Update on Iowa Farmland Market and China Ag Economy

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Farmland Owners Workshop, Altoona, Iowa

Feb 16, 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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CHINESE ACADEMY OF AGRICULTURAL SCIENCES

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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.

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." Di 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." Depresentation 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.

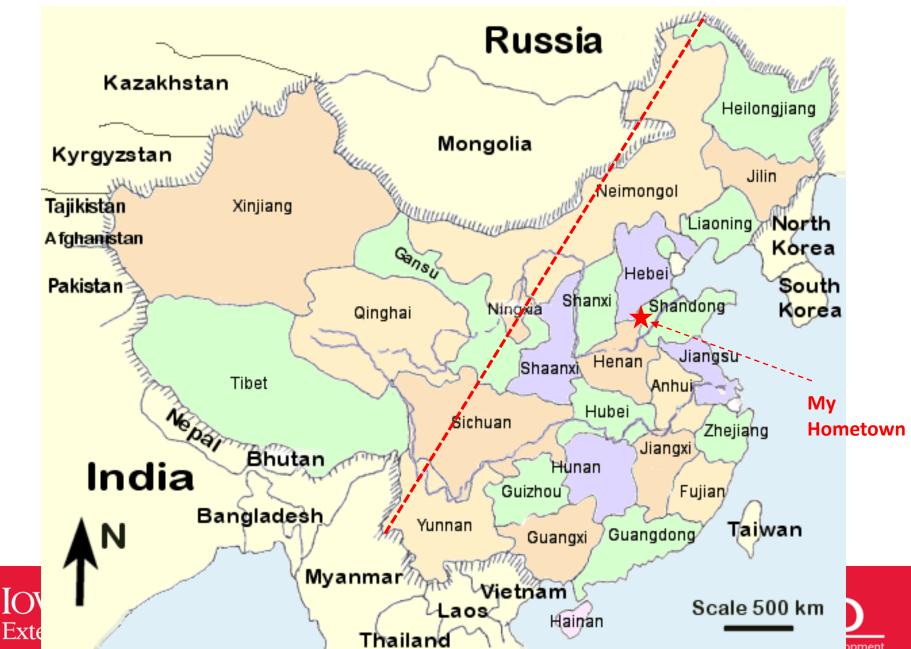


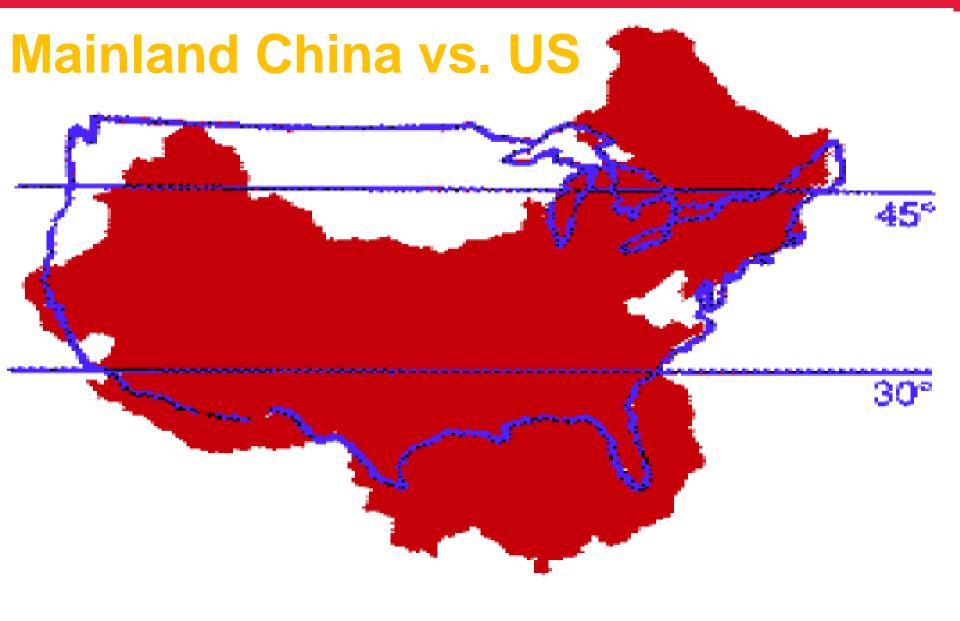






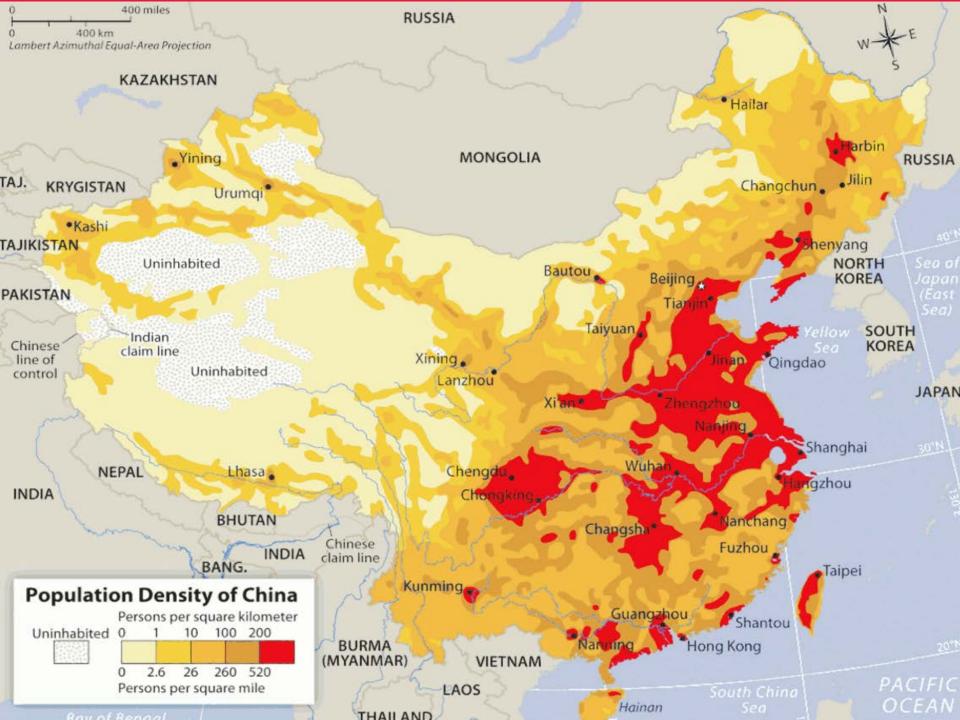
China's Provinces







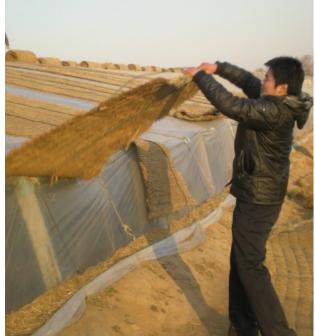




My hometown: Shenxian, Shandong Province

Greenhouse – plastic film - Shandong Province





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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



Chinese land is owned by collectives (Contract Right Certificate)

Total land size

面积(亩)

名称

Number of parcels

84

东水沟 市乾荣

西亚龙 北 清明

东好声 南 跳

市清明 北 外妹

西港电北公路、

东如风 南: 清明

西省风北 乾京

末语志 市 轮柜

西世 世 北 水 沟

西 农电北 坡

京水沟 南 外菜

西 佐如 北 乾京

承包地块

2.05

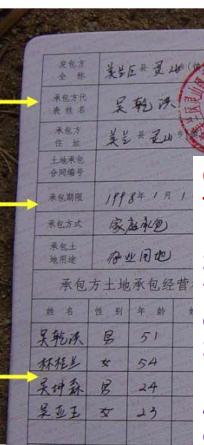
0.32

Family Rep.

30-year term

With at least one 30-year renewal

All family members



China's New Rural Land
Transfer Reform

(盖章)

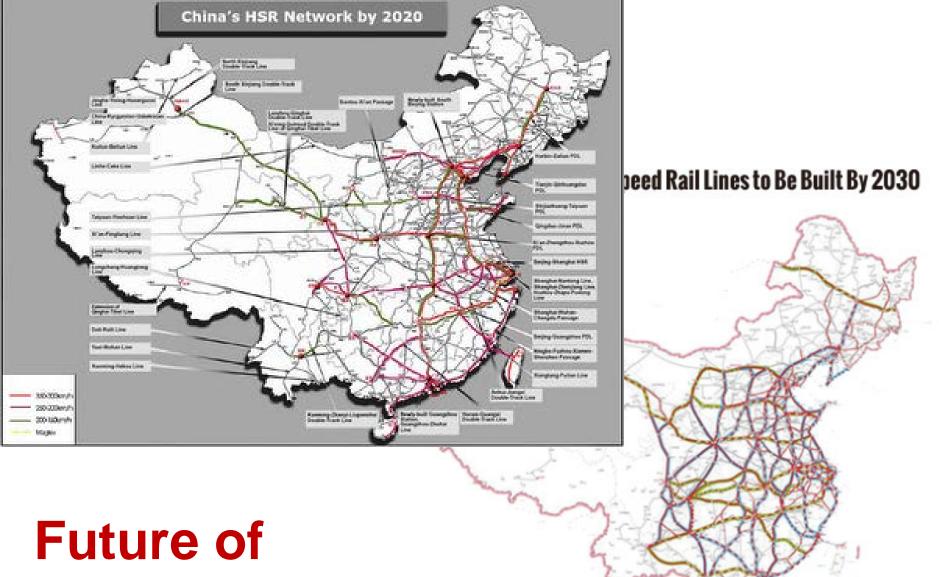
2016:

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

Among them: 30% to coops or corps; 80% non-

grain production





Future of

High-Speed

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Later in an Dureal

Source: National Development and Reform Comission



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)

BBVA RESEARCH Heilongjiang Jilin Ningxia Xinjiang Liaoning Inner Mongolia Beijing 0 Shanxi Oinghai Gansu Shaanxi Shanghai Tibet Hubei Jiangx Hunan Guizhou Chongqing Yunnan Guangxi Hong Kong Macau

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 1900s & 1990s, Gen Z. Donnalter zuous Source: BBVA Research. China National Bureau of Statistics

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:

U.S. 2.0%

China 6.5%

Bloomberg

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Even on**1992**irchasing p

GDP per capita (PPP)

\$37,283

surpUnited States U.S.—

\$1,846

China

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

2004

Urbanized population

79.8%

United States

3 power **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

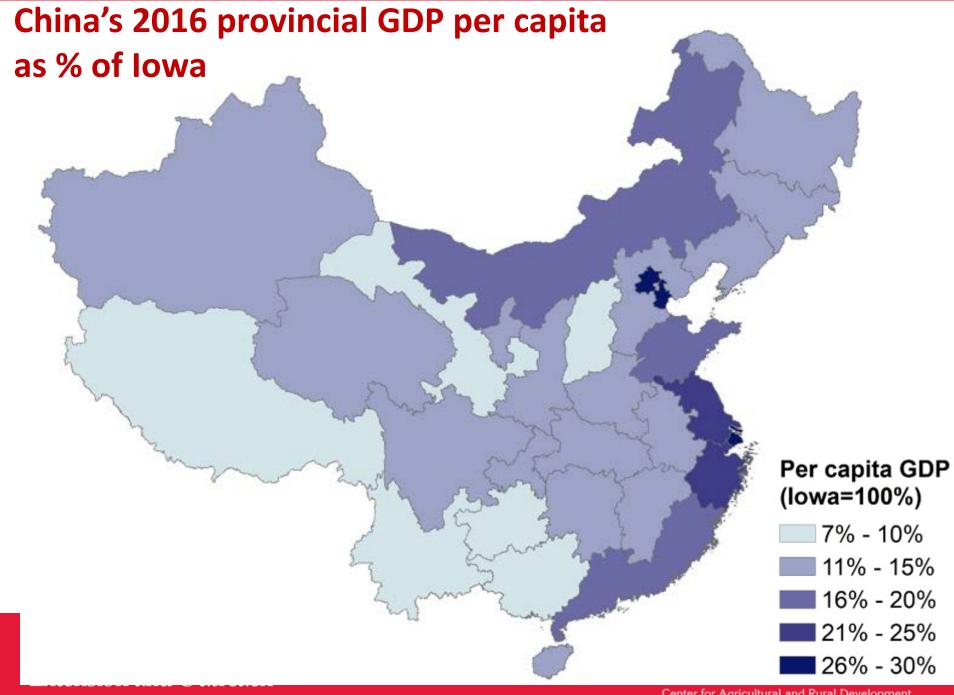
81.8%

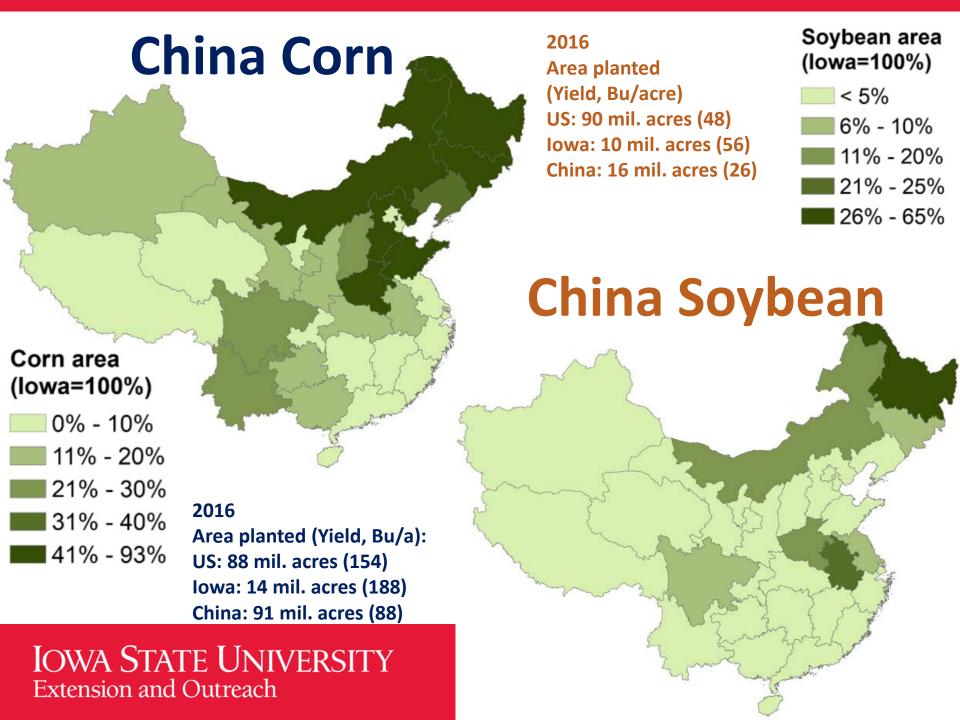
United States

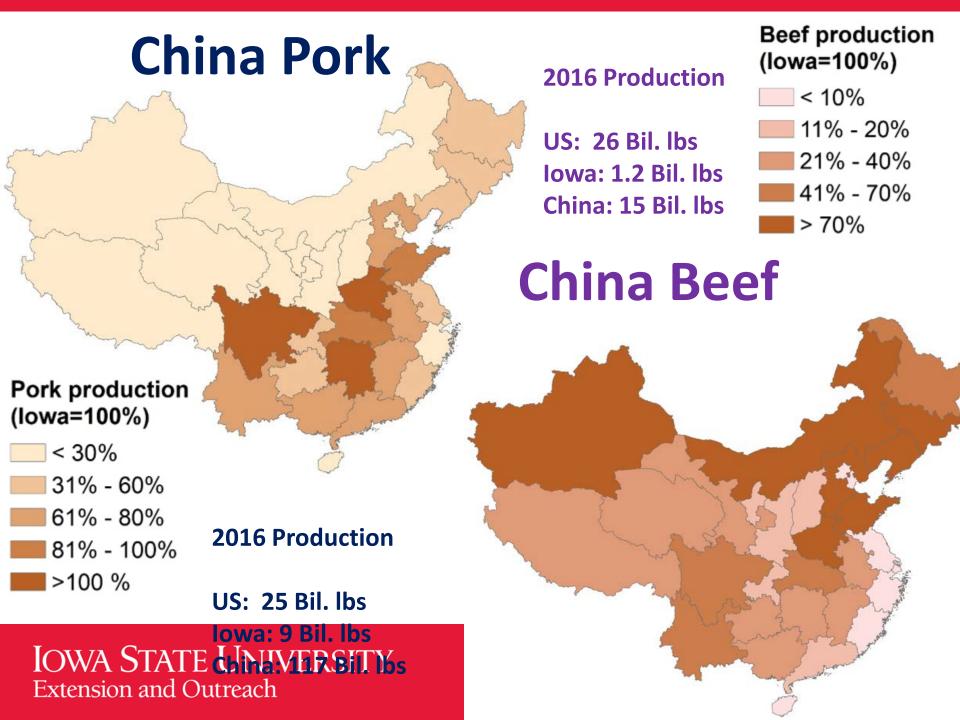
56.8%

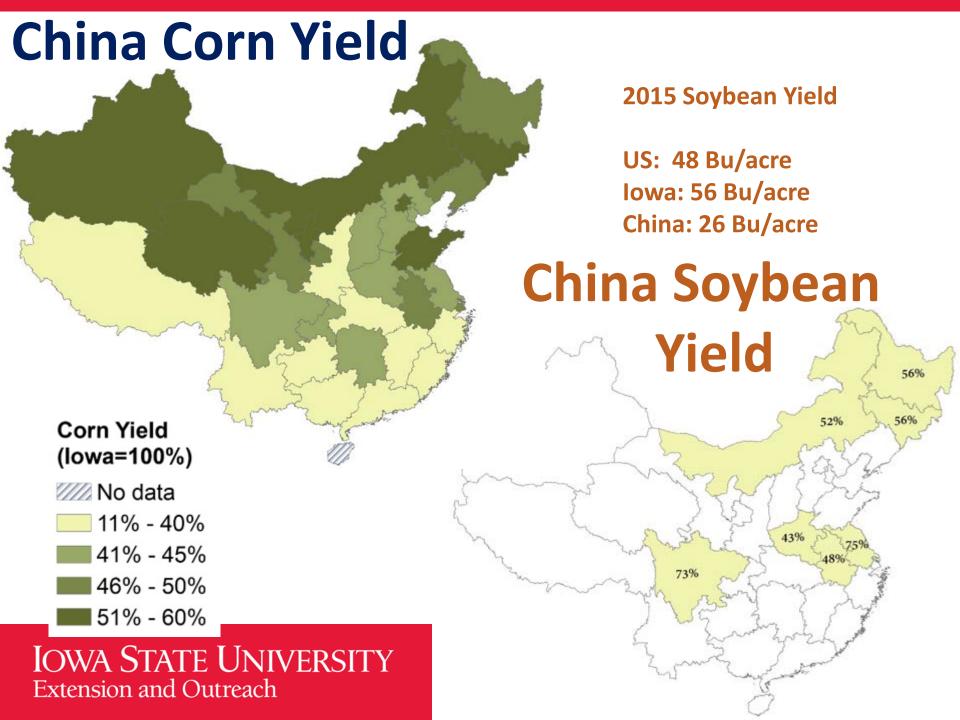
China

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











China

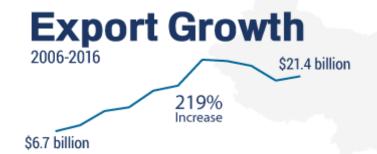
United States Department of Agriculture Foreign Agricultural Service



\$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

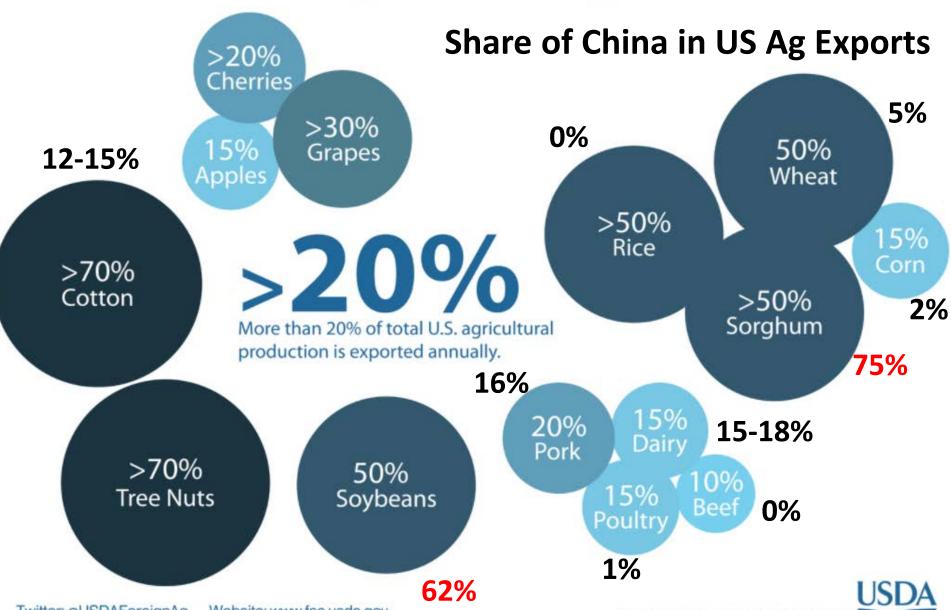


Among U.S. Agricultural Export Markets, 2016

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



Share of U.S. Agriculture Exported in 2016



Twitter: aUSDAForeignAg Website: www.fas.usda.gov Source: USDA-FAS Global Agricultural Trade System (GATS)

United States Department of Agriculture Foreign Agricultural Service



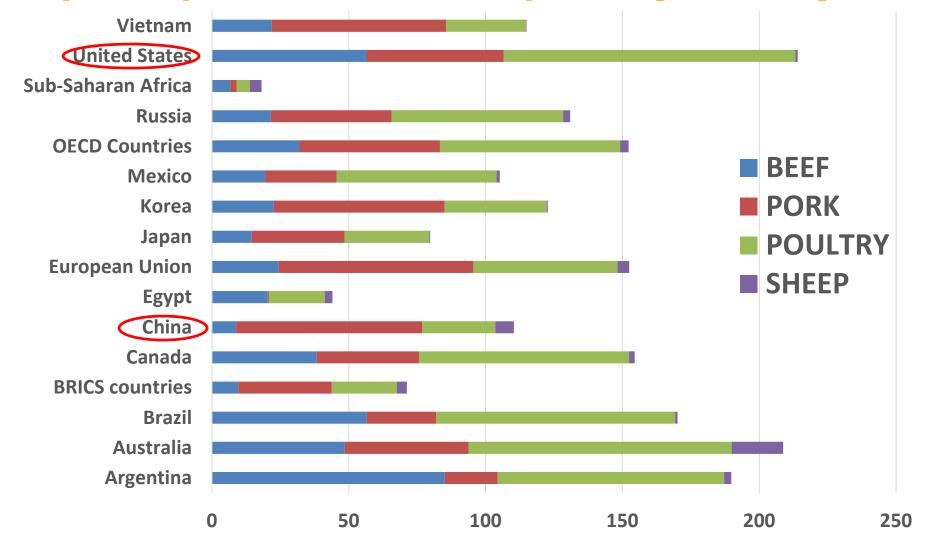
China's Top Ag Imports Sources

Commodity (2016 value of China ag imports)	USA	Brazil	Europe	Australia	Argentina or Uruguay
Soybean (\$34.4 Bil.)	38%	47%			A-10%
Pork (\$2.32 Bil.)	13%		50% Canada: 11%		a: 11%
Ethanol (\$0.38 Bil.)	70%	11%	Pakistan 15%		
Beef (\$2.42 Bil.)	0%	22%		28%	U-21%
Poultry (\$1.11 Bil.)		79%			A-9%
Corn (\$0.87 Bil.)	10%	Ukraine: 79%			

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Ibs per capita Meat Consumption by Country 2016

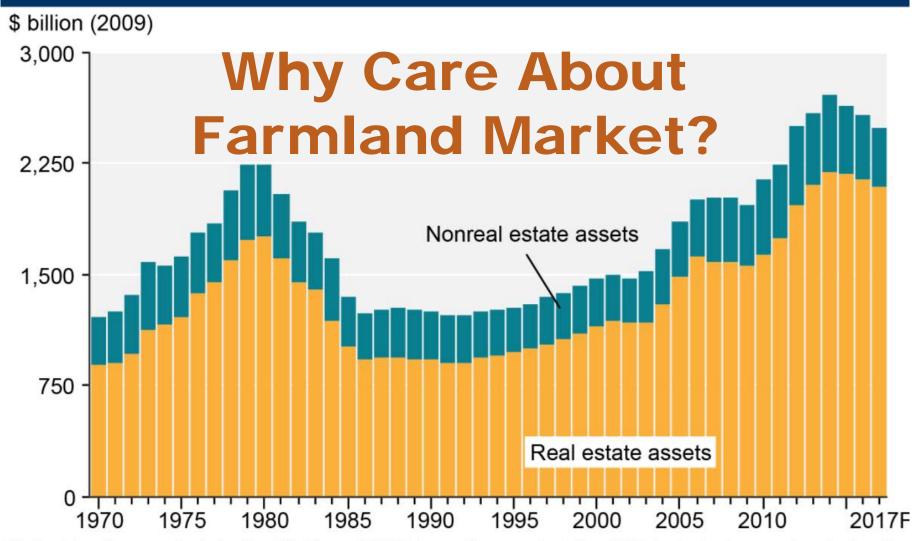






China aims to build a global infrastructure network **Belt and** "Belt and Road" infrastructure projects, planned and completed (March 2017) Silk Road Economic Belt Maritime Silk Road AIIB member states of the 21st Century **Road Initiative** RUSSIA Daging Beyneu Belgrade Madrid Dandong - Navabshah Nouakchott gas field MYAN Ayutthay Map Ta Phút Dire Dawi **Ogaden** Abeba · Calabar Projects subsumed under "Belt and Road" by the Chinese authorities: Libraryitie 448 Kasese 900 Gas pipelines: Proposed economic Sao Tomé & Principe corridors Bujumbura planned or under construction Dar es Salaam Railroad connections: Luanda ----Oil pipelines: **♦ NAMIBIA** Njombe existing existing Luau planned or under planned or under construction Walvis Bay **Ttwara** construction Ports with Chinese engagement: Huambo Chipata MOZAMBIQUE existing . Kapiri Mposhi planned or under construction Petauke

Farm sector assets, inflation adjusted, 1970-2017F



Note: F = forecast; data for 2016 and 2017 are forecasts. The GDP chain-type price index is used to convert the nominal (current-dollar) statistics to real (inflation adjusted) amounts (2009=100).

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.

Data as of February 7, 2017.

Guiding Framework

Land Value = localized net income / universal interest rate



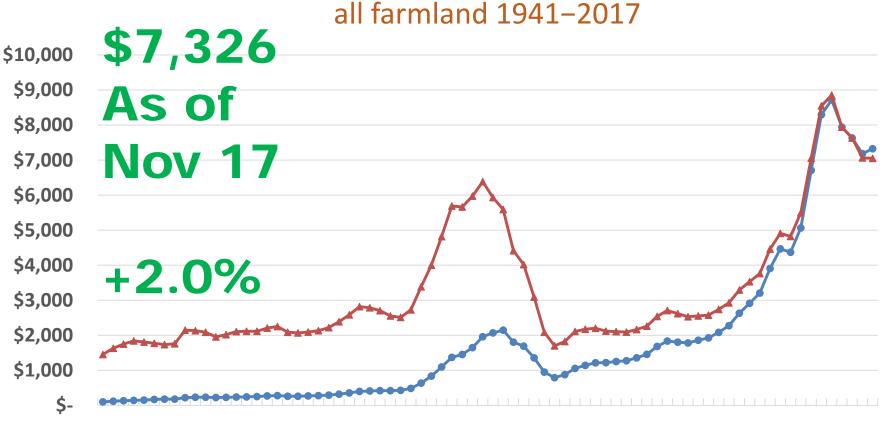
Market Value of Land - Capitalization Formula

$$PV = \sum_{t=0}^{n} \frac{R}{(1+i)^t}$$

- For simplicity, you could think of land value as the present value of all future annual land rental payments a landowner could charge
- PV = R/i



AVERAGE Iowa Land Values

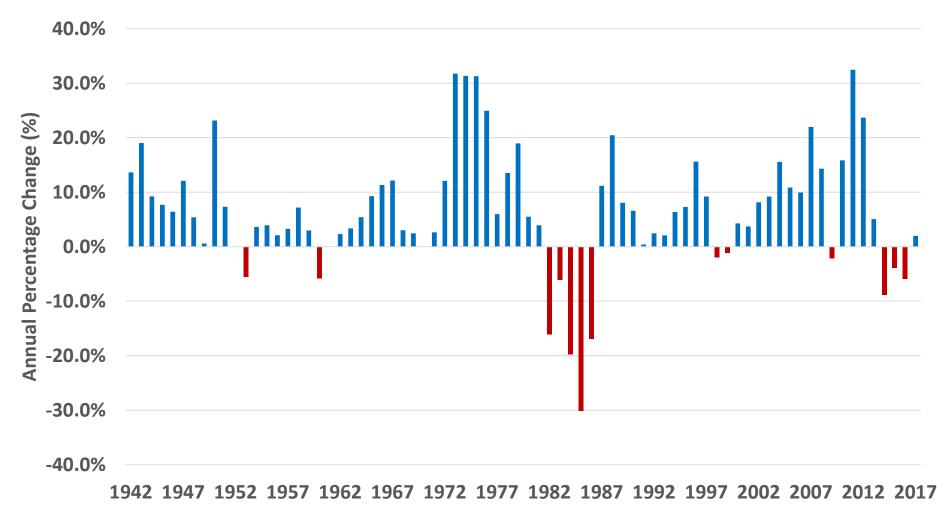


1942 1947 1952 1957 1962 1967 1972 1977 1982 1987 1992 1997 2002 2007 2012 2017

→Nominal land values →Inflation adjusted land values



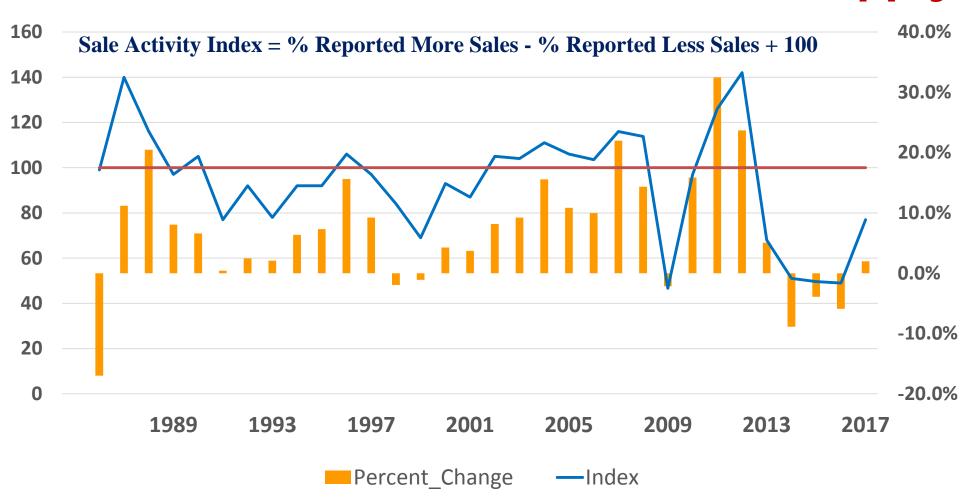
% Change in Nominal Iowa Farmland Values 1942-2017



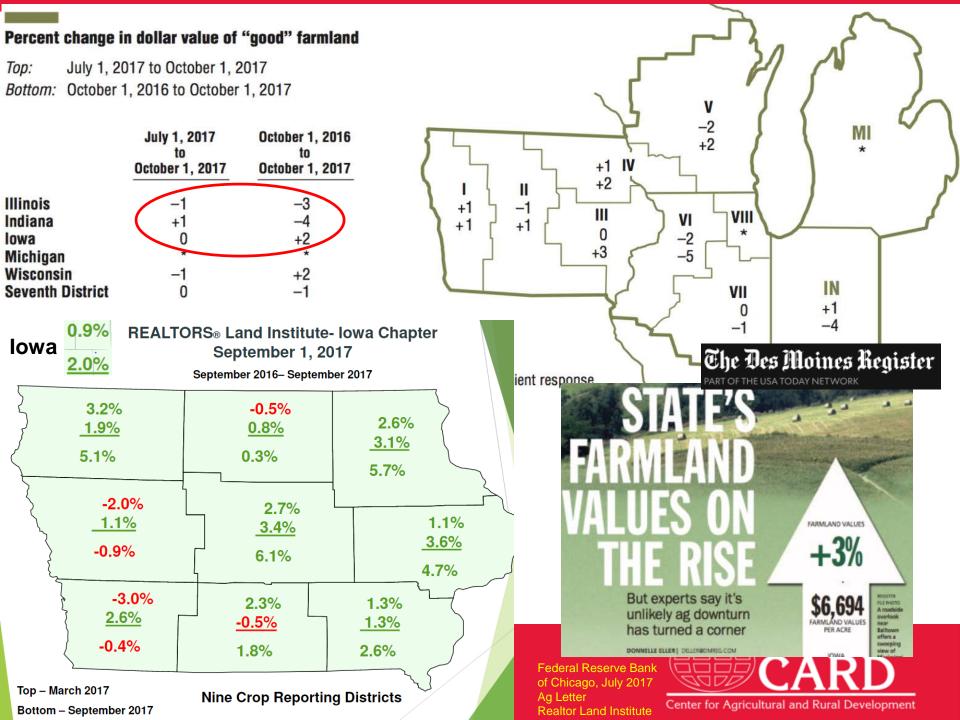




The "temporary break" in continued declines results from limited land supply

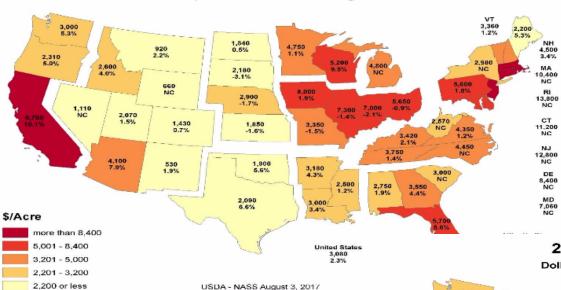






2017 Farm Real Estate Value by State





USDA NASS June Area Survey November 2016 to November 2017

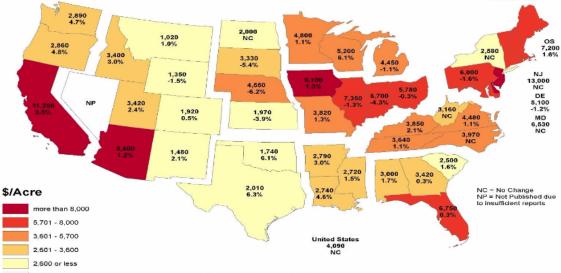
Ag Real Estate Values: + 2.3%

Cropland Values: No change

Pasture Values: +1.5%

2017 Cropland Value by State





USDA June Area Survey, August 2017

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OS includes CT, MA, ME, NH, RI, VT However , don't rush to conclud e a turn of the farmland market

Percent change from previous year *

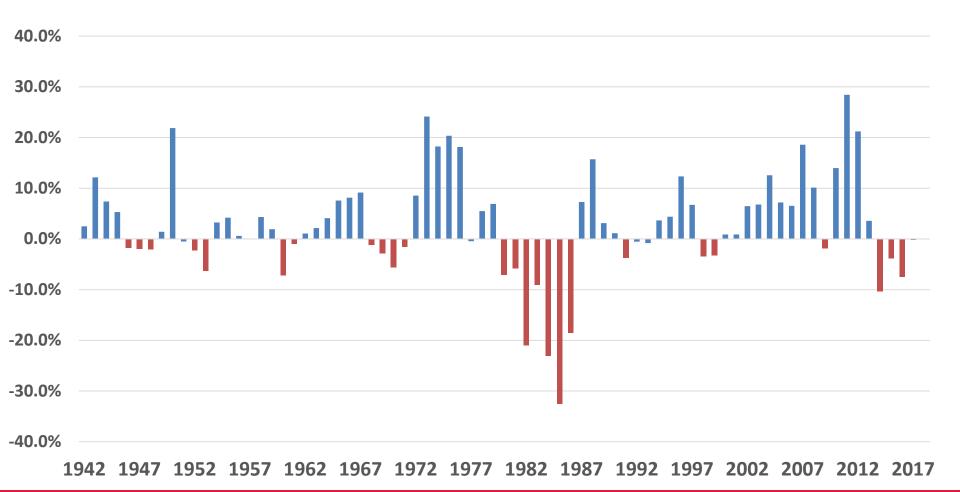
	Nonirrigated	Irrigated	Ranchland
Kansas	- 7	- 8	- 5
Western Missouri	- 1	n/a **	0
Mountain States***	- 3	- 11	1
Nebraska	- 8	- 7	- 8
Oklahoma	- 3	- 4	- 2
Tenth District	- 5	- 7	- 4

Percent changes are calculated using responses only from those banks reporting in both the past and the current quarters.

^{**} Not reported due to small sample size.

^{***} Mountain States include Colorado, northern New Mexico and Wyoming, which are grouped because of limited survey responses from each state.

% Change in Inflation-adjusted Iowa Farmland Values 1942-2017 (decrease 0.2%)



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Indiana and Illinois both show declines

	_		% Change	
		6/16-6/17	6/16-12/16	12/16-6/17
	_	%	%	%
Indiana	Тор	0.2%	2.9%	-2.6%
	Average	-1.6%	1.4%	-3.0%
	Poor	-1.4%	1.9%	-3.2%
	Transition ²	5.2%	13.4%	-7.2%
	Recreation ³	8.5%	11.8%	-2.9%

INDIANA FARMLAND VALUES AND

CASH RENTS CONTINUE TO ADJUST

2017 Illinois Farmland Values and Lease Trends

Table 1. Estimates of Land Price, Beginning and Ending of 2016.

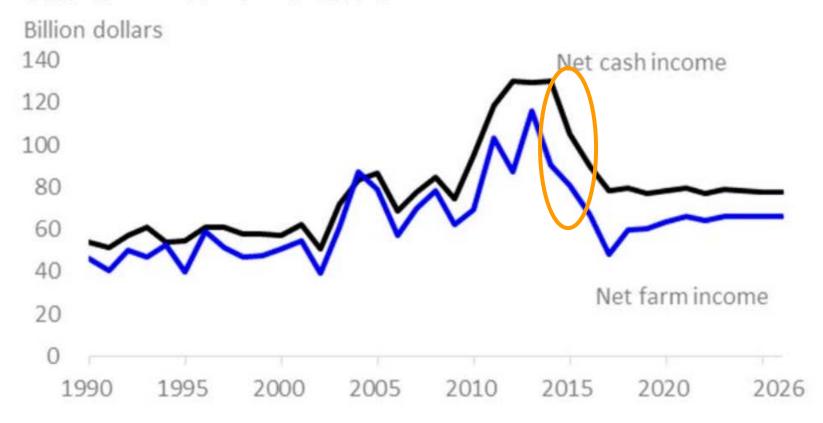
	Dat	e	
Productivity	January 1, 2016	December 31, 2016	Percent Change
	\$ p	per acre	
Excellent	11,600	11,000	-5%
Good	10,100	9,500	-6%
Average	8,200	7,200	-12%
Fair	6,900	5,900	-14%

Note - While we have noted a continued lower trend, there does appear to be some stabilization entering 2017.



US Farm Income 1990-2026

U.S. farm income indicators



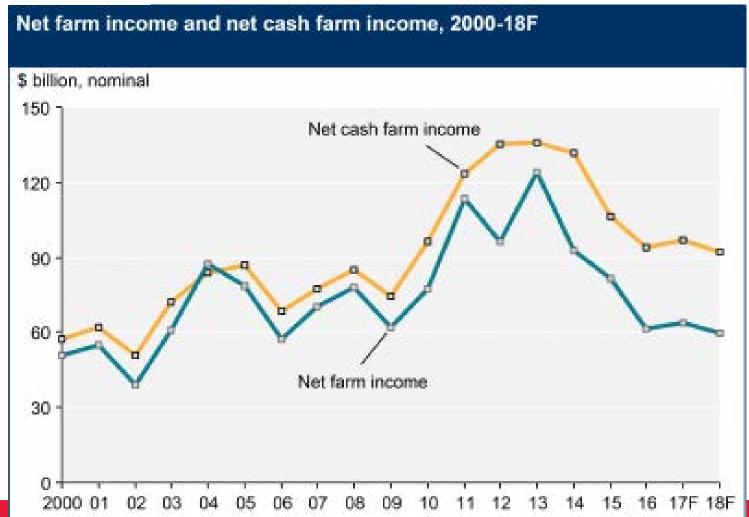


farmdoc

farmdocDAILY

The U.S. Department of Agriculture's Economic Research Service (ERS) indicated on Wednesday that, "Net farm income, a broad measure of profits, is forecast to decrease \$4.3 billion (6.7 percent) to \$59.5 billion in 2018, which would be the lowest level in nominal terms since 2006."

Farm Policy News



IOWA Extension

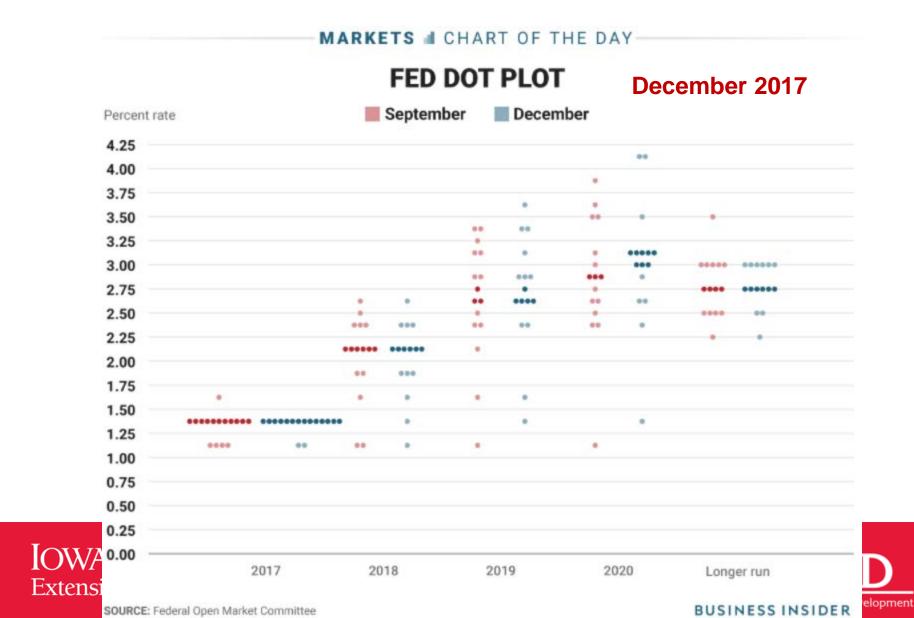
Note: F = forecast.

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.

Data as of February 7, 2018.



Long-term interest rate expectations What the Fed Reserve thinks the interest rate should be



Land Values by District and Quality, Nov 2017

District	Average Value	% Change	High Quality	% Change	Medium Quality	% Change	Low Quality	% Change
Northwest	\$9,388	1.6%	\$10,829	1.7%	\$8,555	1.0%	\$6,216	3.3%
North Central	\$7,802	3.2%	\$8,730	3.4%	\$7,218	3.2%	\$5,265	2.0%
Northeast	\$7,543	3.1%	\$9,151	2.9%	\$7,236	3.5%	\$4,965	2.4%
West Central	\$7,377	0.3%	\$8,881	0.1%	\$6,824	-0.7%	\$4,684	2.3%
Central	\$8,097	3.3%	\$9,568	2.9%	\$7,426	3.3%	\$4,993	-3.2%
East Central	\$8,218	3.8%	\$9,900	4.2%	\$7,674	3.8%	\$5,305	3.0%
Southwest	\$6,058	0.0%	\$7,571	0.6%	\$5,756	1.3%	\$3,935	-6.1%
South Central	\$4,172	-1.6%	\$5,908	-1.2%	\$4,079	-1.2%	\$2,824	-2.3%
Southeast	\$6,864	2.2%	\$9,471	2.2%	\$6,548	4.2%	\$3,768	-0.4%
Iowa Avg.	\$7,326	2.0%	\$8,933	2.0%	\$6,849	2.2%	\$4,689	0.5%

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Livestock and Crop Inventory by Crop Reporting District

District	Li	vestock Inv	ventory - 2012		Acres	2012	Harvested Acres 2017		
	Chickens, Layers	Hogs	Milk Cows	Cattle	Pasture	Timber	Corn	Soybean	
Northwest	30%	26%	29%	22%	7%	2%	15%	16%	
North Central	64%	16%	4%	6%	4%	4%	14%	13%	
Northeast	1%	12%	51%	16%	11%	23%	12%	8%	
West Central	0%	13%	1%	13%	10%	7%	15%	16%	
Central	3%	13%	1%	7%	8%	8%	15%	14%	
East Central	1%	5%	10%	11%	11%	14%	11%	10%	
Southwest	0%	2%	0%	9%	12%	5%	8%	10%	
South Central	0%	2%	1%	9%	25%	19%	4%	6%	
Southeast	1%	11%	3%	6%	12%	19%	7%	8%	
Iowa Total	52.2 million	20.4 million	0.17 million	3.8 million	2.5 million	1.2 million	12.9 million	10.0 million	

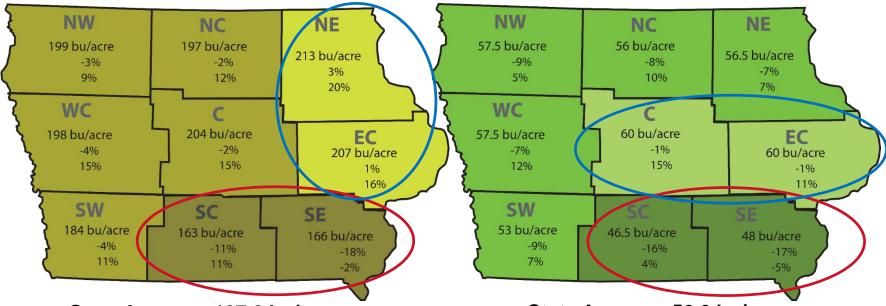
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USDA NASS, Ag Census



Stronger than expected crop yields

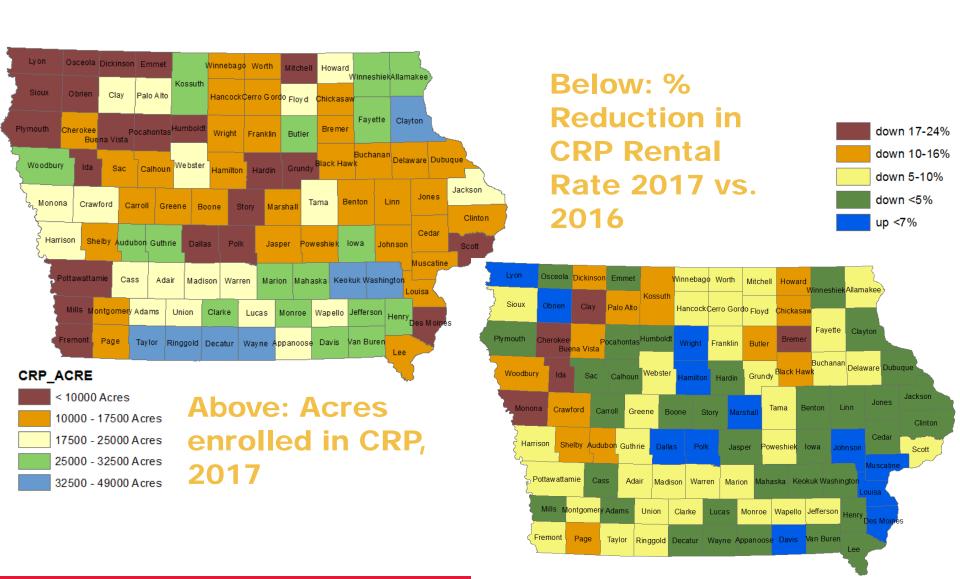
Corn Yield: November 1, 2017 Bushels per Acre Soybean Yield: November 1, 2017
Bushels per Acre



State Average: 197.0 bu/acre

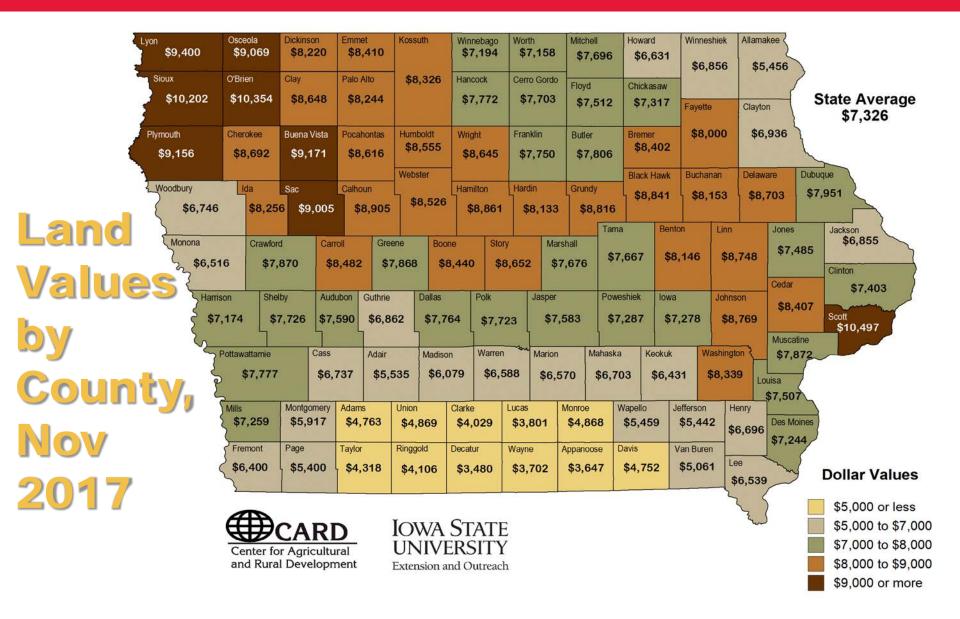
State Average: 56.0 bu/acre





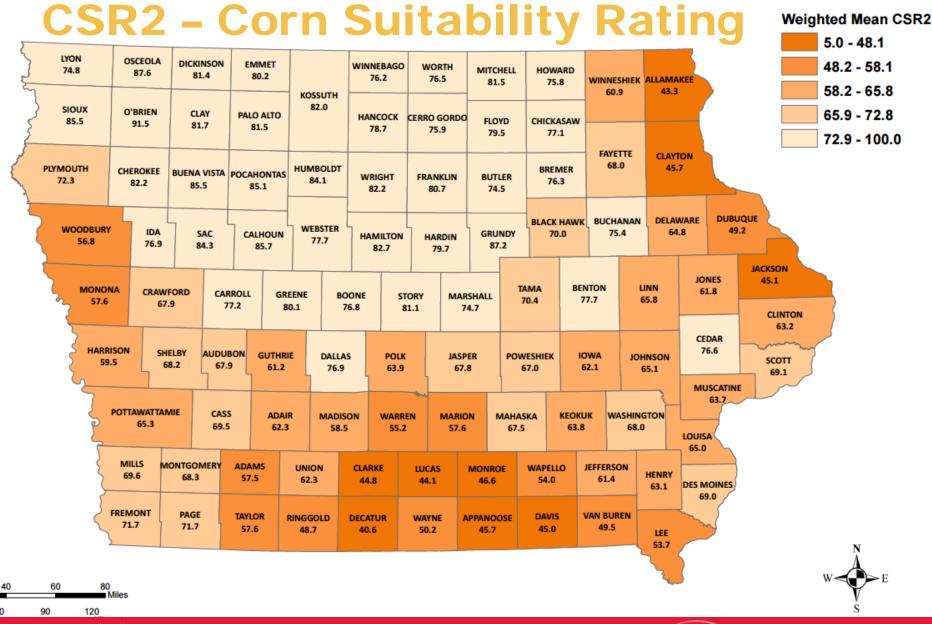










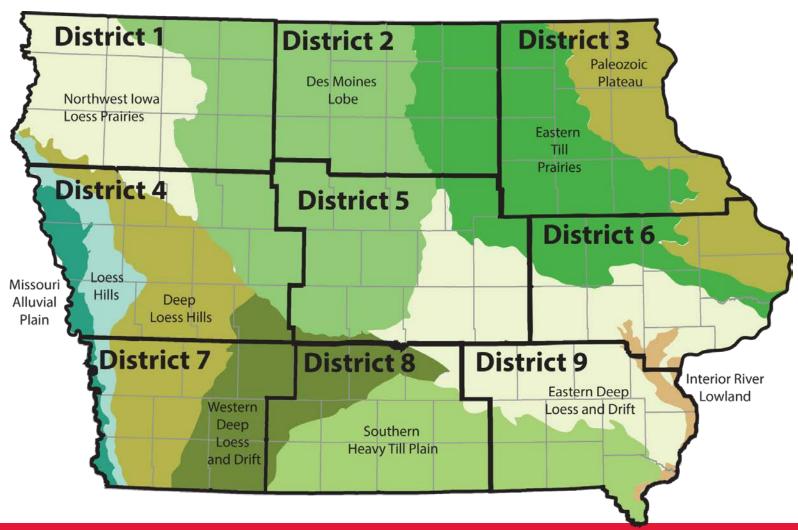




Source: ISU Agronomy



Iowa Major Soil Association

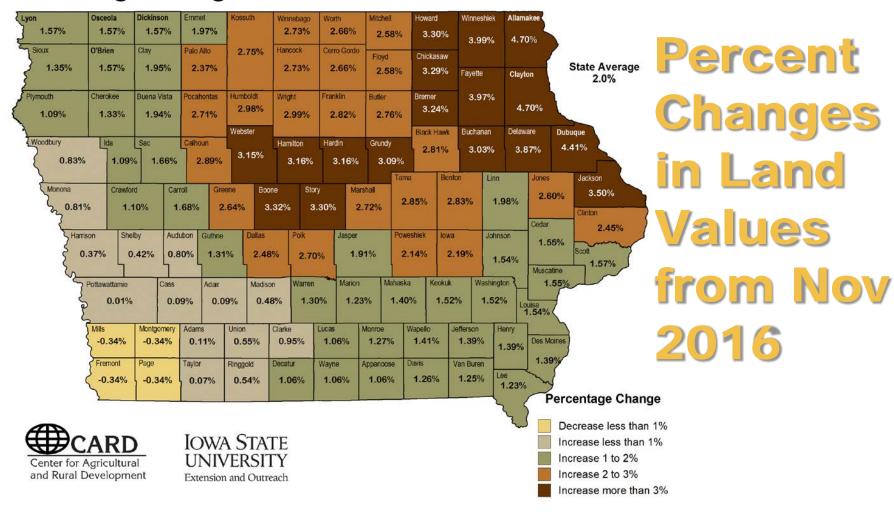






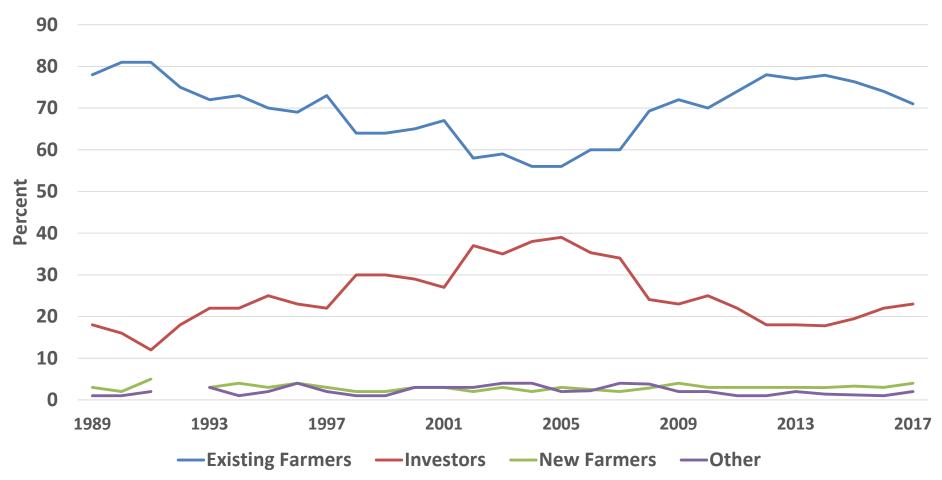


Percentage Change in Iowa Land Values 2016 to 2017





lowa Farmland Purchases by Buyer Types 1989-2017







Iowa Farmland Purchases by Seller Types. 2017

	Active		Estate						
	Farmers	Retired Farmers	Sales	Investors	Other				
		PERCENT							
Northwest	12	17	64	5	2				
North Central	12	19	56	10	3				
Northeast	14	34	43	6	5				
West Central	12	23	57	6	2				
Central	14	20	55	9	3				
East Central	11	23	55	9	2				
Southwest	16	23	48	11	2				
South Central	16	30	33	19	2				
Southeast	9	30	51	7	3				
STATE	13	23	54	8	2				



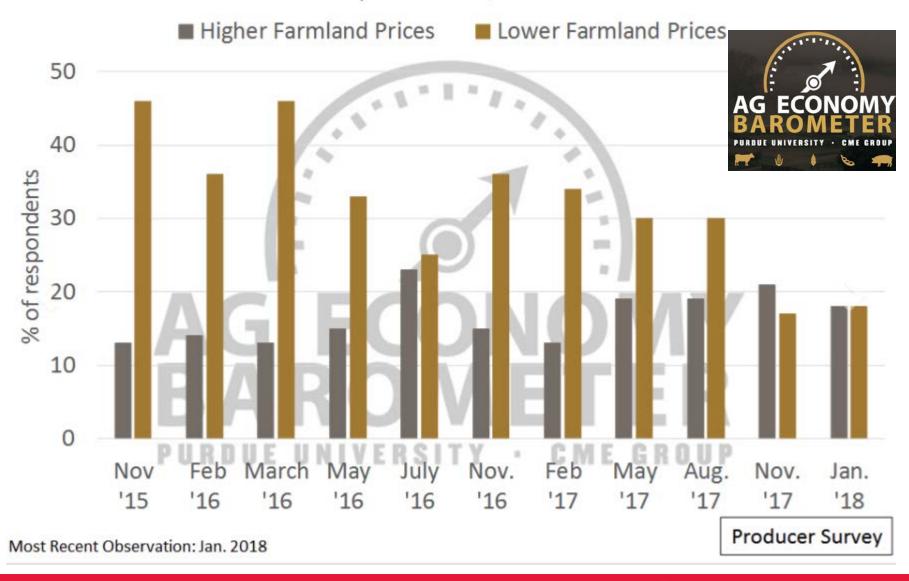


Cash Crop Price Predictions for Nov 2017, 2018, 2020 as of May 2017

Soil Management Land Valuation Conference May 16, 2018 Wednesday, Scheman Bldg

			Cash Corn Prices				Cash Soybean Prices					
	2	017	2	018	2	020	2	017	20	018		2020
Northwest	\$	3.34	\$	3.65	\$	3.98	\$	9.25	\$	9.61	\$	10.32
North Central	\$	3.42	\$	3.59	\$	3.93	\$	9.16	\$	9.46	\$	10.01
Northeast	\$	3.41	\$	3.59	\$	3.95	\$	9.19	\$	9.28	\$	9.76
West Central	\$	3.34	\$	3.59	\$	4.02	\$	9.12	\$	9.33	\$	10.06
Central	\$	3.36	\$	3.50	\$	3.77	\$	9.17	\$	9.40	\$	9.86
East Central	\$	3.42	\$	3.58	\$	3.89	\$	9.26	\$	9.51	\$	10.00
Southwest	\$	3.31	\$	3.56	\$	3.94	\$	9.15	\$	9.42	\$	10.09
South Central	\$	3.36	\$	3.59	\$	3.90	\$	9.51	\$	9.76	\$	10.35
Southeast	\$	3.50	\$	3.83	\$	4.17	\$	9.49	\$	9.59	\$	10.08
STATE	\$	3.38	\$	3.60	\$	3.94	\$	9.24	\$	9.48	\$	10.06

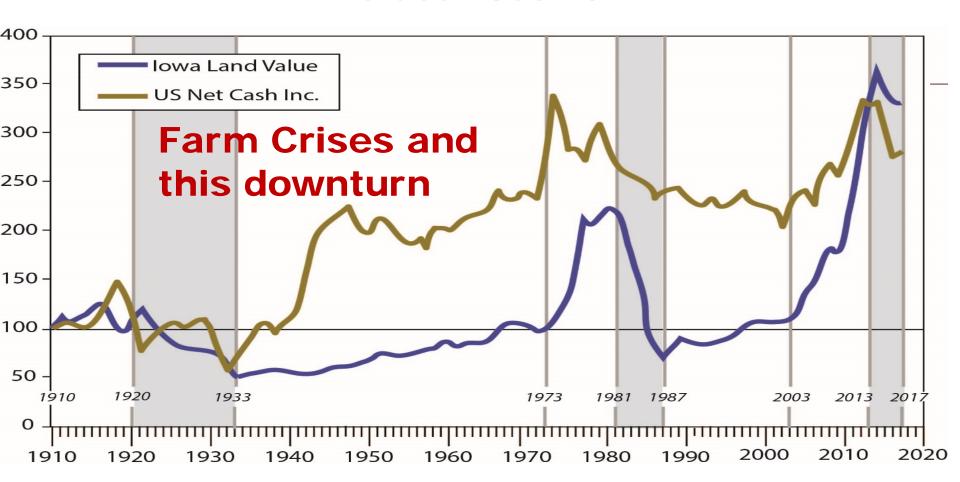
Farmland Price Expectations, 12 months from now

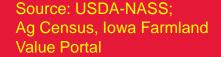


Source: Purdue Ag Barometer



Inflation-adjusted Iowa Ag Real Estate Values 1850-2017







Positive 1: Real Income Accumulation 2003-2013

Average annual percent change in nominal values								
Golden Eras	Iowa Land	U.S. Gross Income	U.S. Net Income					
1910-1920	9.3%	9.0%	8.4%					
1973-1981	19.5%	9.8%	5.3%					
2003-2013	13.7%	7.1%	10.7%					
Crises and Declines	Iowa Land	U.S. Gross Income	U.S. Net Income					
1921-1933	-8.9%	-4.7%	-3.6%					
1981-1987	-14.0%	2.1%	7.3%					
2013-2017	1.1%	-2.4%	-6.4%					
Average annual percent change in inflation-adjusted values								
Golden Eras	Iowa Land	U.S. Gross Income	U.S. Net Incom					
1910-1920	1.7%	1.1%	0.5%					
1973-1981	9.6%	0.7%	-3.4%					
2003-2013	11.0%	4.5%	8.2%					
Crises and Declines	Iowa Land	U.S. Gross Income	U.S. Net Incom					
1921-1933	-5.8%	-2.0%	-1.3%					
1981-1987	-15.0%	-2.4%	2.7%					
2013-2017	-0.1%	-3.7%	-7.6%					

Source: Zhang and Tidgren 2017

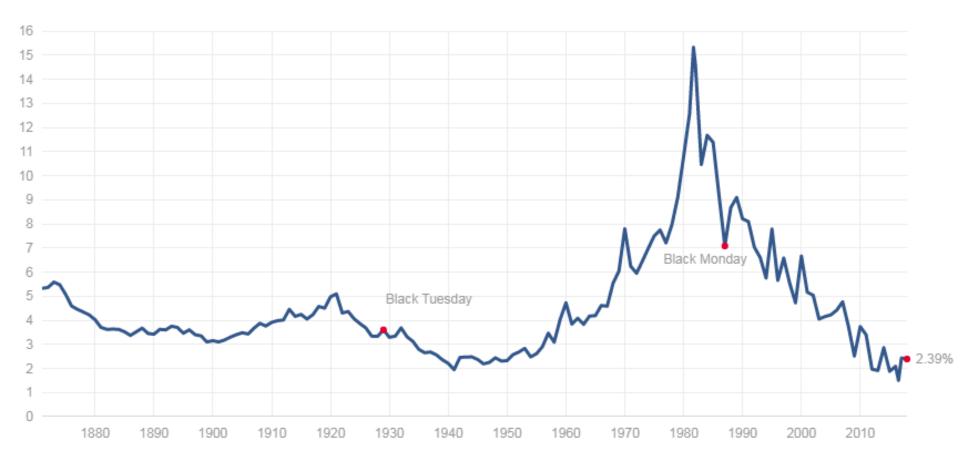
Iowa Landowners tend to hold the farmland; and many don't have debt

Years Owned	% of lowa Farmland	Table 3.5: Fina	nce metho	od as a pe	ercent of	farmland	
<10 years	24%		1982	1992	2002	2007	2012
40.00.1/	040/	Free of debt	62%*	70%*	74%	75%	78%
10-20 Years	21%	Under contract	18%*	11%*	4%	4%	3%
20-30 Years	19%	Mortgaged	20%	19%	22%*	21%*	19%
30-40 Years	15%	* Indicates signification bercent level	nt differenc	es relative	to the 2012	2 survey at	the 5
> 40 Years	20%						

Source: Ag DM PM1980, 2012 Iowa Farmland Ownership and Tenure Survey



Positive 2: Historically low interest rates



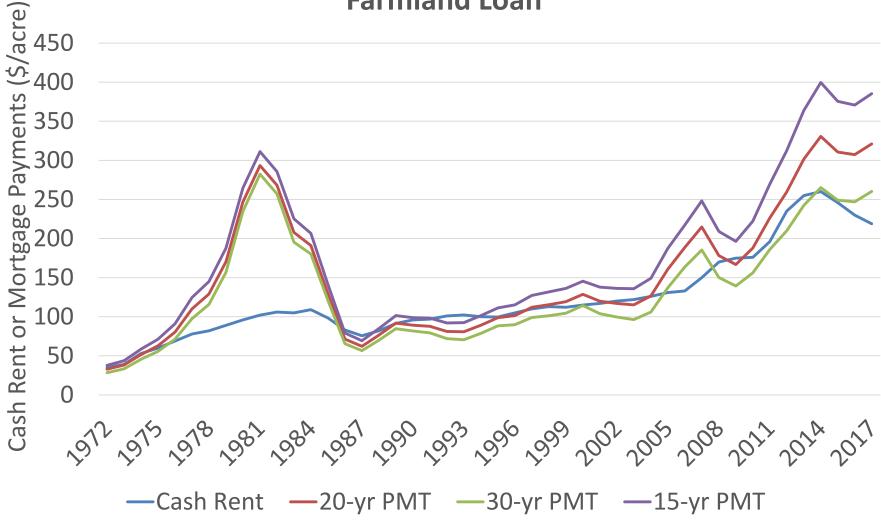


Positive 3: Prudence in Ag Lenders/Regulators

- Banking Regulations
 - More stringent, frequent stress-test
 - BASEL III, liquidity requirements for banks
 - (Ron Hansen Iowa Division of Banking Superintendent) walk into this "with eyes wide open"
- Cash-Flow Based Loan Practice
 - Before 1987: Ioan to value ratio is 85%
 - 1987-2008: loan to value ratio is 65%
 - After 2008: use cash-flow method for collateral (\$4 corn, \$10 bean) and 50% of cash flow value



Annual Mortgage Payments vs. Cash Rents for Iowa **Farmland Loan**







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







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.

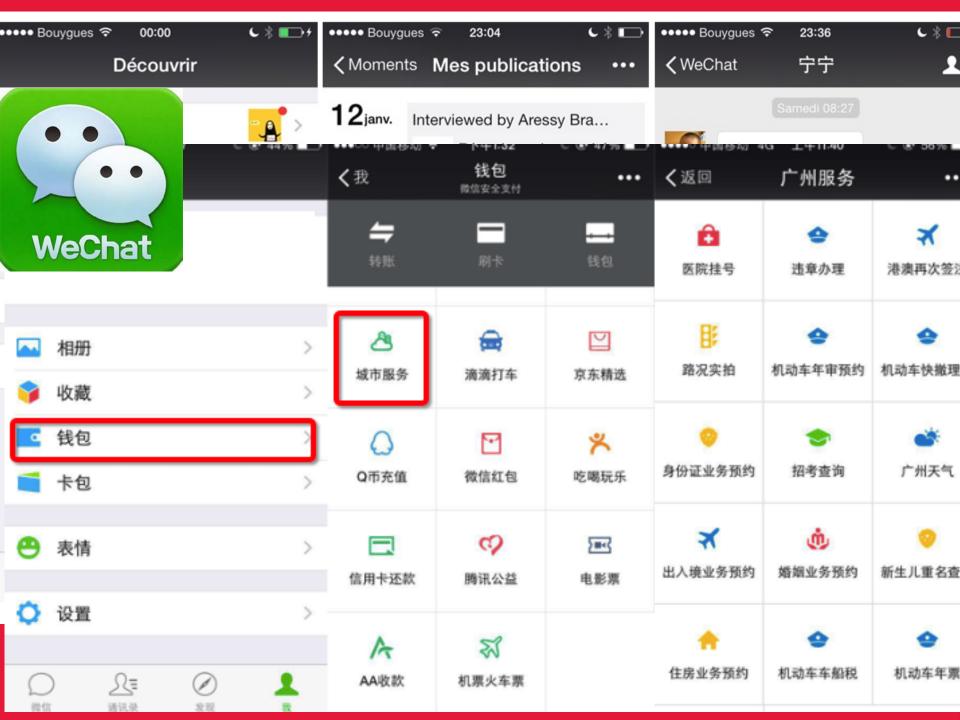
The ministry has approved Syngenta's Agrisure Duracade corn, engineered to be resistant to corn rootworm, and Monsanto's Roundup Ready corn. Dow received import approval last month for Enlist corn, which China approved along with a Monsanto soybean variety, Vistive Gold. At the time, Dow said it had 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.

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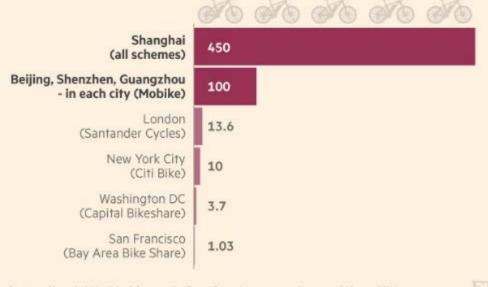






China's cities lead the world in bike-sharing schemes

Number of shared bicycles by city and bike-sharing company ('000)



Sources: Shanghai Municipal Communist Party Committee; companies named above; SPIN



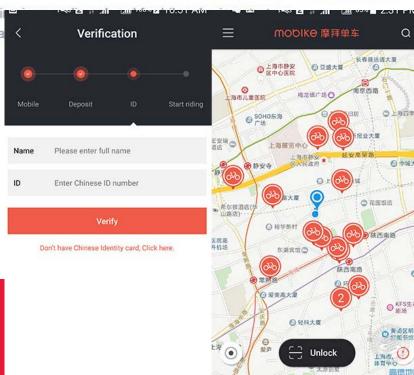
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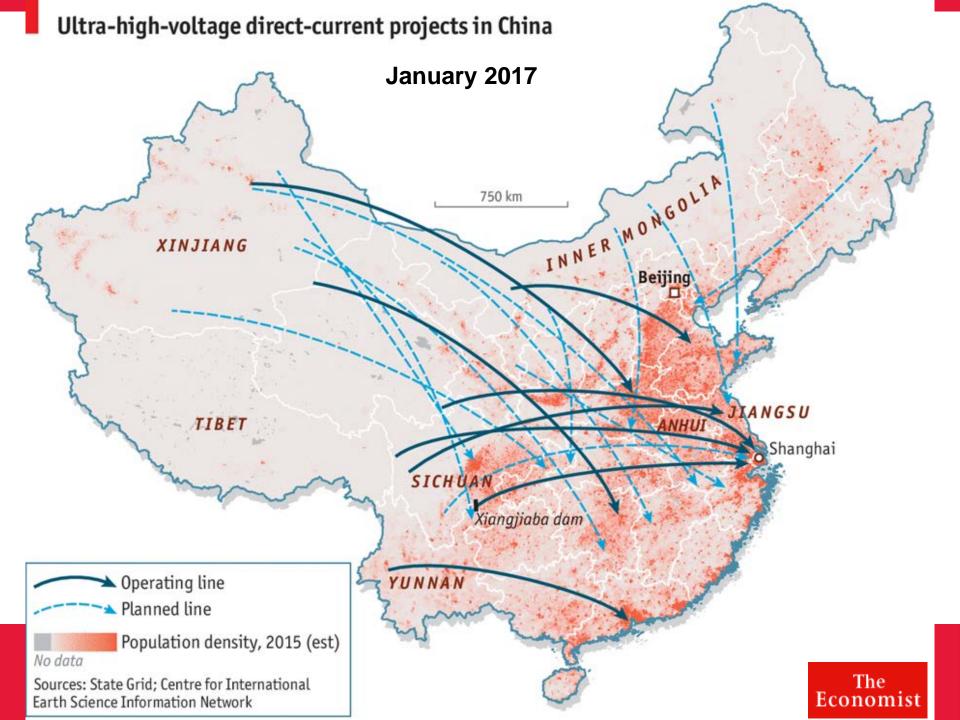




China's 'Uber for bikes' model is going global





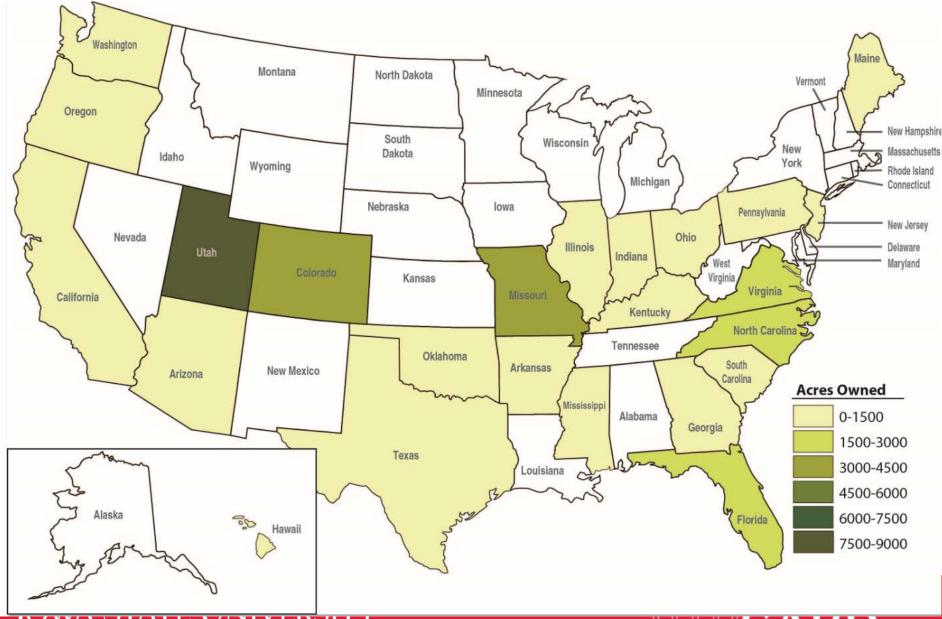




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Farmland Acres Owned by Chinese Owners as of 2016



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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.

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." Di 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." Depresentation 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.

2017 Iowa Farmland Ownership and Tenure Survey

- First land ownership survey in the nation:
 1949
- Only one conducted at frequent intervals:
 - -1949, 1958, 1970, 1976, 1982, 1992, 1997, 2002, 2007, and 2012.

Next one in 2017 Results released spring 2018



Documentaries about China

- China: Time of Xi https://www.youtube.com/watch?v=NEGp6y3uGIA
- One Belt One Road https://www.youtube.com/watch?v=_NtprkECCiU
- A Bite of China Chinese cuisine/culture

<u>https://www.youtube.com/watch?v=Awj4u-</u>
<u>Ntgs&list=PLYOTfstAG_IPjyEeT472GEJzafYmBiA3w</u>

Bird's Eye China – aerial China by province

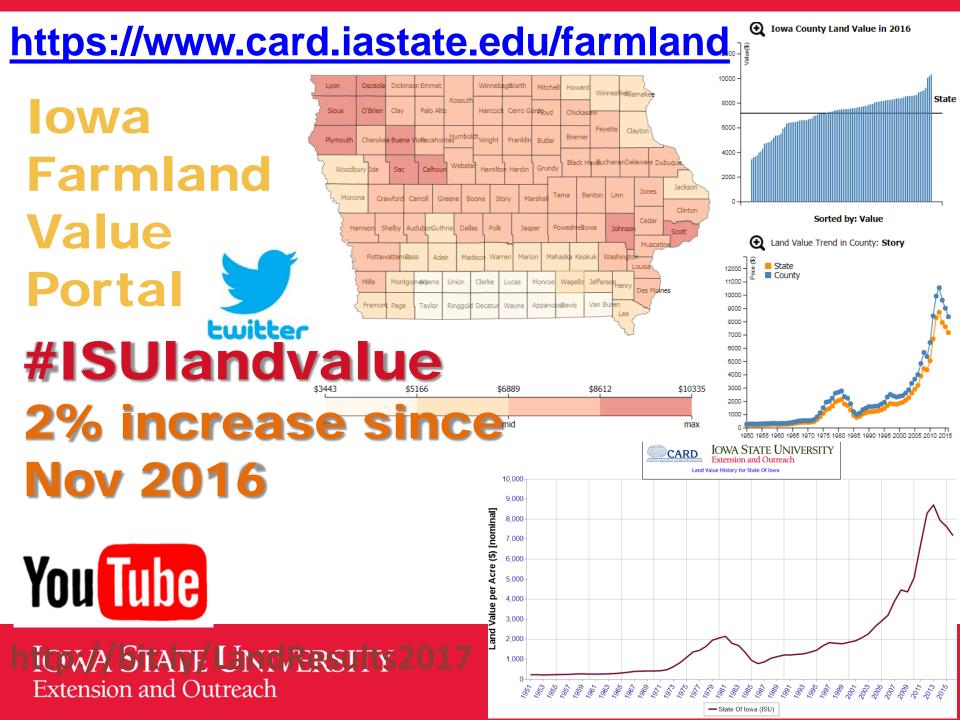
https://www.youtube.com/watch?v=LVjnASDa6Pw

The world's future MegaProjects (2017-2040)

https://www.youtube.com/watch?v=CiQ874ZuIno

- Wild China BBC (2008)
 http://www.bbc.co.uk/programmes/b00bv6lk/episodes/guide
- Chinese New Year: The Biggest Celebration on Earth (2016) BBC http://www.bbc.co.uk/programmes/b071c3mh/episodes/guide
- China's MegaProjects available in Chinese only







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Thank You!

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