

# Soybean / SRW Wheat Outlook

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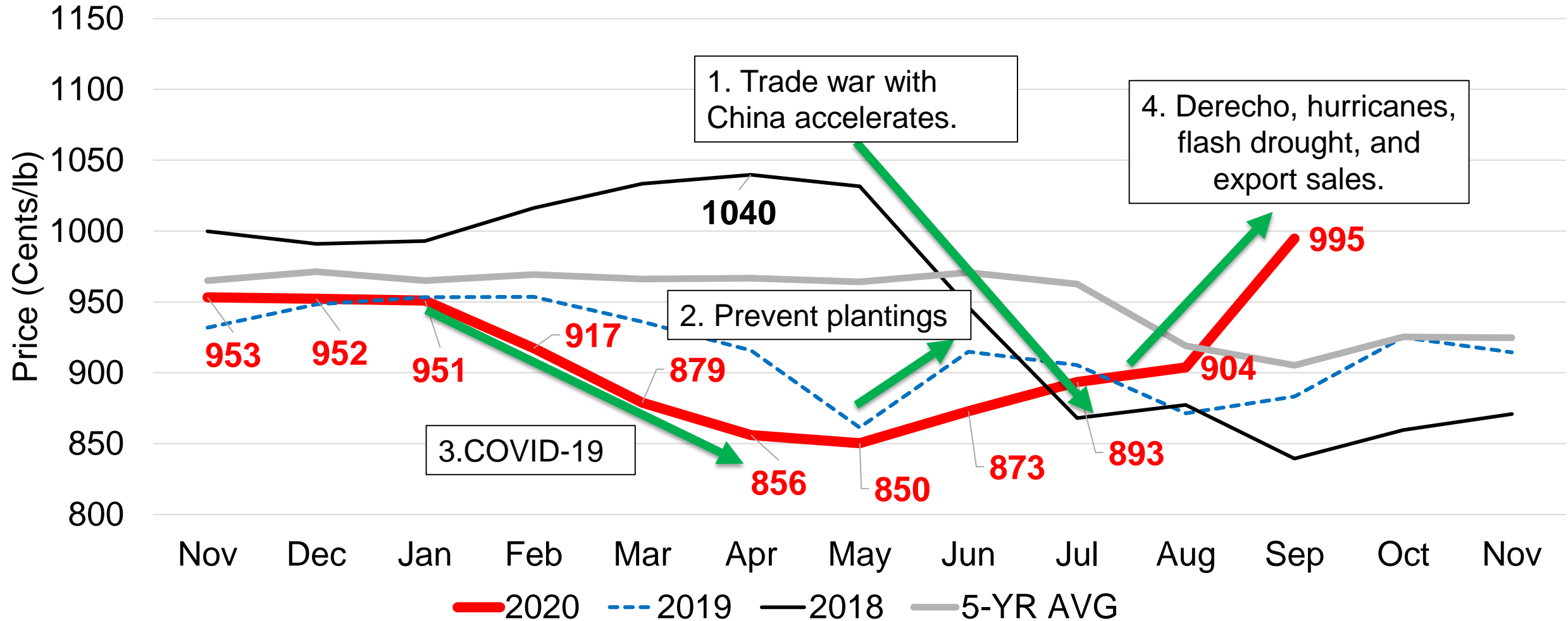
Trend line yield (or above) and futures prices near \$10.00 plus government payments will result in profitable outcomes for many producers in 2020.

Producers must take advantage of profitable pricing opportunities as they may be short lived.

**Trade, Brazil, and Government Payments**

# **SOYBEANS**

# Soybean: Average Monthly November Futures Contract Price, 5-Year Average, 2018, 2019, and 2020



# Direct Government Payments to Soybean Producers

- 2018
  - MFP: \$1.65/bu
  - ARC/PLC: No PLC; ARC varies county-to-county.
- 2019
  - MFP: \$15-\$150/acre (not commodity specific).
  - CFAP: \$0.475/bu on unpriced inventory held in storage as at January 2020, not to exceed 50% of 2019 production.
  - ARC/PLC: No PLC; ARC varies county-to-county.
- 2020
  - CFAP: greater of \$15/acre or  $54\% \times \$0.58 \times \text{APH}$  or 2019 ARC-co yield  $\times 85\%$ .
  - ARC/PLC: Likely no PLC; ARC varies county-to-county.
- 2021
  - ARC/PLC: ???
  - Other ???



**USDA ERS Mississippi Portal Budget**

<b>Gross Revenue</b>	Yield	55	bu/acre
	Price	10.00	\$/bu
<b>Gross value of production</b>		<b>550.00</b>	<b>\$/acre</b>
<b>Operating costs</b>	Seed	61.42	\$/acre
	Fertilizer	25.70	\$/acre
	Chemicals	40.27	\$/acre
	Custom services	16.44	\$/acre
	Fuel, lube, and electricity	36.33	\$/acre
	Repairs	42.05	\$/acre
	Interest on operating capital	2.34	\$/acre
<b>Total, operating costs</b>		<b>224.55</b>	<b>\$/acre</b>
<b>Allocated overhead</b>	Hired labor	16.38	\$/acre
	Opportunity cost of unpaid labor	33.25	\$/acre
	Capital recovery of machinery	124.54	\$/acre
	Opportunity cost of land	98.99	\$/acre
	Taxes and insurance	9.34	\$/acre
	General farm overhead	17.92	\$/acre
<b>Total, allocated overhead</b>		<b>300.42</b>	<b>\$/acre</b>
<b>Total, specified costs</b>		<b>524.97</b>	<b>\$/acre</b>
<b>Returns over specified costs</b>		<b>25.03</b>	<b>\$/acre</b>

**Soybean – 2020 Net Return Table (\$/acre)**

**\$525/acre cost of production**

		<b>Yield (bu/acre)</b>					
		<b>45</b>	<b>50</b>	<b>55</b>	<b>60</b>	<b>65</b>	<b>70</b>
<b>Price (\$/bu)</b>	<b>8.00</b>	(165)	(125)	(85)	(45)	(5)	35
	<b>8.25</b>	(154)	(113)	(71)	(30)	11	53
	<b>8.50</b>	(143)	(100)	(58)	(15)	28	70
	<b>8.75</b>	(131)	(88)	(44)	0	44	88
	<b>9.00</b>	(120)	(75)	(30)	15	60	105
	<b>9.25</b>	(109)	(63)	(16)	30	76	123
	<b>9.50</b>	(98)	(50)	(3)	45	93	140
	<b>9.75</b>	(86)	(38)	11	60	109	158
	<b>10.00</b>	(75)	(25)	25	75	125	175
	<b>10.25</b>	(64)	(13)	39	90	141	193
	<b>10.50</b>	(53)	0	53	105	158	210
	<b>10.75</b>	(41)	13	66	120	174	228
<b>11.00</b>	(30)	25	80	135	190	245	

**Cost of production/yield/price varies across the Southeast region but analysis should be conducted by each producer to determine when they are making or losing money.**

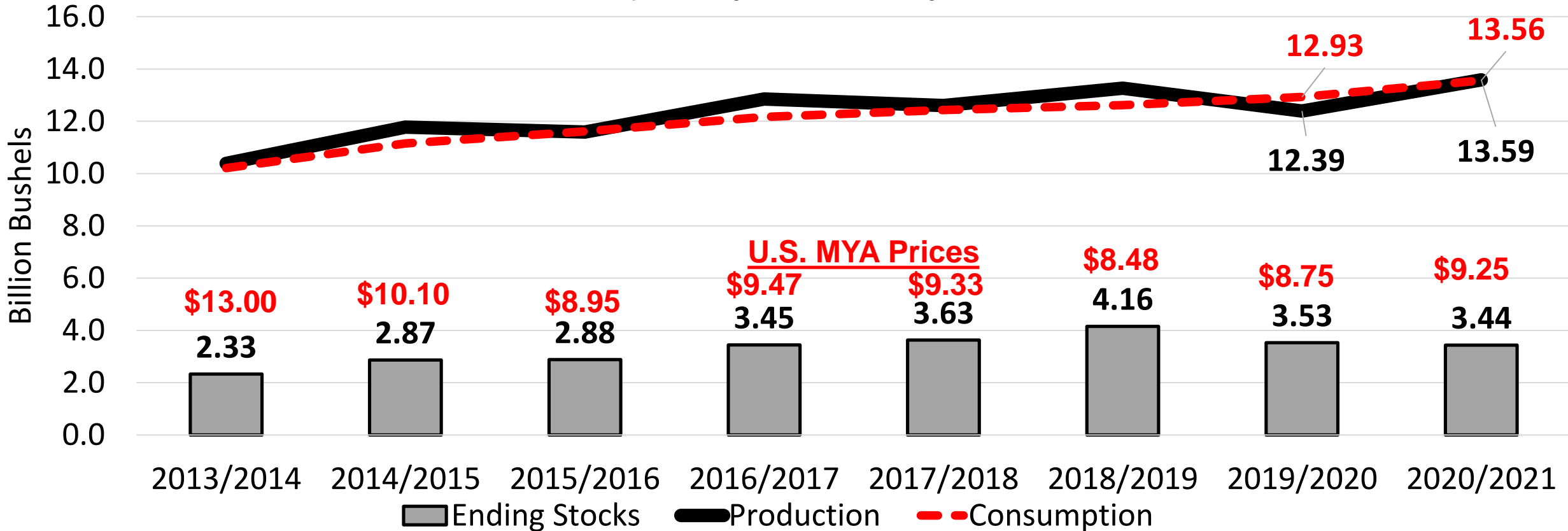
# 2020 Crop Price Outlook

- Futures above \$10.00 is a good opportunity to sell, even if the crop is to be stored.
  - Prices could move above \$11 or below \$9 based on:
    - Brazilian acreage and crop conditions
    - China export purchases
    - Geopolitical/ trade disruptions
    - Global economic growth
    - COVID-19 pandemic
    - ASF out breaks/recovery
    - U.S. planting intentions
- Make decisions based on what is in your control!

Contract	Futures Price Sep 25	Spread (Contract-ZSX20)	Storage Cost (4.5 cents/mth)
ZSX20 (Nov '20)	1005.75	0	0
ZSF21 (Jan '21)	1008.75	3	9
ZSH21 (Mar '21)	1003.75	-2	18
ZSK21 (May '21)	1001.5	-4.25	27
<b>ZSN21 (Jul '21)</b>	<b>1004.75</b>	<b>-1</b>	<b>36</b>
ZSQ21 (Aug '21)	999	-6.75	
ZSU21 (Sep '21)	970	-35.75	
ZSX21 (Nov '21)	950.5	-55.25	
ZSF22 (Jan '22)	950	-55.75	
ZSH22 (Mar '22)	934.75	-71	

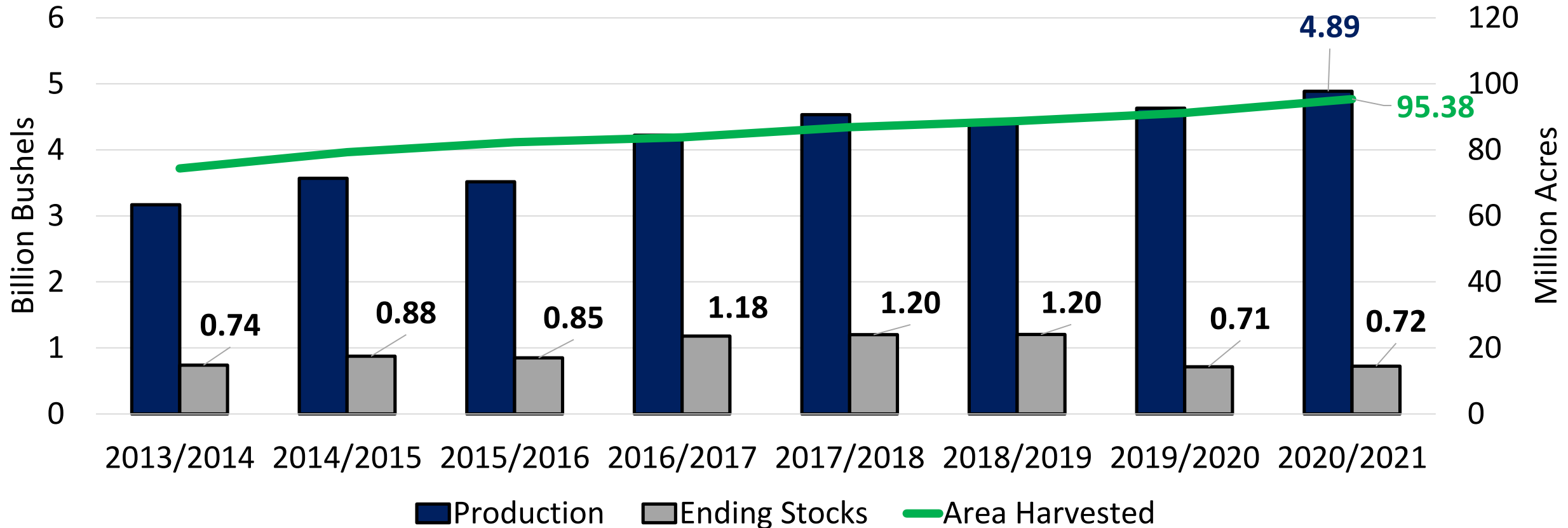
Know your storage costs and historical basis patterns and use them to your advantage.

# Global Soybean Production, Consumption, and Ending Stocks by Marketing Year, 2013/14 to 2020/21



- Global stocks projected down for the second consecutive year.
- Brazil production is the biggest wild card on the supply side.
- China imports (ASF recovery, stockpiling) provides the greatest uncertainty on the demand side.

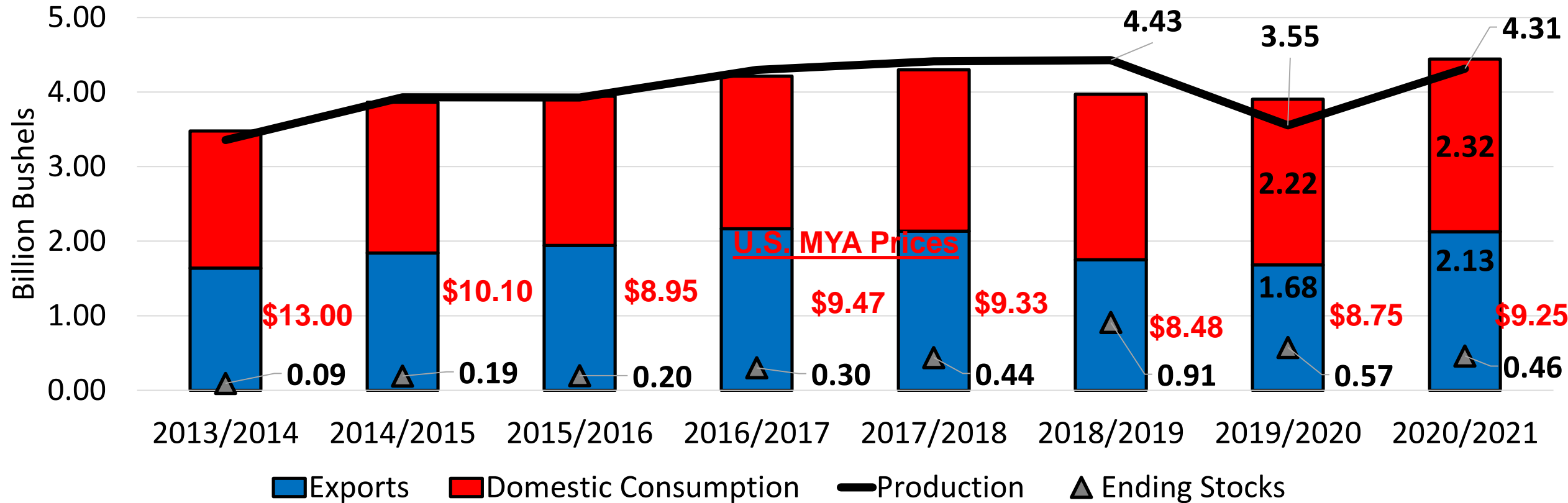
## Brazil Soybean Production, and Ending Stocks, 2013/14-2020/21



- Brazil is approaching 100 million acres of soybeans planted. 28% increase in acreage 2013 to 2020.
- Average yield is similar to the US: 49.6-52.2 bu/acre the past 4 years.
- Production exceeds U.S.
- Stocks are projected to remain low.



# U.S. Soybean Production, Consumption, Exports, and Ending Stocks by Marketing Year, 2013/14 to 2020/21

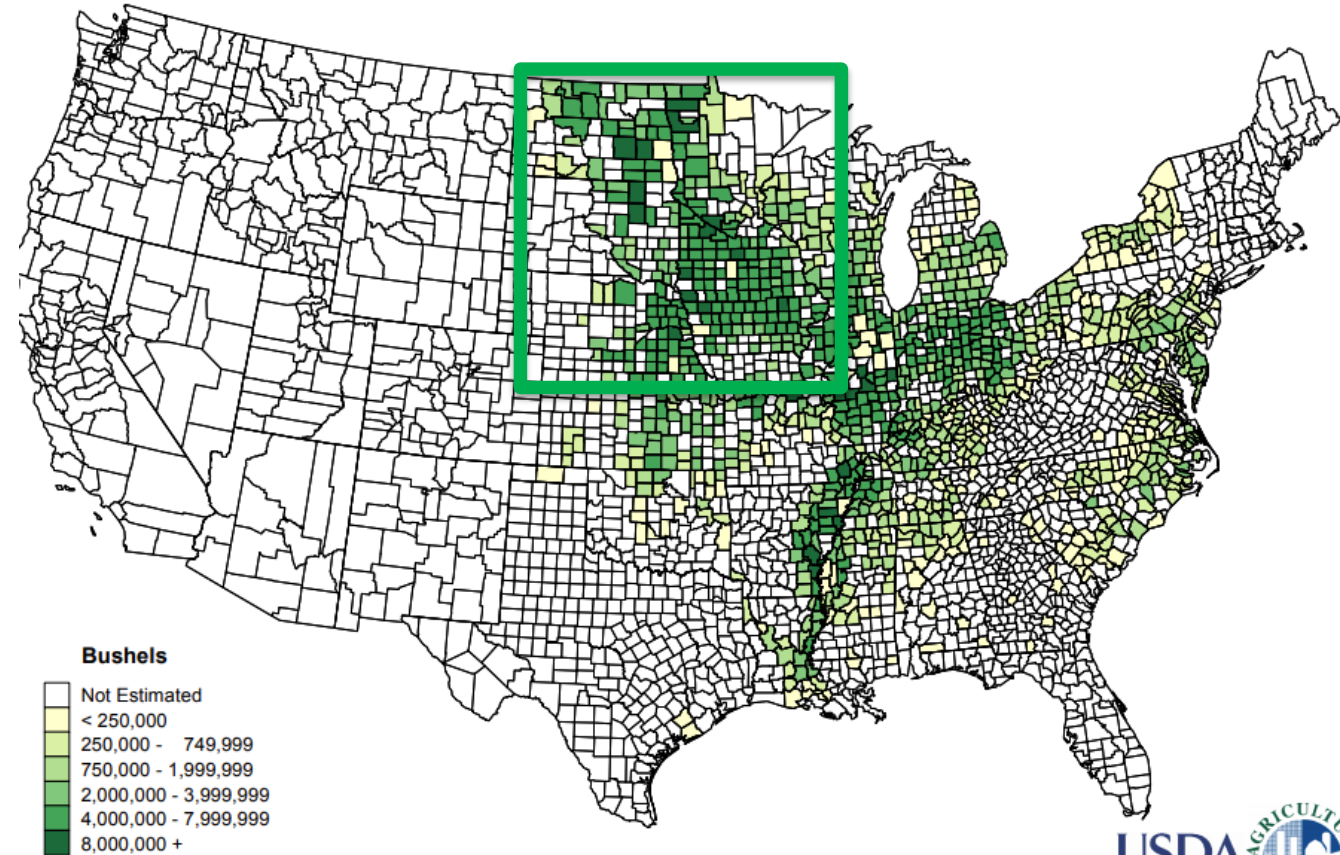
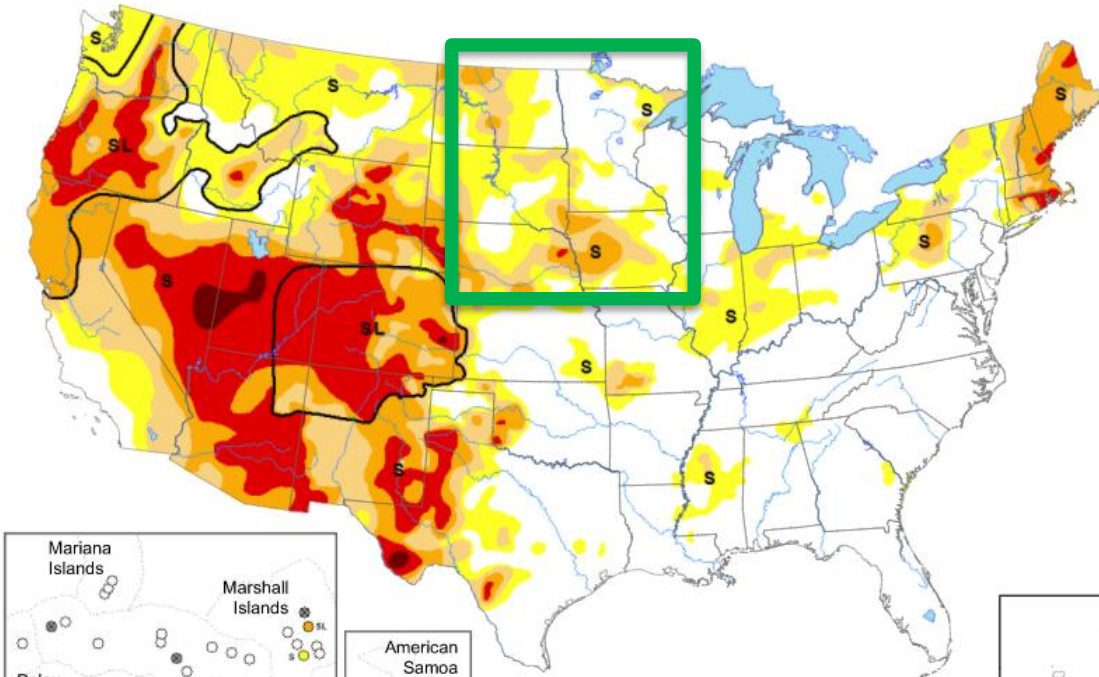


- Modifications to 2020 U.S. production due to flash drought / severe weather.
- Export sales and shipment pace, can the momentum be maintained?
- Is China going to attempt to fulfill obligations under the phase 1 trade deal for 2020 and 2021?

# Flash drought starting the end of July in several key production regions.

Map released: September 24, 2020

Data valid: September 22, 2020



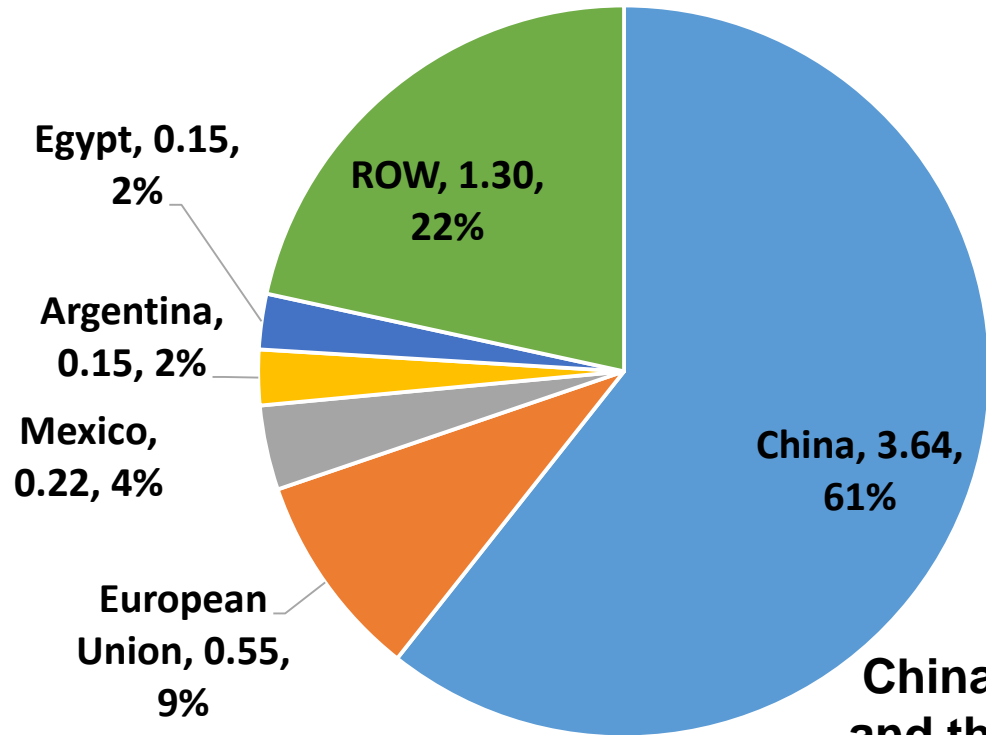
Department of Agriculture, National Agricultural Statistics Service



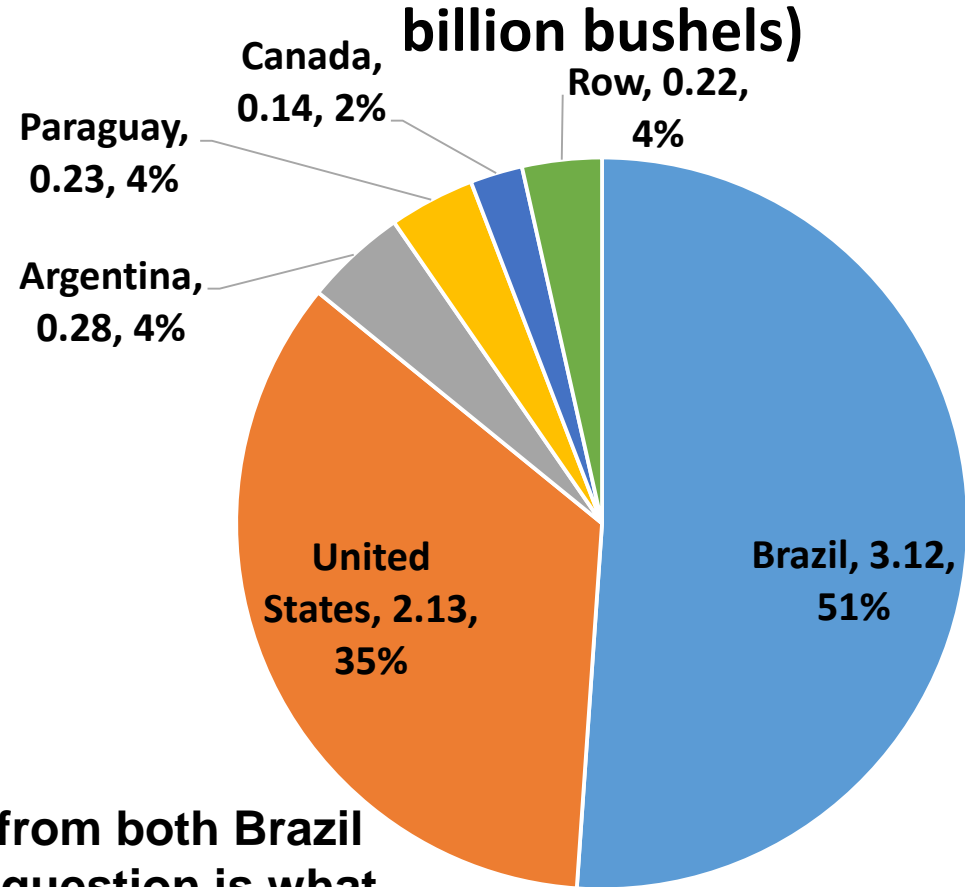
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INSTITUTE OF AGRICULTURE  
THE UNIVERSITY OF TENNESSEE

## 2020/2021 Projected Soybean Imports by Country (Total imports ~6 billion bushels)

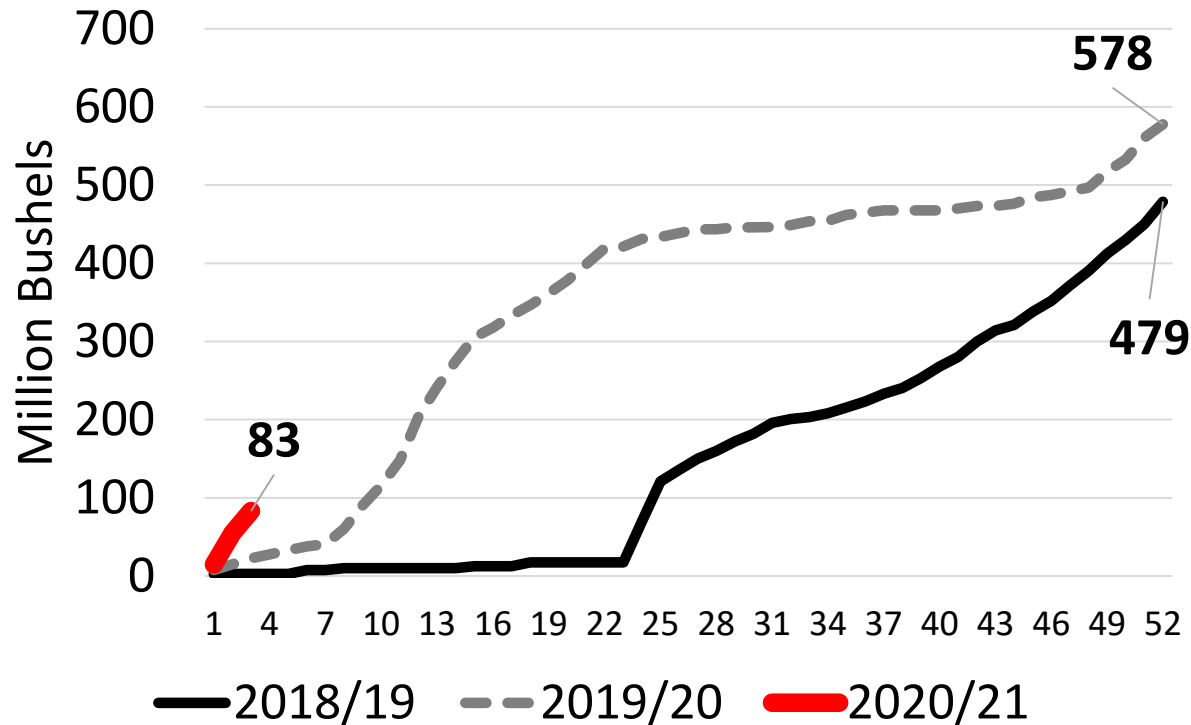


## 2020/2021 Projected Soybean Exports by Country (Total exports ~6 billion bushels)

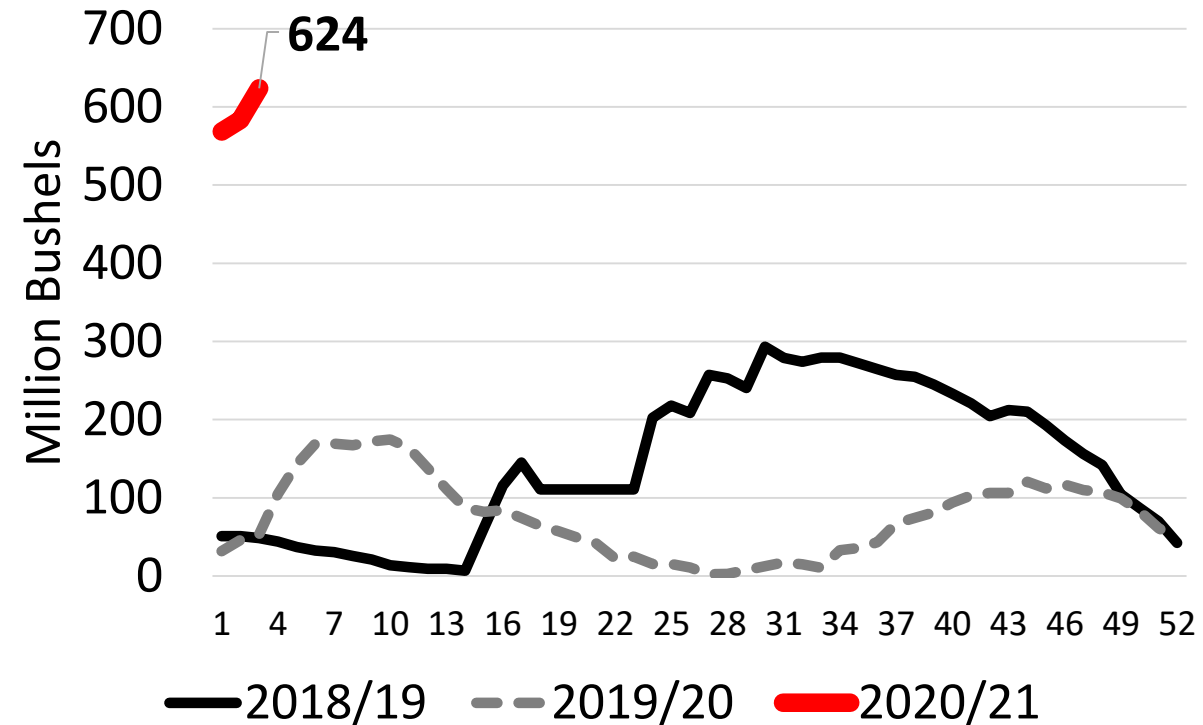


China is buying from both Brazil and the U.S. The question is what are the proportions for 2020/21?

## Accumulated Exports to China by Marketing Week, 2018/19 to 2020/21



## Outstanding Sales to China by Marketing Week, 2018/19 to 2020/21



China is projected to import 3.64 billion bushels in 2020/21 from all countries. What is the US share?

## XE Currency Charts: BRL to CNY

26 Sep 2019 00:00 UTC - 25 Sep 2020 16:16 UTC BRL/CNY close:1.23033 low:1.20388 high:1.77122



## XE Currency Charts: USD to BRL

26 Sep 2019 00:00 UTC - 25 Sep 2020 16:16 UTC USD/BRL close:5.54701 low:3.98780 high:5.88878



# Exchange Rates Matter

## XE Currency Charts: USD to CNY

26 Sep 2019 00:00 UTC - 25 Sep 2020 16:14 UTC USD/CNY close:6.82378 low:6.75339 high:7.16241

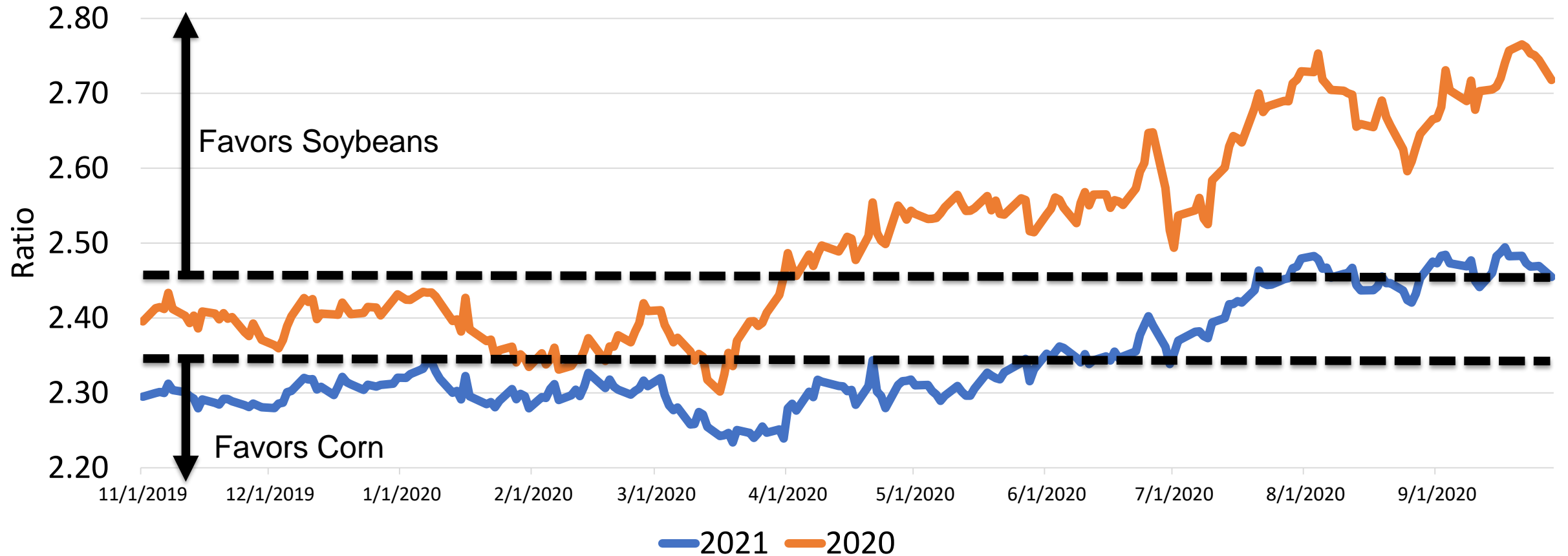


One year ago	Now	Direction
1 USD = 4 BRL	1 USD = 5.5 BRL	Stronger USD/Weaker BRL
1 USD = 7 CNY	1 USD = 6.8 CNY	Stronger CNY/Weaker USD
1 BRL = 1.7 CNY	1 BRL = 1.2 CNY	Stronger CNY/Weaker BRL

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# November Soybean to December Corn Price Ratio, 2020 and 2021



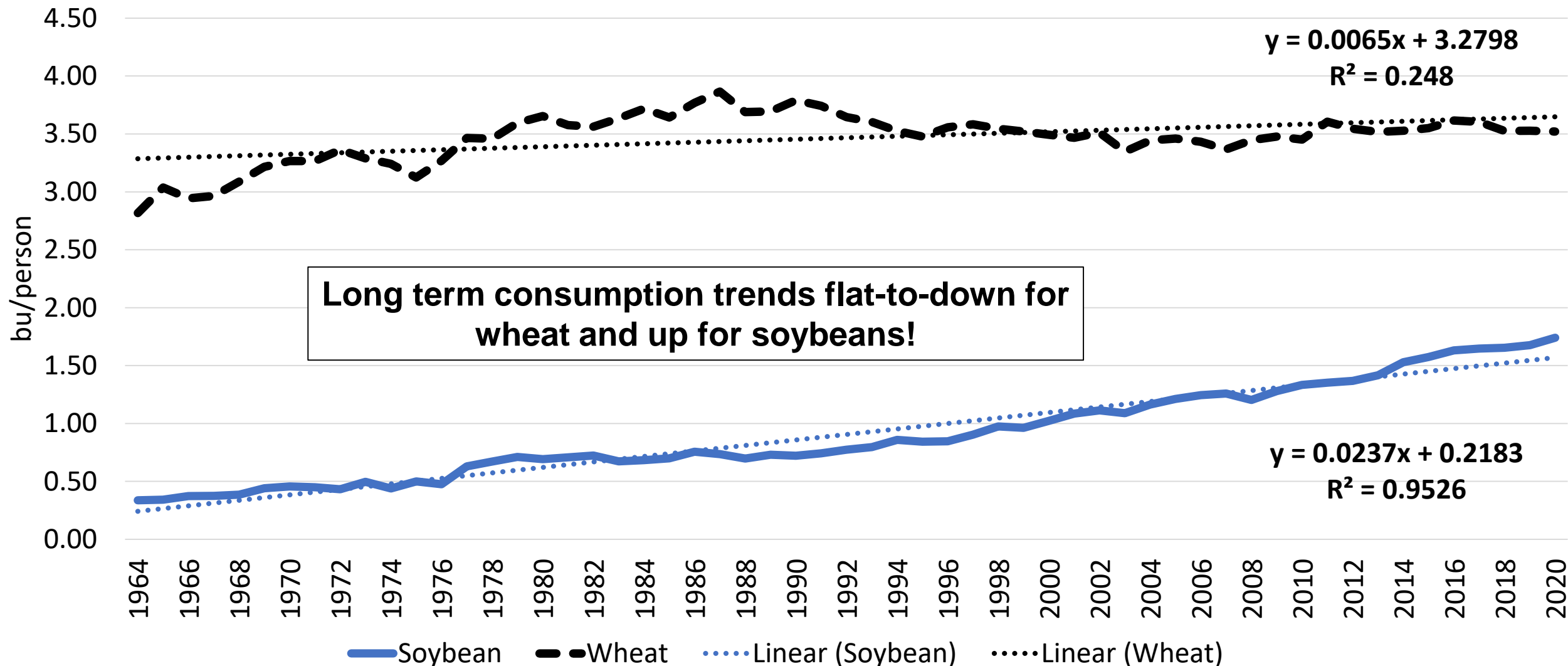
- 2020 planted acreage?

# Soybean Summary

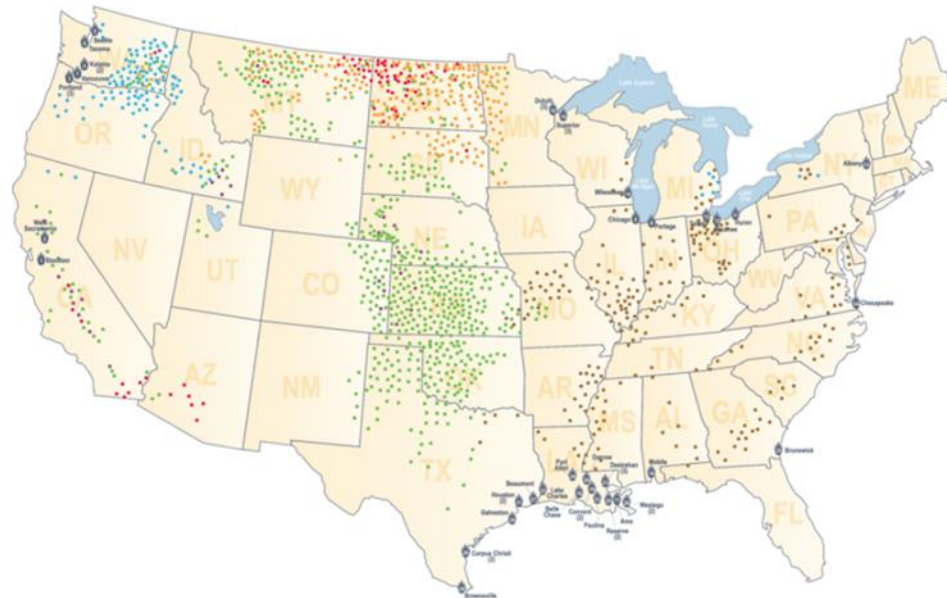
- 2018, 2019, and 2020 government payments were the key driver in profitability.
  - MFP, CFAP, ARC/PLC, WHIP+, crop insurance / prevented planting.
- 2020 prices started out depressed but have come on strong and are currently providing profitable pricing opportunities.
  - MY average farm price \$9.00-\$9.50.
- Expected 2021 prices are highly uncertain.
  - Futures could trade in a wide band of \$9.00-\$11.00.
    - Sales starting near \$9.75 should be considered for many.
- U.S. election provides policy and geopolitical / trade uncertainty.



# Global per Capita Consumption of Soybeans and Wheat (bu/person), 1964-2020



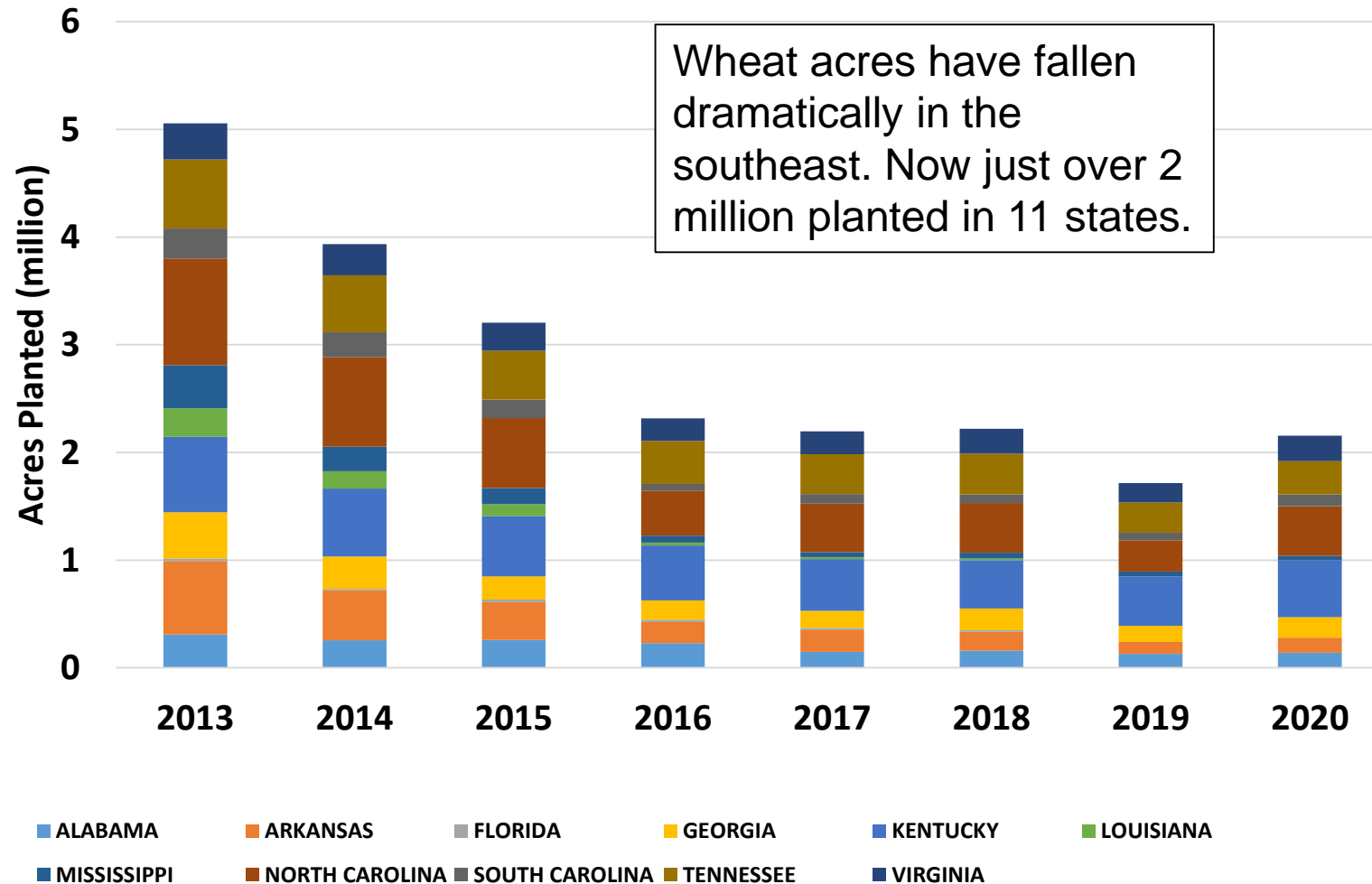
No-Till Wheat \ Double-Crop Soybeans, Per Acre Costs and Returns						
	Quant.	Unit	Price			Total
<b>Gross Returns Per Acre</b>						
Wheat	75	bu	\$5.50			\$413
Soybeans	40	bu	\$9.40			\$376
<b>Total Revenue</b>						<b>\$789</b>
<b>Variable Costs Per Acre</b>						
Seed (Wheat)	135	lbs	\$0.45			\$61
Seed (Soybean)	1.00	bags	\$55.00			\$55
Nitrogen <sup>1</sup>	100	units	\$0.40			\$40
Phosphorous (P <sub>2</sub> O <sub>5</sub> )	75	units	\$0.30			\$23
Potassium (K <sub>2</sub> O)	60	units	\$0.30			\$18
Lime - Delivered and Spread	0.50	ton	\$20.00			\$10
Herbicides	1	acre	\$100.00			\$100
Insecticides <sup>2</sup>	1	acre	\$5.00			\$5
Fungicides <sup>2</sup>	1	acre	\$5.00			\$5
Fuel and Lube	1	acre	\$0.00	Calculate Machiner y Related Costs?	Y	\$17
Repairs	1	acre	\$0.00			\$54
Hired Labor	1	acre	\$0.00			\$0
Operator Labor (Variable Only)	1	acre	\$0.00			\$42
Drying(Wheat): LP, Electric, Maint & Lat	1	gallon LP	\$2.00	Pts Remove	1.0	\$3
Crop Insurance <sup>3</sup>	1	acre	\$30.00			\$30
Cash Rent <sup>4</sup>	1	acre	\$165.00			\$165
Other Variable Costs	1	acre	\$10.00			\$10
Operating Interest	\$592	dollars	6.0%	# Months	8	\$24
<b>Total Variable Costs Per Acre</b>						<b>\$661</b>
<b>Return Above Variable Costs Per Acre</b>						<b>\$127</b>
Operator Labor (Fixed Only)			\$0.00	See Question Above		\$0
Machinery Depreciation and Overhead			\$0.00		\$88	
Taxes and Insurance	1	acre	\$5.00		\$5	
Other Fixed Costs	1	acre	\$5.00		\$5	
<b>Return Above All Specified Costs</b>						<b>\$29</b>



● HARD RED WINTER   
 ● HARD RED SPRING   
 ● SOFT RED WINTER   
 ● SOFT WHITE   
 ● HARD WHITE   
 ● DURUM

SRW is used for producing a wide range of confectionary products like cookies, crackers and cakes, and for blending for baguettes and other bread products. Lower quality for animal feed.

## Wheat Acres Planted Southeast, 2013-2020



### 2020/21 MYA

Global all wheat stocks are abundant – projected at 11.738 billion bushels – stocks-to-use of 42.5%.

US wheat stocks are also abundant at 925 million bushels, but stocks-to-use vary by Class:

**HRW - 46.1%**

HRS – 50.8%

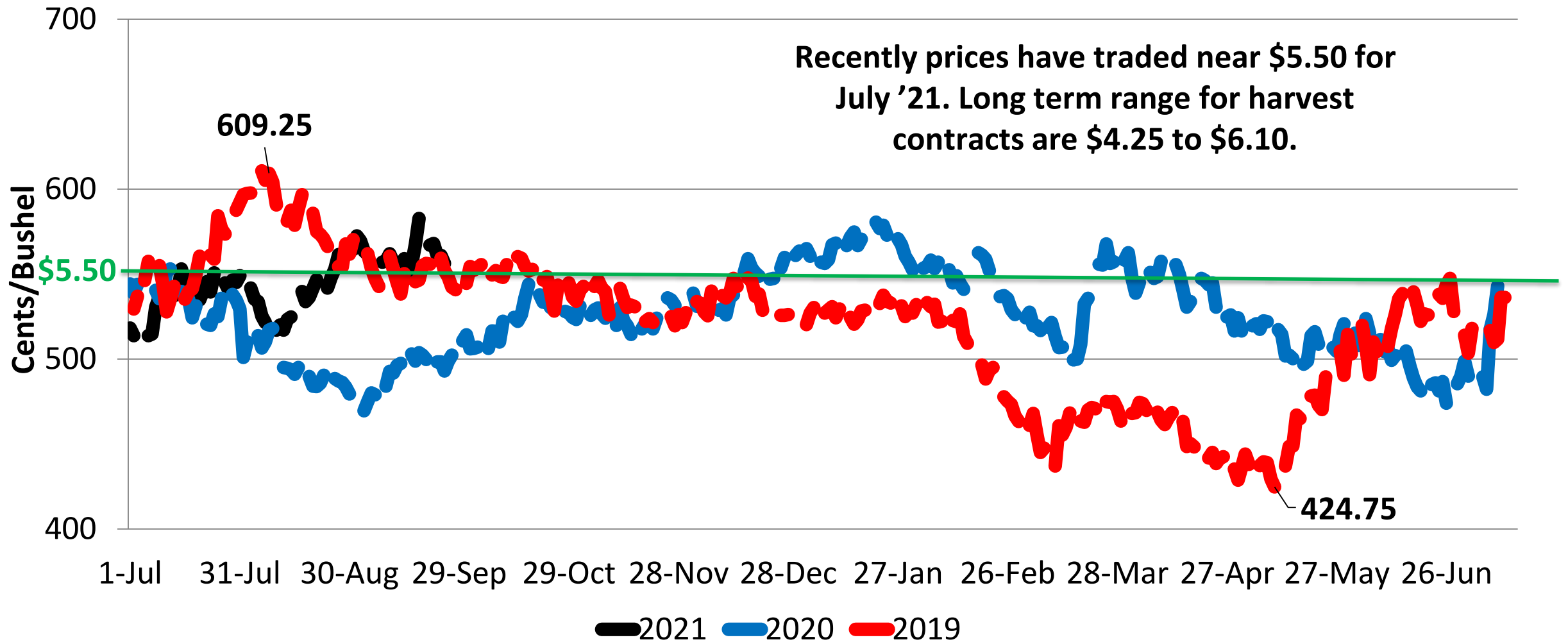
**SRW – 38.0%**

White – 38.5%

Durum – 30.3%

**All Wheat - 44.3%**

# July Wheat Futures (ZWN)



# SRW Wheat Summary

- 2019 and 2020 planting was an issue in several states – resulted in lower plantings than expected.
- Profitable outlook for DC with soybeans?
- Premium relative to HRW wheat of 10-60 cents on the July contract.



# SOUTHERN EXTENSION

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## THANK YOU