainment Sports Culture & Edu Sci & Tech Health Odd Travel In-depth Photos Video

No.1 Central Document targets rural reform



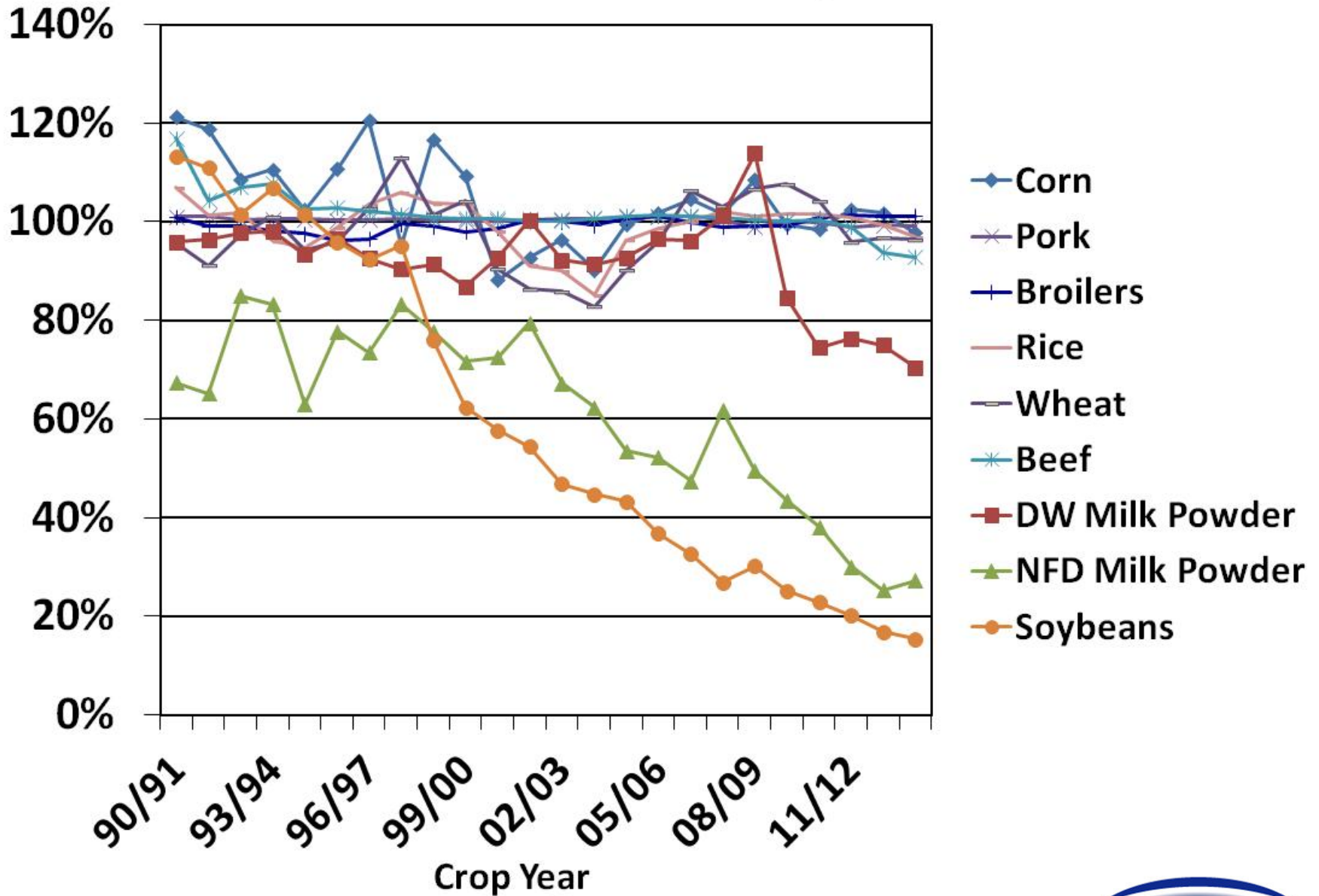
English.news.cn | 2014-01-19 18:35:14 | Editor: Shen Qing

BEIJING, Jan. 19 (Xinhua) -- Chinese authorities on Sunday issued their first policy document of 2014, underscoring the importance of rural reform, developing modern agriculture and maintaining agriculture as the foundation of its economy.

The policy document is issued by the Central Committee of the Communist Party of China and the State Council every year and has been dubbed the "No.1 Central Document".

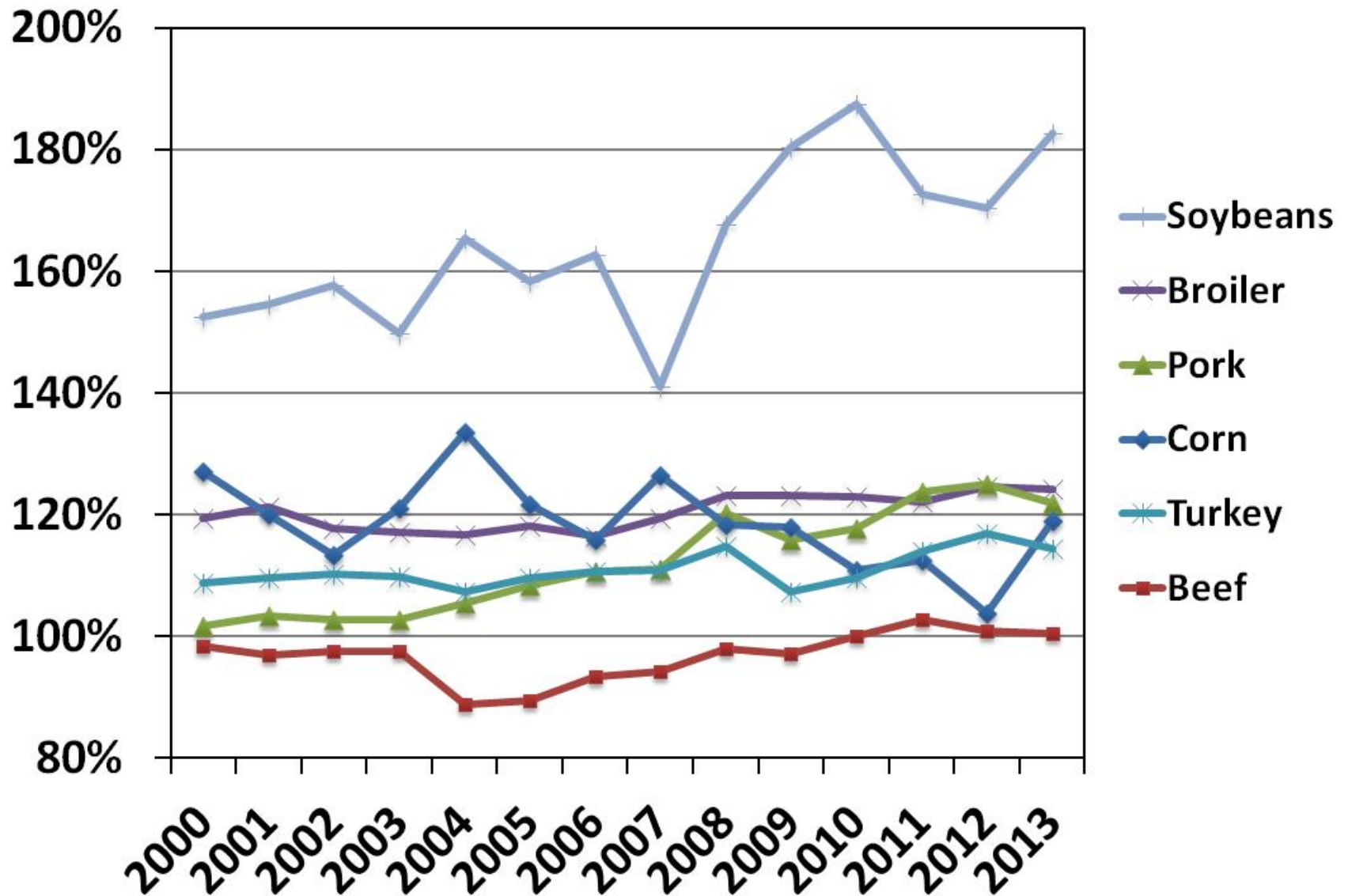
This is the 11th consecutive year in which the document has focused on rural issues.

Chinese Self-Sufficiency: Food



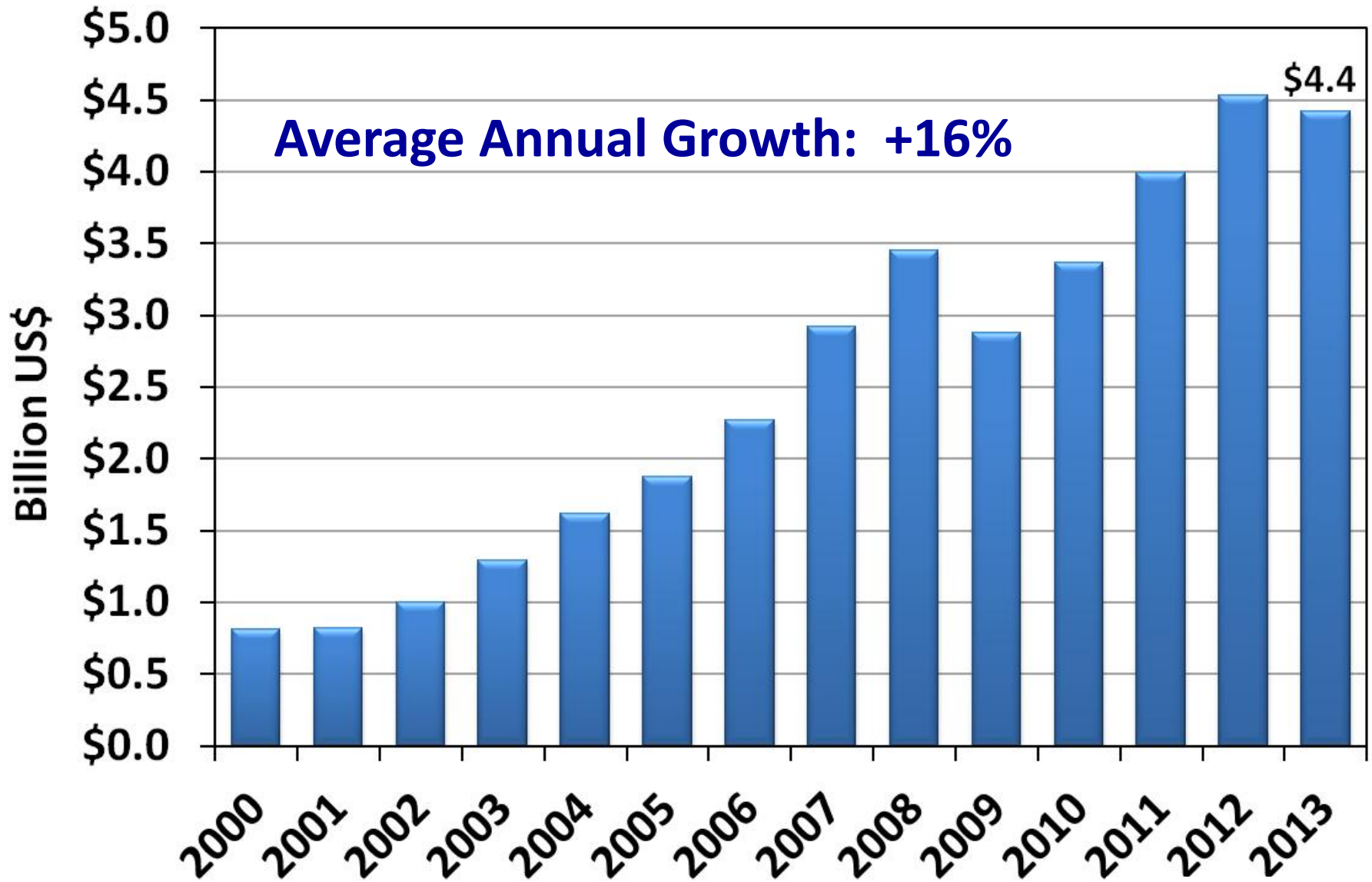
Source: USDA/FAS

U.S. Self Sufficiency



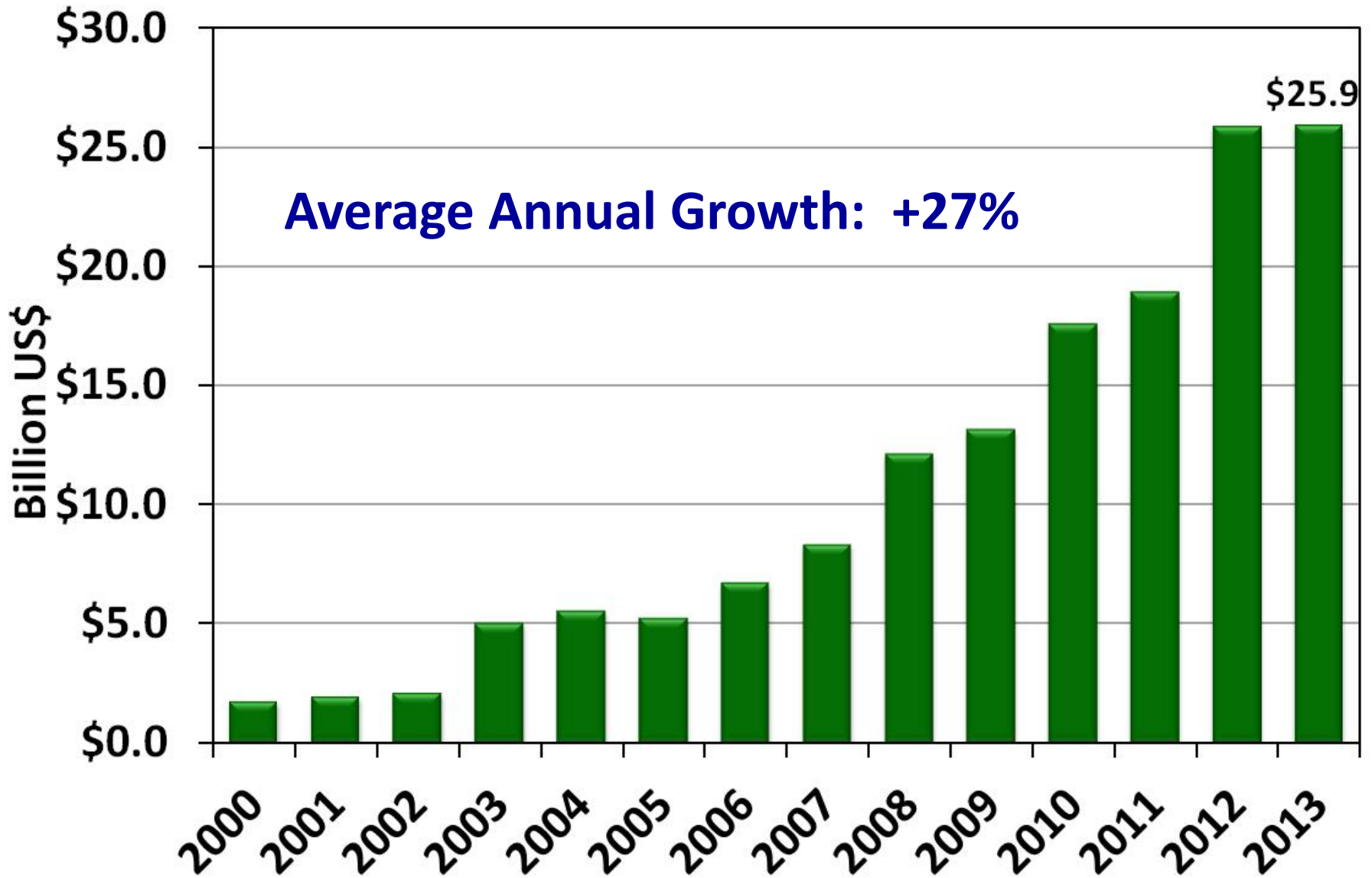
Source: USDA/FAS

U.S. Agricultural Imports from China



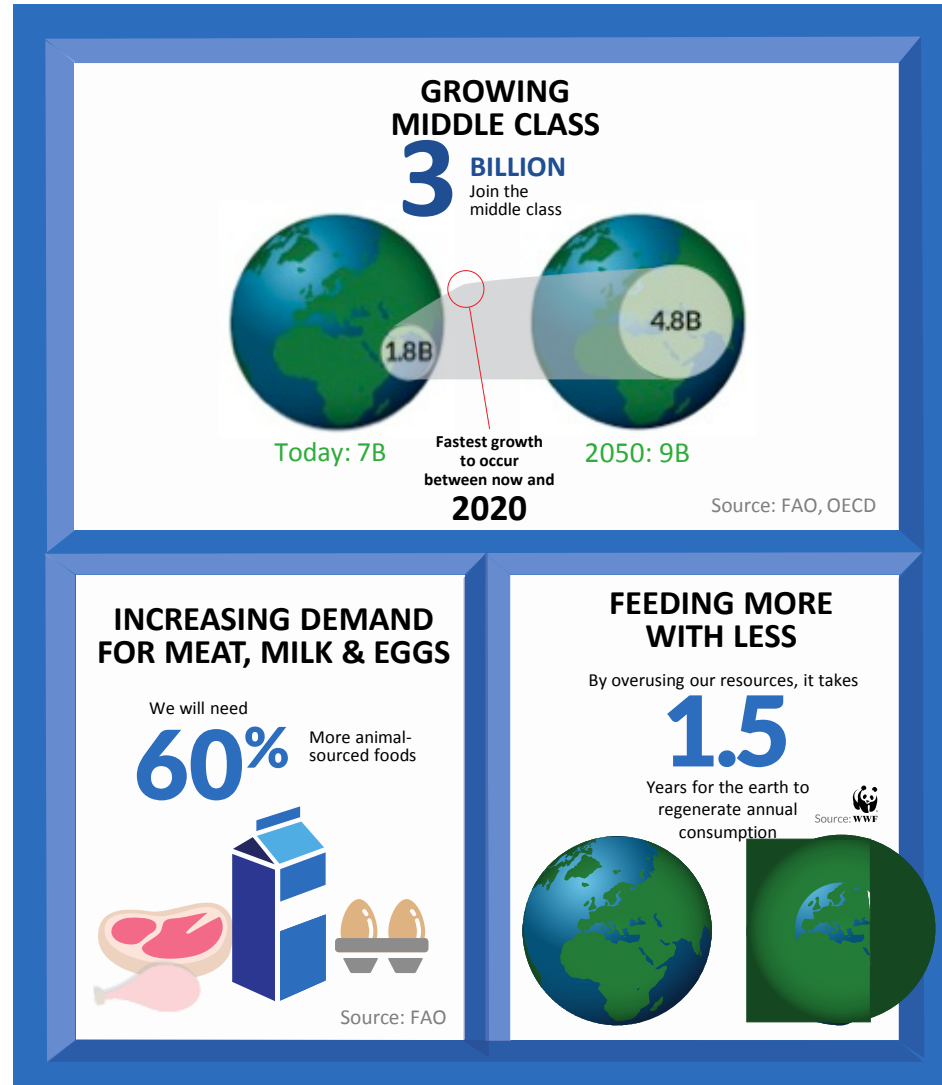
Source: USDA/FAS

U.S. Agricultural Exports to China



Source: USDA/FAS

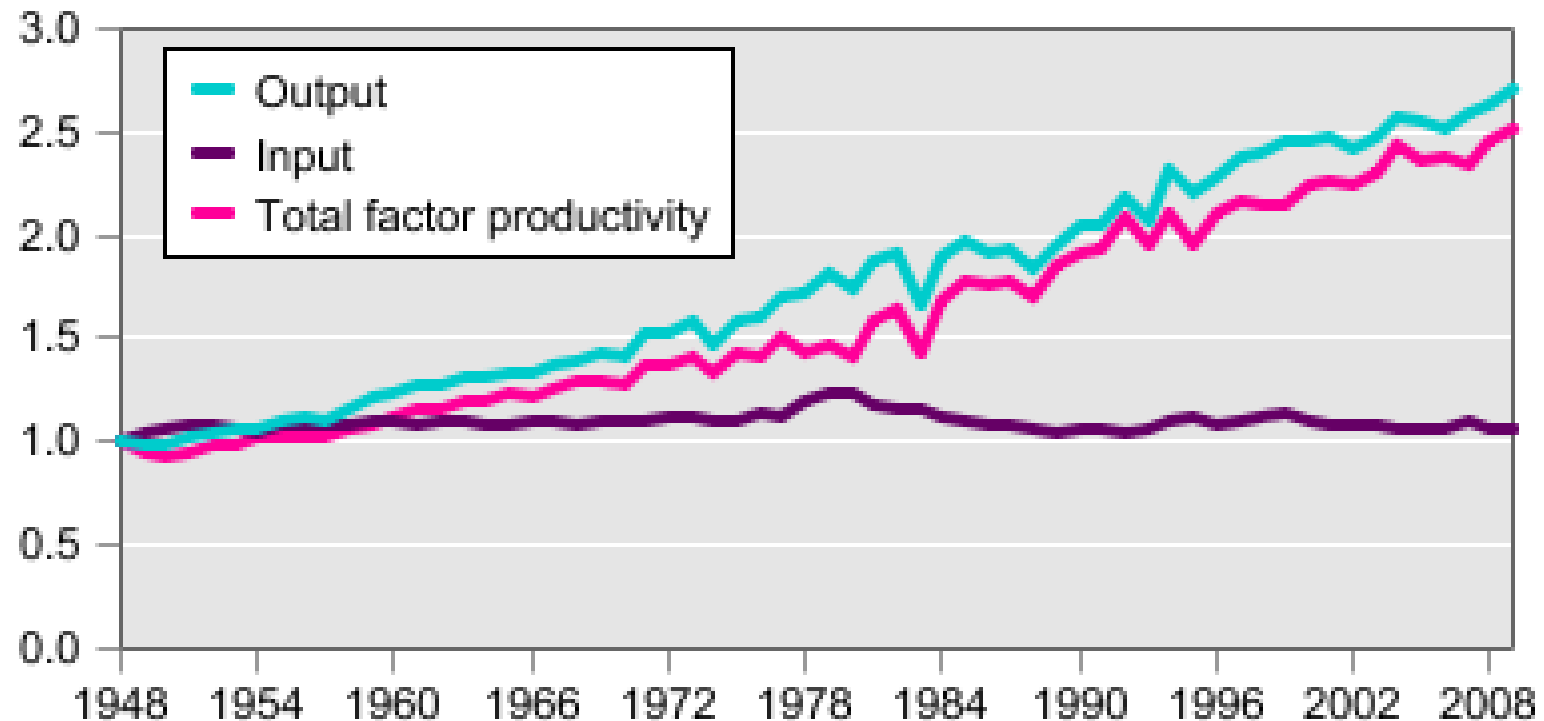
Today's 3 Food Security Realities



Technology - The Benefits of Innovation

U.S. agricultural inputs were steady while total factor productivity expanded from 1948-2009

Indices, 1948=1



Source: USDA, Economic Research Service.

60 years • 250% output • Same input

China and the United States

- Collaboration in science and technology
- Promote bilateral trade
- Deepen agricultural cooperation

Chinese Vice President Xi Jinping said in Des Moines Thursday that China and the United States should enhance collaboration in science and technology, promote bilateral trade and strengthen information exchanges so as to further deepen agricultural cooperation.



Chinese Vice President Xi Jinping addresses the U.S.-China High Level Agricultural Symposium in Des Moines, Iowa, the United States, Feb. 16, 2012. [Xie Huanchi/Xinhua]

Addressing the China-U.S. High Level Agricultural Symposium held in the capital of Iowa, Xi said cooperation and exchanges between China and the United States in agriculture have maintained good momentum in recent years, primarily because both nations are big agricultural countries and enjoy vast shared interests and ample room for cooperation in the area.

Choices – Technology Adoption

European Commission

Directorate-General for Agriculture and Rural Development

PROSPECTS FOR AGRICULTURAL MARKETS AND INCOME IN THE EU 2010–2020



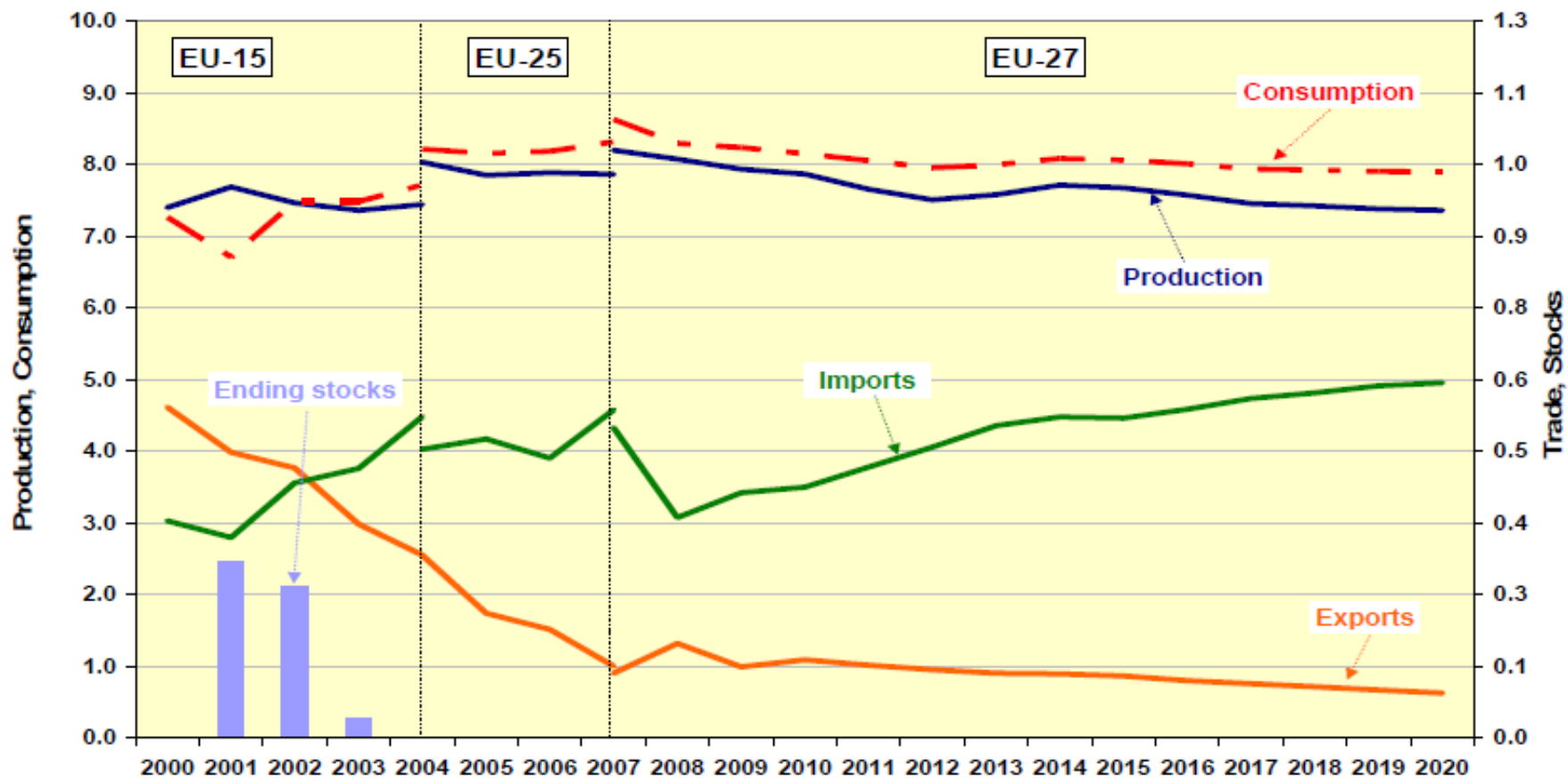
NOTE TO THE READERS

The outlook presented in this publication consist of a set of market and sector income prospects elaborated on the basis of specific assumptions regarding macroeconomic conditions, the agricultural and trade policy environment, weather conditions and international market developments. They are not intended to constitute a forecast of what the future will be, but instead a description of what may happen under a specific set of assumptions and circumstances, which at the time of projections were judged plausible. ...

December 2010

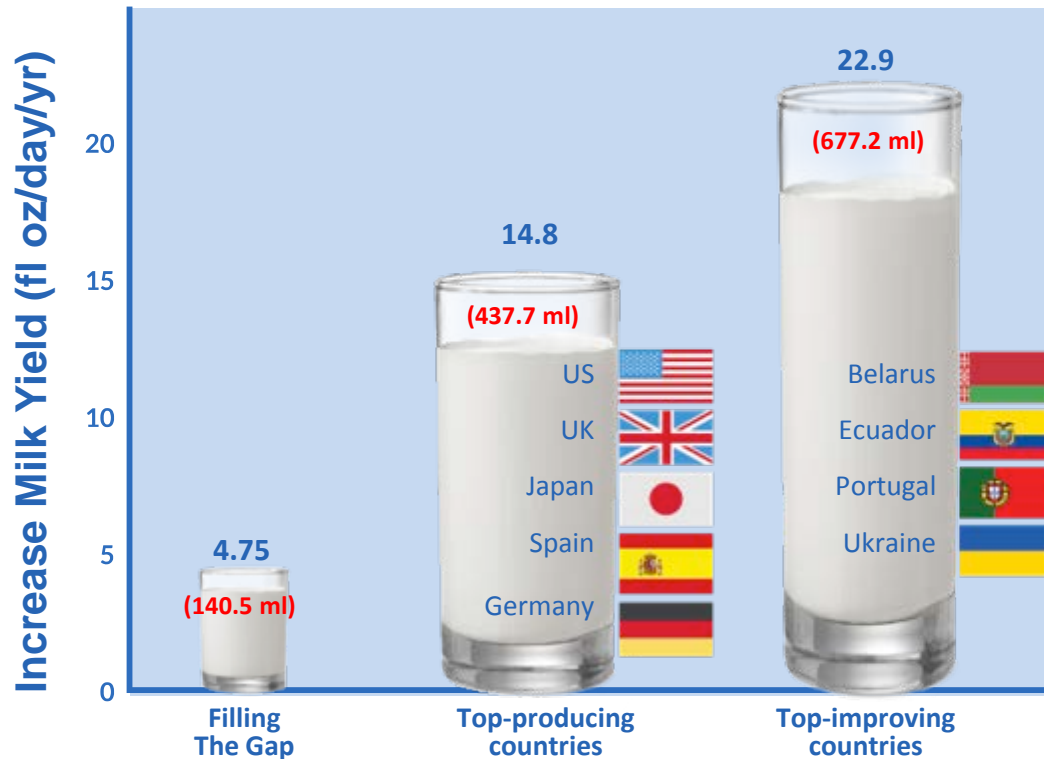
Beef Meat: Net Importers

Graph 3.5 Beef meat market developments (mio t), 2000-2020



The Innovative Path: It Is Possible!

Producing more milk to meet increased demand

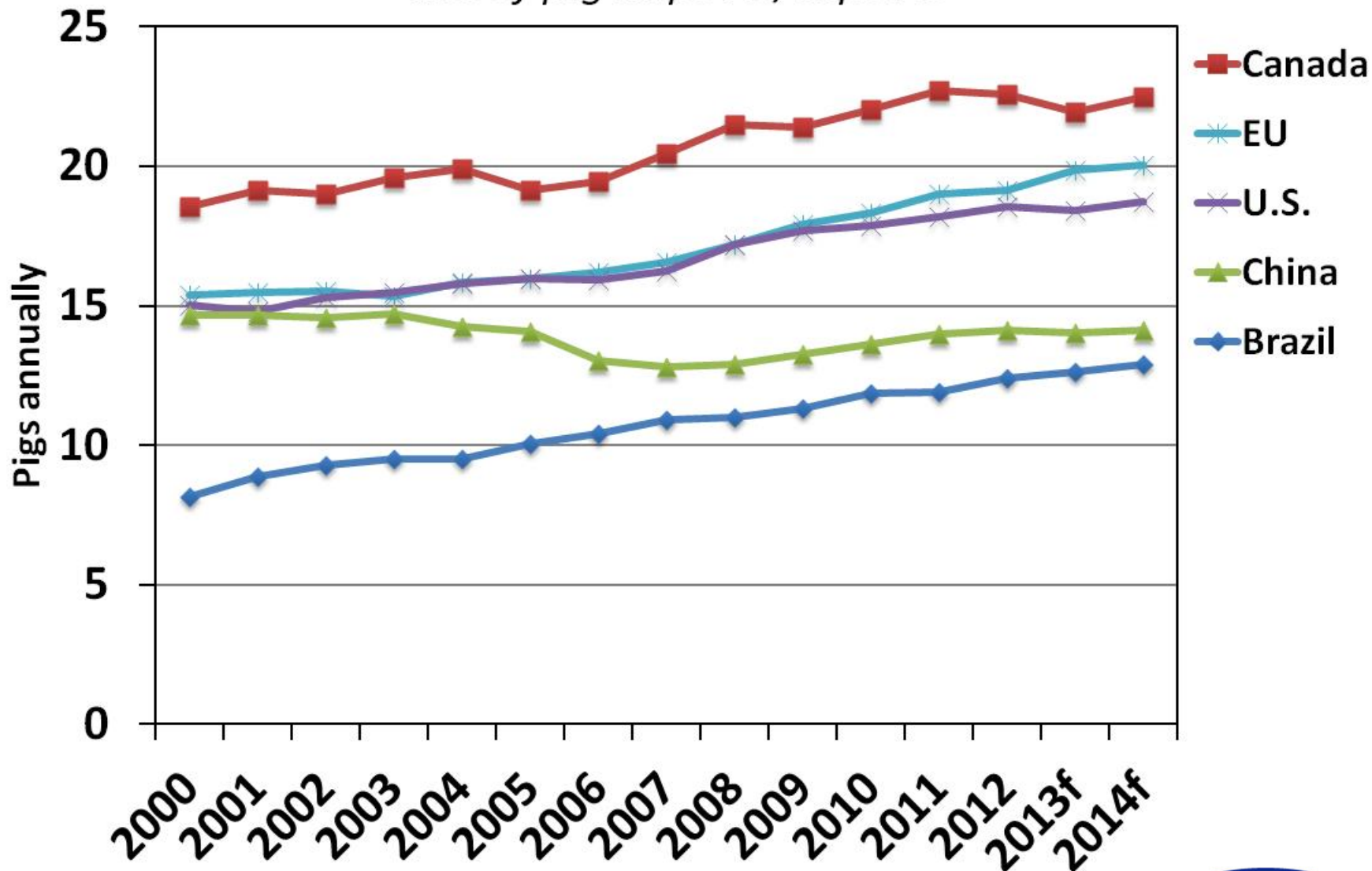


Examples:

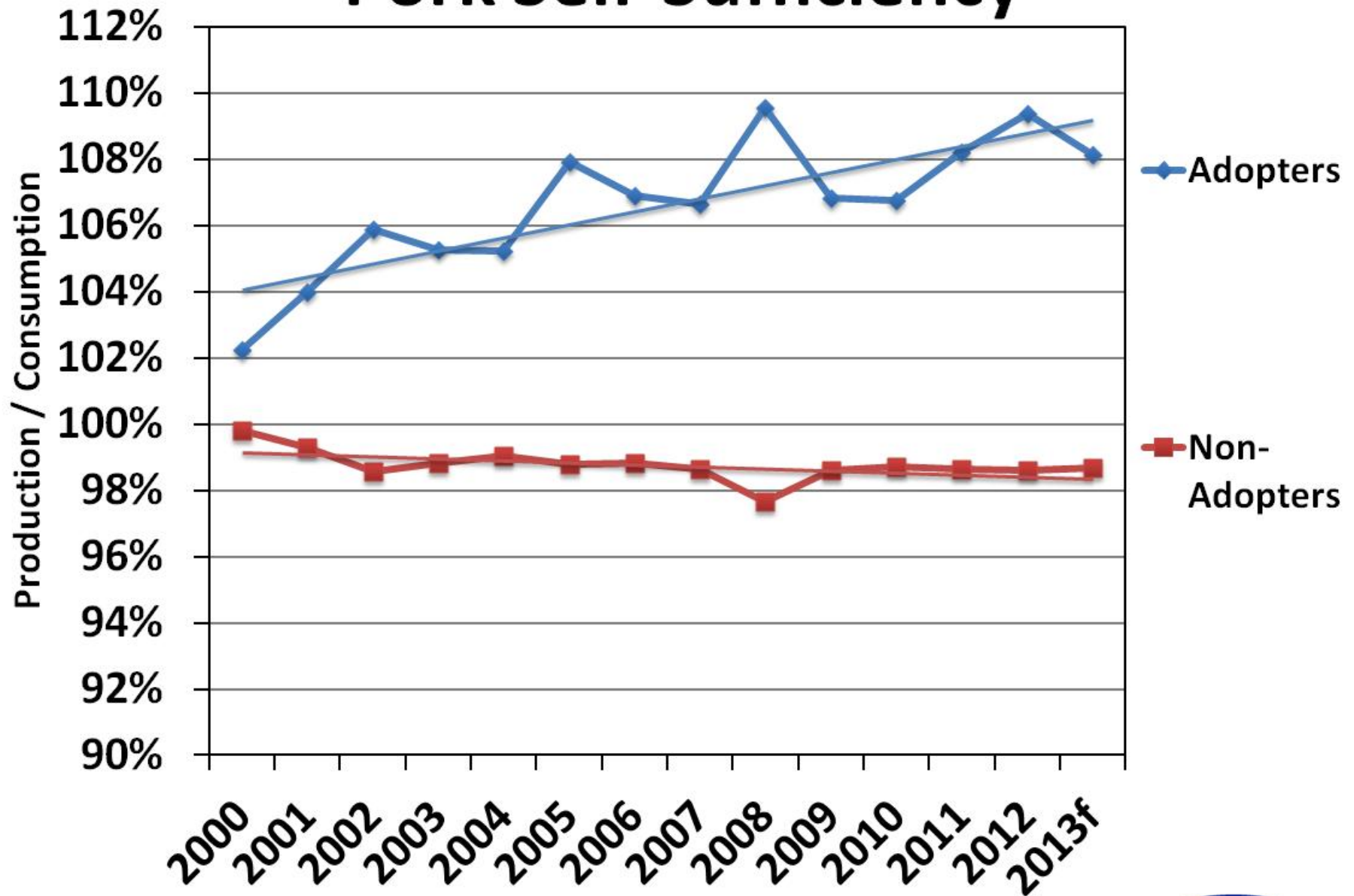
- Genetics
- Nutrition
- Feed optimization
- Health management
- Vaccines
- Disease control
- Fresh, clean water
- Improved housing

Pig Slaughter / Beginning Sow Stocks

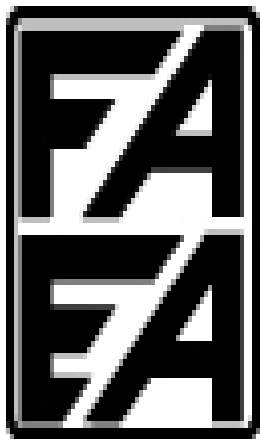
net of pig imports/exports



Pork Self-Sufficiency



Source: USDA/FAS, carc wt equiv.



FOOD & AGRICULTURE EXPORT ALLIANCE



U.S. Dairy
Export Council.

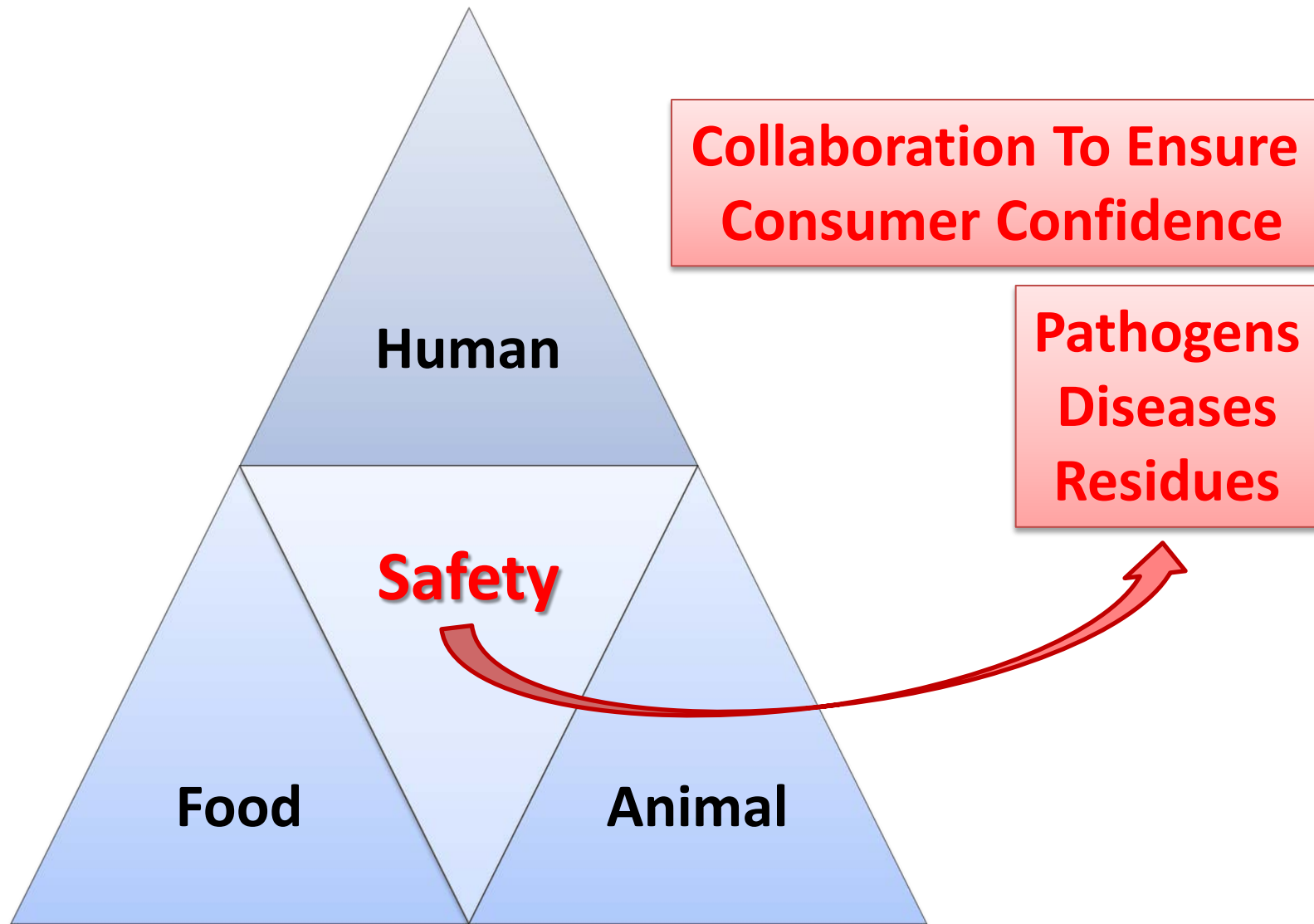


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Common Interests To Achieve Global Food Security

Never Politicize



C O D E X A L I M E N T A R I U S

International Food Standards



World Health
Organization



Food and Agriculture
Organization of
the United Nations

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Scientific basis for Codex

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based on science
and built on trust



C O D E X A L I M E N T A R I U S – International Food Standards –

SAFE, GOOD FOOD FOR EVERYONE.

The Codex Alimentarius Commission, established by FAO and WHO in 1963 develops harmonised international food standards, guidelines and codes of practice to protect the health of the consumers and ensure fair trade practices in the food trade. The Commission also promotes coordination of all food standards work undertaken by international governmental and non-governmental organizations. For more information see [here](#).

FAO/WHO Scientific Basis for Codex

[JECFA](#)

[JMPR](#)

[JEMRA](#)

[Other scientific advice](#)

Latest news

[CAC34 report](#)

30 Sep 2011 - The report of the 34th Session of the Codex Alimentarius Commission in English is available [\[...\]](#)

[Note to the press issued by WHO on the results of the CAC34](#)

29 Sep 2011 - For the note to the press issued by WHO on the results of the 34th [\[...\]](#)

[CCEXEC65 and CAC34 AUDIO RECORDINGS](#)

5 Aug 2011 - Audio recordings of the 65th Session of the Executive Committee of the Codex Alimentarius Commission [\[...\]](#)

[Procedural Manual 20th edition](#)

16 Jun 2011 - The 20th edition of the Procedural Manual of Codex Alimentarius Commission is available in English, [\[...\]](#)

[Code of hygienic practice for fresh fruits and vegetables](#)

16 Jun 2011 - Following the high number of requests for this text due to the recent food safety [\[...\]](#)

[News archive](#)



The China Puzzle – The Technology Imperative

- **Global food security is possible**
- **Innovation will be essential to meet food need**
- **China and U.S. can be the global leaders**
- **Collaboration on technology adoption**
- **Complementary market access**
- **International standards establishment and recognition**

Thank you!



Thank you!

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