

Seeing Red: How China Influences Your Grain, Livestock Prices

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2018 Farm Futures Summit

Coralville, Iowa, January 19th, 2018

A Quick Introduction: Dr. Wendong Zhang

- Grown up in a rural county in NE China
- Attended college in Shanghai and Hong Kong
- Ph.D. in Ag Econ in 2015 from Ohio State
- 2012 summer intern at USDA-ERS on farm economy and farmland values
- Research and extension interests:

land value/ownership www.card.iastate.edu/farmland/agriculture and the environment

China Ag center www.card.iastate.edu/china

<https://www.card.iastate.edu/china>



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Center for China-US Agricultural Economics and Policy

CHINESE ACADEMY OF AGRICULTURAL SCIENCES

China Ag Center · Publications and Presentations

Publications

Minghao Li, Wendong Zhang, Dermot Hayes, Riley Arthur, Yantao Yang, and Xiudong Wang. 2017. ["China's New Nationwide E10 Ethanol Mandate and Its Global Implications."](#) *Agricultural Policy Review*. Center for Agricultural and Rural Development, Iowa State University.

Wu, Qianrong, and Wendong Zhang. 2016. ["Of Maize and Markets: China's New Corn Policy."](#) *Agricultural Policy Review*. Center for Agricultural and Rural Development, Iowa State University.

Zhang, Wendong. 2015. ["The Commonalities and Differences between Chinese and US Agriculture."](#) *Agricultural Policy Review*. Center for Agricultural and Rural Development, Iowa State University.

A corny tale

The
Economist

China imports a farm from Iowa

A slice of the Midwest outside Beijing

Presentations

Zhang, Wendong. 2017. ["Recent Developments in China and its Impacts on US Agriculture."](#) 📄 2017 Pro-Ag Outlook, November 17, 2017.

Zhang, Wendong. 2017. ["From Northeast China to the Midwest."](#) 📄 AMMO Club, November 6, 2017.

Zhang, Wendong. 2017. ["Update on Chinese Ag Economy."](#) 📄 Iowa Institute for Cooperatives Member Summer Workshop, Huxley, IA, June 15, 2017.

Lawrence, John, and Zhang, Wendong. 2017. ["Understanding the U.S. Farm Bill: Policy to Practice."](#) 📄 Presentation to the Chinese Ministry of Agriculture, Agricultural Trade Promotion Center Delegation, Ames, Iowa, May 30, 2017.

Zhang, Wendong. 2017. ["What's Going On in China: Corn, GMO, Crop Insurance and High-Speed Rails."](#) 📄 2017 Crop Advantage Series, Okoboji, IA, January 5, 2017.

China, U.S. reach trade agreement on beef, poultry and natural gas



Donald J. Trump

@realDonaldTrump

Follow

China just agreed that the U.S. will be allowed to sell beef, and other major products, into China once again. This is REAL news!

8:20 AM - 12 May 2017

31,340 126,239



Tweets 36.3K Following 45 Followers 42.3M Likes 23 Moments 5

Tweets Tweets & replies Media

Chicago Tribune



REUTERS

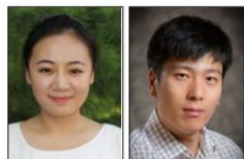
Donald J. Trump

The agreement would also ease import restrictions on agricultural goods, including lifting China's ban on beef imports that was imposed in 2003 after a case of mad cow disease. The Bush and Obama administrations have sought for years to get it removed.

In exchange, the U.S. would allow the sale of cooked Chinese poultry — a market that could be done safely. "We do not intend to endanger anybody's health or safety in the U.S.," he said.

The agreement would also streamline the evaluation of pending U.S. biotechnology product applications; pave the way for allowing American-owned supplier services to begin the licensing processes in China and facilitate the entry of Chinese banks into the U.S. banking market, among other measures.





Of maize and markets: China's new corn policy

By Qianrong Wu, economics graduate student, qianrong@iastate.edu; Wendong Zhang, extension economist, wdzhang@iastate.edu

2017

美国农业大州爱荷华州的农畜产品在世界市场上长期占据重要地位，现任州长特里·布兰斯塔德已被特朗普政府提名为下一届驻华大使。爱荷华州立大学中国留学生对中国玉米产业政策的一份研究报告获得州农业部长Bill Northey 的推荐转发，芝华特对此深度报告进行了翻译整理。

玉米与市场：谈中国的新玉米政策

作者：Qianrong Wu Wendong Zhang

翻译：芝华数据 李佳璇



#ENVIRONMENT

SEPTEMBER 12, 2017 / 8:26 PM / 2 MONTHS AGO

China sets 2020 target for nationwide ethanol use to cut corn stocks

Extension and Outreach



Center for Agricultural and Rural Development

How China hopes a transplanted Iowa farm will help transform its aging ag industry (and boost Iowa trade as well)

THE CHINA-U.S. DEMONSTRATION FARM THAT RECENTLY BROKE GROUND IS A PROMINENT SYMBOL OF XI JINPING'S ATTEMPT TO GENTLY MODERNIZE RURAL CHINA.

How a different Iowa visit changed China

Kenneth Quinn, Iowa View contributor

Published 4:02 p.m. CT Jan. 5, 2017 | Updated 2:04 p.m. CT Sept. 20, 2017

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2017.9.23



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Extension and Outreach

Des Moines Register

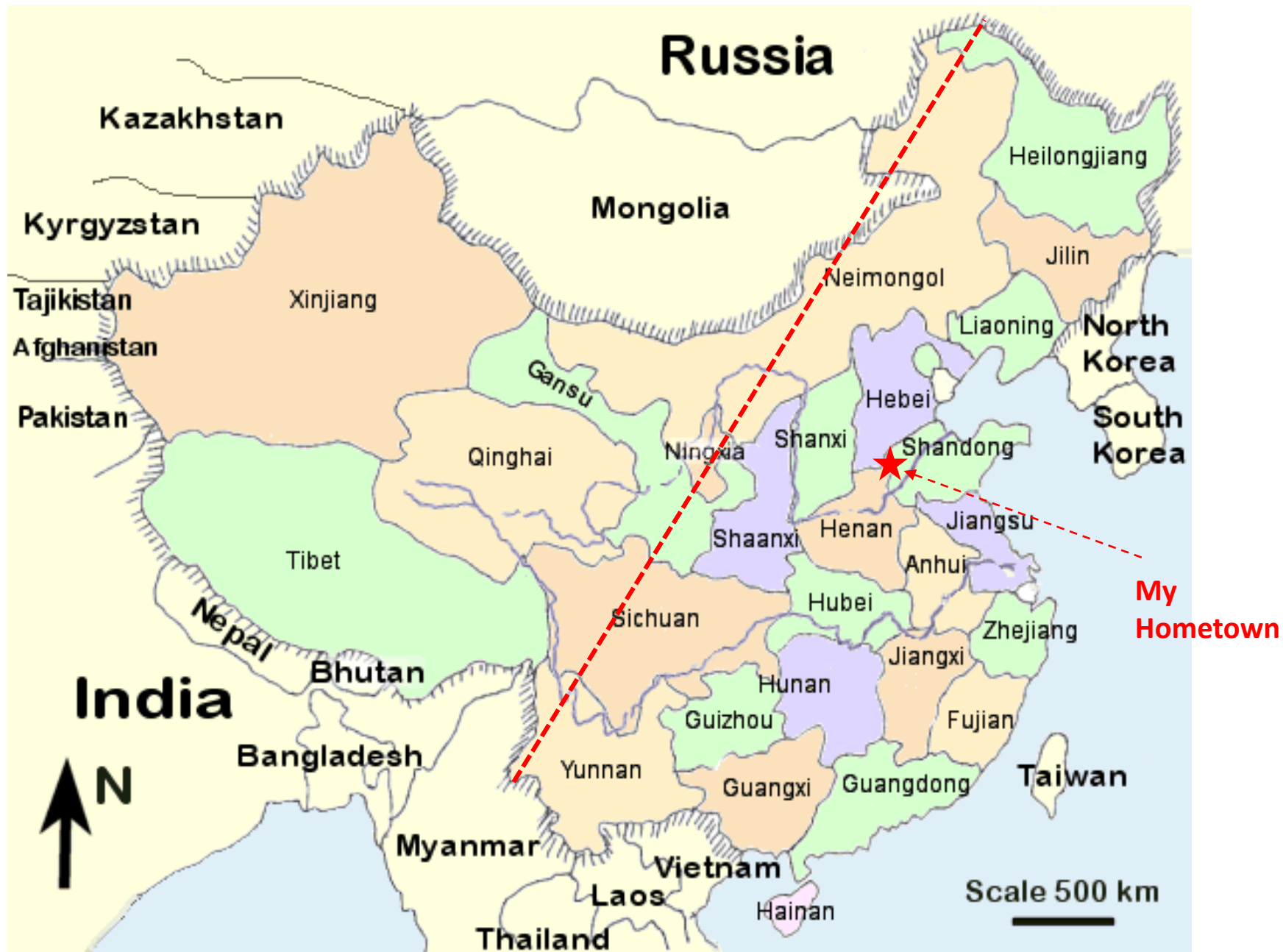
 **CARD**
Center for Agricultural and Rural Development

China enters “New Era”

- Chinese Dream
- Belt and Road Initiative
- Xi Jinping 2030?
- COE of China



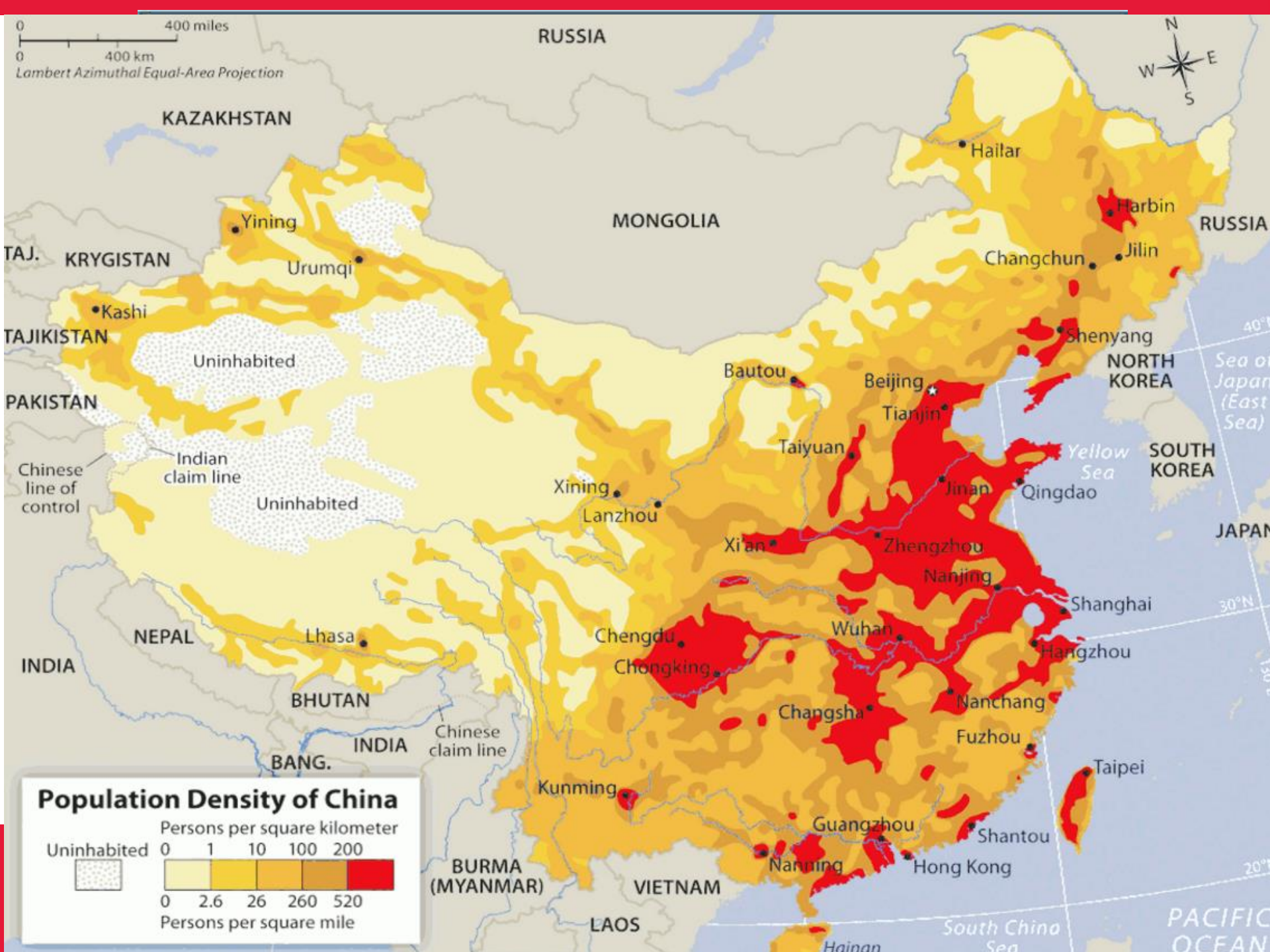
China's Provinces



My hometown: Shenxian, Shandong Province

Greenhouse – plastic film - Shandong Province





China's demographics – large is beautiful

1.39 bn

Population
54% urban

453 mn

Households

415 mn

Millennials
(30% of population)

217 mn

Gen Z
(18% of population)



1005 mn

Working age
population

79 mn

College
graduates

1042 mn

Smartphone
subscribers

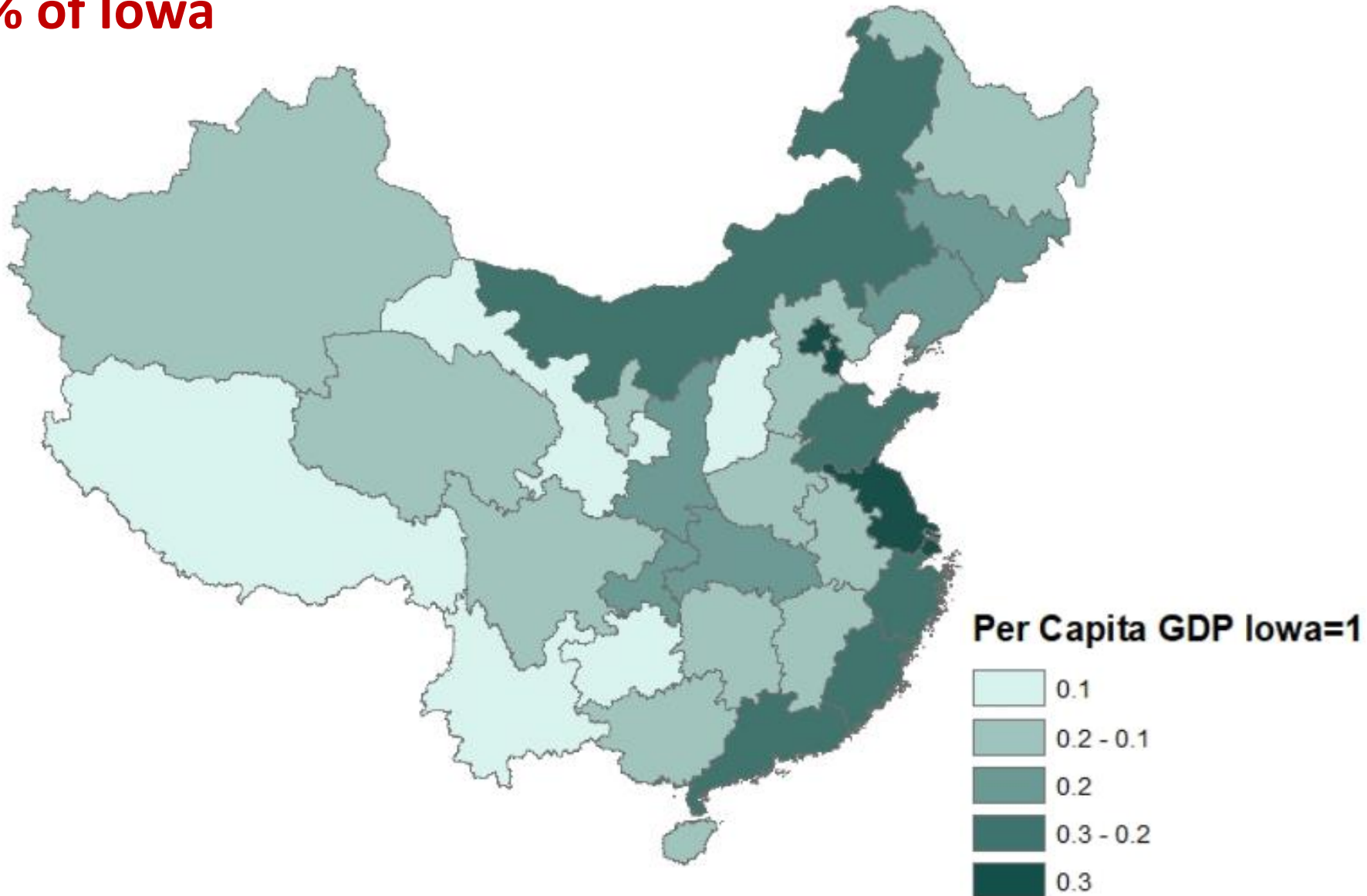
US\$ 606 bn

Online retail
market size

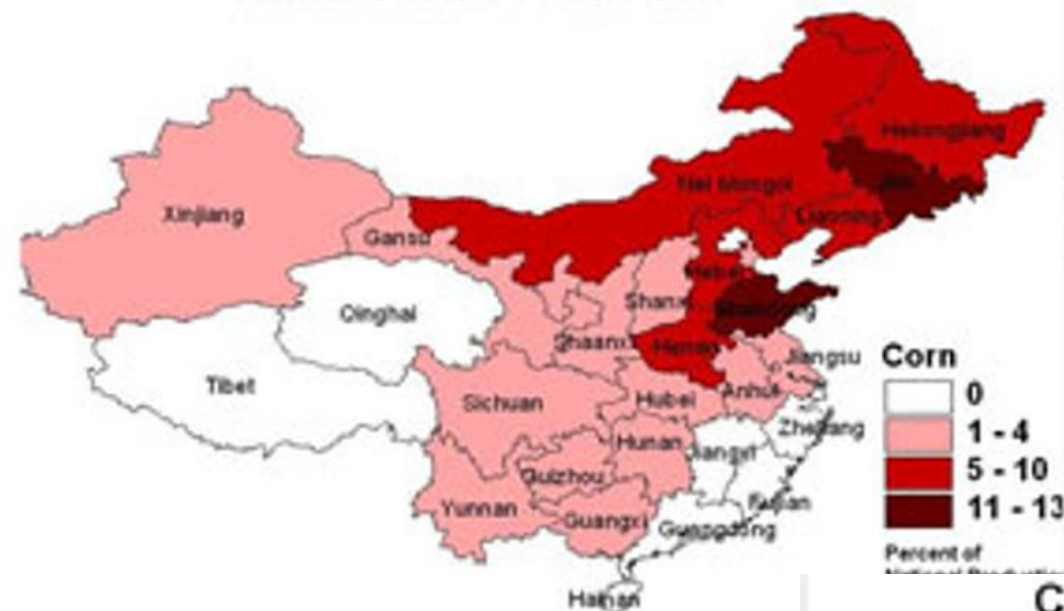
Note : Millennials are those born in the 1990s & 1990s, Gen Z : born after 2000s

Source : BBVA Research, China National Bureau of Statistics

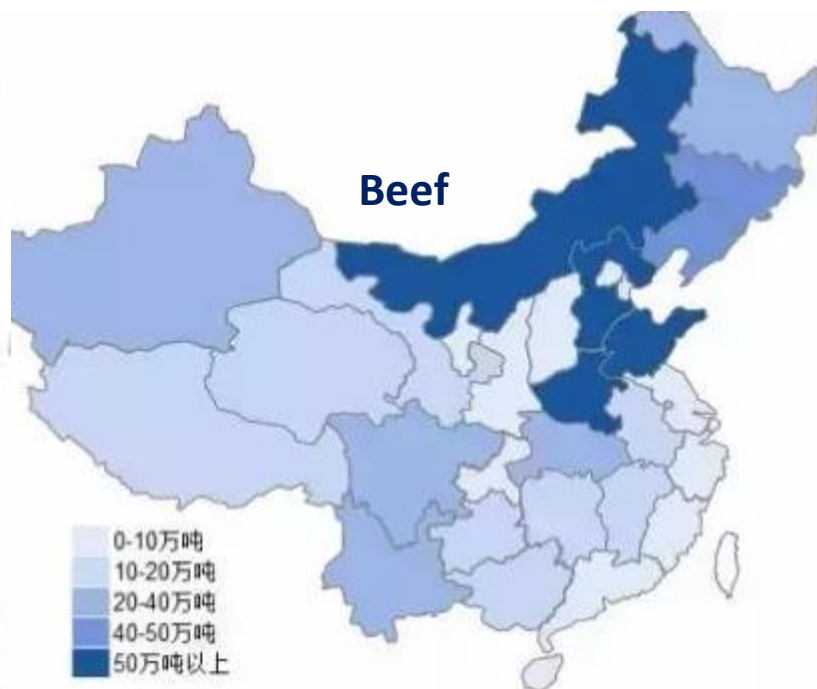
China's 2016 provincial GDP per capita as % of Iowa



China Corn Production



Beef



China Soybeans Production



Pork



中国畜牧业信息网
http://www.caaa.cn

China vs. US

prev

| | China | US |
|------------------------------------|------------------|------------------|
| Total Population | 1350.4 million | 318.9 million |
| Gross agricultural production | 555.2 billion \$ | 232.4 billion \$ |
| Share of Agriculture in Total GDP | 10.0% | 1.3% |
| Share of Agriculture in Employment | 35.0% | 2.0% |

| | China | US |
|--|---------------------|---------------------|
| Number of Farmers | 241.7 million | 3.2 million |
| Number of Farms | 200.2 million | 2.1 million |
| Total Farmland Area | 406.8 million acres | 914.5 million acres |
| Corn Production Area | 89.7 million acres | 87.4 million acres |
| Soybean Production Area | 16.9 million acres | 76.3 million acres |
| Wheat Production Area | 59.6 million acres | 45.3 million acres |
| Total Size of Vegetable/Herb Greenhouses | 83.6 million sq.ft. | 61.8 million sq.ft. |
| Average Farm Size | 2.0 acres | 433.6 acres |

China loosens land transfer rules to spur larger, more efficient farms



#BUSINESS NEWS

2016:
NOVEMBER 2, 2016

Farmland in China is collectively owned and farmers only have the right to contract and use the land. Many rural migrant workers have leased out their land to those who stay in the countryside or commercial entities.

Over 30 percent of rural land has already been leased to others to operate, said Han.

Chinese farmers still cannot sell their land rights freely and the lack of clear rights makes many farmers vulnerable to land grabs by local administrations for development. A program to issue certificates confirming rights to land has covered 60 percent of farmland.

**77 million acres
(35% of cropland)
transferred;
2007: 5%**

**Among them:
30% to co-ops or
corps; 80% non-
grain production**

Goal: China's leaders aim for 60 percent of the population of almost 1.4 billion to be living in cities by 2020, get 100 million migrants to settle in cities by 2020. → could be a driving force for the world's second-largest economy.

**土流网
Tuliu.com**



China Embraces Corporate Farming

firm, China Policy, told VOA. "New opportunities are opening up because Chinese authorities are seeking partnerships with foreign companies in the field of agriculture technology."

"This is surely the beginning of the end of "collective farming" as a very labor intensive sector," Kirkegaard said.

**IOW
Exter**

Cai Jiming, a professor of economics at Tsinghua University in Beijing said while the policy will allow private and foreign companies to rent or lease the land, they will not have ownership rights, which could discourage investments.



Chinese land is owned by collectives (Contract Right Certificate)

Total land size

Number of parcels

Family Rep.

30-year term

With at least one
30-year renewal

All family
members

| | | | | | |
|------------------|------------------------|-----|-----|-----|-----|
| 发包方 全 称 | 美兰县灵山(镇)东兴村 (盖章) | | | | |
| 承包方代 表姓名 | 吴乾洪 | | | | |
| 承包方 住 址 | 美兰县灵山乡东兴村 村宅组 | | | | |
| 土地承 包合同 编号 | | | | | |
| 承包期 限 | 1998年1月1日至2027年12月31日止 | | | | |
| 承包方 式 | 家庭承包 | | | | |
| 承包土 地用途 | 农业用地 | | | | |
| 承包方土地承包经营权共有人情况 | | | | | |
| 姓 名 | 性 别 | 年 龄 | 姓 名 | 性 别 | 年 龄 |
| 吴乾洪 | 男 | 51 | | | |
| 林桂兰 | 女 | 54 | | | |
| 吴坤森 | 男 | 24 | | | |
| 吴亚玉 | 女 | 23 | | | |
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|---------------|-----------|-----|-----|---------------|------|--|
| 承包地总 面积(亩) | 2.05 | | | 承包地块 总数(块) | 8块 | |
| 地块 名称 | 面积 (亩) | 等 级 | 地 类 | 四 至 | | |
| 秧田 | 0.32 | | 水田 | 东:水沟 | 南:乾荣 | |
| 苏管井 | 0.67 | | : | 西:亚花 | 北:陈明 | |
| 东平田 | 0.76 | | : | 东:好豆 | 南:路 | |
| 公路园 | 0.32 | | : | 西:陈明 | 北:好妹 | |
| 陈明园 | 0.35 | | : | 东:陈明 | 南:田金 | |
| 大排九 | 0.20 | | : | 西:提屯 | 北:公路 | |
| 新市河 | 0.26 | | : | 东:好风 | 南:陈明 | |
| 大甘塘 | 0.11 | | : | 西:陈风 | 北:乾荣 | |
| | | | | 东:陈明 | 南:乾洪 | |
| | | | | 西:世昌 | 北:水沟 | |
| | | | | 东:好屯 | 北:好 | |
| | | | | 东:水沟 | 南:好荣 | |
| | | | | 西:黑田 | 北:正兰 | |
| | | | | 东:好屯 | 南:才金 | |
| | | | | 西:好屯 | 北:乾荣 | |



United States Department of Agriculture Foreign Agricultural Service

China



\$21.4 billion

U.S. Agricultural Exports, 2016

Top 5 U.S. Exports

- 1 Soybeans (\$14.2 billion)
- 2 Course Grains* (\$1.0 billion)
- 3 Hides & Skins (\$949 million)
- 4 Pork (\$578 million)
- 5 Cotton (\$550 million)

*Excluding Corn

Export Growth

2006-2016



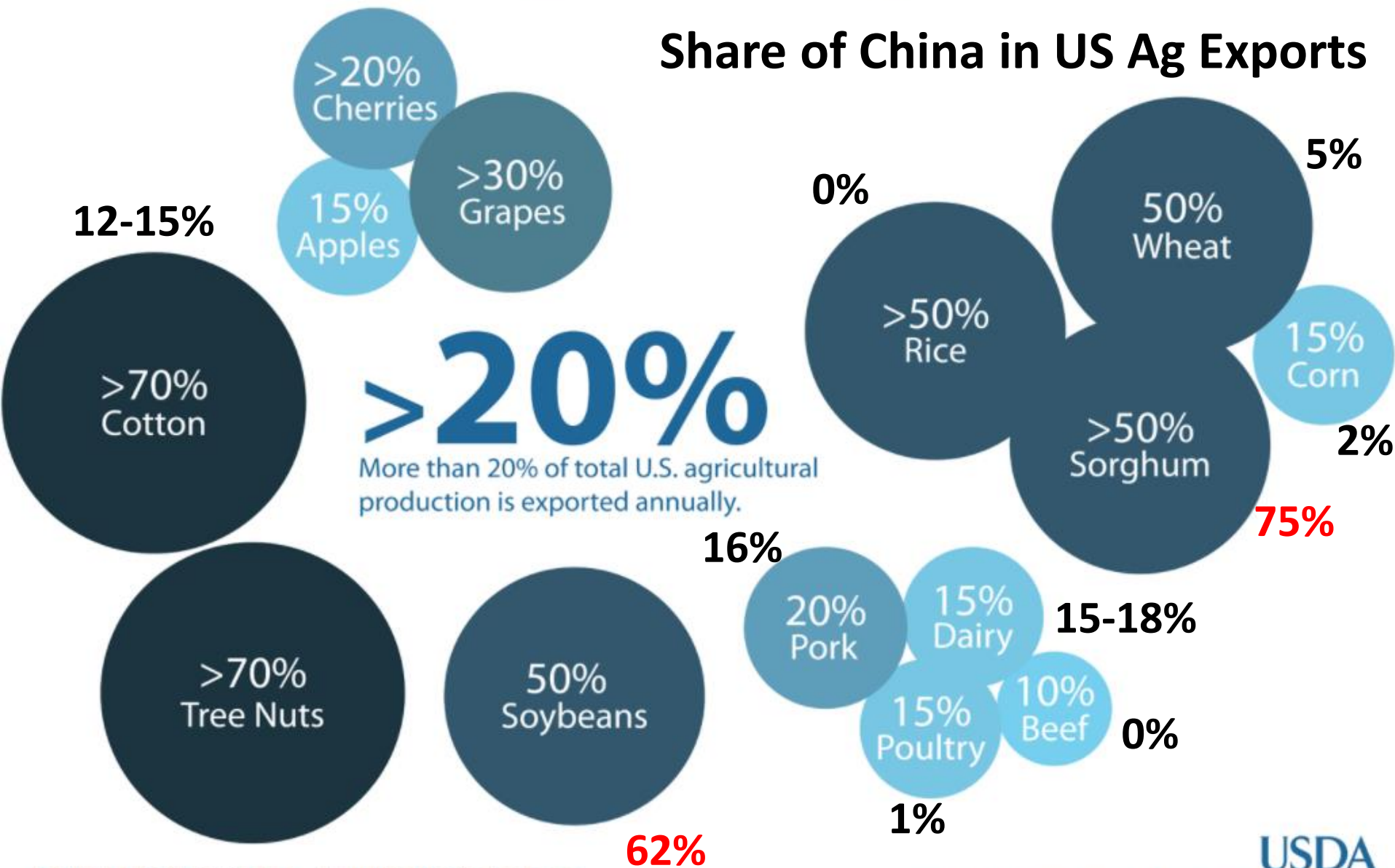
#1

Among U.S.
Agricultural Export
Markets, 2016

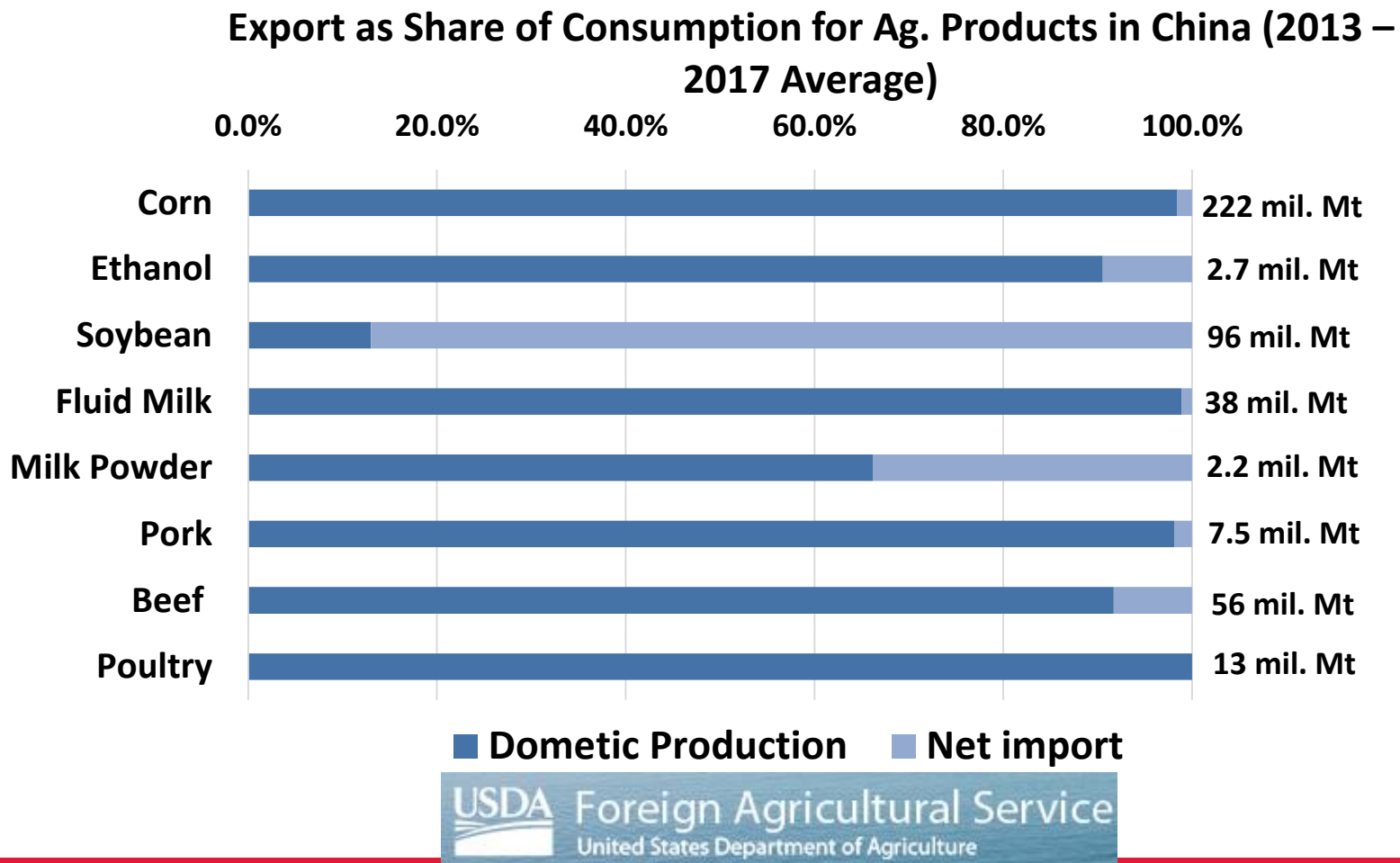
Source: FAS Global Agricultural Trade System (GATS) BICO HS- 6

Share of U.S. Agriculture Exported in 2016

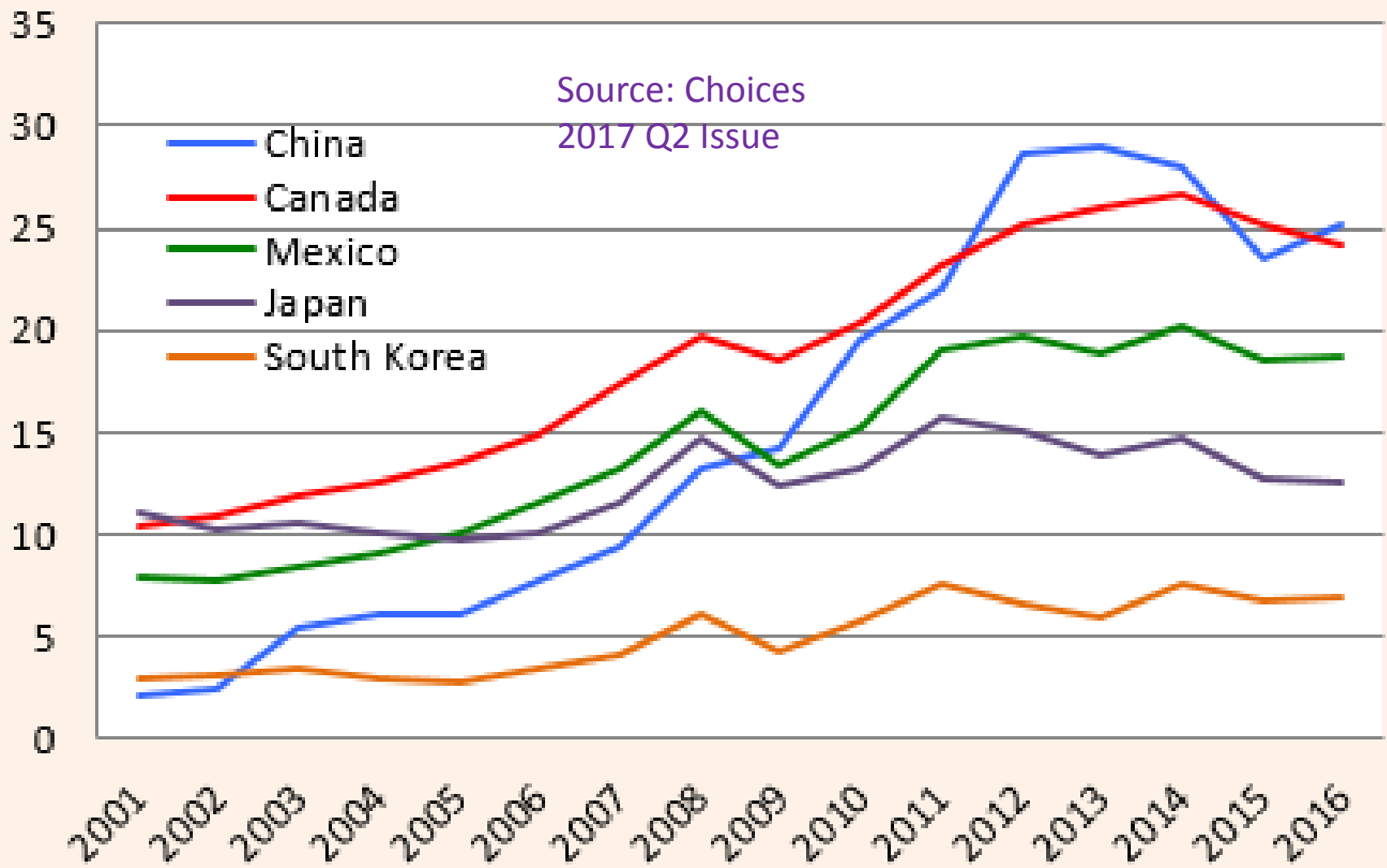
Share of China in US Ag Exports



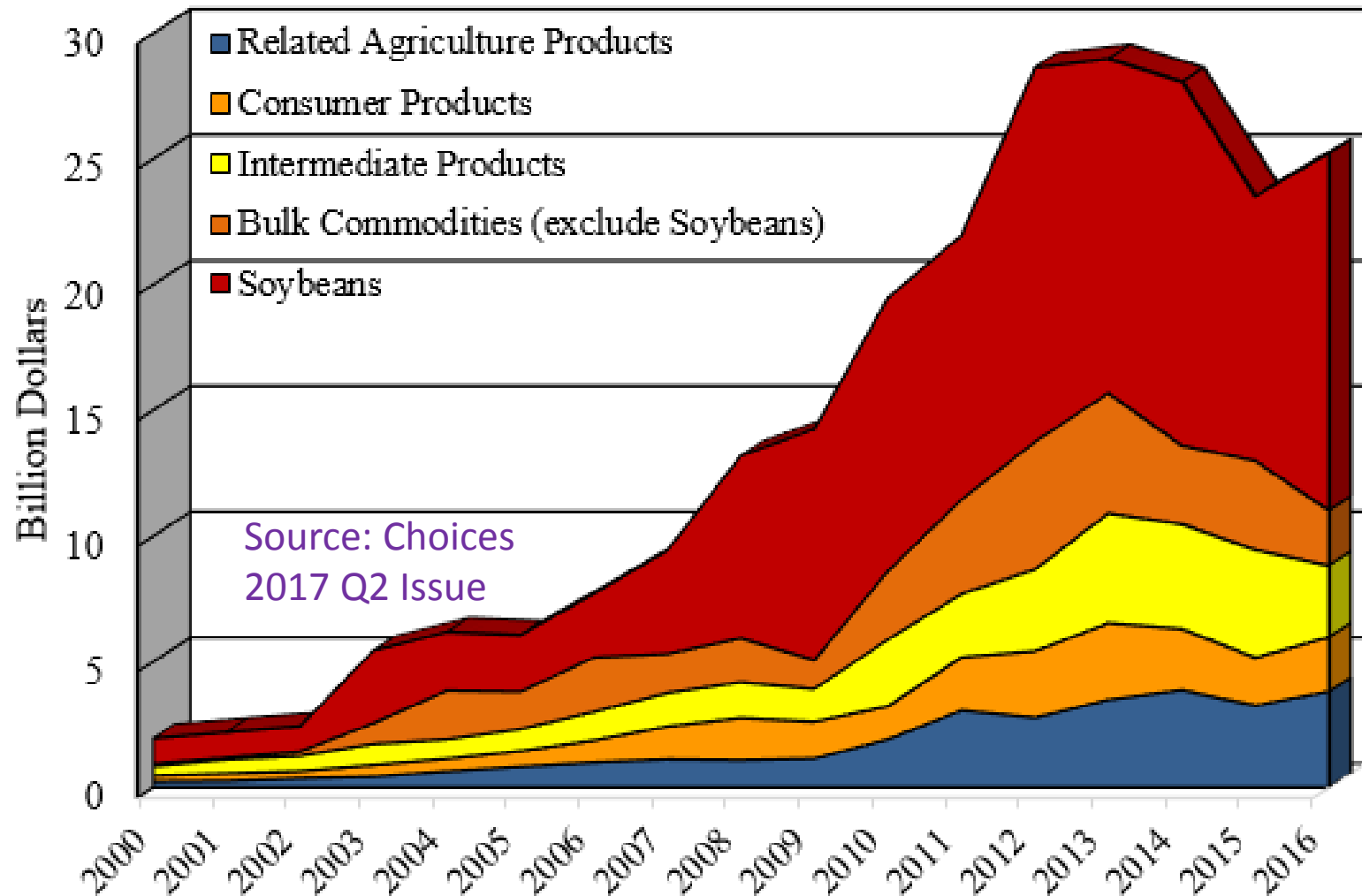
China's still self-sufficient in many Ag commodities, despite growing role of exports



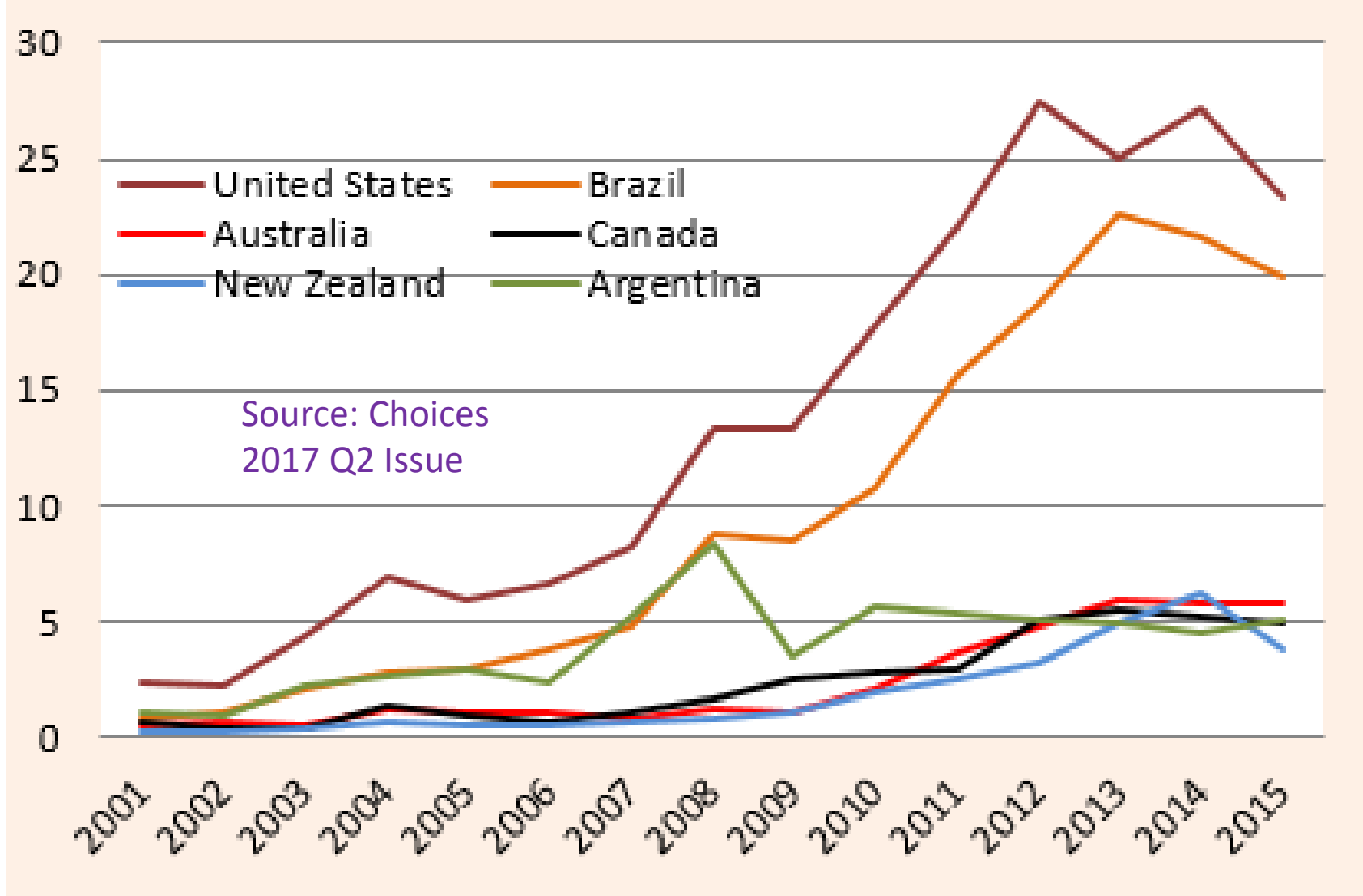
US Ag Exports by Destination Country 2001-2016 (\$ Billion)



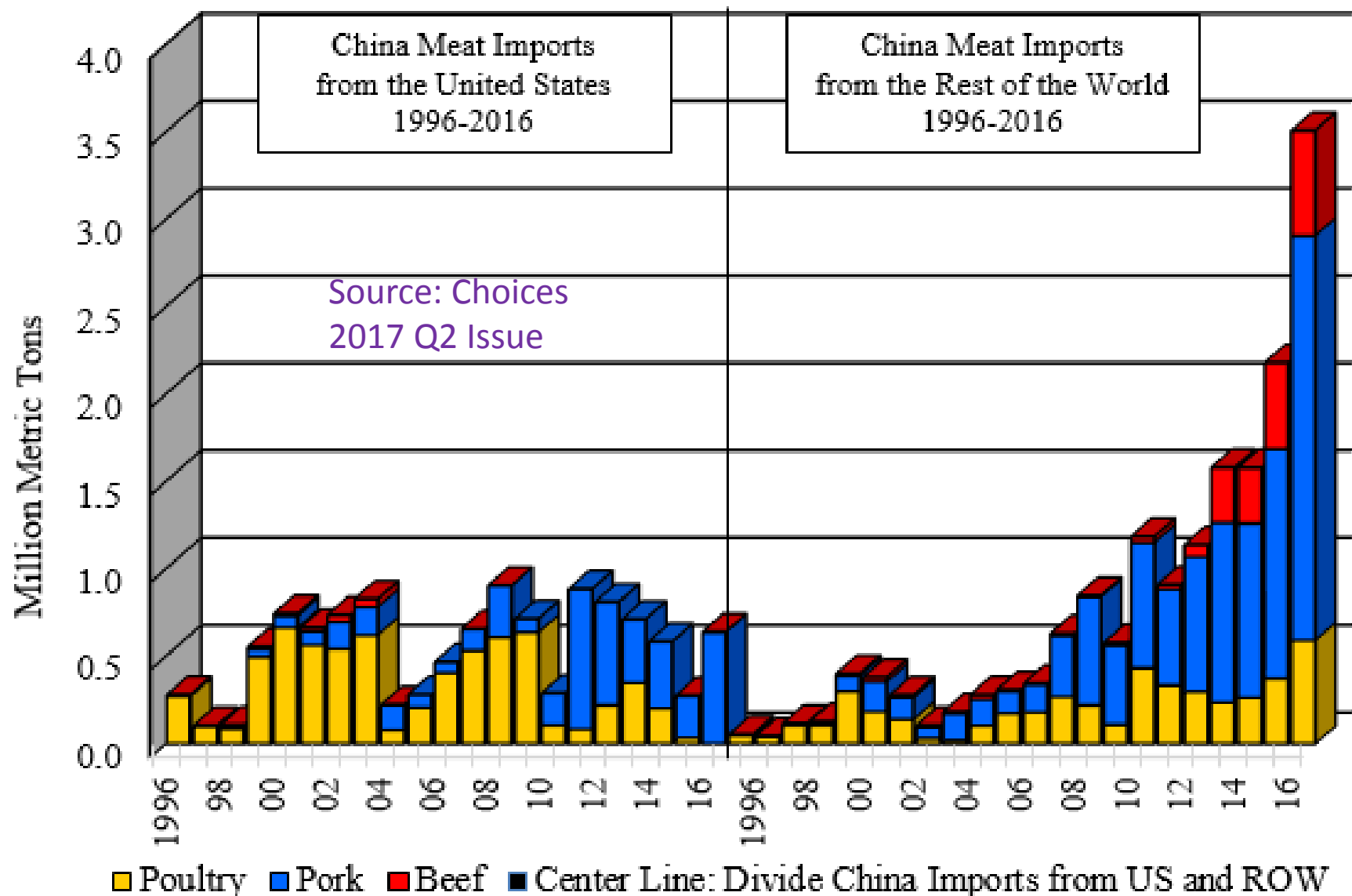
US Ag Exports to China Increased Significantly since China joined WTO in 2001 (\$ Billion)



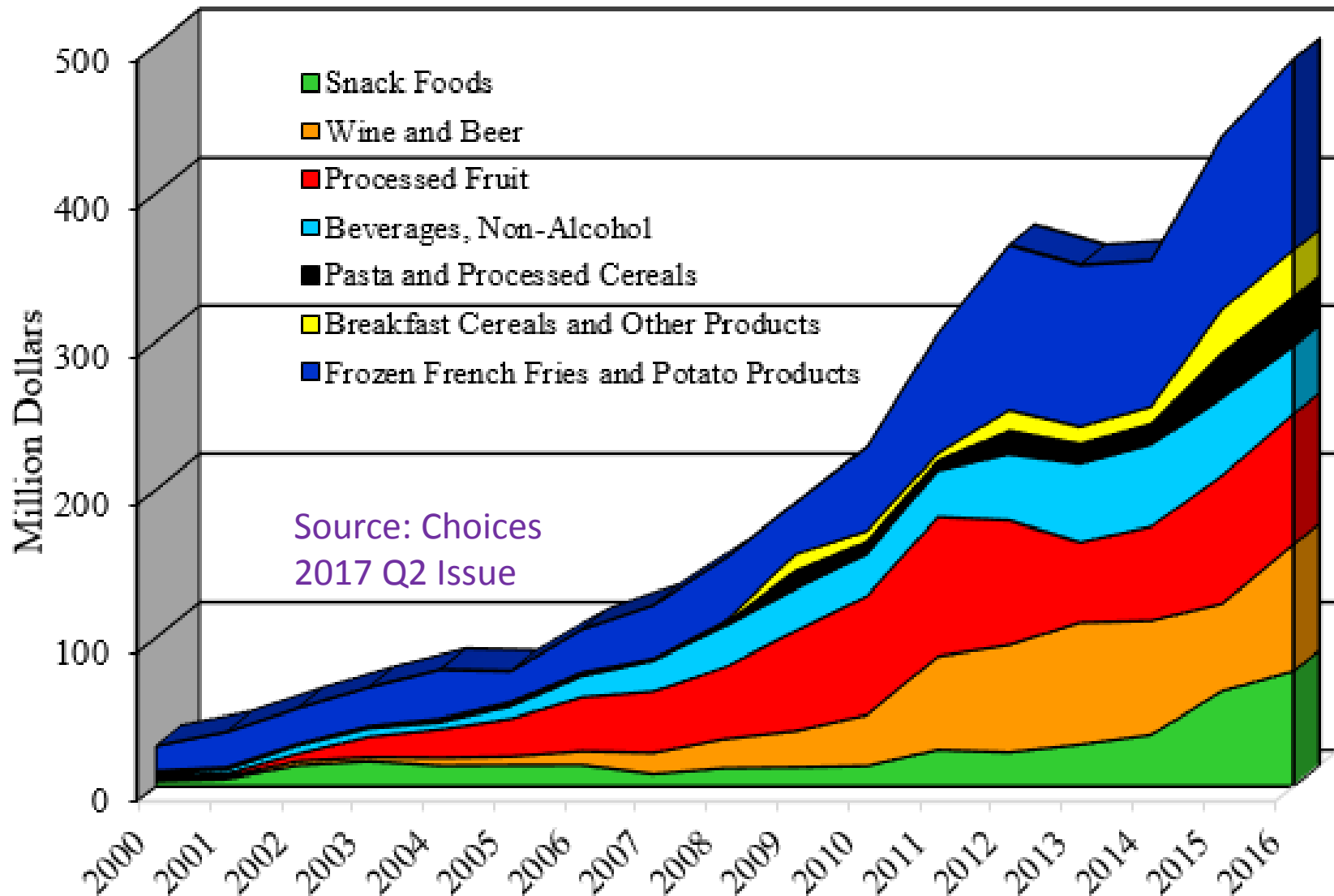
China's Ag Imports by Source Country 2001-2015 (\$ Billion)



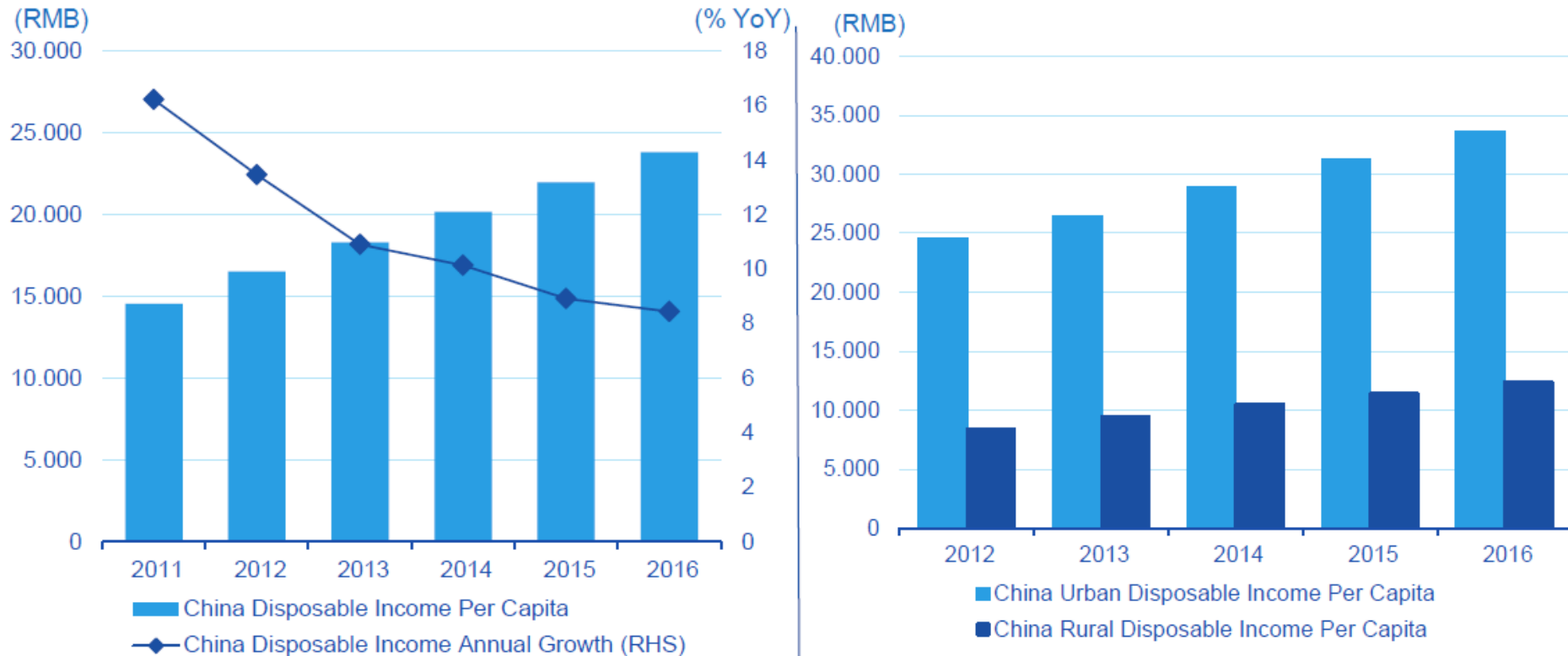
US Loses Market Share as China Increases Meat Imports from the World



Richer households demand more meat and convenience foods



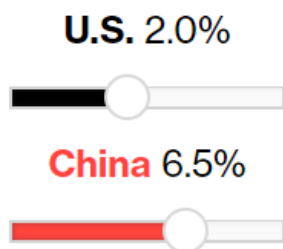
A steadily increasing disposable income, albeit at a moderating but robust pace, with wide urban-rural gap



CHINA CONSUMPTION TRENDS | 2017

Most Chinese people are still much poorer than the average American

China's GDP will overtake the U.S. level in 2028 at these projected average growth rates:



Bloomberg

1992
GDP per capita (PPP)
\$37,283
United States
\$1,846
China

U.S. GDP per capita was
20.2 times that of China

2004
Urbanized population
79.8%
United States
41.1%
China

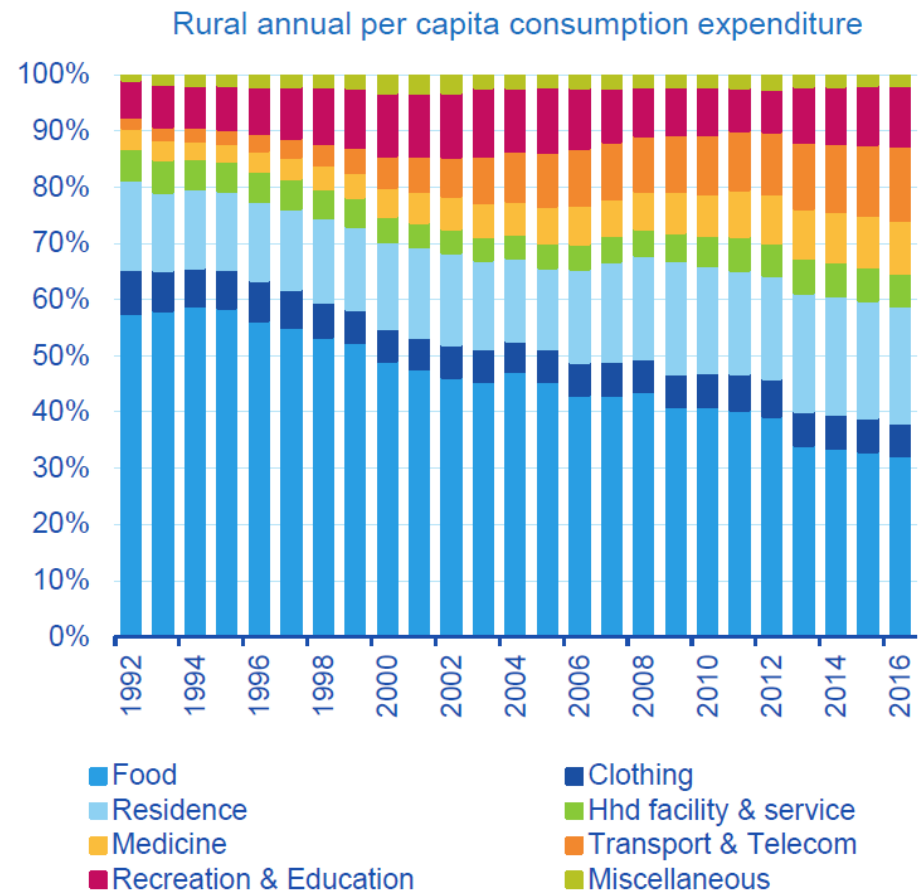
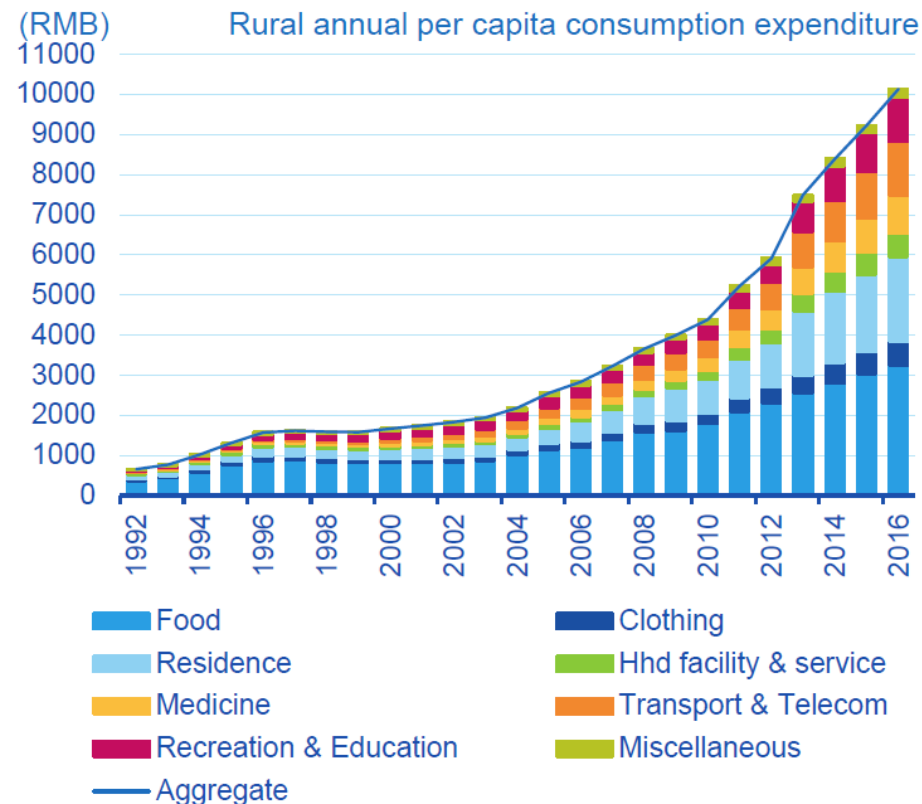
Urbanization in China was lower
than that of the U.S. in 1910

2016
GDP per capita (PPP)
\$53,417
United States
\$14,275
China
U.S. GDP per capita was
3.7 times that of China

2016
Urbanized population
81.8%
United States
56.8%
China

Urbanization in China was lower
than that of the U.S. in 1950

Share of food in rural China's per capita consumption basket is declining, offset by higher value purchases



CHINA CONSUMPTION TRENDS | 2017

Ibs per capita Meat Consumption by Country 2016

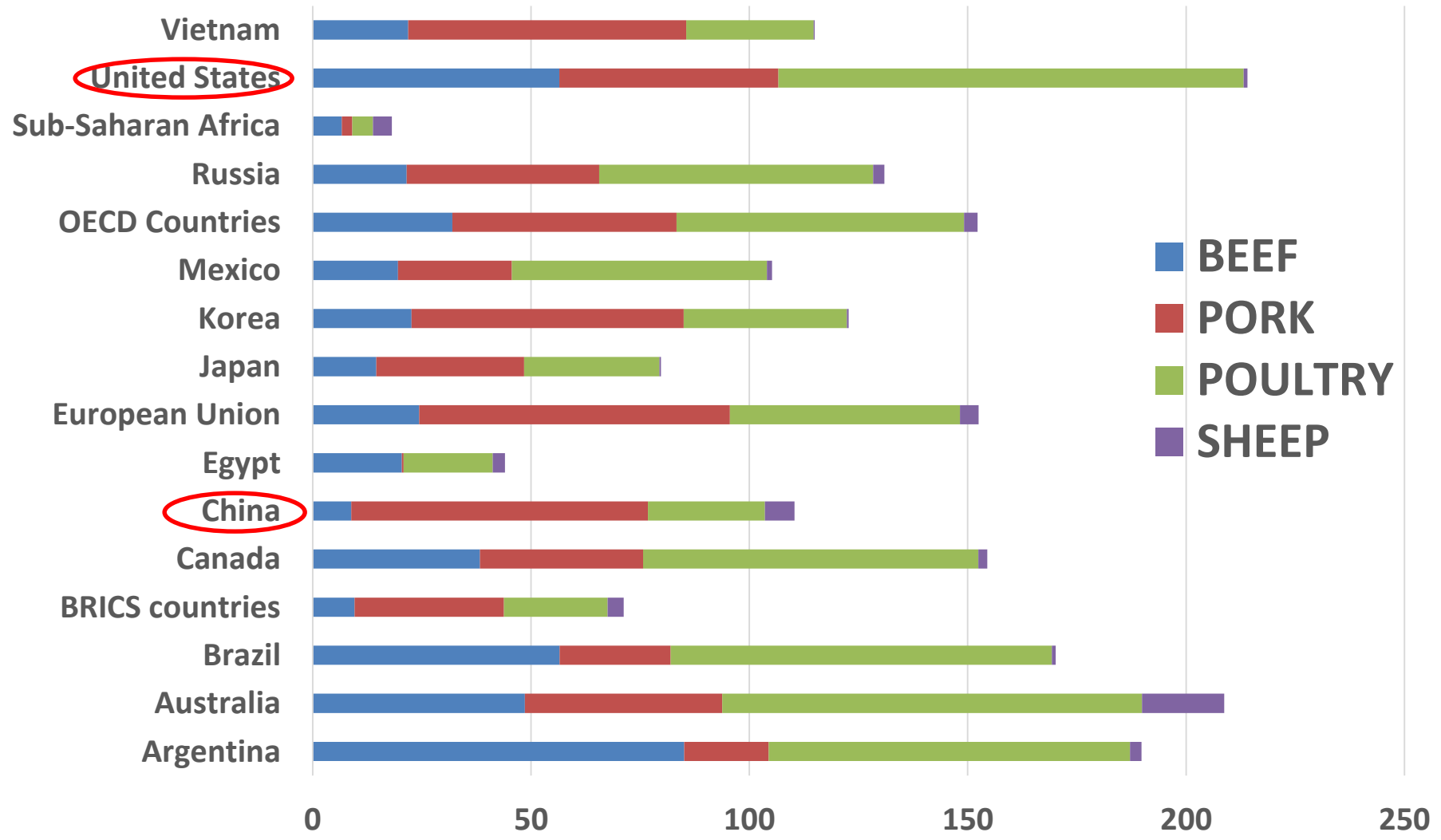
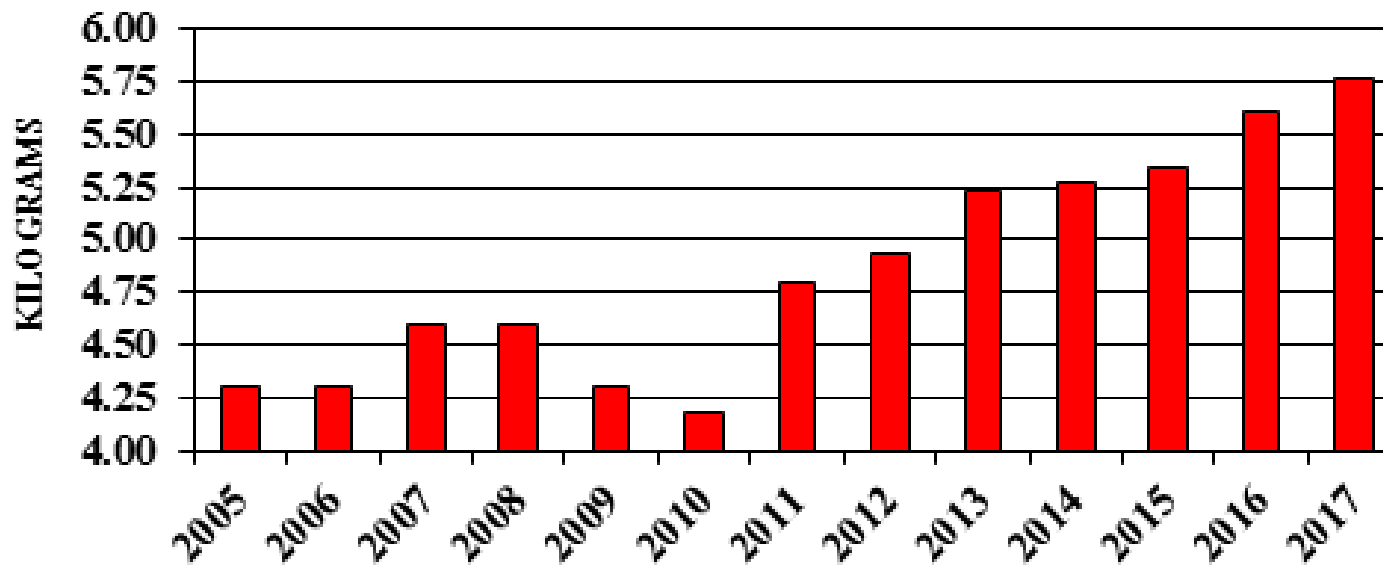
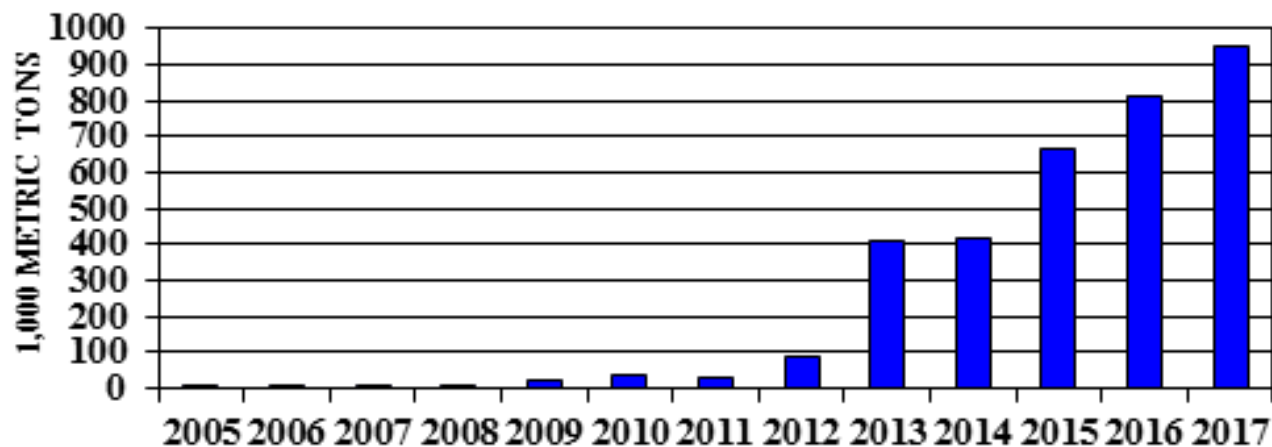


Figure 1. China: Per Capita Beef Consumption



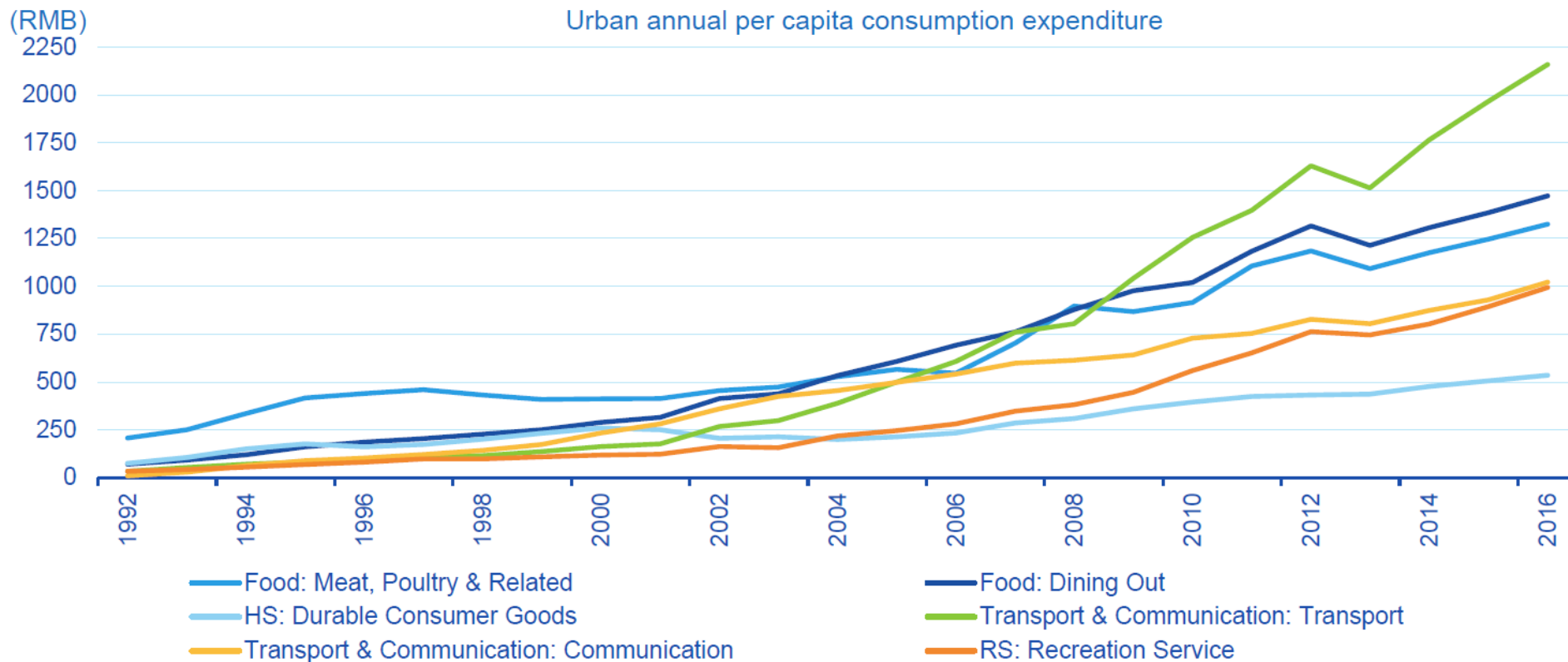
Source:
Derrell Peel
CattleNetwork
, 2017

Figure 2. China: Beef Imports



“When the Chinese people taste our high-quality U.S. beef, there’s no doubt in my mind that they’ll want more of it” – Sonny Purdue

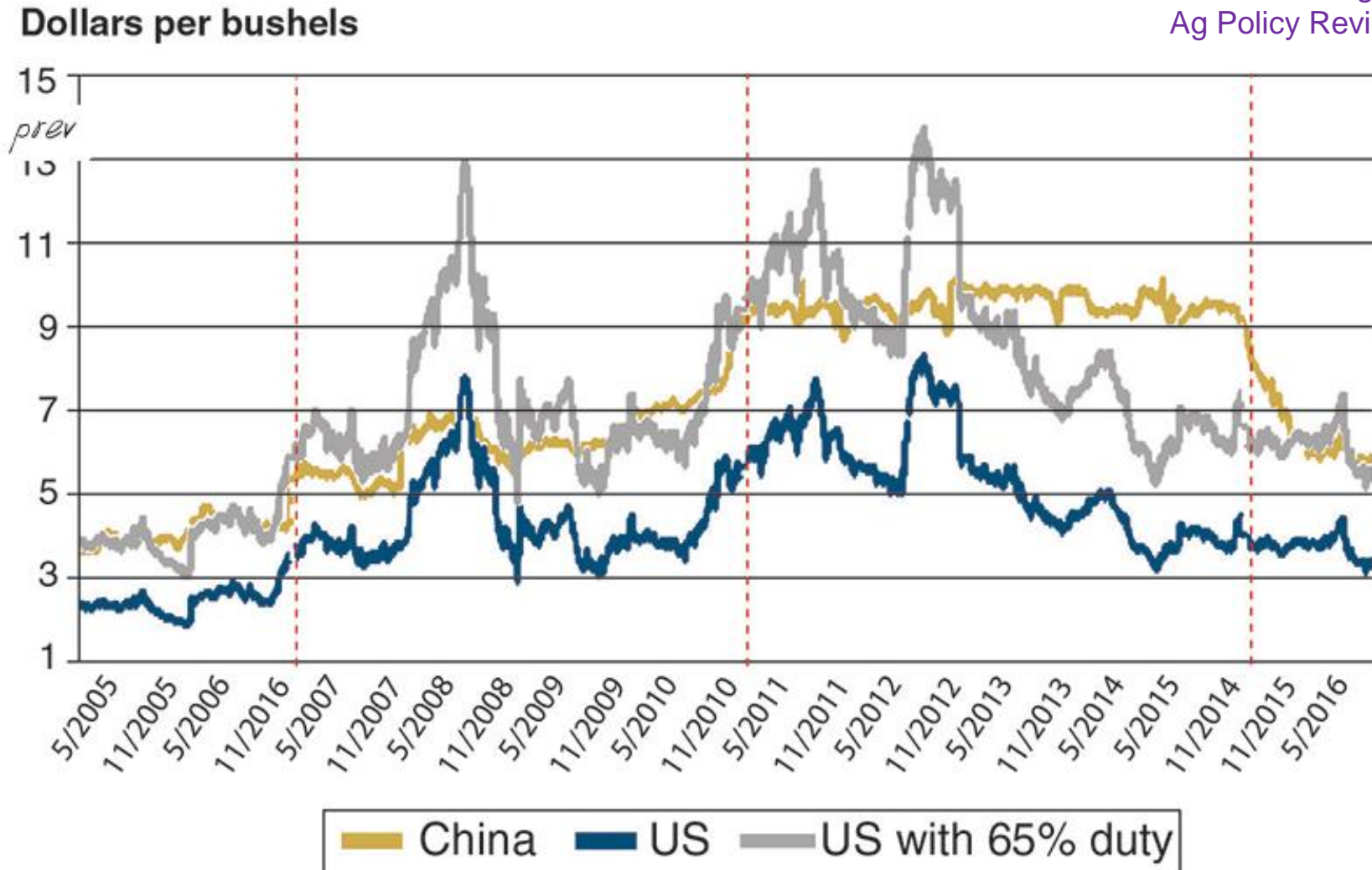
Urban Chinese prefer to travel, stay connected, buy protein rich food, durable goods & recreation



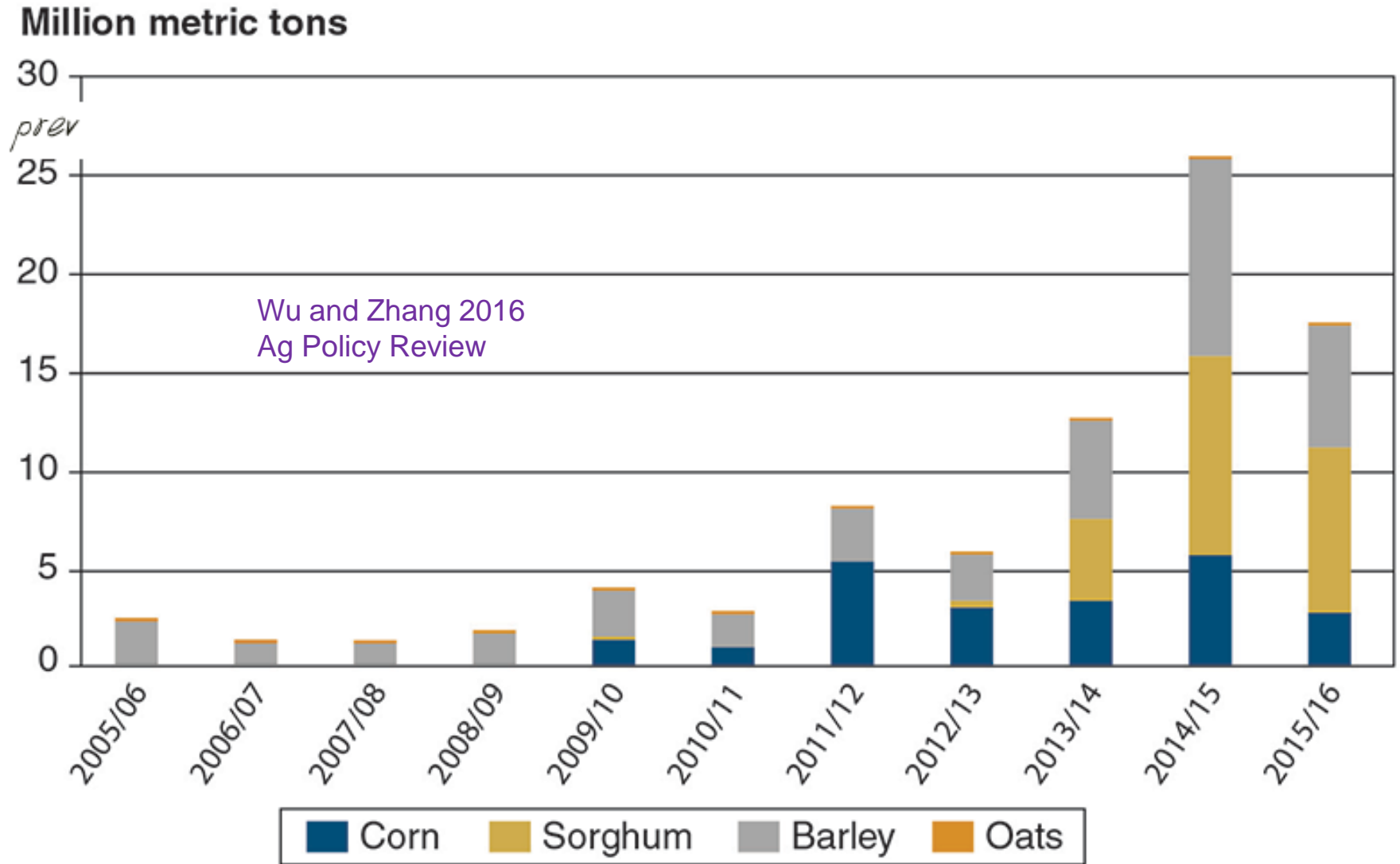
CHINA CONSUMPTION TRENDS | 2017

Of Maize and Markets: China's New Corn Policy

Wu and Zhang 2016
Ag Policy Review

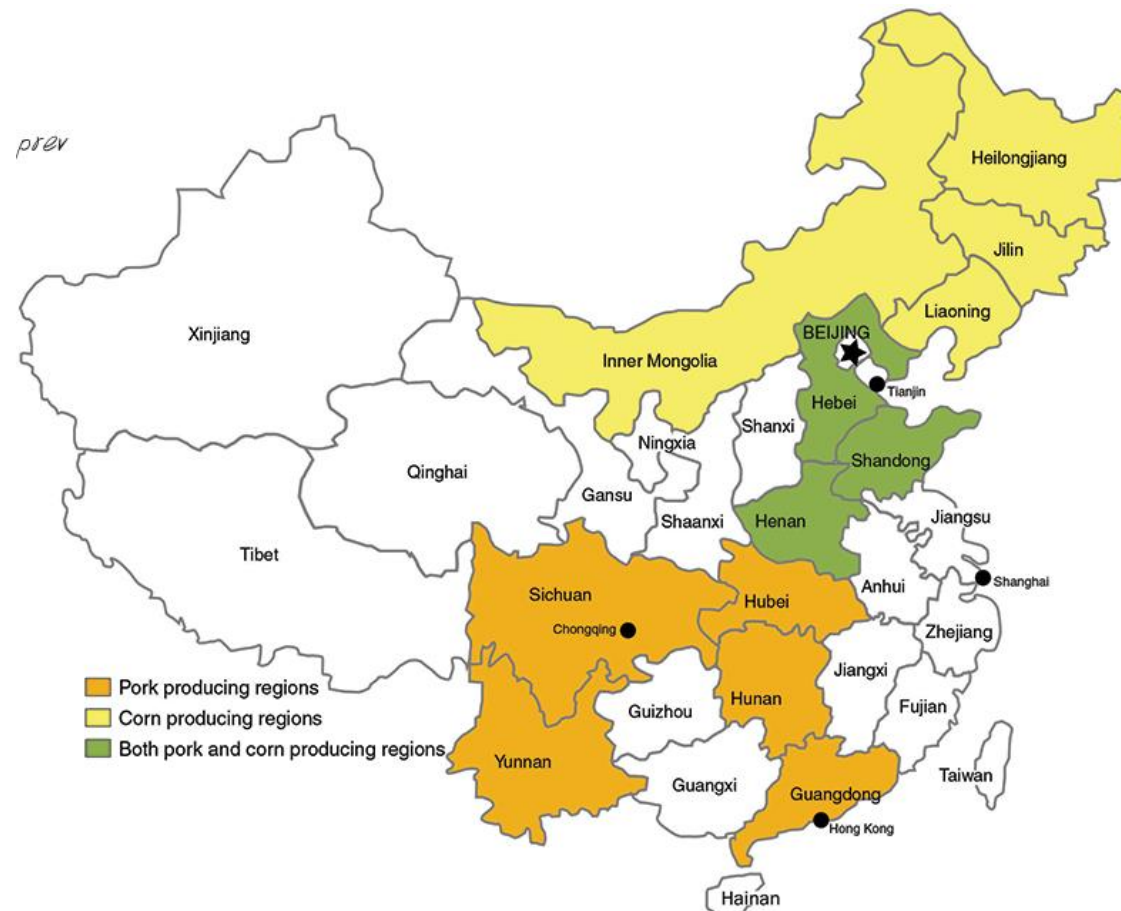


Of Maize and Markets: China's New Corn Policy



Source: USDA FAS Grain: world markets and trade

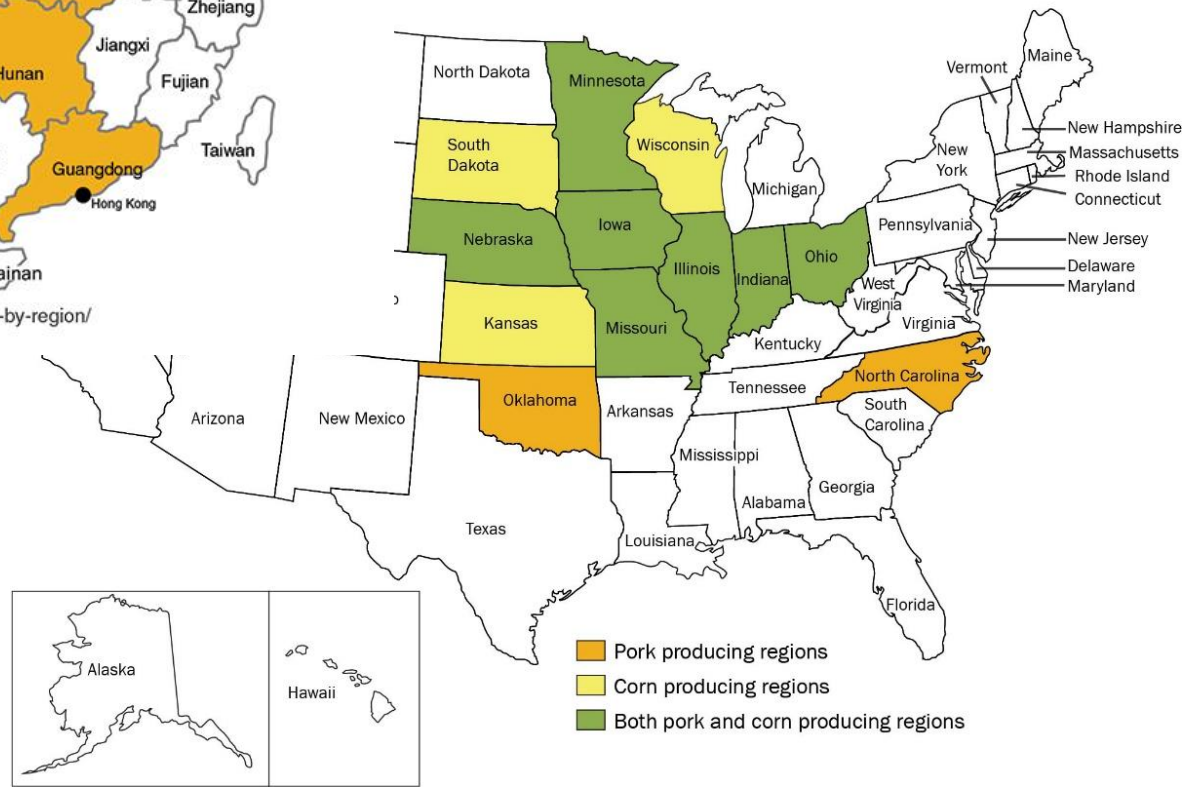
Of Maize and Markets: China's New Corn Policy



Sources: <https://www.statista.com/statistics/242632/corn-production-in-china-by-region/>
<http://chinaag.org/services/production/>

- Pork producing regions
- Corn producing regions
- Both pork and corn producing regions

Wu and Zhang 2016
Ag Policy Review



China sets 2020 target for nationwide ethanol use to cut corn stocks

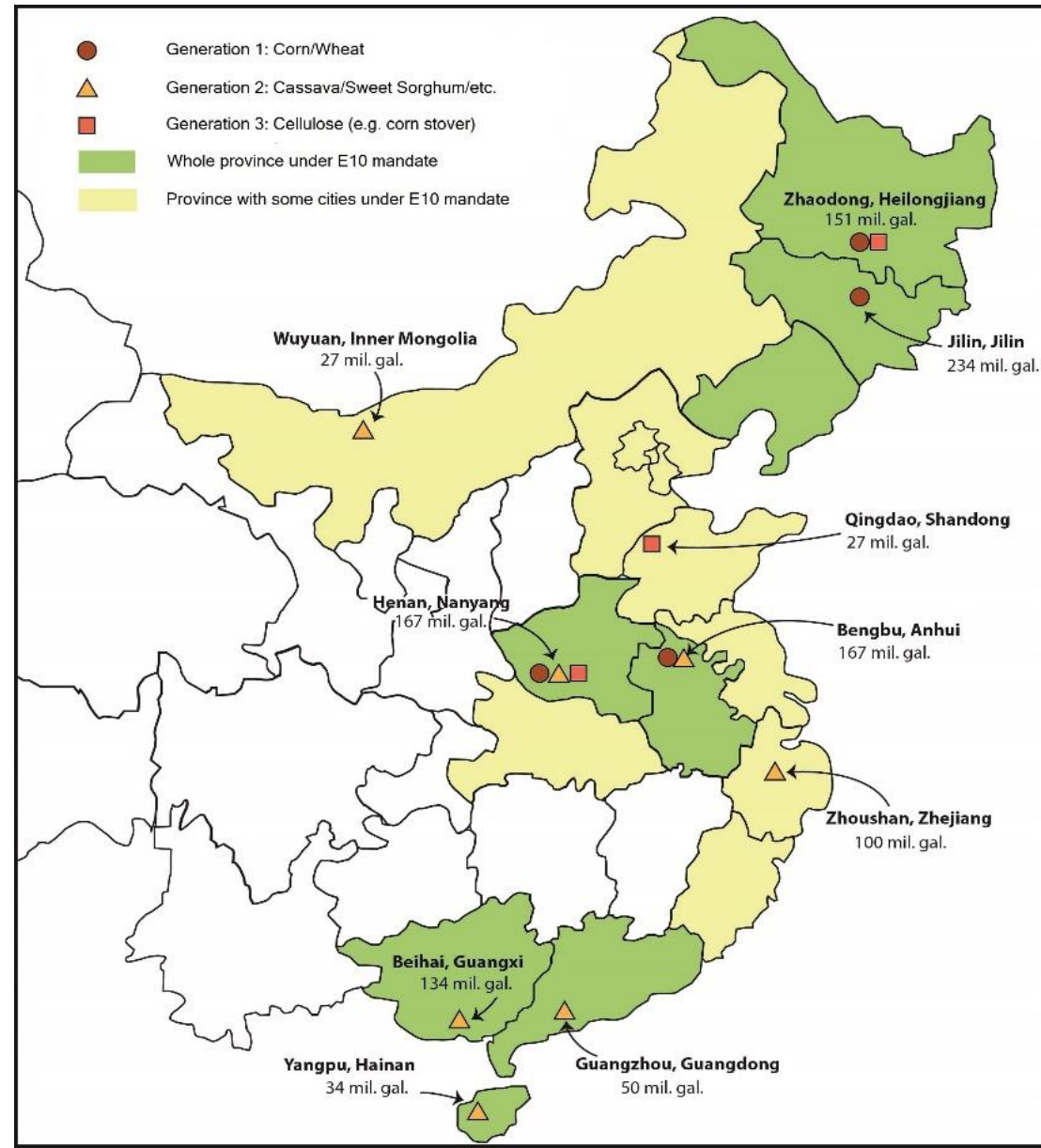
China's Ethanol Trial

China's Ethanol Industry in 2016

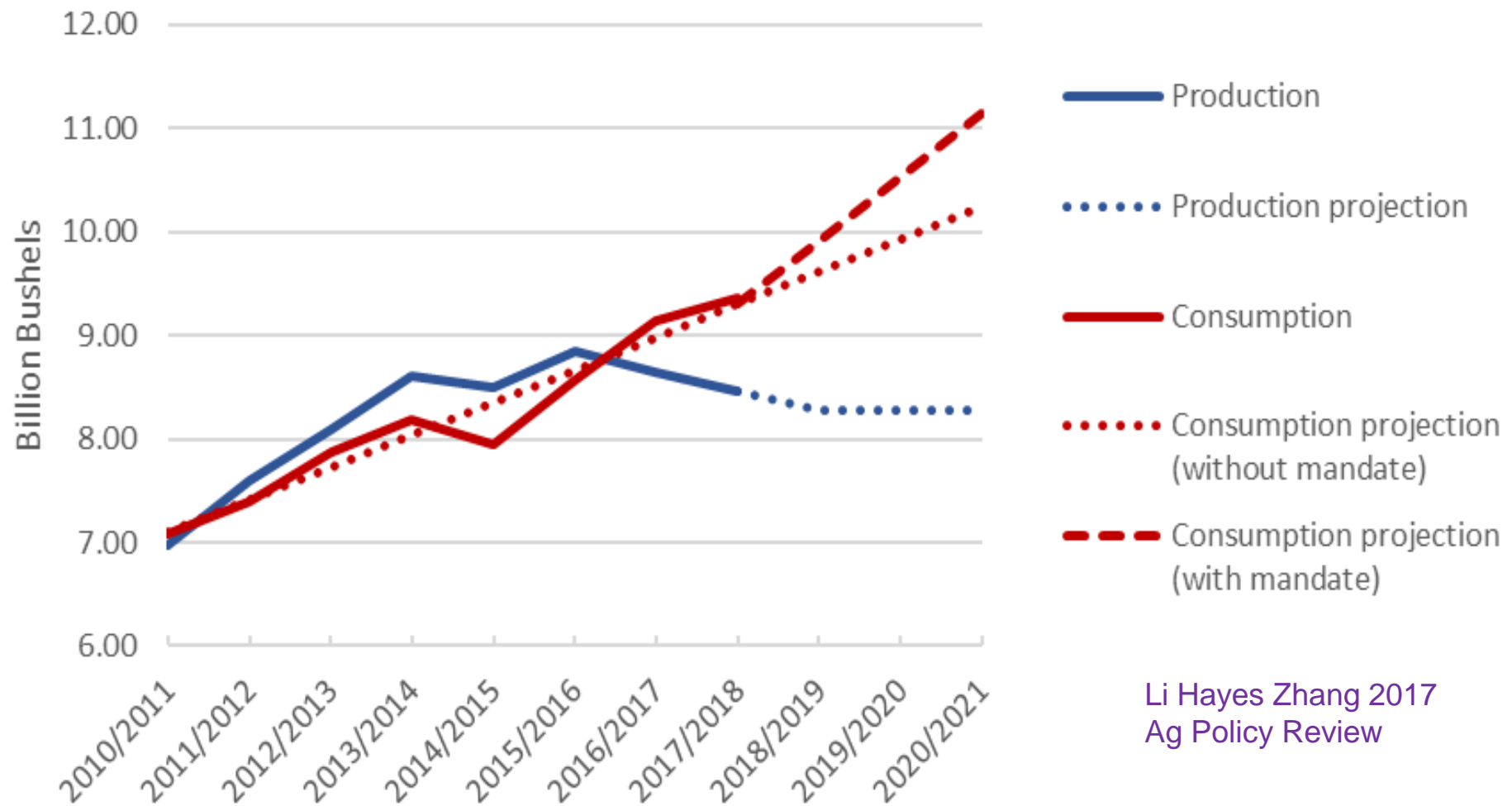
4th largest producer – 1 Bil gal.

- After US, Brazil and EU
- Corn ethanol 64%
- Also uses cassava, sorghum, corn stover
- Imported 225 mil. gal, mainly from U.S.
- Tariff rose from 5% to 30%

China consumes 40 bil. gal gasoline; 1 bil. gal ethanol in 2016



China's projected corn import potential and the role of ethanol



Li Hayes Zhang 2017
Ag Policy Review

GMO in China: Controversy/Divide China Wants GMOs. The Chinese People Don't.

BloombergView

73 SEP 27, 2016 8:00 PM EDT

▶ After Decades Of Wariness, China To Grow GMOs



The Chinese have long been wary of genetically modified organisms. The country allows imports of genetically modified corn and soybeans for animal feed. But it's held off on domestic commercialization of those crops.

Over the past year, China has signaled it would relax that stance. This week it released its latest five-year plan for science and technology, saying it would push for the commercialization of biotech corn and soybeans in the next few years.

GMO in China: Controversy/Divide

Yongyuan
Cui

Larry King
in China;
Key
opponent
voice
of GMO



GMO corn illegal



China OKs two GMO products for import

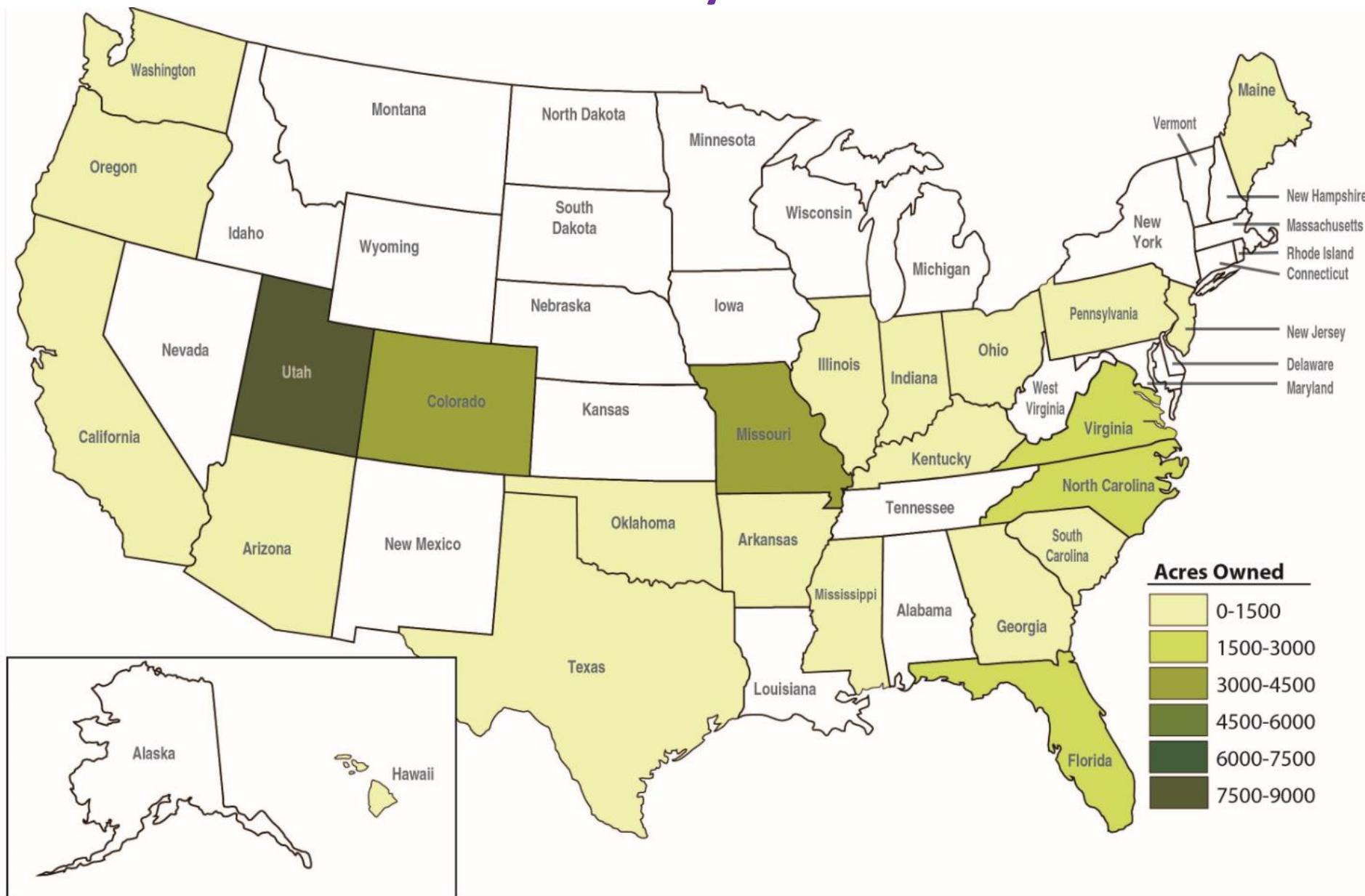
07/17/17 2:45 PM By Steve Davies

WASHINGTON, July 17, 2017 - China has approved two more genetically modified products for import, which should leave four products awaiting decisions from the Chinese Ministry of Agriculture (MOA). But Dow AgroSciences said today that the ministry is "now indicating that Enlist soybeans is not covered" by a [100-day economic action plan](#) initiated by the U.S. and Chinese governments in April.

The ministry has approved [Syngenta's Agrisure Duracade corn](#), engineered to be resistant to corn rootworm, and [Monsanto's Roundup Ready corn](#). Dow received import approval last month for [Enlist corn](#), which China approved along with a [Monsanto soybean variety, Vistive Gold](#). [At the time](#), Dow said it had received inquiries from China's National Biosafety Committee about Enlist soybeans and planned to address those questions quickly.

Today, Dow AgroSciences said it "understands [Enlist soybeans was considered one of 'the eight pending biotechnology traits'](#) by the U.S. Department of Commerce for the [100-day initiative](#) referenced in the (U.S.-China) joint release on May 10," which provided a progress report on the 100-day plan.

Farmland Acres Owned by Chinese Owners as of 2016



China aims to build a global infrastructure network
"Belt and Road" infrastructure projects, planned and completed (March 2017)

Belt and Road Initiative



■ Silk Road Economic Belt ■ Maritime Silk Road of the 21st Century ■ AIIB member states



China High Speed Train Network Map

- Main Cities
- Speed of 300 km/h or above
- Speed of 200-250 km/h
- C train: intercity train



This map illustrates the projected High-Speed Rail (HSR) network in China by the year 2020. The network is shown as a dense web of lines across the country, with a legend in the bottom-left corner indicating different speed capabilities: red lines for 350-380 km/h, orange lines for 250-330 km/h, green lines for 200-250 km/h, and grey lines for existing tracks. Numerous specific lines and projects are labeled with callouts, including the North-South Double-Track Line, South-South Double-Track Line, Beijing-Tianjin-Hebei Line, and the Beijing-Shanghai HSR. The map also shows the network's extension to major cities and regions like Xinjiang, Tibet, and Hainan.

Source: National Development and Reform Commission





12 janv. Interviewed by Aressy Bra...

Samedi 08:27

- 相册
- 收藏
- 钱包
- 卡包
- 表情
- 设置
- 微信
- 通讯录
- 发现
- 我

< 我 钱包 微信支付

转账 刷卡 钱包

城市服务

滴滴打车 京东精选

Q币充值 微信红包 吃喝玩乐

信用卡还款 腾讯公益 电影票

AA收款 机票火车票

< 返回 广州服务

医院挂号 违章办理 港澳再次签注

路况实拍 机动车年审预约 机动车快撤理

身份证业务预约 招考查询 广州天气

出入境业务预约 婚姻业务预约 新生儿重名查

住房业务预约 机动车车船税 机动车年票

<https://www.card.iastate.edu/china>



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Center for China-US Agricultural Economics and Policy

CHINESE ACADEMY OF AGRICULTURAL SCIENCES

China Ag Center · Publications and Presentations

Publications

Minghao Li, Wendong Zhang, Dermot Hayes, Riley Arthur, Yantao Yang, and Xiudong Wang. 2017. ["China's New Nationwide E10 Ethanol Mandate and Its Global Implications."](#) *Agricultural Policy Review*. Center for Agricultural and Rural Development, Iowa State University.

Wu, Qianrong, and Wendong Zhang. 2016. ["Of Maize and Markets: China's New Corn Policy."](#) *Agricultural Policy Review*. Center for Agricultural and Rural Development, Iowa State University.

Zhang, Wendong. 2015. ["The Commonalities and Differences between Chinese and US Agriculture."](#) *Agricultural Policy Review*. Center for Agricultural and Rural Development, Iowa State University.

A corny tale

The
Economist

China imports a farm from Iowa

A slice of the Midwest outside Beijing

Presentations

Zhang, Wendong. 2017. ["Recent Developments in China and its Impacts on US Agriculture."](#) 2017 Pro-Ag Outlook, November 17, 2017.

Zhang, Wendong. 2017. ["From Northeast China to the Midwest."](#) AMMO Club, November 6, 2017.

Zhang, Wendong. 2017. ["Update on Chinese Ag Economy."](#) Iowa Institute for Cooperatives Member Summer Workshop, Huxley, IA, June 15, 2017.

Lawrence, John, and Zhang, Wendong. 2017. ["Understanding the U.S. Farm Bill: Policy to Practice."](#) Presentation to the Chinese Ministry of Agriculture, Agricultural Trade Promotion Center Delegation, Ames, Iowa, May 30, 2017.

Zhang, Wendong. 2017. ["What's Going On in China: Corn, GMO, Crop Insurance and High-Speed Rails."](#) 2017 Crop Advantage Series, Okoboji, IA, January 5, 2017.

<https://www.card.iastate.edu/farmland>

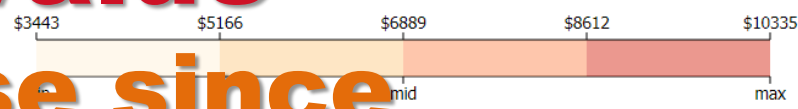
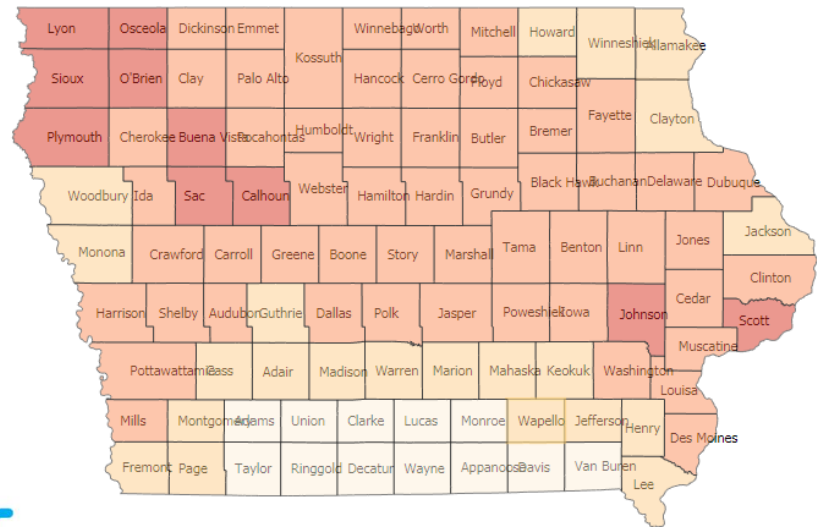
Iowa
Farmland
Value
Portal



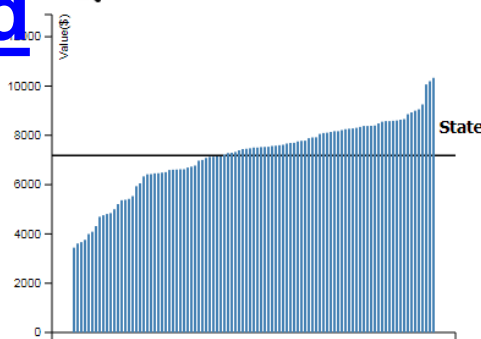
#ISULandvalue
2% increase since
Nov 2016



<http://bit.ly/LandResults2017>

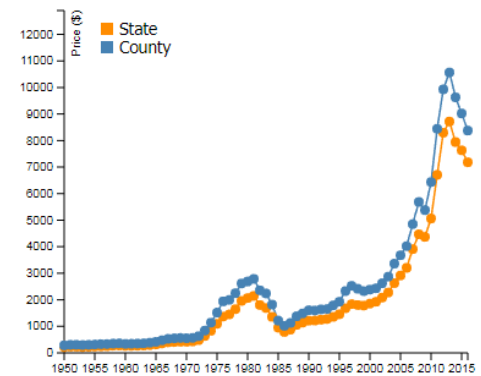


Iowa County Land Value in 2016

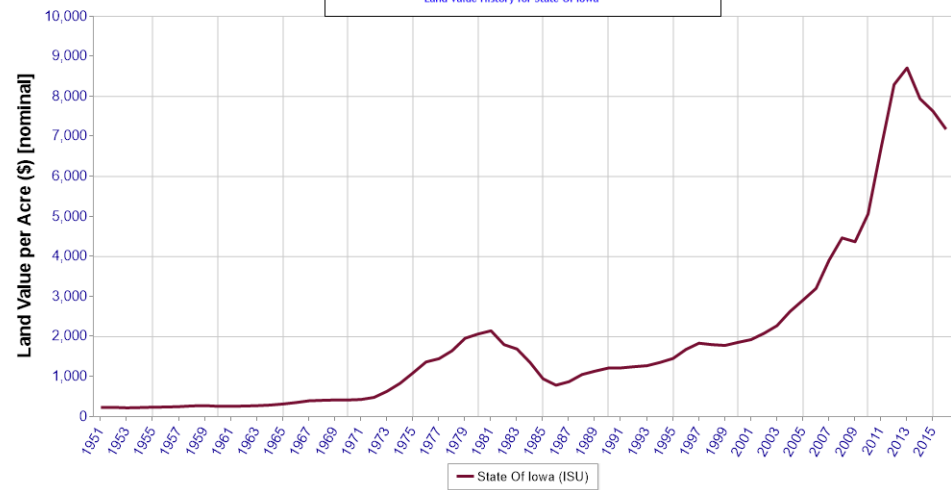


Sorted by: Value

Land Value Trend in County: Story



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Land Value History for State Of Iowa





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Extension and Outreach

Thank You!

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