Soybean Outlook

Southern Outlook Conference
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Overview

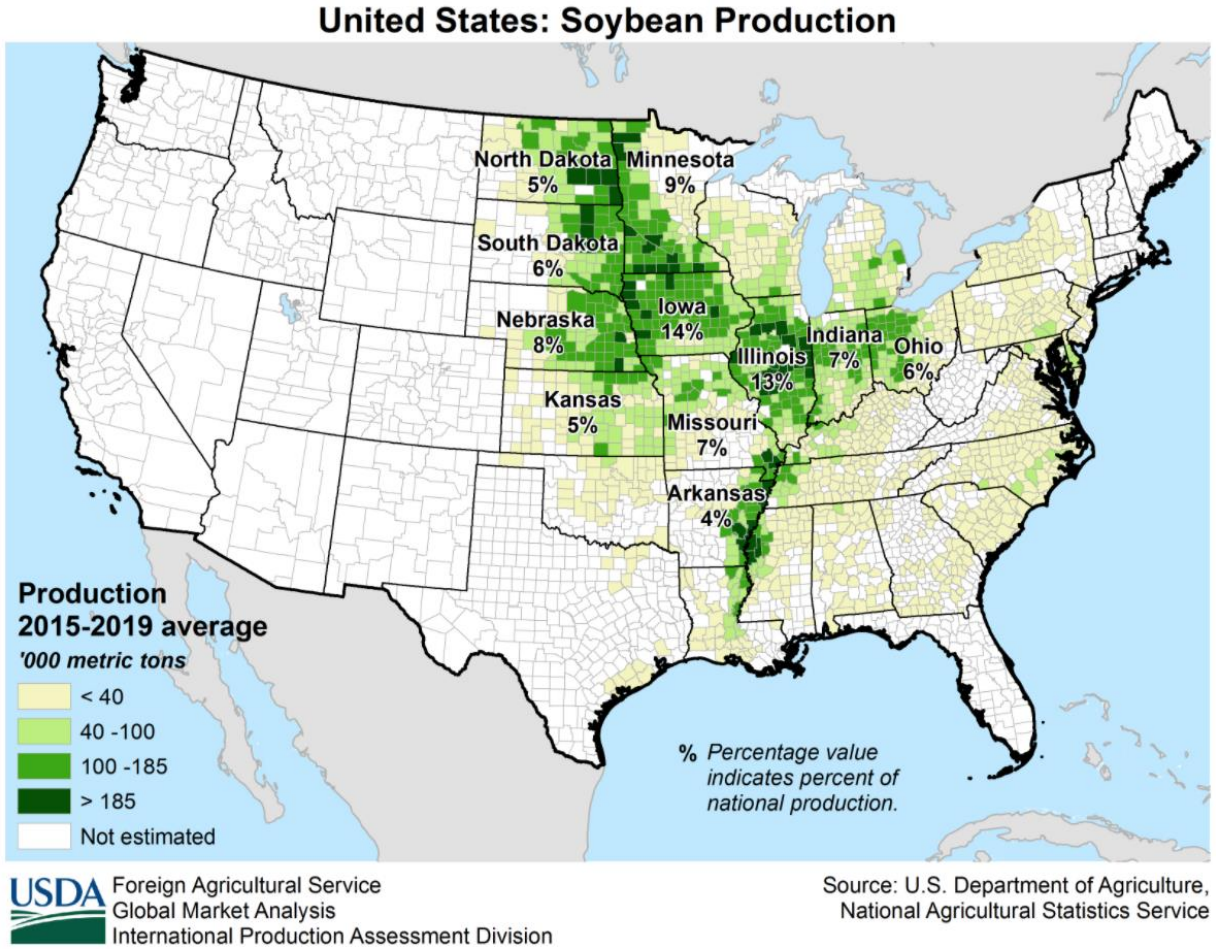
- Important Factors
- U.S. Supply and Demand
- Global Supply and Demand
- Marketing and Price Outlook
- Concluding Thoughts

2021/2022 Important Factors

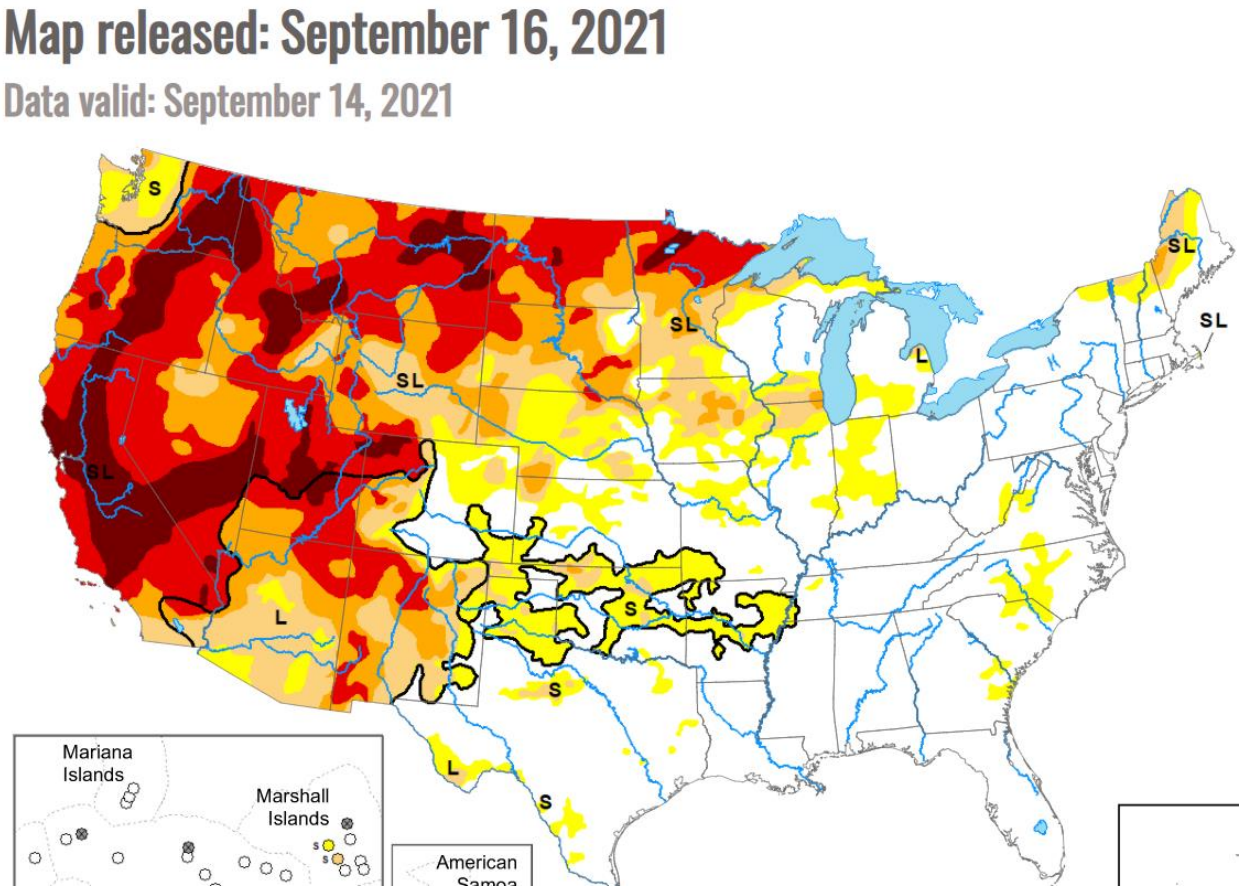
- China soybean purchases and global demand
- South American plantings and increased global production due to high prices
- US production (2021 final production and 2022 plantings)
- Livestock and poultry demand
- Climate and weather
- Exchange rates/geopolitics/economic growth/COVID-19

- High input costs will be a major concern for 2022, particularly if commodity prices pull back during the year. Price risk management will be imperative.

US SUPPLY AND DEMAND



Source: https://ipad.fas.usda.gov/rssiws/al/global_cropprod.aspx



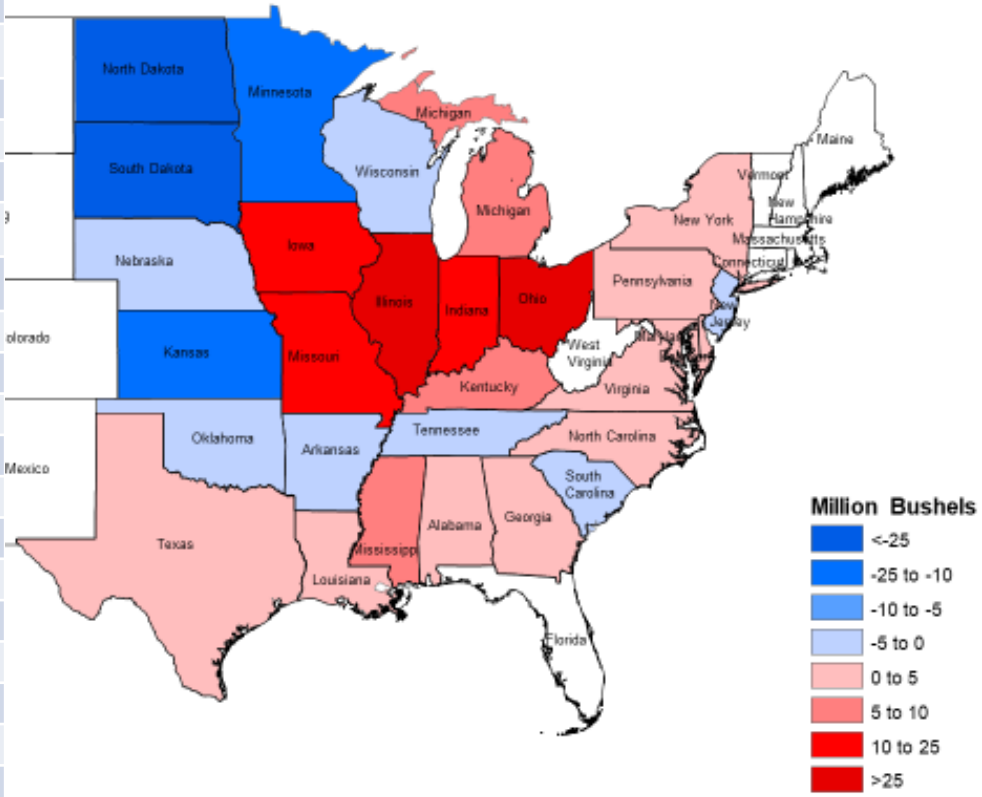
Source: https://droughtmonitor.unl.edu/

- Production has moved north and has displaced some cotton production in the Mississippi delta over the past two decades.
- 2021 drought has adversely affected production in the Western Corn Belt.

September 2021 Versus Projected Trend Line Production

State	2021 Planted Acres Rank	2021 Planted Acres	2021 Projected Yield Less the Trend Adjusted 5-Year Average	Deviation in Production
ILLINOIS	1	10,600,000	4.2	44,312,240
IOWA	2	10,100,000	1.7	16,972,040
MINNESOTA	**3**	**7,700,000**	**(2.4)**	**-18,630,920**
N.DAKOTA	**4**	**7,300,000**	**(11.3)**	**-82,633,080**
INDIANA	5	5,700,000	3.3	18,698,280
MISSOURI	6	5,700,000	2.1	11,858,280
NEBRASKA	7	5,600,000	(0.5)	-2,909,760
S. DAKOTA	**8**	**5,500,000**	**(8.2)**	**-45,207,800**
KANSAS	**9**	**4,850,000**	**(3.2)**	**-15,615,060**
OHIO	10	4,850,000	5.3	25,609,940
ARKANSAS	11	3,050,000	(0.6)	-1,889,780
MISSISSIPPI	12	2,230,000	3.1	6,869,292
MICHIGAN	13	2,150,000	3.3	7,052,860
WISCONSIN	14	2,100,000	(1.8)	-3,821,160
KENTUCKY	15	1,800,000	2.9	5,184,720
NORTH CAROLINA	16	1,650,000	1.9	3,102,660
TENNESSEE	17	1,500,000	(0.6)	-929,400
LOUISIANA	18	1,080,000	2.9	3,110,832
VIRGINIA	19	600,000	3.3	1,968,240
PENNSYLVANIA	20	580,000	4.6	2,656,632
OKLAHOMA	21	575,000	(0.1)	-68,770
MARYLAND	22	490,000	3.7	1,803,396
SOUTH CAROLINA	23	390,000	0.1	31,356
NEW YORK	24	325,000	4.5	1,456,130
ALABAMA	25	310,000	3.9	1,202,924
DELAWARE	26	155,000	1.9	291,462
GEORGIA	27	140,000	4.6	641,256
TEXAS	28	110,000	1.6	173,844
NEW JERSEY	29	100,000	(1.8)	-181,960

Based on September USDA yields soybean production would be 18.9 million bushels lower than the production trend.



Have late summer rains improved yield prospects for the Northern Plains? By how much?

UTEX INSTITUTE

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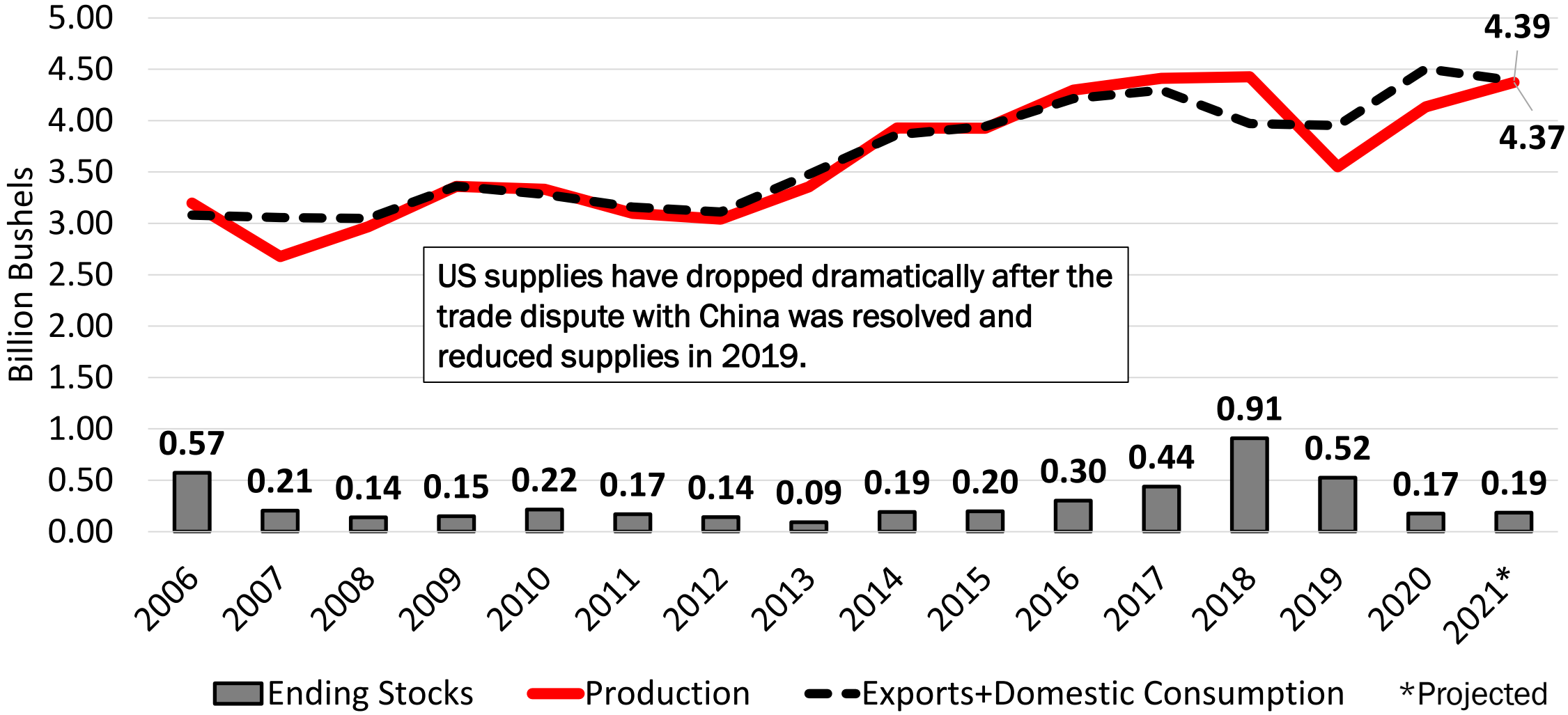
THE UNIVERSITY OF TENNESSEE

U.S. Soybean Production, Consumption + Exports, and Ending Stocks, 2006-2021*



Source: https://apps.fas.usda.gov/psdonline/app/index.html#/app/advQuery

USDA September WASDE

	2017/18	2018/19	2019/20	2020/21 Est.	2021/22 Projected August	2021/22 Projected September	2021/22 Change from Previous Month	Change 2021/22-2020/21
	Planted and Harvested Acres & Yield							
Planted (Million)	90.2	89.2	76.1	83.1	87.6	**87.2**	-0.4	4.1
Harvested (Million)	89.5	87.6	74.9	82.3	86.7	**86.4**	-0.3	4.1
Avg. Yield (Bu/Acre)	49.3	50.6	47.4	50.2	50	**50.6**	0.6	0.4
	Supply (Million Bushels)							
Beg. Stocks	302	438	909	525	160	**175**	15	-350
Production	4,412	4,428	3,552	4,135	4,339	**4,374**	35	239
Imports	22	14	15	20	35	**25**	-10	5
Total Supply	4,735	4,880	4,476	4,680	4,533	**4,574**	41	-106
	Use & Ending Stocks (Million Bushels)							
Crushing	**2,055**	**2,092**	**2,165**	**2,140**	**2,205**	**2,180**	**-25**	**40**
Exports	**2,134**	**1,752**	**1,679**	**2,260**	**2,055**	**2,090**	**35**	**-170**
Seed and Residual	109	127	108	105	118	**118**	0	13
Total Use	4,297	3,971	3,952	4,505	4,379	**4,389**	10	-116
U.S. Ending Stocks	438	909	525	175	155	**185**	30	10
Foreign Stocks	3,200	3,297	2,999	3,318	3,378	**3,449**	71	131
	Price and Stocks to Use Ratio							
U.S. Avg. Price ($/Bu)	$9.33	$8.48	$8.57	$10.90	$13.70	**$12.90**	-$0.80	$2.00
U.S. Stocks/Use	**10.19%**	**22.89%**	**13.28%**	**2.62%**	**3.54%**	**4.22%**	**0.68**	**1.59%**

Source: https://www.usda.gov/oce/commodity/wasde/wasde0921.pdf

GLOBAL SUPPLY AND DEMAND

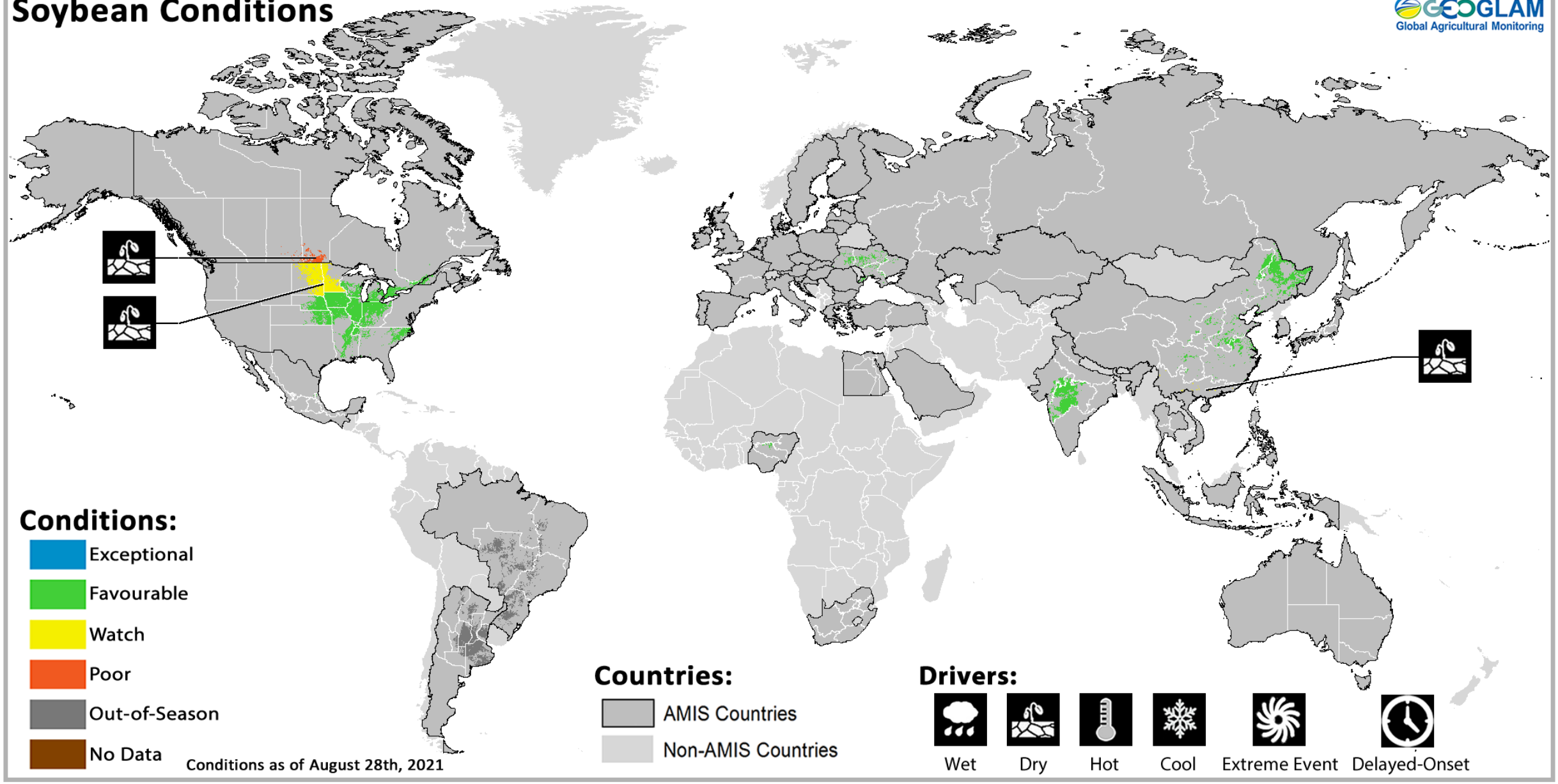
World Soybean Supply and Use (Million Bushels) 2021/2022 Marketing Year - Current Month

Country / Region	Beginning Stocks	Production	Imports	Domestic Crush	Domestic Total	Exports	Ending Stocks
World	3,494	14,125	6,281	12,102	13,903	6,363	3,634
United States	**175**	**4,374**	**25**	**2,180**	**2,299**	**2,090**	**185**
Total Foreign	3,318	9,751	6,256	9,922	11,604	4,273	3,449
Argentina	**904**	**1,911**	**173**	**1,580**	**1,850**	**233**	**904**
Brazil	**977**	**5,291**	**24**	**1,753**	**1,850**	**3,417**	**1,025**
Paraguay	17	386	0	138	149	239	15
China	**1,205**	**698**	**3,711**	**3,601**	**4,325**	**4**	**1,286**
E.U.	40	104	551	584	647	8	40
S.E. Asia	32	19	362	183	381	1	32
Mexico	4	11	228	235	237	0	6
ROW	140	1,331	1,207	1,848	2,165	371	141

Source: https://www.usda.gov/oce/commodity/wasde/wasde0921.pdf

Soybean Conditions

GEOGLAM Global Agricultural Monitoring



Conditions:

- Exceptional
- Favourable
- Watch
- Poor
- Out-of-Season
- No Data

Conditions as of August 28th, 2021

Countries:

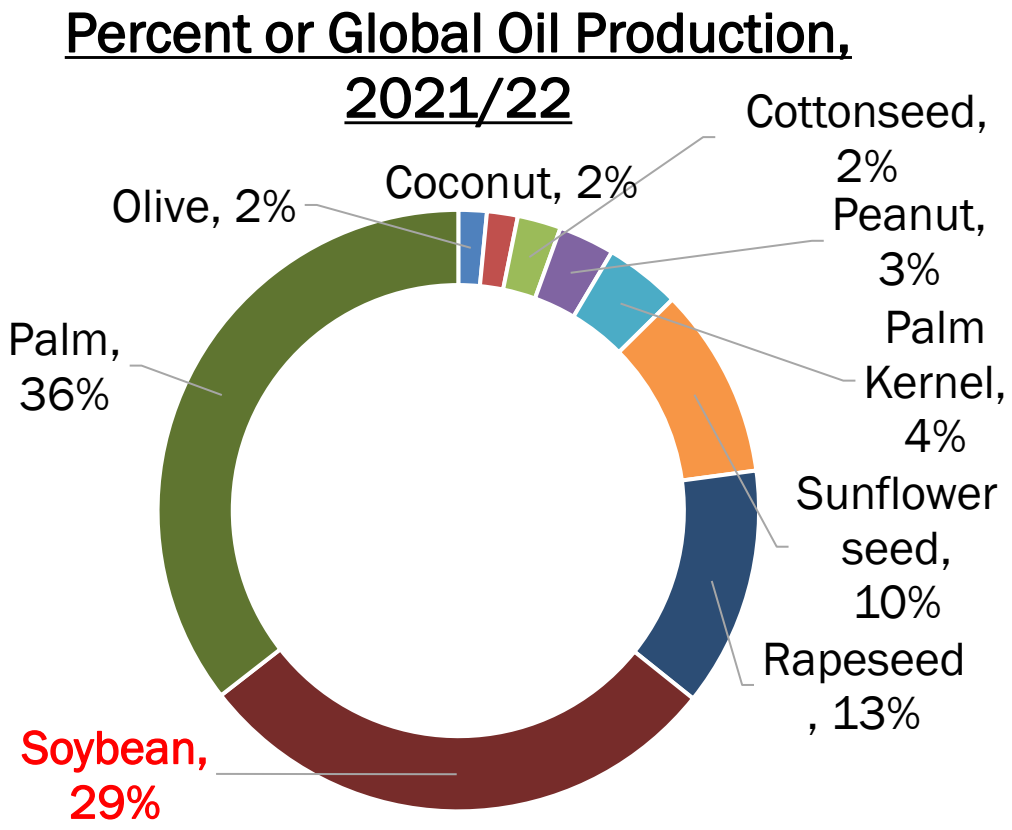
- AMIS Countries
- Non-AMIS Countries

Drivers:

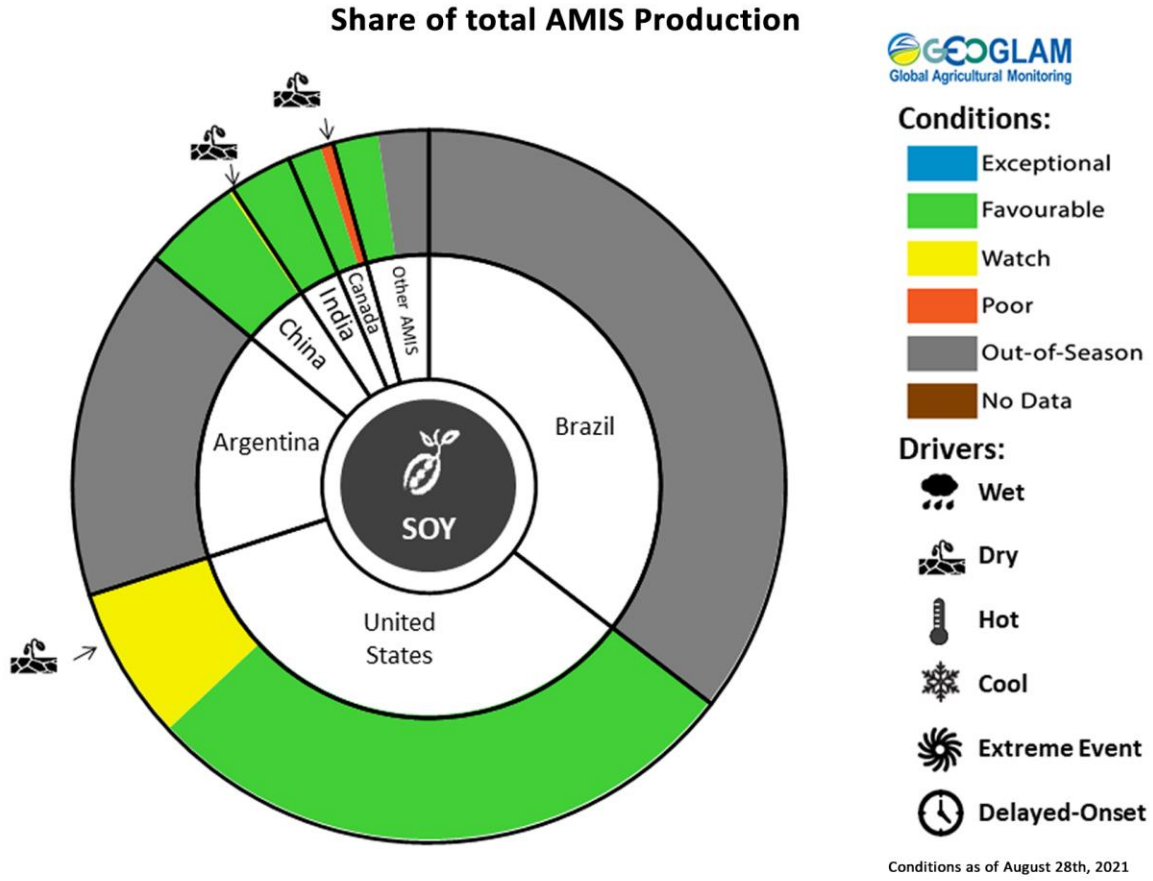
Wet, Dry, Hot, Cool, Extreme Event, Delayed-Onset

Source: https://cropmonitor.org/index.php/cmreports/amis-report/

Soybean Production and Global Oil Production

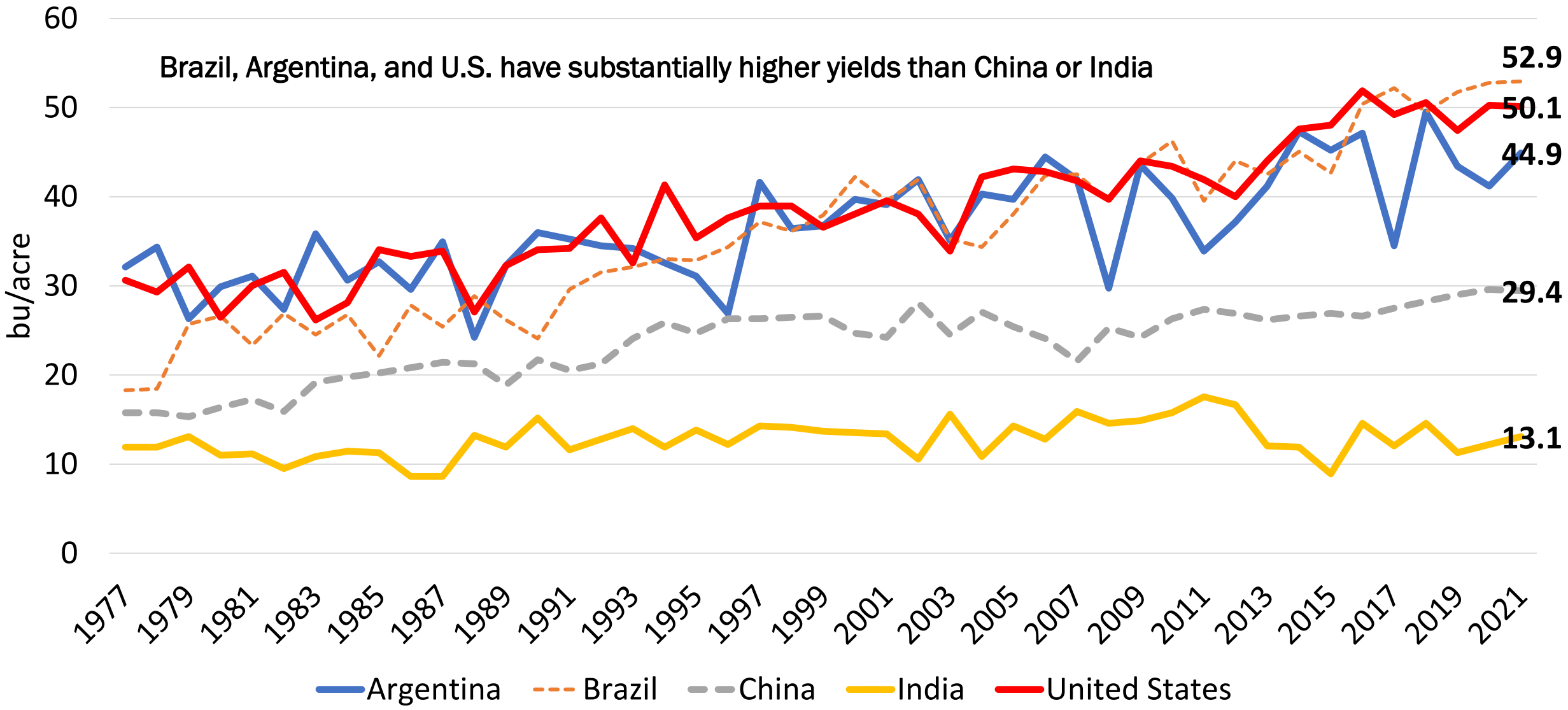


Source: https://apps.fas.usda.gov/psdonline/app/index.html#/app/advQuery



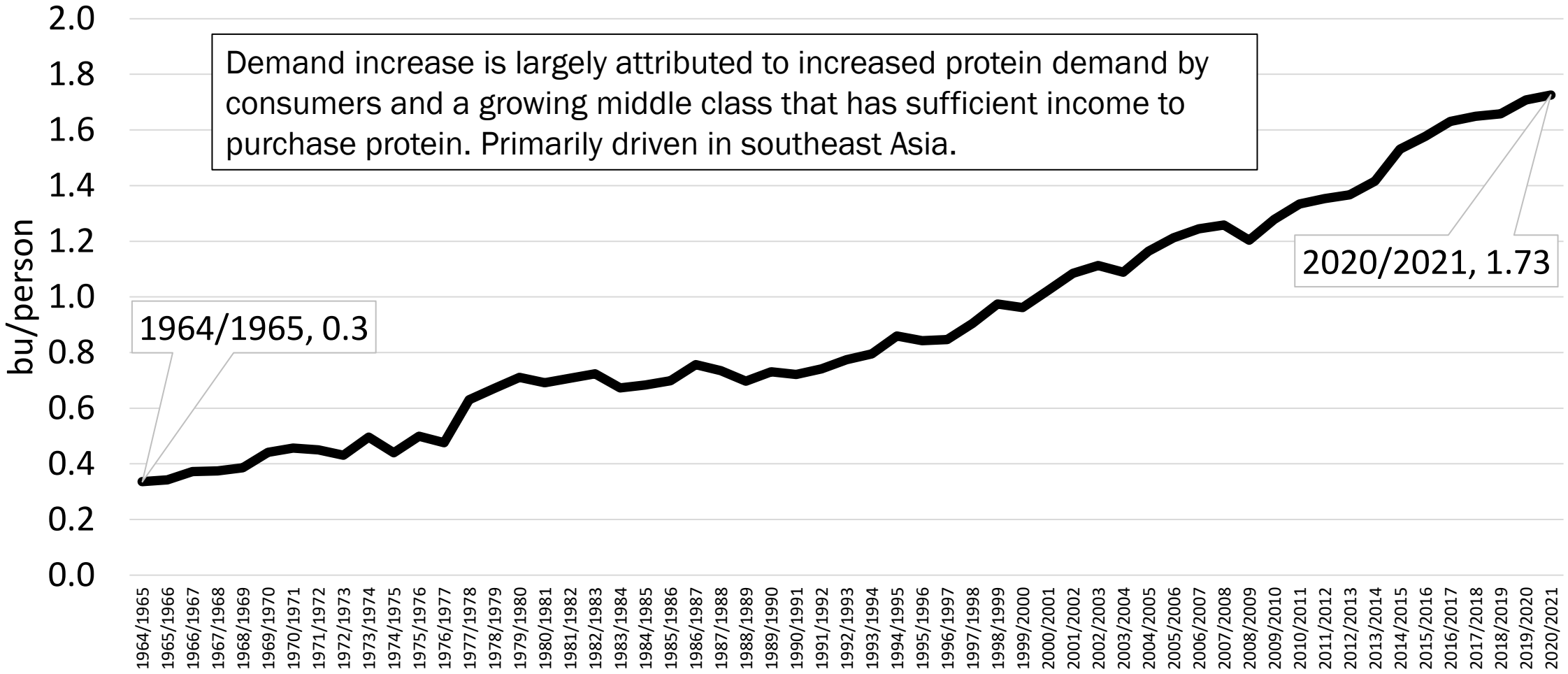
Source: https://cropmonitor.org/index.php/cmreports/amis-report/

Soybean Yield by Country, 1977-2021



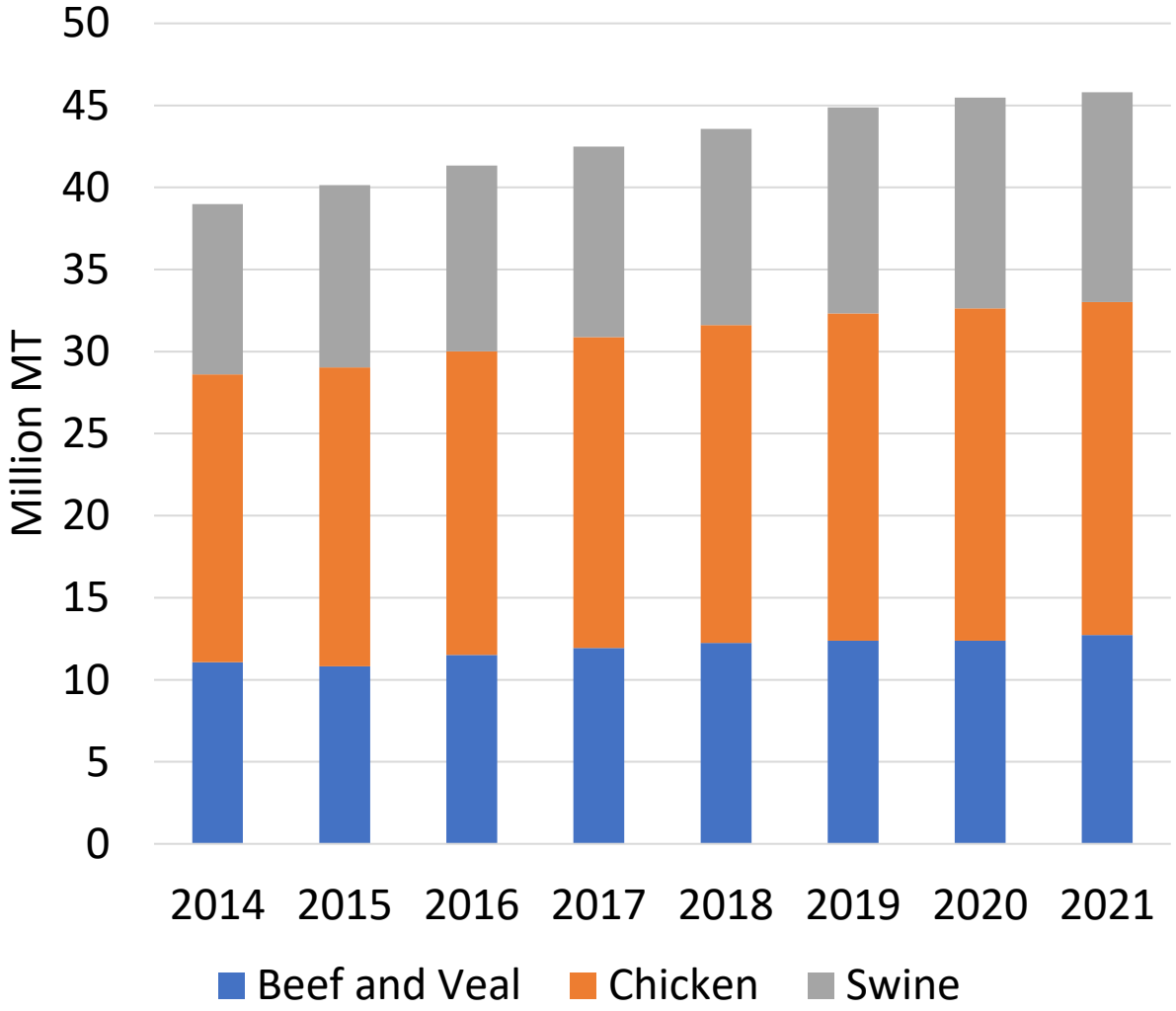
Source: https://apps.fas.usda.gov/psdonline/app/index.html#/app/advQuery

Global Soybean Consumption per Person, 1964/65-2020/21

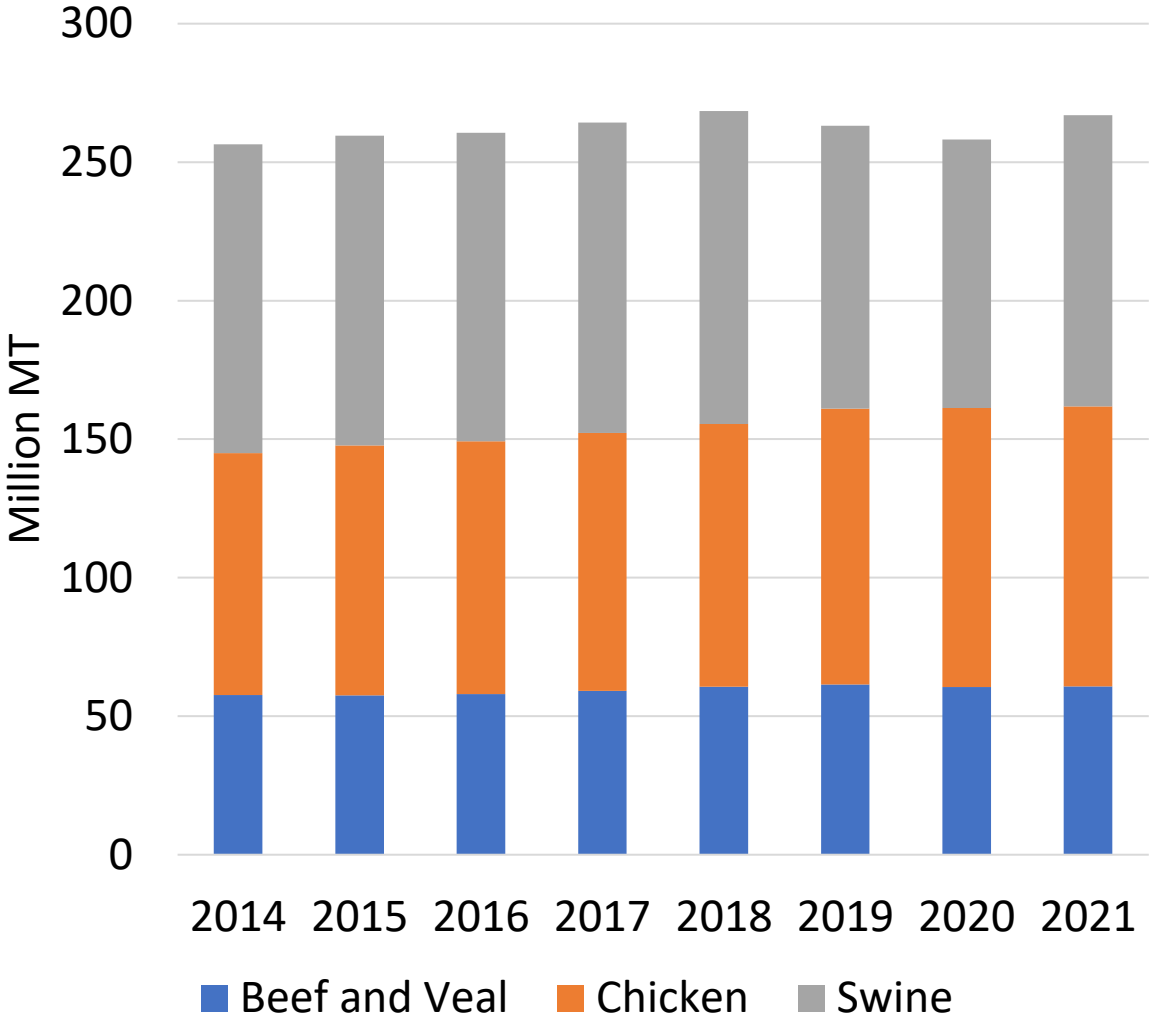


Source: https://apps.fas.usda.gov/psdonline/app/index.html#/app/advQuery

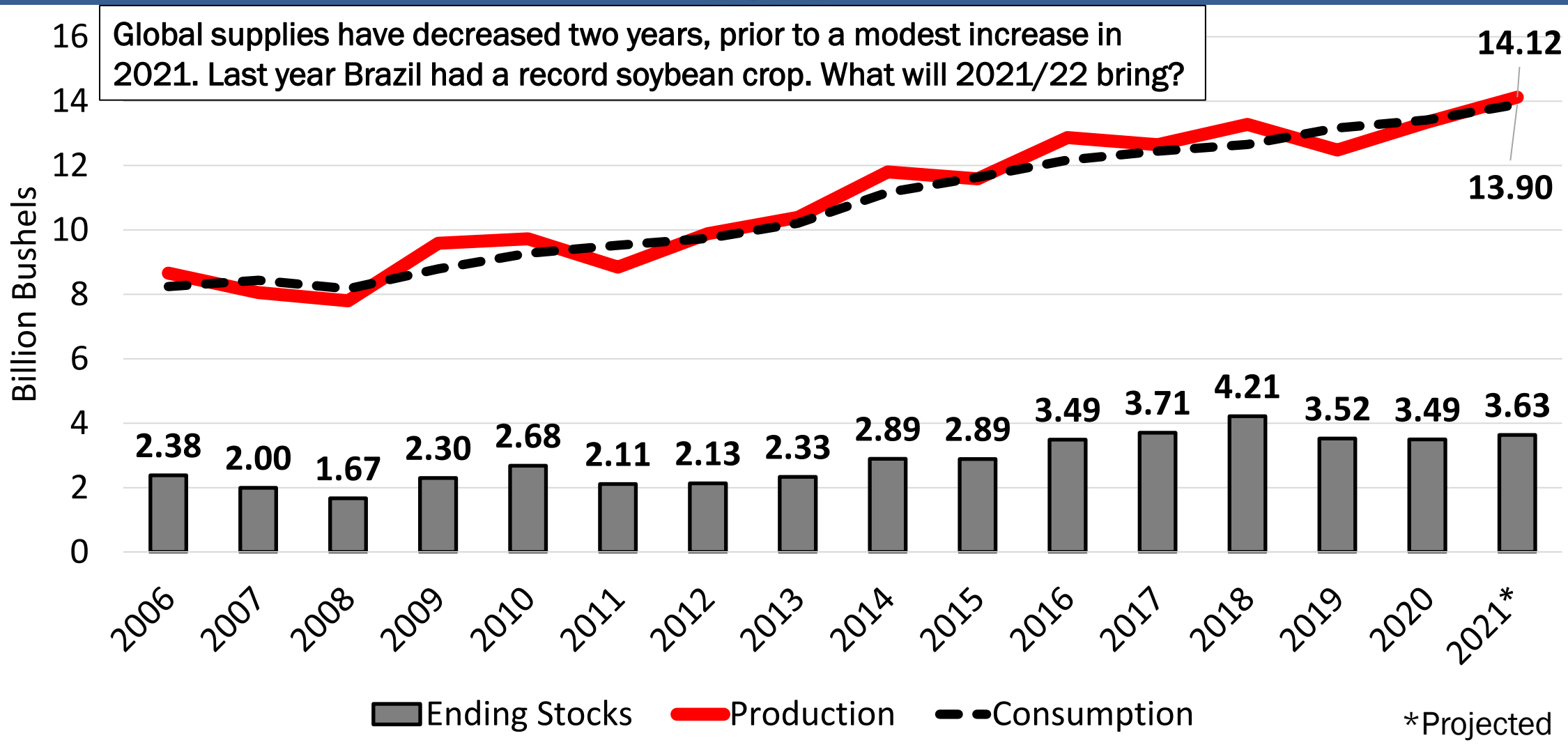
US Meat Production, 2014-2021



Global Meat Production, 2014-2021

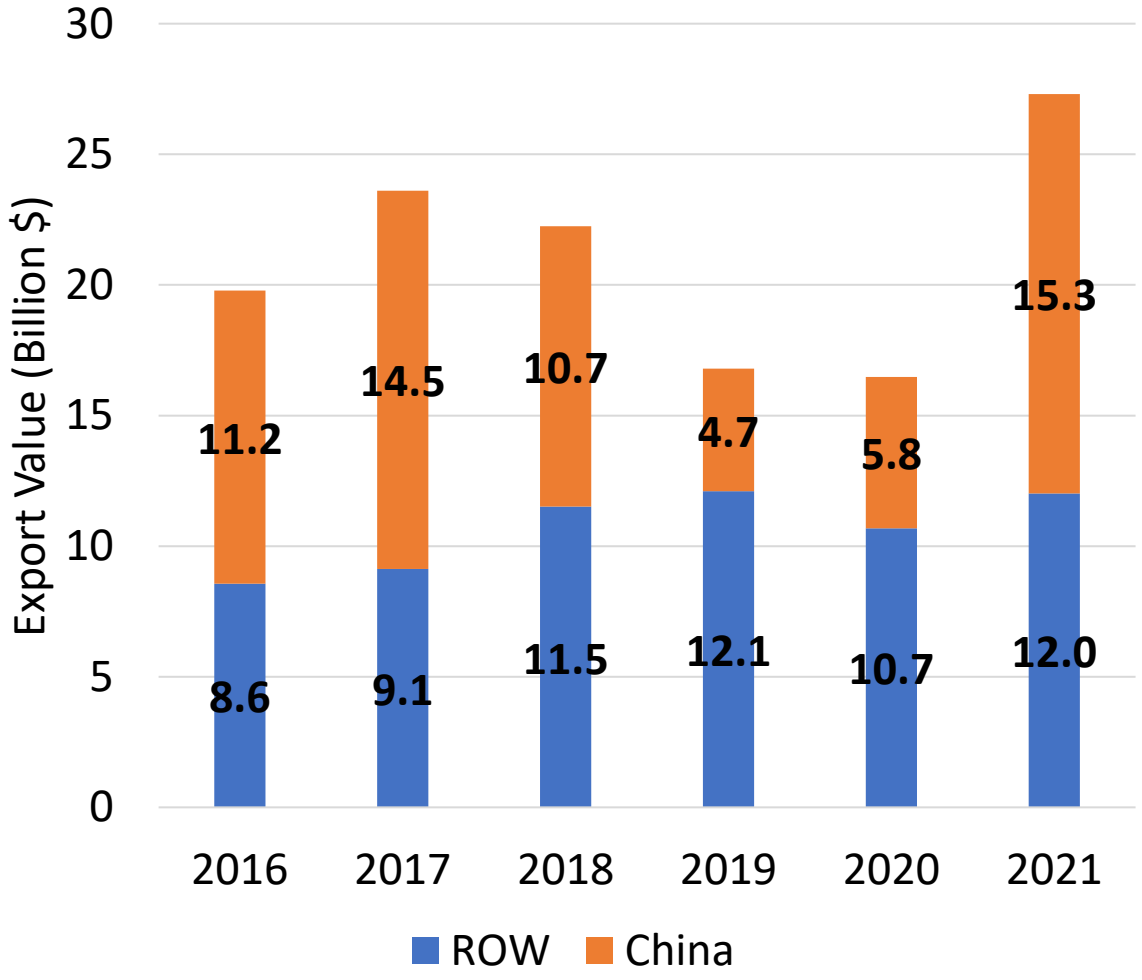


Global Soybean Production, Consumption, and Ending Stocks, 2006-2021*



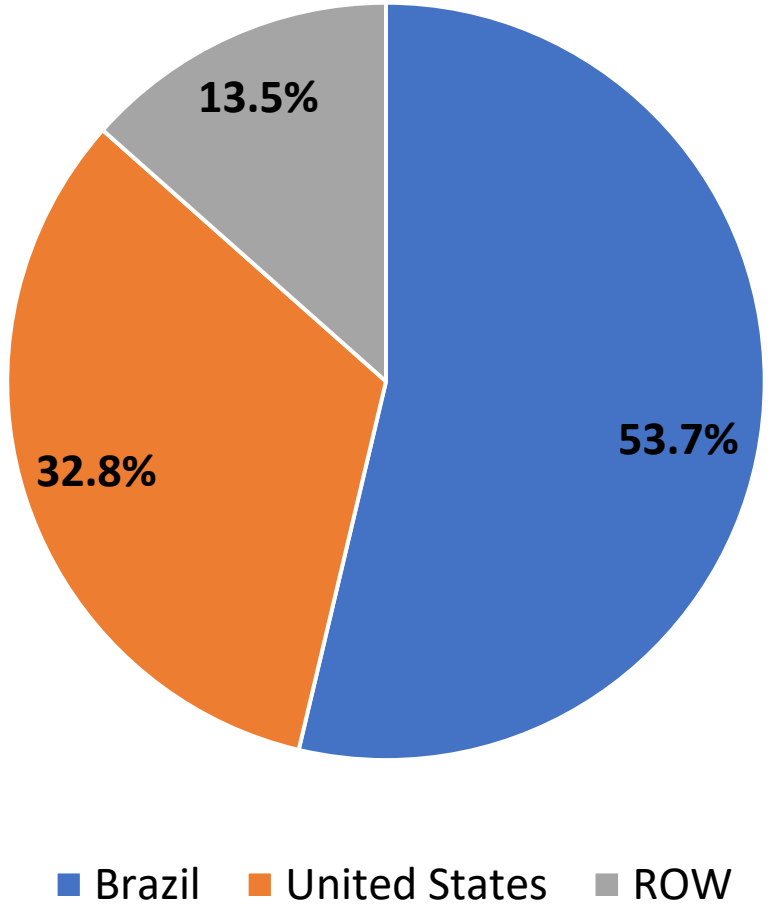
Source: https://apps.fas.usda.gov/psdonline/app/index.html#/app/advQuery

Value of U.S. Soybean Exports, 2016-2021



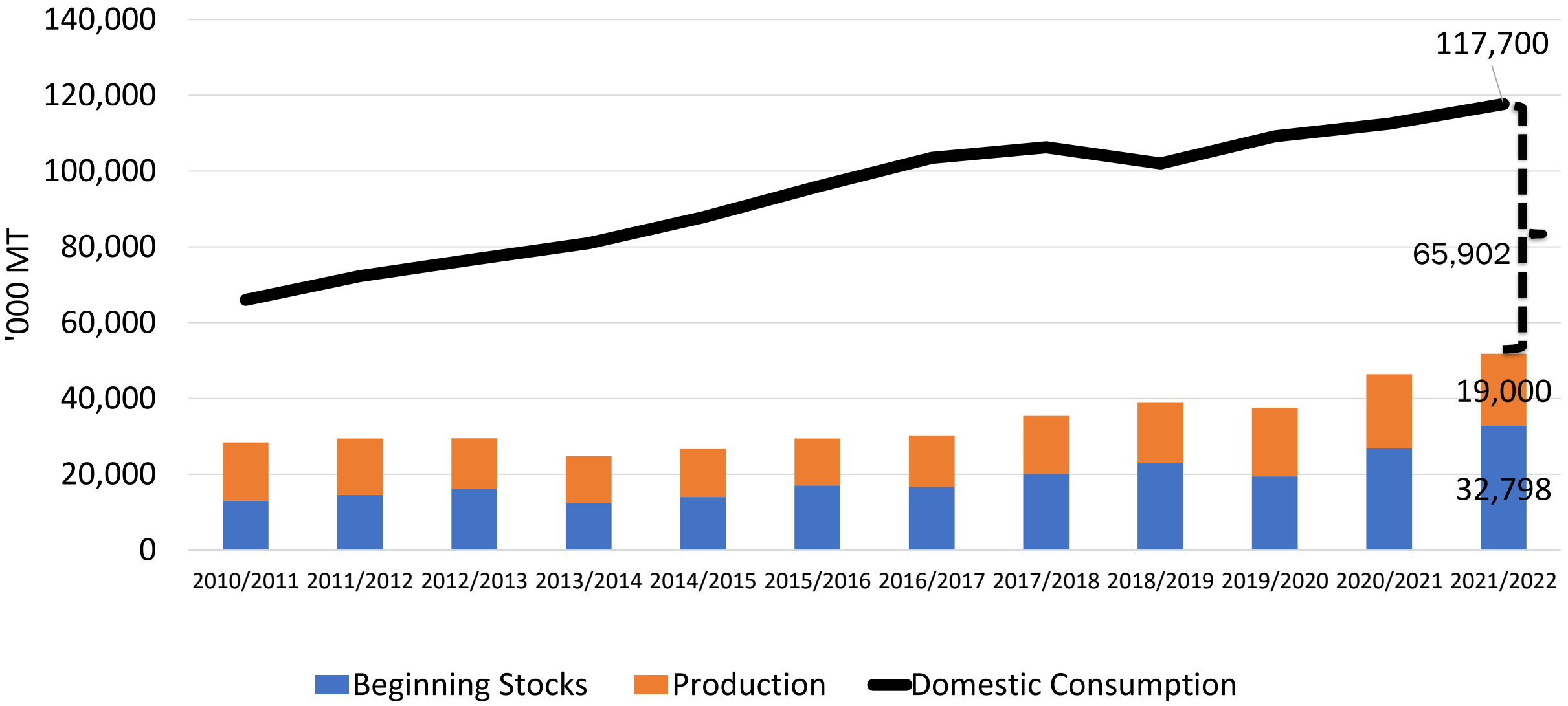
Source: https://apps.fas.usda.gov/GATS/

Global Soybean Exports (6.362 billion bushels), 2021/2022



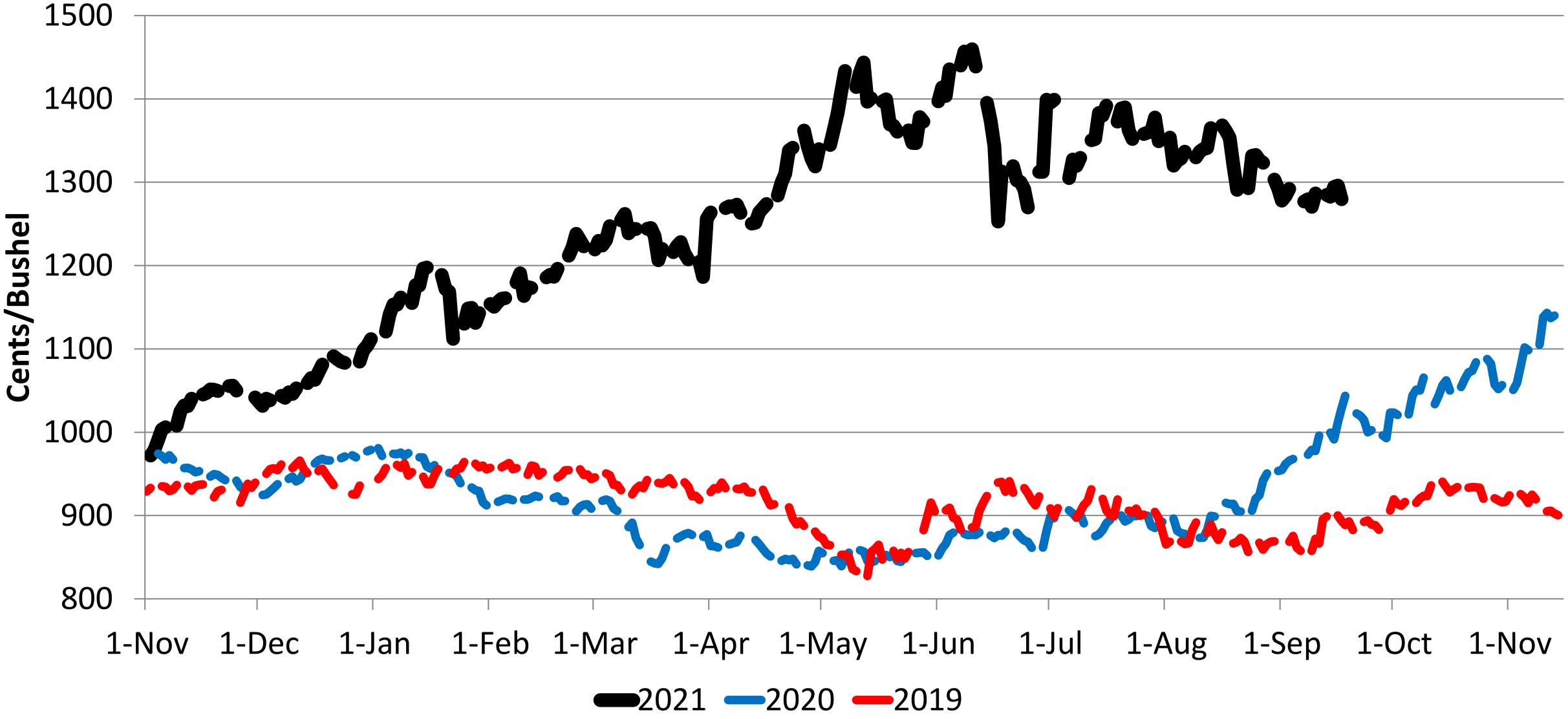
Source: https://apps.fas.usda.gov/psdonline/app/index.html#/app/advQuery

China Consumption Gap, 2010/11 to 2021/22



MARKETING AND PRICE OUTLOOK

November Soybean Futures



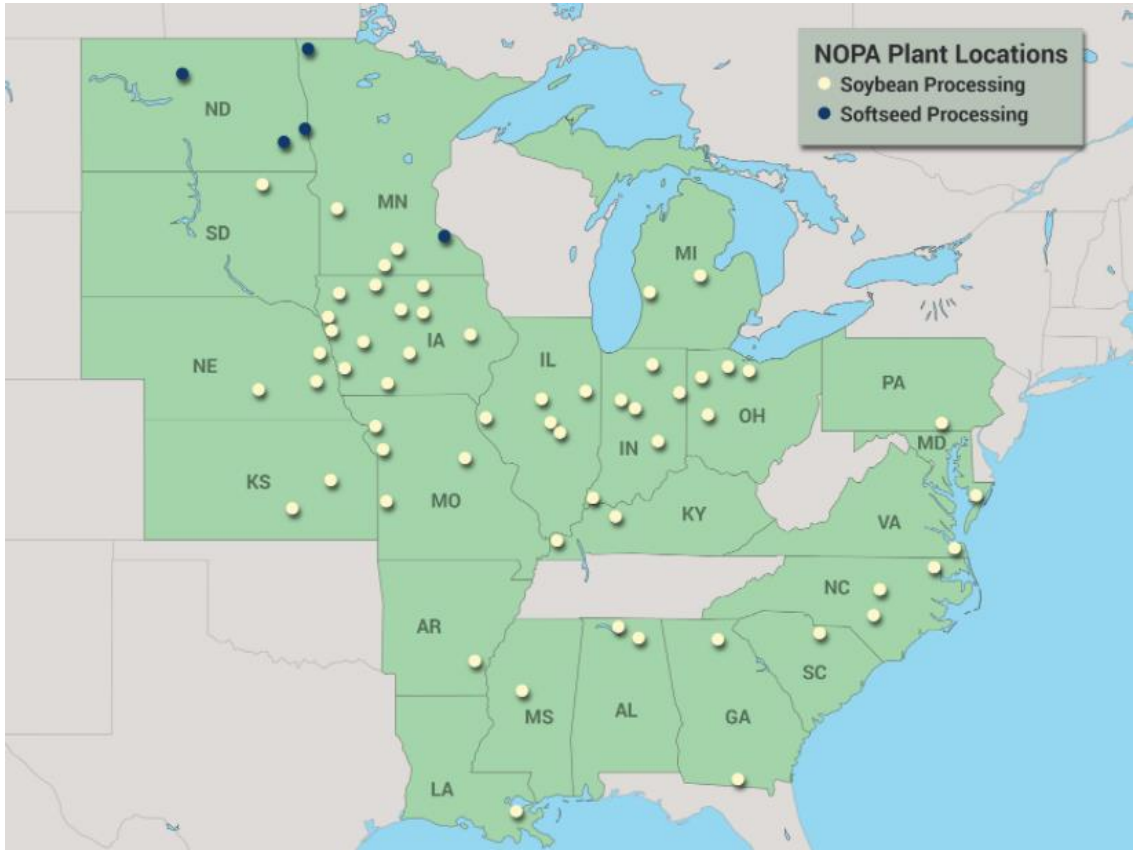
Monthly Marketing

Month	Marketing Weights
September	6.8%
October	24.1%
November	11.1%
December	10.0%
January	13.5%
February	6.4%
March	5.9%
April	4.7%
May	3.7%
June	5.0%
July	4.8%
August	4.0%

Source: https://www.ers.usda.gov/data-products/season-average-price-forecasts/

Market Access

- Proximity to terminal markets
  - Crush facilities
  - Barge points
  - Rail
  - Ports



Source: https://www.nopa.org/oilseed-processing/nopa-plant-locations/

Market Access

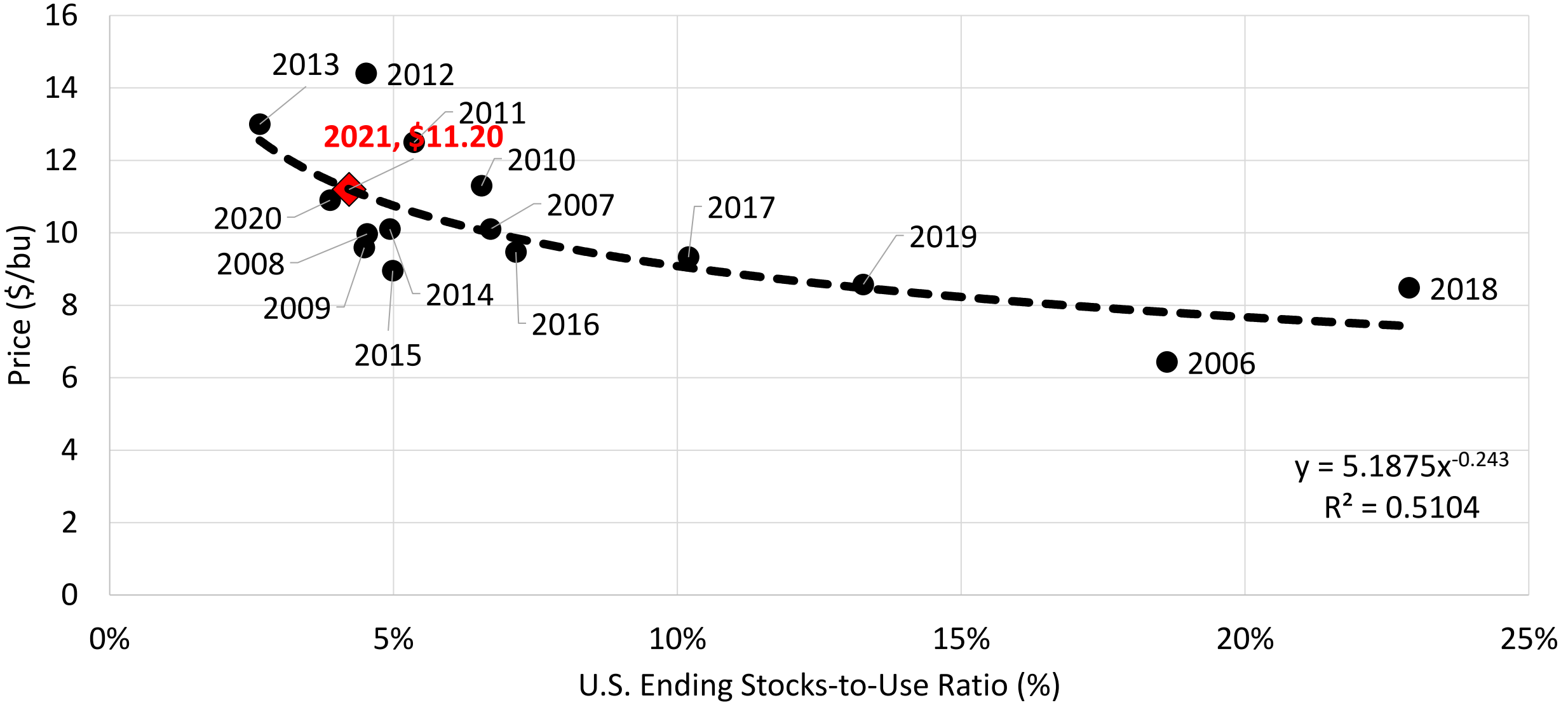
Source: https://www.ams.usda.gov/sites/default/files/media/PortProfilesMap2019.pdf

Source: https://www.acwr.com/economic-development/rail-maps/class-i-freight-carriers

Price Projections

	Harvest Futures (2021) as at September 20, 2001	Harvest Futures (2022) as at September 20, 2001	WASDE (Sep) 2021/22 National MYA Price	Projected 2021/22 MYA Price U.S. Stocks-to-Use
Soybeans	$12.73	$12.45	$12.90	$11.20 ($10.10-$12.30)

U.S. Soybean Ending Stocks-to-Use to MYA Price Relationship, 2006-2020



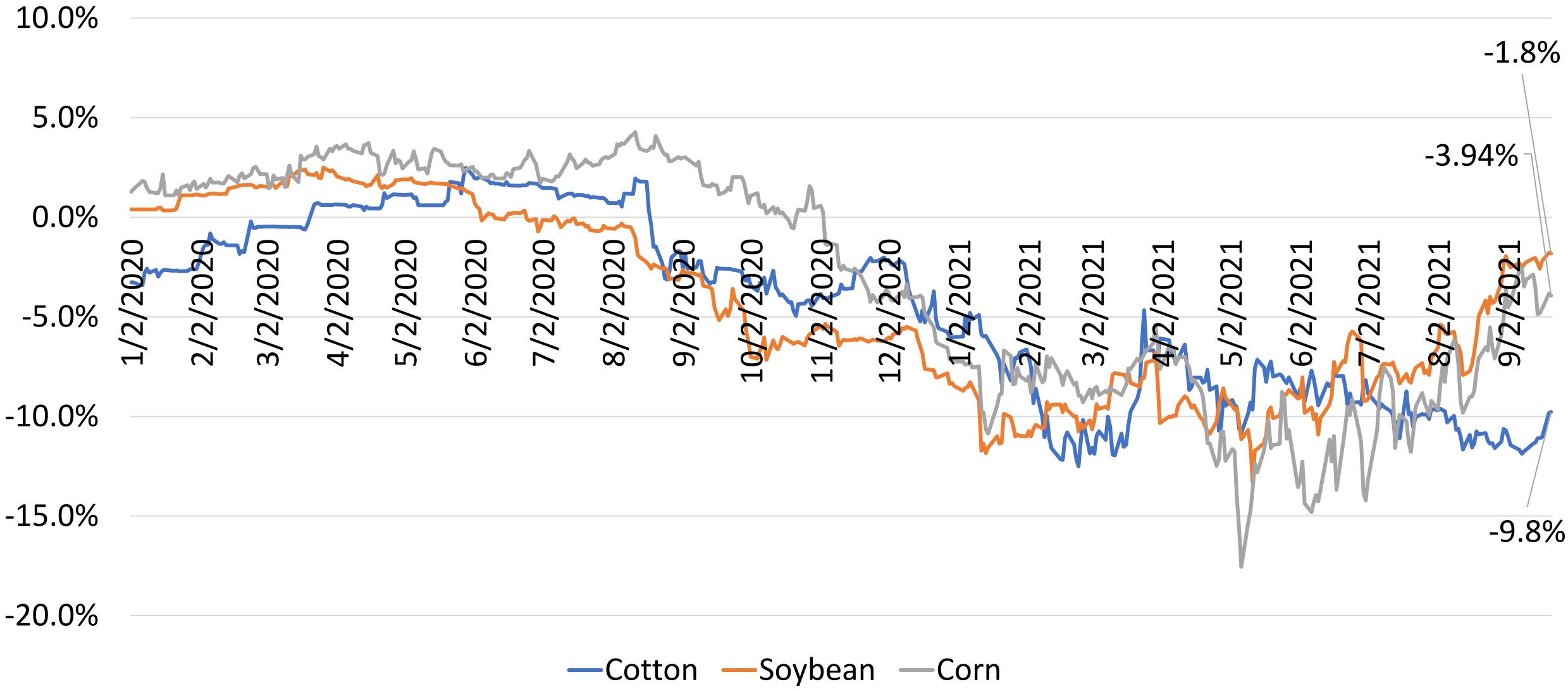
Source: https://apps.fas.usda.gov/psdonline/app/index.html#/app/advQuery

MYA Price Compared to November Soybean Futures Contract

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Avg	$9.95	$13.28	$14.31	$12.75	$11.14	$9.38	$9.78	$9.76	$9.46	$9.12	$9.27	$12.91
Min	$8.94	$11.58	$11.70	$11.66	$9.10	$8.59	$8.70	$9.11	$8.14	$8.28	$8.39	$11.12
Max	$13.30	$14.58	$17.68	$13.96	$12.71	$10.39	$11.63	$10.43	$10.54	$9.64	$11.43	$14.60
MYA	**$11.30**	**$12.50**	**$14.40**	**$13.00**	**$10.10**	**$8.95**	**$9.47**	**$9.33**	**$8.48**	**$8.57**	**$10.90**	**$12.90**

November 2021 and 2022

Percent Difference Harvest Futures 2022 Compared to 2021



Concluding Thoughts

- Still a great deal of uncertainty with the 2021 crop
- South America planting/crop progress
- Demand remains strong due to global protein demand
- Exports to China will be key this winter
- Input prices may favor planting soybeans in 2022
  - 38% cheaper than corn (ERS)
  - 42% cheaper than cotton (ERS)

Thank you

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