



World Agricultural Supply and Demand Estimates

Report of April 11, 2023

Interagency Commodity Estimates Committee Forecasts

World Agricultural Outlook Board, Chairing Agency

Economic Research Service

Foreign Agricultural Service

Farm Production and Conservation

Agricultural Marketing Service

Highlights: April 2023 WASDE

- Focus on old crop; new crop year rollout next month.
- Domestic updates include NASS data from March 1 *Grain Stocks, Rice Stocks*, and Quarterly *Hogs and Pigs* report.
- Southern hemisphere crops in focus:
 - Brazil anticipates record-large soybean crop, despite concerns in the Rio Grande do Sul
 - Brazil cotton crop lowered, but still 2nd largest on record
 - Argentina corn and soybean production lowered again on persistent drought conditions.



World Wheat Production

Country or Region	2021/2022 estimate	2022/2023 forecast	Change from March 8	Change from 2021/2022
<i>----- Million Tons -----</i>				
World	779.1	789.0	0.1	9.9
United States	44.8	44.9	--	0.1
Foreign	734.3	744.1	0.1	9.8
Argentina	22.2	12.6	-0.4	-9.6
Canada	22.4	33.8	--	11.4
Australia	36.2	39.0	--	2.8
European Union	138.2	134.3	-0.4	-3.9
Turkey	16.0	17.2	--	1.2
Russia	75.2	92.0	--	16.8
Ukraine	33.0	21.0	--	-12.0
Kazakhstan	11.8	16.4	--	4.6
China	136.9	137.7	--	0.8
India	109.6	104.0	--	-5.6
Northwest Africa	11.2	7.6	**	-3.6

-- No change. ** Rounds to zero.



World Wheat Supply and Use

Item	2021/2022 estimate	2022/2023 forecast	Change from March 8	Change from 2021/2022
----- Million Tons -----				
Beginning stocks	286.3	272.1	0.6	-14.2
Production	779.1	789.0	0.1	9.9
Total Supply	1,065.5	1,061.1	0.7	-4.3
Feed use	161.5	160.3	1.8	-1.1
Total use	793.4	796.1	2.9	2.7
Trade	202.9	212.7	-1.2	9.8
Ending Stocks	272.1	265.1	-2.1	-7.0



U.S. Wheat Supply and Demand

Item	2021/2022 estimate	2022/2023 forecast	Change from March 8	Change from 2021/2022
Planted area (million acres)	46.7	45.7	--	-1.0
Harvested area (million acres)	37.1	35.5	--	-1.7
Yield (bushels per acre)	44.3	46.5	--	2.2
<i>----- Million bushels -----</i>				
Beginning stocks	845	698	--	-147
Production	1,646	1,650	--	4
Imports	95	125	5	30
Total supply	2,587	2,473	5	-113
Food use	972	975	--	3
Seed	58	70	--	12
Feed and residual	59	55	-25	-4
Domestic use	1,088	1,100	-25	12
Exports	800	775	--	-25
Total use	1,888	1,875	-25	-13
Ending stocks	698	598	30	-100
<i>----- Percent -----</i>				
Stocks to use ratio	37.0	31.9	2.0	-5.1
<i>----- Dollars per bushel -----</i>				
Average market price	7.63	8.90	-0.10	1.27

-- No change.



World Rice Production

Country or Region	2021/2022 estimate	2022/2023 forecast	Change from March 8	Change from 2021/2022
----- Million Tons -----				
World	513.9	509.4	-0.4	-4.4
United States	6.1	5.1	--	-1.0
Foreign	507.8	504.3	-0.4	-3.4
Argentina	0.8	0.8	**	**
Brazil	7.3	6.8	-0.1	-0.5
Egypt	2.9	3.6	--	0.7
Australia	0.50	0.36	--	-0.14
Bangladesh	35.9	36.4	0.5	0.5
Burma	12.4	12.5	--	0.1
Cambodia	5.8	5.9	--	0.2
China	149.0	145.9	--	-3.0
India	129.5	132.0	--	2.5
Indonesia	34.4	34.0	-0.6	-0.4
Japan	7.6	7.5	**	-0.2
Sri Lanka	2.7	2.5	--	-0.2
Pakistan	9.3	6.6	--	-2.7
Philippines	12.5	12.4	--	-0.1
Thailand	19.9	20.2	--	0.3
Vietnam	26.8	27.0	--	0.2

-- No change. ** Rounds to zero.



World Rice Supply and Use

Item	2021/2022 estimate	2022/2023 forecast	Change from March 8	Change from 2021/2022
----- <i>Million Tons</i> -----				
Beginning stocks	187.3	182.0	-1.4	-5.3
Production	513.9	509.4	-0.4	-4.4
Total Supply	701.2	691.4	-1.9	-9.7
Total use	519.2	520.0	0.1	0.9
Trade	56.8	55.7	0.8	-1.1
Ending Stocks	182.0	171.4	-2.0	-10.6



U.S. Rice Supply and Demand

Item	2021/2022 estimate	2022/2023 forecast	Change from March 8	Change from 2021/2022
Planted area (million acres)	2.53	2.22	--	-0.31
Harvested area (million acres)	2.49	2.17	--	-0.31
Yield (pounds per acre)	7,709	7,383	--	-326
<i>----- Million cwt -----</i>				
Beginning stocks	43.7	39.7	--	-4.0
Production	191.6	160.4	--	-31.2
Imports	37.8	40.0	-2.0	2.2
Total supply	273.0	240.1	-2.0	-32.9
Domestic use	151.1	151.0	4.0	-0.1
Exports	82.2	61.0	2.0	-21.2
Total use	233.3	212.0	6.0	-21.3
Ending stocks	39.7	28.1	-8.0	-11.6
<i>----- Percent -----</i>				
Stocks to use ratio	17.0	13.3	-4.3	-3.8
<i>----- Dollars per cwt -----</i>				
Average market price	16.10	19.40	--	3.30

-- No change.



World Corn Production

Country or Region	2021/2022 estimate	2022/2023 forecast	Change from March 8	Change from 2021/2022
<i>----- Million Tons -----</i>				
World	1,217.0	1,144.5	-3.0	-72.5
United States	382.9	348.8	--	-34.1
Foreign	834.1	795.8	-3.0	-38.4
Argentina	49.5	37.0	-3.0	-12.5
Brazil	116.0	125.0	--	9.0
Mexico	26.8	27.6	--	0.8
Canada	14.6	14.5	--	-0.1
European Union	71.4	53.0	-1.2	-18.4
Serbia	6.0	5.0	-0.4	-1.0
FSU-12	64.1	48.2	1.8	-15.9
Ukraine	42.1	27.0	--	-15.1
Russia	15.2	15.8	1.8	0.6
South Africa	16.1	16.7	--	0.6
China	272.6	277.2	--	4.6
India	33.7	34.6	--	0.9

-- No change.



World Corn Supply and Use

Item	2021/2022 estimate	2022/2023 forecast	Change from March 8	Change from 2021/2022
<i>----- Million Tons -----</i>				
Beginning stocks	292.8	306.9	1.2	14.1
Production	1,217.0	1,144.5	-3.0	-72.5
Total Supply	1,509.8	1,451.4	-1.8	-58.4
Feed use	748.9	726.9	**	-21.9
Total use	1,202.9	1,156.1	-0.7	-46.9
Trade	205.7	173.8	-0.9	-31.9
Ending Stocks	306.9	295.3	-1.1	-11.6

** Rounds to zero.



U.S. Corn Supply and Demand

Item	2021/2022 estimate	2022/2023 forecast	Change from March 8	Change from 2021/2022
Planted area (million acres)	93.3	88.6	--	-4.7
Harvested area (million acres)	85.3	79.2	--	-6.1
Yield (bushels per acre)	176.7	173.3	--	-3.3
<i>----- Million bushels -----</i>				
Beginning stocks	1,235	1,377	--	142
Production	15,074	13,730	--	-1,344
Imports	24	40	-10	16
Total supply	16,333	15,147	-10	-1,186
Feed and residual	5,721	5,275	--	-446
Food, seed, and industrial	6,764	6,680	-10	-84
Ethanol	5,326	5,250	--	-76
Domestic use	12,484	11,955	-10	-529
Exports	2,471	1,850	--	-621
Total use	14,956	13,805	-10	-1,151
Ending stocks	1,377	1,342	--	-35
<i>----- Percent -----</i>				
Stocks to use ratio	9.2	9.7	**	0.5
<i>----- Dollars per bushel -----</i>				
Average market price	6.00	6.60	--	0.60

-- No change. ** Rounds to zero.

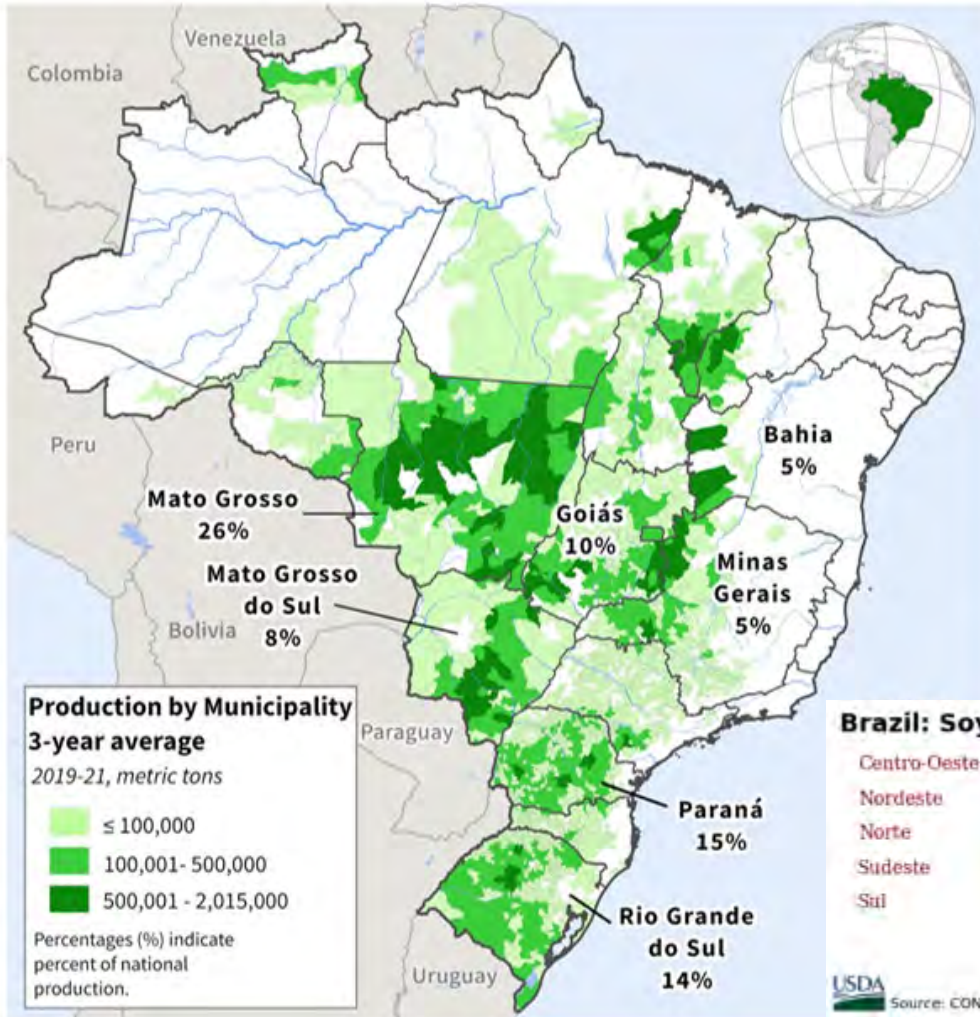


World Soybean Production

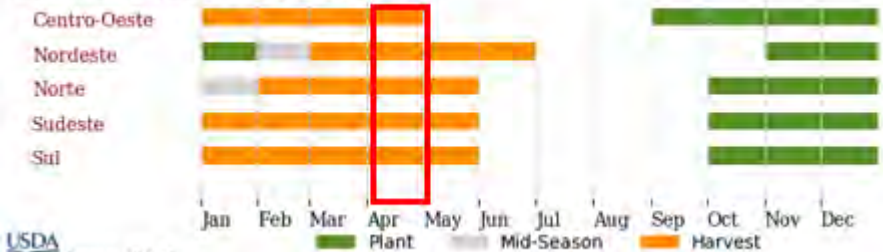
Country or Region	2021/2022 estimate	2022/2023 forecast	Change from March 8	Change from 2021/2022
<i>----- Million Tons -----</i>				
World	359.8	369.6	-5.5	9.8
United States	121.5	116.4	--	-5.2
Foreign	238.3	253.3	-5.5	15.0
Argentina	43.9	27.0	-6.0	-16.9
Brazil	130.5	154.0	1.0	23.5
Paraguay	4.2	10.0	--	5.8
Canada	6.2	6.5	--	0.3
India	11.9	12.0	--	0.1
China	16.4	20.3	--	3.9

-- No change.

Brazil Soybean Production



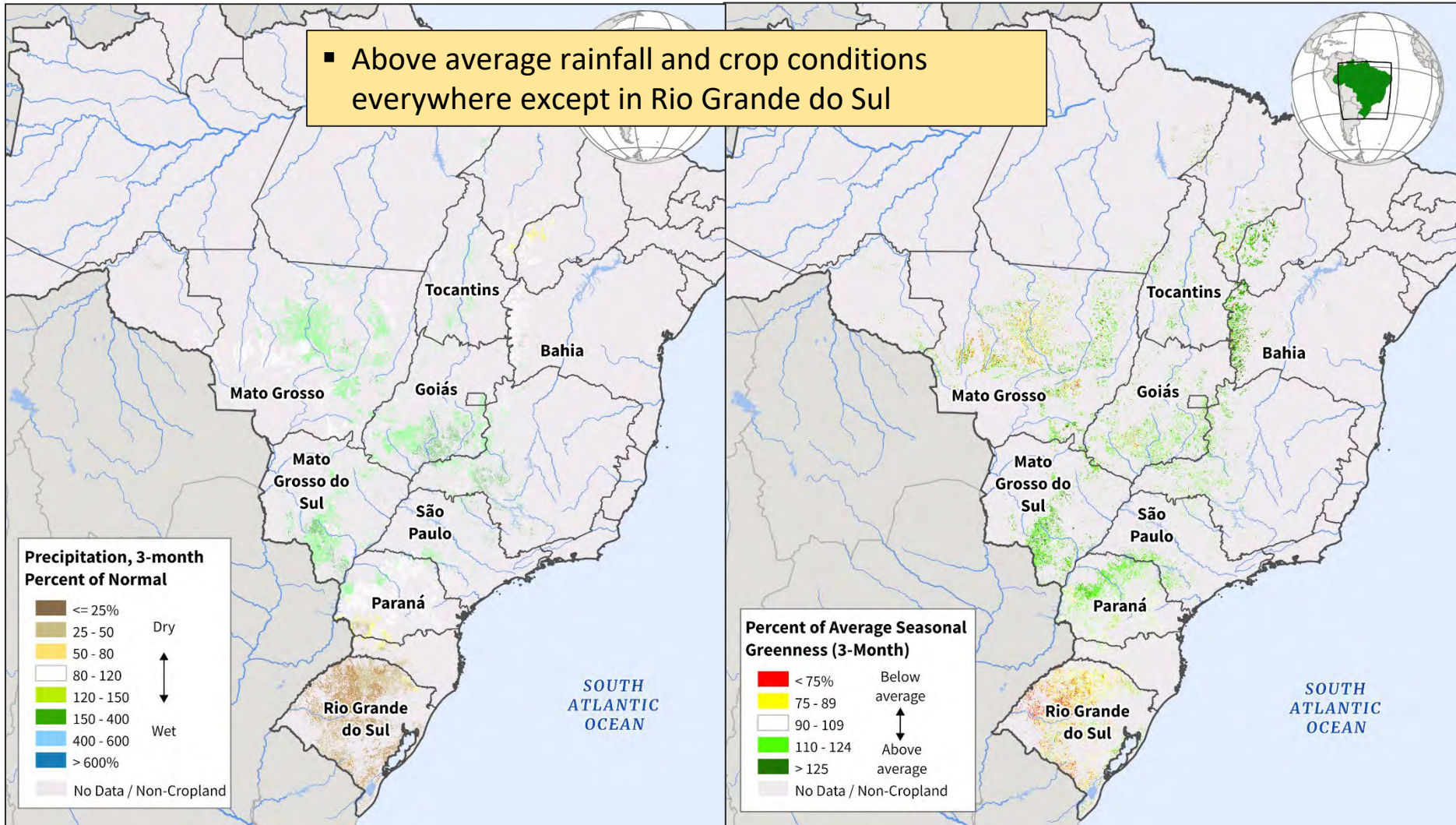
Brazil: Soybean Crop Calendar



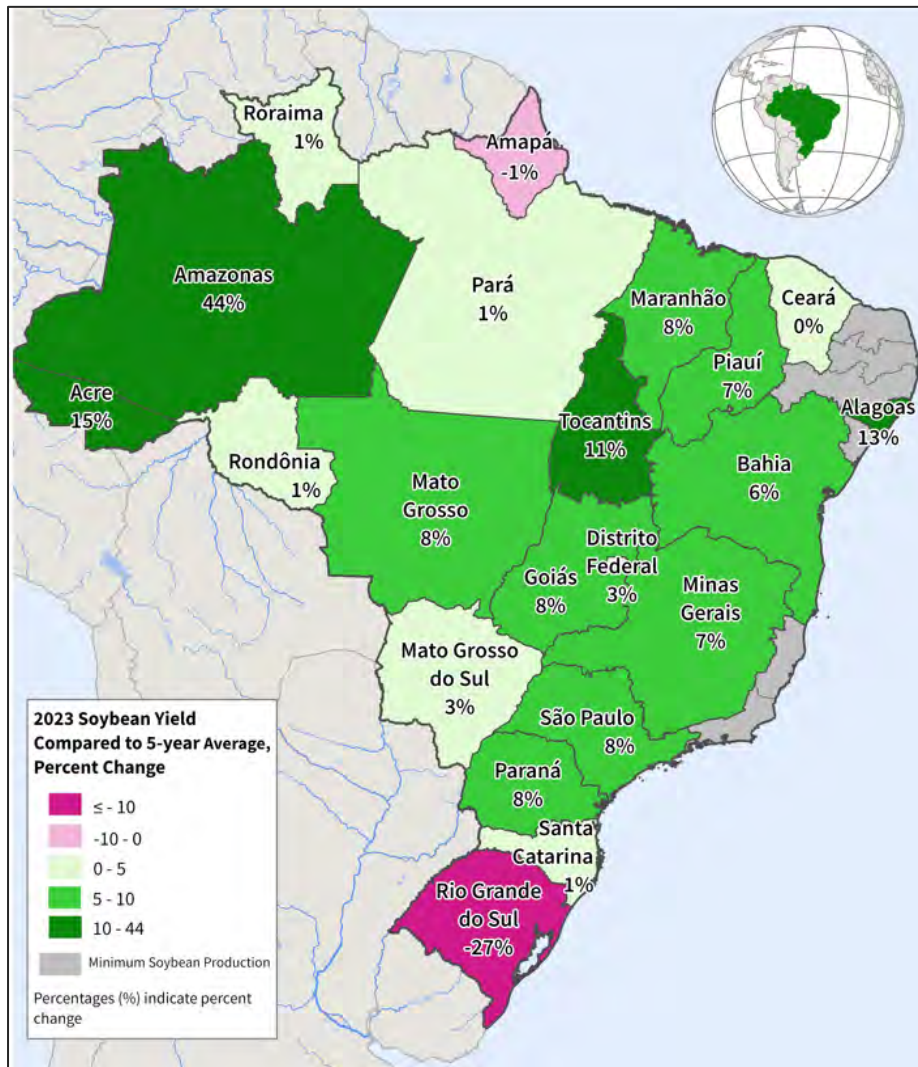

 Source: CONAB

Brazil, 3-Month Percent of Normal Precipitation
Dec 1, 2022 to Feb 28, 2022

3-Month Percent of Average Seasonal Greenness
Dec 3, 2022 to Feb 25, 2023



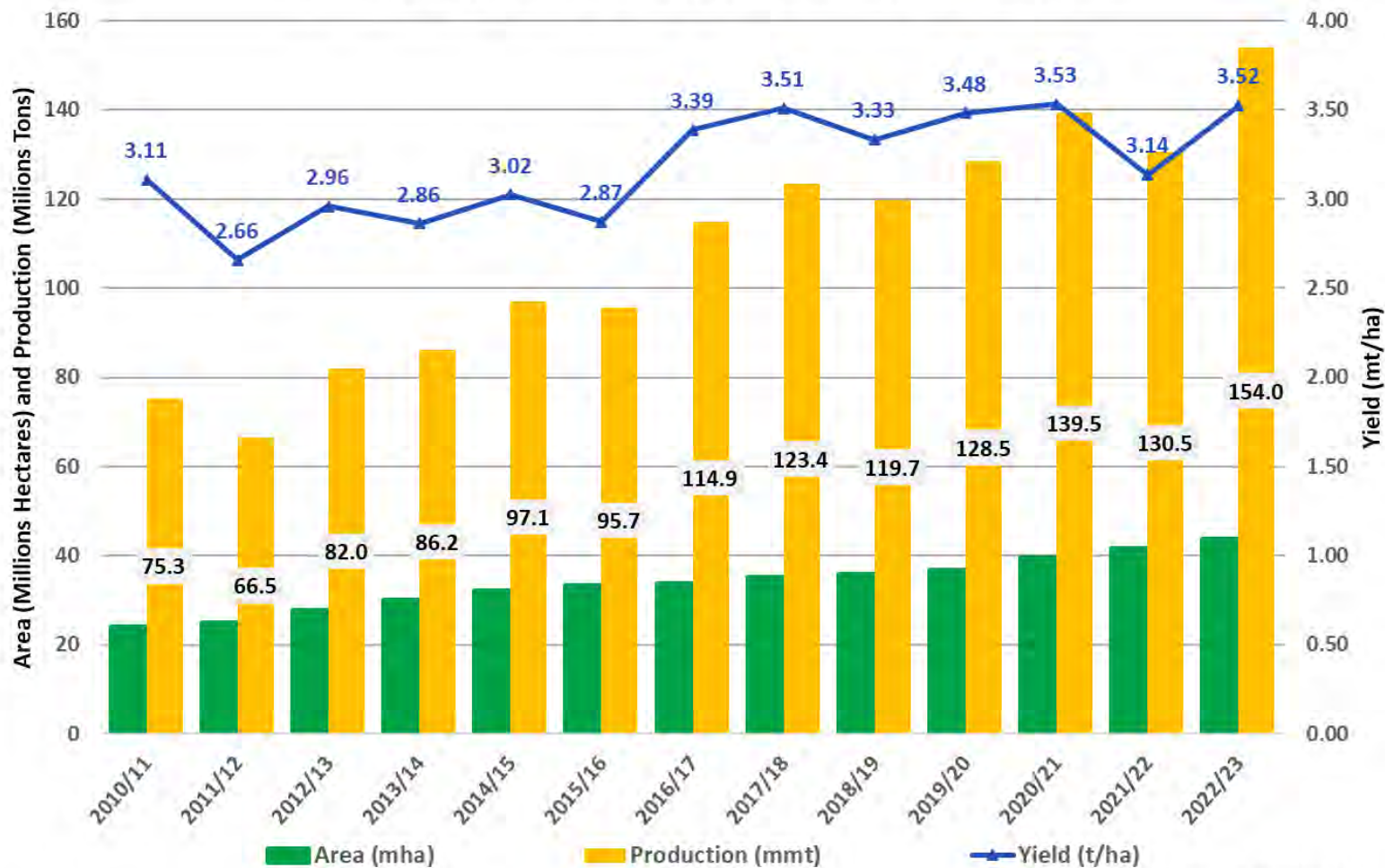
2022/23 Soybean Yields Compared to the 5 Year Average



Sources: Average soybean yields for 2018-2022 from Série histórica das Safras by CONAB. April 2023 state yields substituted from Mato Grosso (IMEA), Paraná (DERAL), and Rio Grande do Sul (EMATER-RS) reports.

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Brazil Soybean Area, Yield and Production



Source: USDA PSD Online

World Soybean Supply and Use

Item	2021/2022 estimate	2022/2023 forecast	Change from March 8	Change from 2021/2022
----- Million Tons -----				
Beginning stocks	100.4	99.7	0.7	-0.6
Production	359.8	369.6	-5.5	9.8
Total Supply	460.1	469.4	-4.8	9.2
Crush	313.8	315.2	-4.8	1.4
Total use	363.0	365.8	-5.3	2.8
Trade	154.0	168.0	-0.4	14.0
Ending Stocks	99.7	100.3	0.3	0.6
Addendum				
Beginning stocks				
Argentina plus Brazil	54.6	51.5	0.7	-3.1
Imports*				
China	91.6	96.0	--	4.4

*From all sources.

-- No change.



U.S. Soybeans Supply and Demand

Item	2021/2022 estimate	2022/2023 forecast	Change from March 8	Change from 2021/2022
Planted area (million acres)	87.2	87.5	--	0.3
Harvested area (million acres)	86.3	86.3	--	0.0
Yield (bushels per acre)	51.7	49.5	--	-2.2
<i>----- Million bushels -----</i>				
Beginning stocks	257	274	--	17
Production	4,465	4,276	--	-189
Imports	16	15	--	-1
Total supply	4,738	4,566	--	-173
Crush	2,204	2,220	--	16
Seed and Residual	102	120	**	18
Domestic use	2,306	2,340	**	34
Exports	2,158	2,015	--	-143
Total use	4,464	4,355	**	-109
Ending stocks	274	210	**	-64
<i>----- Percent -----</i>				
Stocks to use ratio	6.1	4.8	**	-1.3
<i>----- Dollars per bushel -----</i>				
Average market price	13.30	14.30	--	1.00

-- No change. ** Rounds to zero.

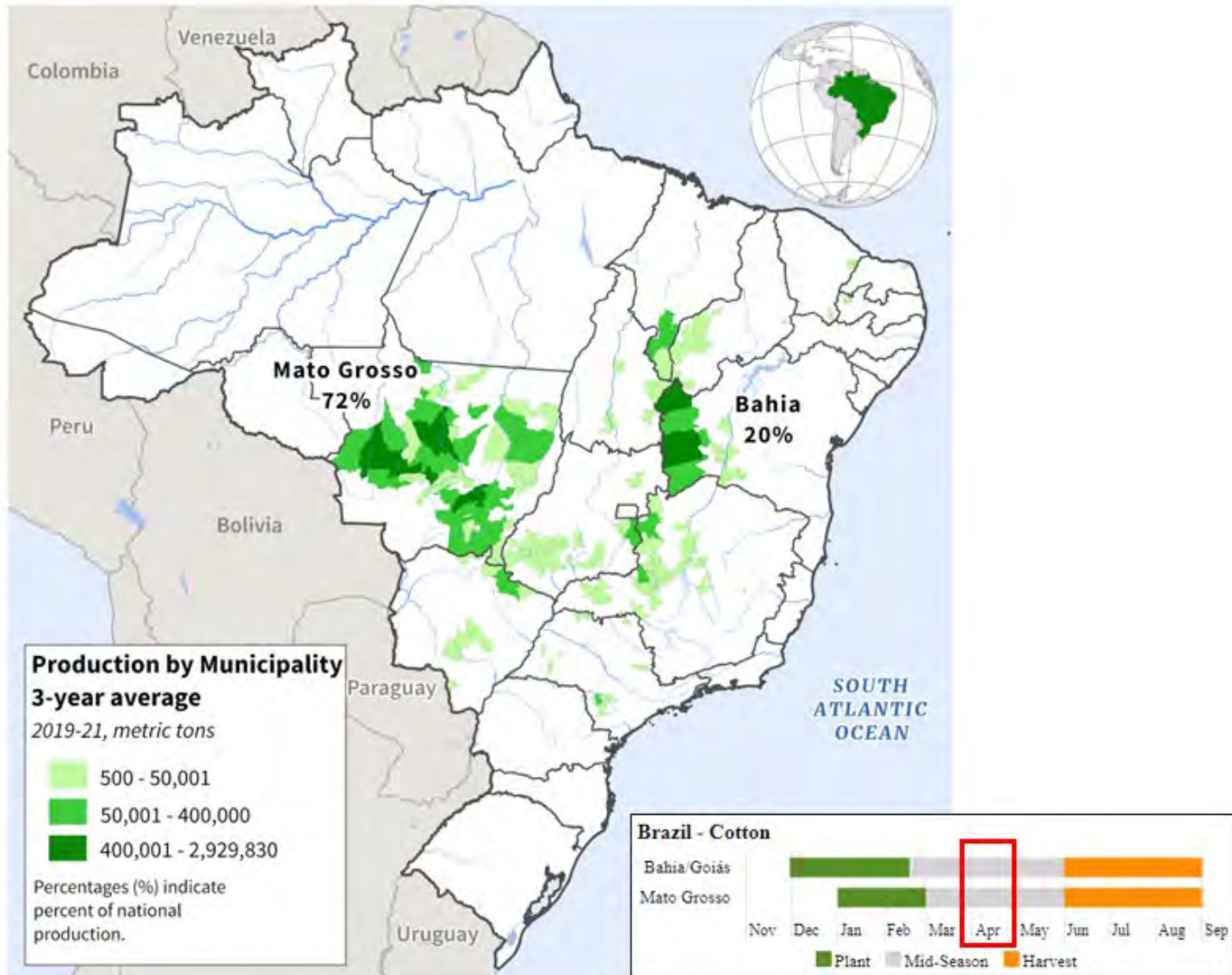


World Cotton Production

Country or Region	2021/2022 estimate	2022/2023 forecast	Change from March 8	Change from 2021/2022
----- Million bales -----				
World	116.0	115.9	0.8	-0.1
United States	17.5	14.7	--	-2.8
Foreign	98.5	101.2	0.8	2.7
Argentina	1.5	1.2	**	-0.4
Brazil	11.7	13.0	-0.3	1.3
Turkey	3.8	4.9	--	1.1
Australia	5.9	5.5	--	-0.4
China	26.8	30.5	1.0	3.7
India	24.4	24.5	--	0.1
Pakistan	6.0	3.9	--	-2.1
Uzbekistan	2.9	2.9	--	--
Turkmenistan	0.9	0.9	--	--
African Franc Zone	6.0	4.8	--	-1.2

-- No change. ** Rounds to zero.

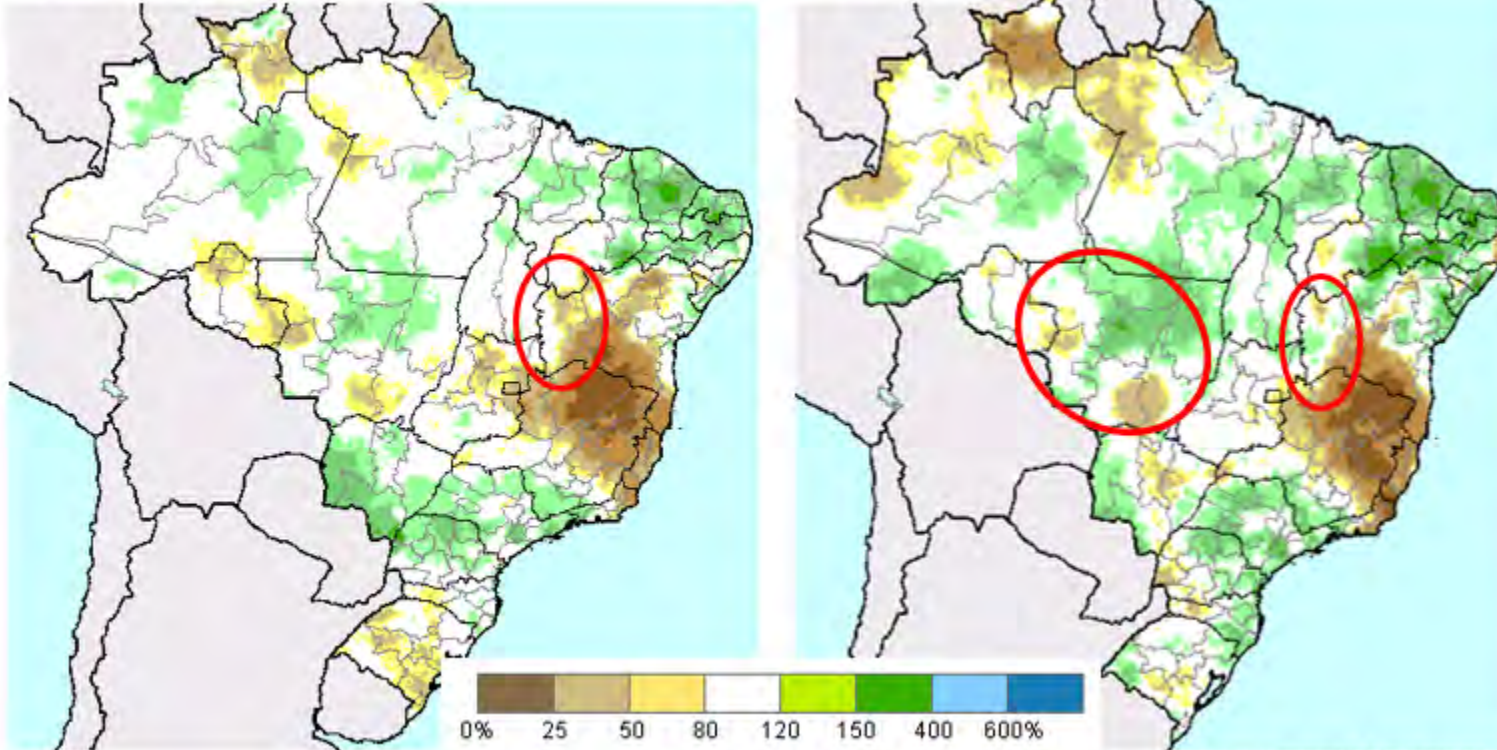
Brazil Cotton Production



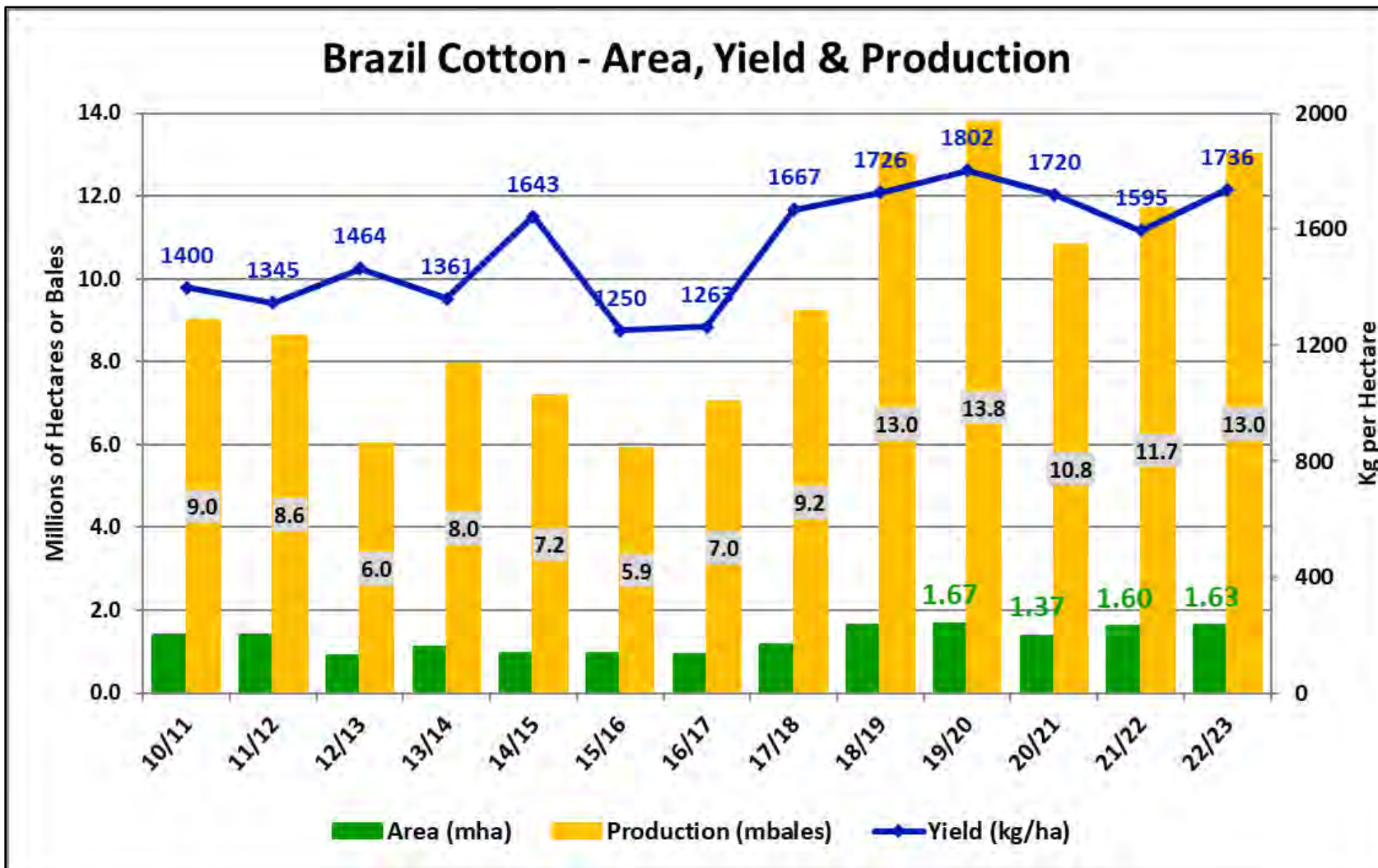
Brazil Cotton: Percent of Normal Precipitation

Feb 6 – Apr 5

March



Source: UCSB CHIRPS



Source: USDA PSD Online



World Cotton Supply and Demand

Item	2021/2022 estimate	2022/2023 forecast	Change from March 8	Change from 2021/2022
----- Million bales -----				
Beginning stocks	86.3	86.2	0.1	-0.1
Production	116.0	115.9	0.8	-0.1
Total Supply	202.3	202.1	0.9	-0.2
Consumption	116.3	110.2	0.1	-6.1
Trade	42.9	38.9	-0.7	-4.0
Ending Stocks	86.2	92.0	0.9	5.8
Addendum				
China ending stocks	38.6	39.7	0.3	1.1



U.S. Cotton Supply and Demand

Item	2021/2022 estimate	2022/2023 forecast	Change from March 8	Change from 2021/2022
Planted area (million acres)	11.22	13.76	--	2.55
Harvested area (million acres)	10.27	7.44	--	-2.83
Yield (pounds per acre)	819	947	--	128
<i>----- Million bales -----</i>				
Beginning stocks	3.15	3.75	--	0.60
Production	17.52	14.68	--	-2.84
Imports	0.01	0.01	--	--
Total supply	20.68	18.44	--	-2.24
Mill use	2.55	2.10	--	-0.45
Exports	14.62	12.20	0.20	-2.42
Total use	17.17	14.30	0.20	-2.87
Unaccounted	-0.24	0.04	--	0.28
Ending stocks	3.75	4.10	-0.20	0.35
<i>----- Percent -----</i>				
Stocks to use ratio	21.8	28.7	-1.8	6.8
<i>----- Cents per pound -----</i>				
Average market price	91.40	82.00	-1.00	-9.40

-- No change.



U.S. Sugar Supply and Demand

Item	2021/2022 estimate	2022/2023 forecast	Change from March 8	Change from 2021/2022
<i>----- Thousand short tons, raw value -----</i>				
Beginning Stocks	1,705	1,820	--	115
Production	9,157	9,306	-5	148
Beets	5,155	5,150	-10	-6
Cane	4,002	4,156	5	154
Imports	3,646	3,511	182	-135
TRQ	1,579	1,730	112	151
Re-export	298	250	--	-48
Mexico	1,379	1,306	--	-73
High-tier	390	225	69	-165
Total Supply	14,508	14,637	177	129
Exports	29	35	--	6
Domestic deliveries	12,578	12,705	--	127
Total use	12,688	12,740	--	52
Ending stocks	1,820	1,897	177	77
<i>----- Percent -----</i>				
Stocks/use ratio	14.3	14.9	1.4	0.5

-- No change.



Mexico Sugar Supply and Demand

Item	2021/2022 estimate	2022/2023 forecast	Change from March 8	Change from 2021/2022
<i>----- Thousand metric tons -----</i>				
Beginning Stocks	1,053	964	--	-89
Production	6,185	5,560	75	-625
Imports	31	35	--	4
Total Supply	7,269	6,559	75	-710
Domestic Use	4,629	4,499	60	-130
Exports	1,676	1,123	2	-552
Total use	6,305	5,622	62	-683
Ending stocks	964	937	13	-27

-- No change.



U.S. Meat Production and Prices

Item	2022 forecast	2023 forecast	Change from March 8	Change from 2022
Production	<i>----- Billion Pounds -----</i>			
Beef	28.29	26.78	0.11	-1.52
Pork	26.99	27.36	-0.05	0.37
Broilers	46.21	46.90	0.15	0.69
Turkey	5.22	5.59	--	0.36
Total Meat	107.47	107.36	0.21	-0.11
Prices	<i>----- Dollars per cwt -----</i>			
Steers	144.40	164.73	2.97	20.33
Hogs	71.21	60.96	-4.79	-10.25
	<i>----- Cents per pound -----</i>			
Broilers	140.5	130.4	3.6	-10.2
Turkey	154.5	171.5	9.5	16.9

-- No change.



U.S. Meat Trade

Million Pounds

Item	2022 forecast	2023 forecast	Change from March 8	Change from 2022
<i>----- Exports -----</i>				
Beef	3,536	3,135	45	-401
Pork	6,338	6,380	30	42
Broilers	7,278	7,360	45	82
Turkey	408	370	10	-38
Mature chickens	30	16	--	-14
Total Meat	17,595	17,267	130	-328
<i>----- Imports -----</i>				
Beef	3,391	3,500	75	109

-- No change.



U.S. Milk Supply and Demand

Item	2022 forecast	2023 forecast	Change from March 8	Change from 2022
<i>----- Billion pounds -----</i>				
Production	226.5	228.7	0.2	2.2
Fat Basis				
Imports	7.1	7.7	0.3	0.6
Domestic Use	219.0	222.8	1.2	3.8
Exports	13.4	12.2	-0.8	-1.1
Skim-solid Basis				
Imports	6.7	6.9	0.5	0.2
Domestic Use	179.0	183.3	1.8	4.3
Exports	52.5	50.7	-1.2	-1.8



U.S. Dairy Product Prices

Item	2022 forecast	2023 forecast	Change from March 8	Change from 2022
Product prices	<i>----- Dollars per pound -----</i>			
Cheese	2.11	1.86	0.04	-0.25
Butter	2.87	2.42	0.09	-0.45
Nonfat dry milk	1.69	1.16	-0.07	-0.52
Dry whey	0.60	0.43	0.04	-0.18
Class prices	<i>----- Dollars per cwt -----</i>			
Class III	21.94	18.25	0.70	-3.69
Class IV	24.47	18.10	-0.20	-6.37
All milk	25.56	20.65	0.20	-4.91



U.S. Production Summary

Item	2021/2022		2022/2023		
	Estimate	Change from March 8	Forecast	Change from March 8	Change from 2021/2022
<i>Crops and Products</i>					
Wheat (million bushels)	1,646	--	1,650	--	4
Rice (million cwt)	191.6	--	160.4	--	-31.2
Corn (million bushels)	15,074	--	13,730	--	-1,344
Sorghum (million bushels)	448	--	188	--	-260
Barley (million bushels)	120	--	174	--	54
Oats (million bushels)	40	--	58	--	18
Soybeans (million bushels)	4,465	--	4,276	--	-189
Soybean oil (million pounds)	26,155	--	26,195	--	40
Soybean meal (thousand s.t.)	51,814	--	52,489	-50	675
Cotton (million bales)	17.52	--	14.68	--	-2.84
Sugar (thousand s.t., raw value)	9,157	--	9,306	-5	148
<i>Milk (billion pounds)</i>	226.5	--	228.7	0.2	2.2
<i>Meat (billion pounds)</i>					
Beef	28.29	--	26.78	0.11	-1.52
Pork	26.99	--	27.36	-0.05	0.37
Broilers	46.21	--	46.90	0.15	0.69
Turkey	5.22	--	5.59	--	0.36
Total Meat	107.47	--	107.36	0.21	-0.11

-- No change.



U.S. Domestic Consumption Summary

Item	2021/2022		2022/2023		
	Estimate	Change from March 8	Forecast	Change from March 8	Change from 2021/2022
<i>Crops and Products</i>					
Wheat (million bushels)	1,088	--	1,100	-25	12
Rice (million cwt)	151.1	--	151.0	4.0	-0.1
Corn (million bushels)	12,484	--	11,955	-10	-529
Sorghum (million bushels)	127	--	120	--	-7
Barley (million bushels)	157	--	170	5	13
Oats (million bushels)	124	--	141	-5	17
Soybeans (million bushels)	2,306	--	2,340	**	34
Soybean oil (million pounds)	24,825	--	26,050	--	1,225
Soybean meal (thousand s.t.)	38,970	--	39,400	--	430
Cotton (million bales)	2.55	--	2.10	--	-0.45
Sugar (thousand s.t., raw value)	12,578	--	12,705	--	127
<i>Milk (billion pounds, fat basis)</i>	219.0	--	222.8	1.2	3.8
<i>Meat (Billion pounds)</i>					
Beef	28.17	--	27.29	0.14	-0.87
Pork	21.96	--	22.03	-0.02	0.08
Broilers	38.42	--	39.11	-0.02	0.69
Turkey	4.88	--	5.27	-0.06	0.39
Total Meat	94.51	--	94.78	0.02	0.27

-- No change. ** Rounds to zero.

April 11, 2023



U.S. Export Summary

Item	2021/2022		2022/2023		
	Estimate	Change from March 8	Forecast	Change from March 8	Change from 2021/2022
<i>Crops and Products</i>					
Wheat (million bushels)	800	--	775	--	-25
Rice (million cwt)	82.2	--	61.0	2.0	-21.2
Corn (million bushels)	2,471	--	1,850	--	-621
Sorghum (million bushels)	294	--	90	--	-204
Soybeans (million bushels)	2,158	--	2,015	--	-143
Soybean oil (million pounds)	1,773	--	500	--	-1,273
Soybean meal (thousand s.t.)	13,524	--	13,700	--	176
Cotton (million bales)	14.62	--	12.20	0.20	-2.42
Meat (Million lbs)					
Beef	3,536	--	3,135	45	-401
Pork	6,338	--	6,380	30	42
Broilers	7,278	--	7,360	45	82
Turkey	408	--	370	10	-38
Mature Chickens	30	--	16	--	-14
Total Meat	17,595	--	17,267	130	-328

-- No change.

April 11, 2023



Price Summary

Item	2021/2022		2022/2023		
	Estimate	Change from March 8	Forecast	Change from March 8	Change from 2021/2022
<i>Crops and products</i>					
Wheat (\$/bu)	7.63	--	8.90	-0.10	1.27
Rice (\$/cwt)	16.10	--	19.40	--	3.30
Corn (\$/bu)	6.00	--	6.60	--	0.60
Soybeans (\$/bu)	13.30	--	14.30	--	1.00
Soybean oil (¢/lb)	72.98	--	64.00	-2.00	-8.98
Soybean meal (\$/s.t.)	440	--	465	--	25
Cotton (¢/lb)	91.40	--	82.00	-1.00	-9.40
<i>Livestock</i>					
Steers (\$/cwt)	144.40	--	164.73	2.97	20.33
Hogs (\$/cwt)	71.21	--	60.96	-4.79	-10.25
Broilers (¢/lb)	140.5	--	130.4	3.6	-10.2
Turkeys (¢/lb)	154.5	--	171.5	9.5	16.9
<i>Dairy products</i>					
Cheese (\$/lb)	2.11	--	1.86	0.04	-0.25
Butter (\$/lb)	2.87	--	2.42	0.09	-0.45
Nonfat dry milk (\$/lb)	1.69	--	1.16	-0.07	-0.52
Dry whey (\$/lb)	0.60	--	0.43	0.04	-0.18
<i>Milk classes</i>					
Class III (\$/cwt)	21.94	--	18.25	0.70	-3.69
Class IV (\$/cwt)	24.47	--	18.10	-0.20	-6.37
All milk (\$/cwt)	25.56	--	20.65	0.20	-4.91

-- No change.