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
  - 2020 Results now available at ISU Farmland Portal [www.card.iastate.edu/farmland/](http://www.card.iastate.edu/farmland/)
  - 2019 Farm Transfer Survey
  - agriculture and the environment (e.g., the 2019 Iowa Lakes Survey)

China Ag center [www.card.iastate.edu/china](http://www.card.iastate.edu/china)
CHINA

The decaying U.S.-China relationship will change each of our lives

Money and information won’t flow like it used to and global companies will have to make stark choices.

Los Angeles Times

News Analysis: How bad could U.S.-China relations get?

South China Morning Post

US-China trade war: both sides cling to phase one deal as wider relationship crumbles
China’s Ag Minister Tang in Dec 2020:
China’s hog inventory is 91% of 2017 levels

Figure 1. Monthly US agricultural and related products exports to China, 2017–2020.
Recent commodity price rallies driven by surging exports, not record gov’t payments

Corn Export Sales
- China: almost 700 mil. Bu
- Up 28,903%
- Account for half of export growth

Soybean Export Sales
- China: >800 mil. Bu
- Up 195%
- Account for 90% of export growth

Source: Chad Hart, ISU
China makes progress rebuilding hog herd

By Sean Pratt

Published: August 6, 2020

Markets

HOG RECOVERY

China is rapidly rebuilding its sow herd, according to Chinese government statistics. China’s Statistics Bureau estimates inventory at 36.3 million at the end of June 2020. The goal is to be at pre-African swine fever levels of 43.9 million head by the end of 2020.

China sow inventory numbers, 2018-2020

Large Hog Companies Gain from China’s Ongoing African Swine Fever

Chen-Ti Chen, Tao Xiong, and Wendong Zhang
China’s hog rebuilding progress 2018-2021

Hog inventory (Million herds)
Sow inventory (Million herds)
Hog slaughter (Million herds)

Hog inventory: Orange line
Sow inventory: Red line
Hog slaughter: Green line

Years: 2016-2022

Source: Iowa State University Extension and Outreach
China’s hog & pork & corn prices 2017-2021

- Piglet
- Sow
- Pork
- Corn

Corn Price (US $/bushel)

Price ($ per pound)
# China’s Agricultural Imports under the Phase One Deal: Is Success Possible?

## Table 1. China’s Imports of Key Commodities 2017 and 2020

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>160</td>
<td>442</td>
<td>26.55%</td>
</tr>
<tr>
<td>Soybeans</td>
<td>13940</td>
<td>25698</td>
<td>35.17%</td>
</tr>
<tr>
<td>Cotton</td>
<td>983</td>
<td>1207</td>
<td>44.88%</td>
</tr>
<tr>
<td>Sorghum</td>
<td>957</td>
<td>69</td>
<td>93.26%</td>
</tr>
<tr>
<td>Peanuts</td>
<td>62</td>
<td>268</td>
<td>18.74%</td>
</tr>
<tr>
<td>Pork</td>
<td>1162</td>
<td>3217</td>
<td>26.53%</td>
</tr>
<tr>
<td>Beef</td>
<td>25</td>
<td>3116</td>
<td>0.80%</td>
</tr>
<tr>
<td>Poultry</td>
<td>0</td>
<td>1032</td>
<td>0.00%</td>
</tr>
<tr>
<td>Dairy</td>
<td>1087</td>
<td>8203</td>
<td>11.71%</td>
</tr>
<tr>
<td>Ethanol</td>
<td>1</td>
<td>29</td>
<td>3.09%</td>
</tr>
<tr>
<td><strong>Total agricultural and related products</strong></td>
<td><strong>24,000</strong></td>
<td><strong>101,860</strong></td>
<td><strong>19.07%</strong></td>
</tr>
</tbody>
</table>

Source: General Administration of Customs of China data (CACC 2020)
China’s Agricultural Imports under the Phase One Deal: Is Success Possible?

Table 3. China’s Predicted Agricultural Imports of Key Commodities from February 15, 2020, to February 14, 2021

<table>
<thead>
<tr>
<th></th>
<th>Value ($Million)</th>
<th>Imports from US</th>
<th>Imports from all sources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity (Thousand metric tons)</td>
<td>Value ($Million)</td>
<td>Quantity (Thousand metric tons)</td>
</tr>
<tr>
<td>Corn</td>
<td>3,907</td>
<td>17,690</td>
<td>5,475</td>
</tr>
<tr>
<td>Soybeans</td>
<td>14,520</td>
<td>35,130</td>
<td>40,006</td>
</tr>
<tr>
<td>Cotton</td>
<td>1,501</td>
<td>922</td>
<td>3,172</td>
</tr>
<tr>
<td>Sorghum</td>
<td>1,121</td>
<td>4,828</td>
<td>1,261</td>
</tr>
<tr>
<td>Pork</td>
<td>2,005</td>
<td>1,488</td>
<td>20,567</td>
</tr>
<tr>
<td>Beef</td>
<td>230</td>
<td>28</td>
<td>10,439</td>
</tr>
<tr>
<td>Ethanol</td>
<td>33</td>
<td>78*</td>
<td>54</td>
</tr>
<tr>
<td>Poultry</td>
<td>751</td>
<td>423</td>
<td>3,593</td>
</tr>
<tr>
<td>Total ag</td>
<td>35,822</td>
<td>182,130</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Author’s estimation based on 2017 seasonal patterns and China’s most recent agricultural purchases from the United States, which includes advanced corn and soybeans sales until January 29, 2021. We assume the advanced corn and soybean sales until January 29, 2021, will be delivered in the
A possible & more balanced pathway for China’s ag import surge?

Key Chinese agricultural imports by commodity and country in 2017
What Do Farmers Think About the Trade Deal?

Do you think it is likely or unlikely that China will fulfill the food and agricultural import requirements outlined in the Phase One economic and trade agreement signed with the U.S. back in January 2020?

<table>
<thead>
<tr>
<th>% of respondents</th>
<th>9/20</th>
<th>10/20</th>
<th>11/20</th>
<th>12/20</th>
<th>1/21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unlikely</td>
<td>53</td>
<td>41</td>
<td>56</td>
<td>58</td>
<td>60</td>
</tr>
<tr>
<td>Likely</td>
<td>47</td>
<td>44</td>
<td>42</td>
<td>59</td>
<td>40</td>
</tr>
</tbody>
</table>

In the next five years, how likely is it that new foreign export markets will open up to American agricultural goods?

<table>
<thead>
<tr>
<th>% of respondents</th>
<th>10/20</th>
<th>11/20</th>
<th>12/20</th>
<th>1/21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unlikely</td>
<td>22</td>
<td>40</td>
<td>41</td>
<td>43</td>
</tr>
<tr>
<td>Likely</td>
<td>78</td>
<td>60</td>
<td>59</td>
<td>57</td>
</tr>
</tbody>
</table>
US-China phase one tracker: China’s purchases of US goods

US exports and China’s imports in 2020 of all goods covered by the phase one deal

b. China’s imports by product type, billions USD

2020 commitment (total) $36.6 billion
Actual purchases $23.6 billion

Biden administration says Trump’s China trade deal ‘under review’
Farmer Expectations Regarding Changes in Policies Affecting U.S. Agriculture in Next 5 Years, October-January 2021

% of respondents

<table>
<thead>
<tr>
<th>Regulation</th>
<th>10/20</th>
<th>11/20</th>
<th>12/20</th>
<th>1/21</th>
</tr>
</thead>
<tbody>
<tr>
<td>More Restrictive Environmental Regulations</td>
<td>41</td>
<td>77</td>
<td>83</td>
<td>83</td>
</tr>
<tr>
<td>Higher Estate Taxes</td>
<td>40</td>
<td>66</td>
<td>71</td>
<td>73</td>
</tr>
<tr>
<td>Higher Income Taxes</td>
<td>66</td>
<td>74</td>
<td>75</td>
<td></td>
</tr>
</tbody>
</table>

AG ECONOMY BAROMETER
Purdue University - CME Group

PURDUE UNIVERSITY Center for Commercial Agriculture

IOWA STATE UNIVERSITY Extension and Outreach

CARD Center for Agricultural and Rural Development
Biden is No Stranger to Xi

MUSCATINE VISITOR
Spokesman: Friendly Iowans bring VP back

Mike Ferguson  Feb 13, 2012 Updated Feb 28, 2012

FILE - In this Aug. 21, 2011, file photo U.S. Vice President Joe Biden, right, walks with Chinese Vice President Xi Jinping, left, as they visit the South Bridge in Dujiangyan on the outskirts of Chengdu, in southwestern China's Sichuan province. Xi will visit Iowa in February, 2012, reciprocating for Vice President Joe Biden's visit to China last August. (AP Photo/Ng Han Guan, File)

Chinese Vice President Ends U.S. Tour on Friendly Note

By Edward Wong
Feb. 17, 2012

Vice President Xi Jinping of China and Vice President Joseph R. Biden spoke to students at the International Studies Learning Center in South Gate, Calif. Monica Almeida/The New York Times
China’s “dual-circulation” strategy means relying less on foreigners

Xi Jinping sees the creation of fully domestic supply chains as a matter of national security

With RCEP Complete, China Eyes CPTPP

Is President Xi Jinping’s statement desire to join the CPTPP a signal of reconciliation to the new Biden administration or a bid to advance China’s regional dominance?

Europe strikes major investment deal with China despite US concerns

China pledges to become carbon neutral before 2060

Unexpectedly forthright pledge will boost UN efforts to galvanise action on climate crisis
Conjecturing Trade Policy under Biden

– Trade policy likely not an immediate priority (compared to COVID-19 response & international coordination, Paris Accord, potentially Iran)

– Lower your expectations on tariff rollbacks, will remain tough on China
  • Biden in 2019: “If we don't set the rules, we in fact are going to find ourselves with China setting the rules, and that's why we need to organize the world to stop China to stop the corrupt practices that are under way”

– More likely to embrace allies & multilateral approaches & Intl. organizations

– The tone will be more polite & regular dialogue channels will be resumed

– RCEP (SE Asia, China, Japan, Korea, Australia, New Zealand) will put pressure on Biden to consider rejoining TPP (now called CPTPP) – CPTPP has higher standards on tariff removals, labor and environmental standards

– New sources of tensions with China on human rights, Hong Kong, S China Sea

– Biden voted for NAFTA & China joining WTO & met 4th generations of Chinese leaders
US-China Relations under Biden

- Areas of collaboration – good will is needed to be shown through actions
  - work together under Paris Climate Accord;
  - reinstating regular strategic and economic dialogues channels;
  - Encouraging people to people interactions (e.g., restart Fulbright Scholars & Peace Corps)
  - Coordinating COVID-19 vaccine roll-out under WHO + fiscal policy coordination?
  - re-opening consulates in Houston and Chengdu?
  - A 24-hr high-level hotline?

- Uncertainties:
  - Review & renegotiation of trade deals (phase one, CPTPP)
  - Tensions related to human rights issues
  - Restrictions on tech-related bilateral investments & trade (e.g., Huawei)
With RCEP Complete, China Eyes CPTPP

Is President Xi Jinping’s statement desire to join the CPTPP a signal of reconciliation to the new Biden administration or a bid to advance China’s regional dominance?

Notable Omissions:
USA for TPP
India from RCEP
Biden picks longtime China critic Katherine Tai as top U.S. trade official

If confirmed, Tai would inherit a Cabinet-level position tasked with enforcing U.S. import rules and brokering trading terms with China and other U.S. partners.

Though Tai may favor greater cooperation with allies, her leadership as USTR wouldn’t necessarily signal a change to the tougher stance toward China.

Biden has said he wouldn’t immediately remove tariffs on China as his administration reviews the deal the Trump administration brokered with Beijing.

President-elect Joe Biden introduces Iowa's Tom Vilsack as the nation's next agriculture secretary

The associate director of a University of Missouri think tank, Seth Meyer, will become USDA chief economist at the end of January, succeeding Rob Johansson, who held the post since 2015, said Agriculture Secretary Sonny Perdue on Monday. As chief economist, Meyer will be responsible for USDA’s agricultural forecasts and projections and will advise the agriculture secretary on the economic impact of legislation and regulations.
Commodity Agriculture is Comparative Advantage for U.S., not China
China’s Diversification away from U.S. began well before 2018, and got accelerated from the trade war.

Soy-corn Double-cropping to the Brazilian Savanna

Guilherme DePaula (gde Paula@iastate.edu)

Spring 2019 APR
China is a Country of Rapid Change

High Speed Rail

Meet the man behind one of China’s biggest agricultural drone makers

- Demand for agricultural drones is rising because of labour shortages in China
- Agricultural drones are used for crop monitoring as well as pesticide spraying

IOWA STATE UNIVERSITY
Extension and Outreach

3-min YouTube video about China’s Pesticide-spraying drones

https://youtu.be/8ZbhJT6NinM
China moves toward commercialization of GMO corn and soy

BY JUSTIN CREMER
JANUARY 23, 2020

China moves on to tackle the 'chips' for agriculture

By Chu Daye
Published: Dec 30, 2020 11:51 PM Updated: Dec 30, 2020 11:53 PM

China food security: Beijing calls for biotech breakthrough to improve seed industry

- China’s top leaders have signalled a push to improve the nation’s seed industry as part of a campaign to ensure food security
- Concerns about food supply have heightened this year due to reports of grain shortages and disruptions from the pandemic
China is a Country of Rapid Change

With its CRISPR revolution, China becomes a world leader in genome editing

By Jon Cohen, Nirja Desai | Aug. 2, 2019, 8:00 AM

To feed its 1.4 billion, China bets big on genome editing of crops

By Jon Cohen | Jul. 29, 2019, 8:00 AM

China’s CRISPR push in animals promises better meat, novel therapies, and pig organs for people

By Jon Cohen | Jul. 31, 2019, 8:00 AM

China Takes Its Pigs to the Futures Market

New hog futures may smooth out some of the wild swings in Chinese markets

THE WALL STREET JOURNAL

What is this?
China’s Ministry of Agriculture and Rural Affairs said on Monday it was set to approve the safety of a new genetically modified (GMO) corn variety and a GMO soybean, both produced by local company Beijing Dabeinong Technology Group Co Ltd 002385.SZ. China approved three domestically designed GMO crops as safe, the first to gain a safety certificate in a decade.

According to a statement issued after the annual Central Economic Work Conference held on Dec. 16-18, China needs to make better use of science and technology to achieve a “turnaround” in its seed industry.

“The key to ensuring food security lies in implementing the strategy of storing grain in the ground and storing grain in technology,” according to the statement,
China’s First Live Hog Futures to Begin Trading on Jan. 8
Chinese Lesson Time

美国

牛

The Year of Ox (pronunciation: New)
In the Chinese Zodiac, the Ox is very hardworking and methodical. 2021 is going to be a year when work will get rewarded. [www.thechinesezodiac.org/chinese-horoscope-2021-year-of-the-metal-ox/](http://www.thechinesezodiac.org/chinese-horoscope-2021-year-of-the-metal-ox/)

Lucky Colors of 2021: white, yellow and green
Learn more about contemporary Chinese economy

Will publish on July 1, 2020
Broaden your information sources!

AGree NewsFeed

www.foodandagpolicy.org

South China Morning Post

www.scmp.com

Ag Decision Maker

A Business Newsletter for Agriculture

Vol. 24, No. 4

www.extension.iastate.edu/agdm

February 2020
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