

## May 10, 2017 - USDA World Supply and Demand Estimates

### Corn

The U.S. feed-grain outlook for 2017/18 is for lower production, domestic use, exports and ending stocks. The corn crop is projected at 14.1 billion bushels, down from last year's record high with a lower forecast area and yield. The yield projection of 170.7 bushels per acre is based on a weather-adjusted trend assuming normal planting progress and summer weather, estimated using the 1988-2016 time period. The yield model includes a downward stochastic adjustment to account for the asymmetric response of yield to July precipitation. The smaller corn crop is partly offset by the largest projected beginning stocks since 1988/89, leaving total corn supplies down from a year ago but still the second highest on record.

Total U.S. corn use in 2017/18 is forecast to decline 2 percent from a year ago as a slight increase in domestic use is more than offset by lower exports. Food, seed, and industrial (FSI) use is projected to rise 80 million bushels to 7.0 billion due to increased use of corn to produce ethanol for fuel and expected growth in non-ethanol FSI. Corn used to produce ethanol is up 50 million bushels, reflecting expectations of gasoline consumption growth, reduced sorghum used to produce ethanol, higher expected blending and continued global ethanol import demand. Projected feed and residual use declines as a smaller crop and increased use of ethanol by-products more than offsets growth in grain consuming animal units. U.S. corn exports are down 350 million bushels, as a 1.0-billion-bushel year-over-year increase in the combined corn exports of Brazil and Argentina during 2016/17 (local marketing years beginning in March 2017 and ending February 2018) is expected to cut into the 2017/18 U.S. shipping season. With total supply falling faster than use, 2017/18 U.S. ending stocks of corn are down 185 million bushels. The season-average farm price is projected at \$3.00 to \$3.80 per bushel, unchanged at the midpoint from 2016/17.

The global coarse grain outlook for 2017/18 is for lower production, increased use and sharply reduced ending stocks. Corn production is forecast down from a year ago, with the largest declines in China and the United States. Partly offsetting are larger crops projected for the EU and Canada. Global corn use is up 354 million bushels (1 percent), while global corn imports are projected to increase 276 million bushels. Notable increases in corn imports include Vietnam, Egypt, the EU, Saudi Arabia, Mexico and Iran. Global corn ending stocks are down from last year's record high and if realized would be the lowest since 2013/14. The drop largely reflects forecast declines for China and the United States.

For China, total corn supply is down 551 million bushels in 2017/18, based on projected declines in beginning stocks and production. Area is reduced based on planting intentions published by the National Bureau of Statistics. On the demand side, feed and residual use is expected to increase based on continued relatively low internal market prices, efforts by the government to

promote use of domestic supplies and reduced imports of corn substitutes. Projected FSI use is higher based on expectations of growth in domestic use and exports of corn-based industrial products.

### Market Reaction:

July 2017 corn futures closed up 7 ¼ cents at \$3.73 ¾ with a trading range for the day of \$3.66 to \$3.74. December 2017 corn futures closed up 6 ½ cents at \$3.91 ½ with a trading range for the day of \$3.84 to \$3.91. A projected billion bushel decrease in domestic production for 2017/18 and a 1.127 billion bushel decrease in global stocks would be positive for long term price prospects. Current and projected U.S. ending stocks of over 2 billion will likely continue to provide headwinds for short term price increases.

	2013/14	2014/15	2015/16	2016/17 Projected April	2016/17 Projected May	2017/18 Projected May	2016/17 Change From Previous Month	Change 2016/17 to 2017/18
<b>Planted and Harvested Acres &amp; Yield</b>								
Acres Planted (Million Acres)	95.4	90.6	88	94	94	90	0.0	-4.0
Acres Harvested (Million Acres)	87.5	83.1	80.8	86.7	86.7	82.4	0.0	-4.3
U.S. Average Yield (Bu/Acre)	158.1	171.0	168.4	174.6	174.6	170.7	0.0	-3.9
<b>Supply (Million Bushels)</b>								
Beg. Stocks	821	1,232	1,731	1,737	1,737	2,295	0	558
Production	13,829	14,216	13,602	15,148	15,148	14,065	0	-1,083
Imports	36	32	67	55	55	50	0	-5
Total Supply	14,686	15,479	15,401	16,940	16,940	16,410	0	-530
<b>Use &amp; Ending Stocks (Million Bushels)</b>								
Feed and Residual	5,040	5,280	5,120	5,500	5,500	5,425	0	-75
Ethanol	5,124	5,200	5,224	5,450	5,450	5,500	0	50
Food, Seed & Industrial	1,369	1,401	1,422	1,445	1,470	1,500	25	30
Exports	1,920	1,867	1,898	2,225	2,225	1,875	0	-350
Total Use	13,454	13,748	13,664	14,620	14,645	14,300	25	-345
U.S. Ending Stocks	1,232	1,731	1,737	2,320	2,295	2,110	-25	-185
Foreign Stocks	5,653	6,529	6,624	6,458	6,519	5,577	61	-942
<b>Price and Stocks to Use Ratio</b>								
U.S. Avg. Season Price (\$/Bu)	\$4.46	\$3.70	\$3.61	\$3.25-\$3.55	\$3.25-\$3.55	\$3.00-\$3.80	\$0.00	\$0.00
U.S. Stocks/Use	9.16%	12.59%	12.71%	15.87%	15.67%	14.76%	-0.2%	-0.92%

Source: USDA-WASDE May 10, 2017

**World Corn Supply and Use (Million Bushels) 2017/18 (May)**

<b>Country / Region</b>	<b>Beginning Stocks</b>	<b>Production</b>	<b>Imports</b>	<b>Domestic Feed</b>	<b>Domestic Total</b>	<b>Exports</b>	<b>Ending Stocks</b>
World	8,814	40,693	5,700	25,623	41,821	5,980	7,687
US	2,295	14,065	50	5,425	12,425	1,875	2,110
Foreign	6,519	26,629	5,650	20,198	29,396	4,106	5,577
Argentina	113	1,575	0	295	445	1,122	120
Brazil	365	3,740	12	2,047	2,401	1,339	377
South Africa	109	492	4	228	461	67	77
Egypt	83	236	394	528	626	0	87
EU	236	2,500	551	2,209	2,953	98	236
Japan	49	0	591	453	594	0	45
Mexico	252	984	610	894	1,602	28	217
Southeast Asia	127	1,166	594	1,443	1,750	28	109
South Korea	75	3	402	315	405	0	74
Canada	95	598	31	335	555	59	111
China	3,988	8,464	118	6,535	9,370	1	3,200
Ukraine	49	1,102	1	276	331	787	34
ROW	979	5,767	2,342	4,642	7,903	576	890

**World Corn Supply and Use (Million Bushels) May 2017/18 - May 2016/17**

<b>Country / Region</b>	<b>Beginning Stocks</b>	<b>Production</b>	<b>Imports</b>	<b>Domestic Feed</b>	<b>Domestic Total</b>	<b>Exports</b>	<b>Ending Stocks</b>
World	454	-1,238	270	666	343	-263	-1,127
US	558	-1,083	-5	-75	5	-350	-185
Foreign	-104	-155	275	741	338	88	-942
Argentina	71	-	-	20	24	39	8
Brazil	98	-39	-8	39	39	-	12
South Africa	67	-110	-	-	-	-12	-31
Egypt	-4	-	39	28	31	-	4
EU	-27	110	35	87	98	20	-
Japan	-4	-	-	-	-	-	-4
Mexico	47	-79	28	28	35	-4	-35
Southeast Asia	-41	9	59	57	57	-12	-18
South Korea	-1	-	16	16	16	-	-1
Canada	7	79	-8	39	46	16	16
China	-372	-179	-	157	236	-	-788
Ukraine	26	-	-1	-	-	39	-15
ROW	30	54	114	271	-246	1	-89

Source: USDA-WASDE May 10, 2017

## **Cotton**

A projected 2017/18 U.S. cotton crop of 19.2 million bales is expected to sharply increase next season's ending stocks. Production is anticipated to rise 12 percent from 2016/17, based on 12.2 million planted acres as indicated in Prospective Plantings, combined with below-average abandonment (due to relatively favorable moisture and average yields). Domestic mill use is projected higher at 3.4 million bales, while exports are expected to fall to 14.0 million, as competitors' supplies grow. Ending stocks are projected at 5.0 million bales, or 29 percent of total use. The preliminary range for the marketing year average price received by producers is 54.0 to 74.0 cents per pound.

For 2016/17, U.S. cotton production is reduced marginally from last month. The export forecast is increased to 14.5 million bales, reflecting higher-than-anticipated export sales to date, with ending stocks lowered accordingly.

The world 2017/18 cotton projections show a decline in stocks of 2.4 million bales, as consumption exceeds production for the third consecutive season. Global production is expected to rise nearly 7 percent, despite marginally lower average yields, as area rebounds to its highest level in 3 years. Production is forecast to rise in all major producing countries, led by the United States (2.0 million bales higher) and India (1.5 million bales higher). Global consumption is projected to rise 2.3 percent, as a growing world economy drives mill use higher around the world. Projected world trade is raised slightly from 2016/17, as import-oriented consumers such as Vietnam and Bangladesh are accounting for a larger share of world consumption. Ending stocks are projected at 87.1 million bales, 75 percent of world consumption. Falling China stocks exceed the projected global decline while stocks outside of China rise for the second consecutive year. Despite the projected decrease, China stocks are still equivalent to more than 100 percent of China's total disappearance.

For 2016/17, world production is reduced marginally from last month, while consumption is raised slightly. Ending stocks lowered 1.4 million bales. Consumption and imports are slightly higher in China, and ending stocks are lower in India, the United States, and China.

## **Market Reaction:**

July 2017 cotton futures closed down 0.94 cents at 76.49 with a trading range for the day of 76.36 to 77.57 cents. December 2017 cotton futures closed down 0.71 cents at 72.33 with a trading range for the day of 72.26 to 73.12 cents. Increased U.S. acreage and geopolitical uncertainty are the two largest headwinds for improved cotton prices. Continued reductions in Chinese and global stocks will continue to support price prospects. Long term demand prospects will need to improve to ensure price stability in cotton.

	2013/14	2014/15	2015/16	2016/17 Projected April	2016/17 Projected May	2017/18 Projected May	2016/17 Change From Previous Month	Change 2016/17 to 2017/18
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**Planted and Harvested Acres & Yield**

Acres Planted (Million Acres)	10.41	11.04	8.58	10.07	10.07	12.23	0	2.16
Acres Harvested (Million Acres)	7.54	9.35	8.07	9.52	9.51	11.38	-0.01	1.87
U.S. Average Yield (lbs/acre)	821	838	766	869	867	810	-2	-57

**Supply (Million Bales)**

Beg. Stocks	3.8	2.35	3.65	3.8	3.8	3.2	0	-0.6
Production	12.91	16.32	12.89	17.23	17.17	19.2	-0.06	2.03
Imports	0.01	0.01	0.03	0.01	0.01	0.01	0	0
Total Supply	16.72	18.68	16.57	21.04	20.98	22.41	-0.06	1.43

**Use & Ending Stocks (Million Bales)**

Domestic	3.55	3.58	3.45	3.3	3.3	3.4	0	0.1
Exports	10.53	11.25	9.15	13.2	14.5	14	1.3	-0.5
Total Use	14.08	14.82	12.6	16.5	17.8	17.4	1.3	-0.4
U.S. Ending Stocks	2.35	3.65	3.8	4.5	3.2	5	-1.3	1.8
Foreign Stocks	100.63	108.09	93.34	85.98	86.32	82.14	0.34	-4.18
Chinese Stocks	62.71	66.92	58.2	48.9	48.7	39.65	-0.2	-9.05

**Price and Stocks to Use Ratio**

U.S. Avg. Season Price (\$/lb)	\$0.779	\$0.613	\$0.612	\$0.67- \$0.70	\$0.69	\$0.54- \$0.74	\$0.005	-\$0.050
U.S. Stocks/Use	17%	25%	30%	27%	18%	29%	-9.30%	10.76%
Chinese Stocks/Use	182%	197%	166%	135%	132%	106%	-3.27%	-25.89%

Source: USDA-WASDE May 10, 2017

**World Cotton Supply and Use (Million 480 lb Bales) 2017/18 (May)**

Country / Region	Beginning Stocks	Production	Imports	Domestic Use	Exports	Loss	Ending Stocks
World	89.52	113.22	37.63	115.75	37.63	-0.15	87.14
US	3.2	19.2	0.01	3.4	14	0.01	5
Foreign	86.32	94.02	37.62	112.35	23.63	-0.16	82.14
Central Asia	2.4	6.19	0	2.65	3.1	0	2.85
Afr. Fr. Zone	1.56	5.16	0	0.12	4.62	0	1.98
Australia	2.65	4.8	0	0.04	4.3	-0.15	3.26
Brazil	7.33	7	0.1	3.3	3.2	-0.15	8.08
India	11.99	28	1.75	24	4.5	0	13.24
Mexico	0.47	1.1	0.98	1.8	0.13	0.03	0.6
China	48.7	23.5	5	37.5	0.05	0	39.65
EU	0.24	1.38	0.72	0.74	1.26	0.03	0.31
Turkey	1.36	3.7	3.4	6.55	0.28	0	1.63
Pakistan	2.49	8.5	2.6	10.4	0.35	0.03	2.82
Indonesia	0.63	0	3.2	3.2	0.01	0	0.63
Thailand	0.2	0	1.36	1.33	0	0.03	0.21
Bangladesh	1.41	0.13	7	6.9	0	0.01	1.62
Vietnam	0.88	0	6.2	5.9	0	0	1.19
ROW	4.01	4.56	5.31	7.92	1.83	0.01	4.07

**World Cotton Supply and Use (Million 480 lb Bales) May 2017/18 - May 2016/17**

Country / Region	Beginning Stocks	Production	Imports	Domestic Use	Exports	Loss	Ending Stocks
World	-7.62	7.34	1.14	2.55	0.67	0.02	-2.38
US	-0.6	2.03	-	0.1	-0.5	0.03	1.8
Foreign	-7.02	5.31	1.14	2.45	1.17	-0.01	-4.18
Central Asia	0.31	0.37	-	0.11	0.13	-	0.45
Afr. Fr. Zone	0.12	0.24	-	-	-0.05	-0.01	0.42
Australia	0.72	0.4	-	-	0.5	-	0.61
Brazil	1.07	0.2	-0.13	0.1	0.3	-	0.75
India	1.05	1.5	-0.75	0.25	0.3	-	1.25
Mexico	-0.1	0.37	-0.05	0.07	0.03	-	0.13
China	-9.5	0.75	0.2	0.5	0	-	-9.05
EU	-0.01	0.07	-	-	-0.02	-	0.07
Turkey	-0.22	0.5	0.25	0.25	0	-	0.27
Pakistan	-0.13	0.8	-0.1	0.1	0.15	-	0.33
Indonesia	0.1	-0.01	-	0.1	-	-	-
Thailand	-	-	0.06	0.05	-	-	0.01
Bangladesh	-0.13	-	0.75	0.4	-	-	0.21
Vietnam	0.1	-	0.8	0.6	-	-	0.31
ROW	-0.4	0.12	0.11	-0.08	-0.17	0	0.06

Source: USDA-WASDE May 10, 2017

## **Soybeans**

The 2017/18 outlook for U.S. soybeans is for higher supplies, crush, exports, and ending stocks. The soybean crop is projected at 4,255 million bushels, down 52 million from last year's record crop with a forecast lower trend yield more than offsetting higher harvested area. With sharply higher beginning stocks, soybean supplies are projected at 4,715 million bushels, up 4 percent from 2016/17.

The U.S. soybean crush for 2017/18 is projected at 1,950 million bushels, up 25 million from the revised 2016/17 forecast. Domestic soybean meal disappearance is forecast to increase with expected gains in U.S. meat production. U.S. soybean meal exports are forecast at 12.4 million short tons, leaving the U.S. share of global trade slightly lower than in 2016/17. With increased supplies and lower projected prices, U.S. soybean exports are forecast at 2,150 million bushels, up 100 million from the revised 2016/17 projection. Despite sharply higher beginning stocks in South America this fall, a smaller projected harvest in early 2018 leaves 2017/18 total supplies almost unchanged from 2016/17, limiting projected gains for South American soybean exports. With forecast global soybean import growth of 5 percent, the U.S. soybean export share is projected at 39 percent, up slightly from 2016/17 and near the 5-year average. U.S. ending stocks for 2017/18 are projected at 480 million bushels, up 45 million from the revised 2016/17 forecast. The 2017/18 U.S. season-average soybean price range is forecast at \$8.30 to \$10.30 per bushel compared with \$9.55 per bushel in 2016/17. Soybean meal prices are forecast at \$295 to \$335 per short ton, compared with \$320 per ton for 2016/17. Soybean oil prices are forecast at 30.0 to 34.0 cents per pound compared with 31.75 cents for 2016/17.

The 2017/18 global oilseed supply and demand forecasts include higher production, crush, and exports compared to last year. Global oilseed production is projected up from 2016/17. Soybean production is projected down 125 million bushels to 12.666 billion mainly on declines from last year's records for the United States, Brazil, and Paraguay as yields return to trend levels. Conversely, soybean production is forecast up for Canada, China, Bolivia, and Ukraine.

Global oilseed crush is forecast to increase in 2017/18 driven by higher demand for protein meals and oils. Global protein meal consumption is projected to expand 4 percent in 2017/18. China's soybean meal equivalent consumption is expected to grow at 5 percent, similar to last year but below the prior 5-year average. Global vegetable oil consumption is projected up, led by increases for India and China. Soy oil production gains are expected for China and palm oil production gains for Indonesia and Malaysia.

Global soybean exports are projected at 5.497 billion bushels, up 184 million from 2016/17. Imports are expected to grow for China, Egypt, Vietnam, and the EU. Lower global production has led to a 48-million-bushel decrease in soybean stocks, particularly in Brazil and Argentina

where stocks are expected to decline by 96 million bushels combined. Partially offsetting are higher stocks in the United States and Canada.

### Futures Market Reaction:

July 2017 soybean futures were down 3 ¾ cents to \$9.70 ½ with a trading range for the day of \$9.66 ¾ to \$9.89. November 2017 soybean futures closed down ¾ cent at \$9.66 ¾ with a trading range for the day of \$9.63 to \$9.80. Demand for soybeans and soybean products is projected to remain strong however the key for the projected marketing year may be whether production in the U.S. and Brazil decreases from this year's estimates.

	2013/14	2014/15	2015/16	2016/17 Projected April	2016/17 Projected May	2017/18 Projected May	2016/17 Change From Previous Month	Change 2016/17 to 2017/18
<b>Planted and Harvested Acres &amp; Yield</b>								
Acres Planted (Million Acres)	76.8	83.3	82.7	83.4	83.4	89.5	0.0	6.1
Acres Harvested (Million Acres)	76.3	82.6	81.7	82.7	82.7	88.6	0.0	5.9
U.S. Average Yield (Bu/Acre)	44.0	47.5	48	52.1	52.1	48	0.0	-4.1
<b>Supply (Million Bushels)</b>								
Beg. Stocks	141	92	191	197	197	435	0	238
Production	3,358	3,927	3,926	4,307	4,307	4,255	0	-52
Imports	72	33	24	25	25	25	0	0
Total Supply	3,570	4,052	4,140	4,528	4,528	4,715	0	187
<b>Use &amp; Ending Stocks (Million Bushels)</b>								
Crushing	1,734	1,873	1,886	1,940	1,925	1,950	-15	25
Exports	1,638	1,842	1,936	2,025	2,050	2,150	25	100
Seed and Residual	107	146	122	118	118	135	0	17
Total Use	3,478	3,862	3,944	4,093	4,093	4,235	0	142
U.S. Ending Stocks	92	191	197	445	435	480	-10	45
Foreign Stocks	2,211	2,658	2,635	2,766	2,877	2,783	111	-94
<b>Price and Stocks to Use Ratio</b>								
U.S. Average Season Price (\$/Bu)	\$13.00	\$10.10	\$8.95	\$9.40- \$9.70	\$9.55	\$8.30- \$10.30	-\$0.05	-\$0.25
U.S. Stocks/Use	2.65%	4.95%	4.99%	10.87%	10.63%	11.33%	5.63%	0.71%

Source: USDA-WASDE May 10, 2017



**World Soybean Supply and Use (Million Bushels) 2017/18 (May)**

Country / Region	Beginning Stocks	Production	Imports	Domestic Crush	Domestic Total	Exports	Ending Stocks
World	3,312	12,665	5,429	11,079	12,648	5,495	3,263
US	435	4,255	25	1,950	2,085	2,150	481
Foreign	2,877	8,410	5,404	9,129	10,563	3,346	2,783
Argentina	1,163	2,094	44	1,672	1,837	331	1,134
Brazil	852	3,932	15	1,543	1,679	2,333	786
Paraguay	12	345	0	145	147	202	9
China	645	507	3,417	3,362	3,924	6	640
EU	37	90	551	573	633	7	38
Japan	9	10	121	86	129	0	11
Mexico	4	15	158	173	175	0	3
ROW	153	1,416	1,098	1,574	2,037	467	162

**World Soybean Supply and Use (Million Bushels) May 2017/18 - May 2016/17**

Country / Region	Beginning Stocks	Production	Imports	Domestic Crush	Domestic Total	Exports	Ending Stocks
World	480	-123	252	399	475	182	-49
US	239	-52	-	25	42	100	45
Foreign	241	-72	252	374	433	83	-94
Argentina	-2	-	-	26	28	-	-29
Brazil	189	-169	-4	18	24	59	-66
Paraguay	3	-33	-	2	2	-29	-4
China	24	33	147	184	209	-	-6
EU	-	1	15	15	15	-	-
Japan	-1	1	4	2	2	-	2
Mexico	1	-3	4	3	3	-	-1
ROW	28	99	87	125	150	53	10

Source: USDA-WASDE May 10, 2017

## **Wheat**

U.S. wheat supplies for 2017/18 are projected down 9 percent from 2016/17 on lower production, which is partially offset by higher beginning stocks. All wheat production for 2017/18 is projected at 1,820 million bushels, down nearly 500 million bushels from the prior year. The year-to-year decline is due to a sharp reduction in planted area and projected lower yields. The all wheat yield is projected at 47.2 bushels per acre, down 10 percent from last year's record. The first survey-based forecast for 2017/18 winter wheat production is down sharply with the lowest harvested area in more than a century and lower yields. Winter wheat benefited from diminishing drought conditions in the Plains and Midwest. However, a late April snow storm affected large portions of the Hard Red Winter wheat belt, especially western Kansas. Combined spring wheat and Durum production for 2017/18 is projected to decline 10 percent on lower area and a return to trend yields.

Total use for 2017/18 is projected down 2 percent on lower exports and feed and residual use. Exports are projected at 1.0 billion bushels, down 35 million from the previous year's revised level but above the five-year average. The EU is expected to regain export market share following last year's small crop and quality problems. U.S. feed and residual use is projected down 20 million bushels on lower supplies. U.S. ending stocks are projected to decline 245 million bushels to 914 million, the lowest in three years. The season-average farm price is projected at \$3.85 to \$4.65 per bushel. The mid-point of this range is up \$0.35 from the previous year's low level.

Global wheat supplies are projected to decline fractionally as higher beginning stocks are more than offset by a production decline following last year's record. Total wheat production is projected at 27.11 billion, the second highest total on record. Global wheat consumption is projected down slightly from last year's record with reduced feed and residual usage partially offset by increased food use. Global imports are expected to be a record for the fifth consecutive year. Global ending stocks are projected at a record 9.491 million bushels, up 107 million from 2016/17.

### **Futures Market Reaction:**

July 2017 wheat futures closed up 2 ¼ cents at \$4.31 ¾ with a trading range for the day of \$4.26 to \$4.35 ¾. September 2017 wheat futures closed up 2 ¼ cents at \$4.46 ¾ with a trading range for the day of \$4.41 to \$4.50 ¼. Domestic supplies of wheat are projected to contract, however foreign stock growth is projected to exceed domestic contraction.

	2013/14	2014/15	2015/16	2016/17 Est. April	2016/17 Est. May	2017/18 Projected May	2016/17 Change From Previous Month	Change 2016/17 to 2017/18
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**Planted and Harvested Acres & Yield**

Acres Planted (Million Acres)	56.2	56.8	55	50.2	50.2	46.1	0	-4.1
Acres Harvested (Million Acres)	45.3	46.4	47.3	43.9	43.9	38.5	0	-5.4
U.S. Average Yield (Bu/Acre)	47.1	43.7	43.6	52.6	52.6	47.2	0	-5.4

**Supply (Million Bushels)**

Beg. Stocks	718	590	752	976	976	1,159	0	183
Production	2,135	2,026	2,062	2,310	2,310	1,820	0	-490
Imports	173	151	113	115	115	125	0	10
Total Supply	3,026	2,768	2,927	3,400	3,400	3,105	0	-295

**Use & Ending Stocks (Million Bushels)**

Food	955	958	957	960	955	955	-5	0
Seed	77	79	67	61	61	66	0	5
Feed	228	114	152	225	190	170	-35	-20
Exports	1,176	864	775	1,025	1,035	1,000	10	-35
Total Use	2,436	2,015	1,952	2,271	2,241	2,191	-30	-50
U.S. Ending Stocks	590	752	976	1,129	1,159	914	30	-245
Foreign Stocks	6,524	7,243	7,932	8,055	8,223	8,577	168	354

**Price and Stocks to Use Ratio**

U.S. Avg. Season Price (\$/Bu)	\$6.87	\$5.99	\$4.89	\$3.80- \$3.90	\$3.90	\$3.85- \$4.65	\$0.05	\$0.35
U.S. Stocks/Use	24.22%	37.32%	50.26%	50.15%	51.72%	41.72%	1.46%	-10.00%

Source: USDA-WASDE May 10, 2017

**World Wheat Supply and Use (Million Bushels) 2017/18 (May)**

<b>Country / Region</b>	<b>Beginning Stocks</b>	<b>Production</b>	<b>Imports</b>	<b>Domestic Feed</b>	<b>Domestic Total</b>	<b>Exports</b>	<b>Ending Stocks</b>
World	9,383	27,111	6,560	5,090	27,003	6,553	9,491
US	1,159	1,820	125	170	1,191	1,000	913
Foreign	8,223	25,290	6,435	4,920	25,812	5,553	8,577
Argentina	19	625	0	4	220	404	19
Australia	324	919	6	165	294	698	256
Canada	263	1,042	17	129	323	808	190
EU	405	5,548	239	2,039	4,676	1,139	378
Brazil	75	206	254	18	426	37	71
China	4,071	4,813	110	478	4,262	29	4,703
Sel. Mideast	456	716	707	181	1,469	20	390
N. Africa	498	654	1,042	80	1,664	25	505
Pakistan	156	963	1	33	933	22	165
Southeast Asia	173	0	909	261	858	38	187
India	354	3,564	147	184	3,674	18	373
Russia	391	2,462	18	606	1,451	1,066	354
Kazakhstan	137	478	2	77	254	257	106
Ukraine	76	919	1	143	389	533	74
ROW	824	2,383	2,982	522	4,917	458	807

**World Wheat Supply and Use (Million Bushels) May 2017/18 - May 2016/17**

<b>Country / Region</b>	<b>Beginning Stocks</b>	<b>Production</b>	<b>Imports</b>	<b>Domestic Feed</b>	<b>Domestic Total</b>	<b>Exports</b>	<b>Ending Stocks</b>
World	475	-561	113	-330	-194	-51	108
US	184	-489	10	-20	-15	-35	-246
Foreign	291	-71	103	-310	-179	-17	354
Argentina	-4	37	-	-	4	29	-
Australia	117	-367	-	-	1	-184	-68
Canada	73	-123	-1	-55	-51	73	-73
EU	-166	203	37	-37	-46	147	-28
Brazil	38	-42	4	-11	-4	7	-4
China	505	79	-44	-129	-92	-	632
Sel. Mideast	-65	-28	55	-1	28	-	-66
N. Africa	-112	137	4	-4	20	1	7
Pakistan	15	22	-	4	33	-4	8
Southeast Asia	-14	-	-2	-62	-30	-	14
India	-180	367	-73	11	92	4	18
Russia	185	-203	-	-18	-18	37	-37
Kazakhstan	43	-73	-1	-	-	-	-31
Ukraine	-47	-66	-	-4	-7	-103	-3
ROW	-97	-14	127	-4	-108	-25	-17

Source: USDA-WASDE May 10, 2017

## 2017 Estimated Returns – Non-Irrigated

The profitability outlook has been updated after the release of the May 10, USDA WASDE report. Yields used for non-irrigated estimates are a 5 year Tennessee state average year plugging in the 2016 state average projection of 151 bushels per acre for corn, 45 bushels per acre for soybeans, and 1104 pounds per acre cotton. A wheat yield of 73 bushels per acre is currently projected as the Tennessee 2017 state average is in used in this profitability update. Costs are based on the 2017 UT Extension Row Crop budgets with adjustments made based on current input prices. Prices used for 2017 are incorporating forward 2017 harvest prices. Milo prices are an estimate as very few quotes are available. Prices have varied since the April 11 WASDE Report with Corn even, Soybeans up 30 cents, Wheat down 17 cents and Cotton down 1 cent. Soybeans and Corn still are showing a profitable Net Return as is wheat and double crop soybeans. It depends on a producer's situation on what is showing to be the most profitable crop. Producers with cash rent or owned ground will want to look at Returns Over Variable Expenses as their land cost will be fixed and if their machinery cost are truly fixed and no equipment changes will be made. Producers with share rent will want to plug in their appropriate share rent if their equipment cost are fixed. Producers who may be making some equipment changes may want to look at Net Returns. This may be an opportunity to review marketing plans and decide whether to lock in a percentage of forward harvest prices. Visit with your supplier on input cost expectations. Please contact your local County Extension office or Area Specialist – Farm Management for assistance in developing your own budget or farm financial plan. This table below should be used as a guide as yields, prices, and expenses will vary among producers and locations. Expenses will vary among producers and production systems. I would like to point out the cotton price of 71 cents that is being used in the profitability outlook. The price of 71 cents is made up of a cash price of 66 cents and gin rebates (seed & hauling) of 5 cents. The cash price of 66 cents is composed of a loan rate of 49.49 cents and a 16.5 cent equity from the buyer. Note - When prices are low, cotton is redeemed out of the marketing loan program at the Adjusted World Price (AWP). This is effect helps create the loan option or equity price that producers receive. Currently, this price is in 16 -17 cent range. Basically, this is a result of the way the cotton marketing loan program works. My observations and discussions with cotton buyers would indicate that when futures move above 70-73 cents, then the prices to the producers would start to move up penny for penny. Producers should look at these returns as what could be if no adjustments are made in their operation and consider it a warning sign that adjustments will need to be made in 2017 to be sustainable. These estimates do not consider any USDA or crop insurance payments from the new farm bill. Please contact your local County Extension office or Area Specialist – Farm Management for assistance in developing your own budget or farm financial plan. This table below should be used as a guide as yields, prices, and expenses will vary among producers and locations. Expenses will vary among producers and production systems. Cotton prices include revenue for cottonseed and hauling. For reference, in variable expenses below, fertilizer expense per acre is estimated as follows: Cotton - \$ 97, Soybeans - \$38, Corn - \$121 (includes 170 units of N), Milo - \$87, and Wheat/Soybeans - \$93. Cost of

production will continue to be adjusted as information becomes available. Weed control costs with resistant weeds have also been difficult to estimate. These costs will vary greatly among producers and individual fields. Production costs are estimates based on the 2017 University of Tennessee Crop Budgets with adjustments made where needed. Please visit with your farm supplier on estimated cost in your area. Producers with owned land and or cash rent can use Returns Over Variable as a guide in decision making. Producers with share rent ground should use Returns Over Variable and Land Costs as a guide with their appropriate share rent calculated. A land cost of 25% of revenue minus 25% of crop insurance cost is used in the table as a guide or method of comparison and should not be construed as the appropriate rent for a particular area. Producers who are not making major equipment changes can use UT budgets and this table as a guide in developing their own cropping decision budgets. If equipment changes are being made, then a whole farm financial plan would be better suited as a decision aid.

### 2017 Estimated Returns – Non-Irrigated

	<b>Cotton</b>	<b>Soybeans</b>	<b>Corn</b>	<b>Milo</b>	<b>Wheat/Soybeans</b>
Yield	<b>962 lbs.</b>	<b>44 bu.</b>	<b>144 bu.</b>	<b>90 bu.</b>	<b>73 bu./32 bu.</b>
Price (as of 5/10/17)	\$0.71 lb.	\$9.70 bu.	\$3.74 bu.	\$3.44 bu.	\$4.46 bu./\$9.70 bu.
Revenue	\$683	\$427	\$539	\$310	\$636
Variable Expenses	\$403	\$216	\$308	\$229	\$374
<b>Returns Over Variable</b>	<b>\$280</b>	<b>\$210</b>	<b>\$230</b>	<b>\$81</b>	<b>\$262</b>
Land Costs (25% of Revenue-25% crop insurance)	\$168	\$105	\$131	\$75	\$155
<b>Returns Over Variable and Land Costs</b>	<b>\$112</b>	<b>\$106</b>	<b>\$99</b>	<b>\$6</b>	<b>\$106</b>
Fixed Costs Depreciation & interest on machinery	\$130	\$62	\$56	\$62	\$99
<b>Returns Over Specified Costs</b>	<b>-\$19</b>	<b>\$43</b>	<b>\$43</b>	<b>-\$56</b>	<b>\$8</b>
Breakeven Price at Average Yield and Specified Cost	\$0.73	\$ 8.71	\$3.44	\$4.06	\$4.77/8.80

## **2017 Estimated Returns – Irrigation**

Considering irrigation, profitability is positive for soybeans considering variable, land and fixed cost. Returns Over Variable and Land Costs are positive for cotton, corn, and wheat-soybeans. Producers should look at these returns as what could be if no adjustments are made in their operation and consider that adjustments may need to be made in 2017 to be sustainable. The table below is an estimate of returns for crops under irrigation. Since irrigated yields are not as of yet kept separate in Tennessee, yields below are an estimate of irrigated yields. Irrigation fixed costs and energy costs will vary greatly among producers and systems. These projections include in variable expenses energy costs for irrigation of \$28 per acre for corn, \$24 per acre for cotton, and \$18 per acre for soybeans and \$15 per acre of irrigation repairs and maintenance. Fixed costs of \$85 per acre for irrigation equipment are used. Please contact your local County Extension office or Area Specialist – Farm Management for assistance in developing your own budget or farm financial plan. This table below should be used as a guide as yields, prices, and expenses will vary among producers and locations. Expenses will vary among producers and production systems. For reference, in variable expenses below, fertilizer expense per acre is estimated as follows: Cotton - \$101, Soybeans - \$37, Corn - \$159 (includes 240 units of N), Milo - \$103, and Wheat/Soybeans - \$93. Cost of production will continue to be adjusted as information becomes available. Hopefully, we will see costs reduced or possibly suitable generic products available. Weed control costs with resistant weeds have also been difficult to estimate. These costs will vary greatly among producers and individual fields. Production costs are estimates based on the 2017 University of Tennessee Crop Budgets with adjustments made where needed. Please visit with your farm supplier on estimated cost in your area. Producers with owned land and or cash rent can use Returns Over Variable and Fixed IR Costs as a guide in decision making. Producers with share rent ground should use Returns Over Variable, Fixed IR Costs and Land Costs as a guide with their appropriate share rent calculated. A land cost of 25% of revenue minus 25% of crop insurance cost minus 25% of the irrigation equipment fixed cost is used in the table as a guide or method of comparison and should not be construed as the appropriate rent for a particular area. A management cost of \$30 per acre is included in Fixed Costs – management labor, depreciation & interest on machinery. This is an additional \$15 above the dryland crop management labor. Producers who are not making major equipment changes can use UT budgets and this table as a guide in developing their own cropping decision budgets. If equipment changes are being made, then a whole farm financial plan would be better suited as a decision aid.

### 2017 Estimated Returns – Irrigation

	<b>Cotton</b>	<b>Soybeans</b>	<b>Corn</b>	<b>Milo</b>	<b>Wheat/Soybeans</b>
Yield	<b>1100 lbs.</b>	<b>60 bu.</b>	<b>190 bu.</b>	<b>130 bu.</b>	<b>73 bu./45 bu.</b>
Price (as of 5/10/17)	\$0.71 lb.	\$9.70 bu.	\$3.74 bu.	\$3.44 bu.	\$4.46 bu./\$9.70 bu.
Revenue	\$781	\$582	\$711	\$447	\$762
Variable Expenses( include energy cost)	\$450	\$250	\$402	\$291	\$409
Fixed Irrigation Costs per Acre	<b>\$85</b>	<b>\$85</b>	<b>\$85</b>	<b>\$85</b>	<b>\$85</b>
Returns Over Variable & Fixed IR Costs	<b>\$246</b>	<b>\$247</b>	<b>\$223</b>	<b>\$71</b>	<b>\$268</b>
Land Costs (25% of Revenue-25% crop insurance-25% fixed irrigation costs)	\$172	\$122	\$153	\$88	\$166
Returns Over Variable, IR Fixed Cost and Land Costs	<b>\$74</b>	<b>\$125</b>	<b>\$70</b>	<b>-\$16</b>	<b>\$103</b>
Fixed Costs- management labor, depreciation & interest on machinery	\$145	\$77	\$71	\$77	\$114
Returns Over Specified Costs	-\$71	\$47	-\$1	-\$94	-\$11
Breakeven Price at Average Yield and Specified Cost	\$0.77	\$8.91	\$3.74	\$4.16	\$4.77/\$9.64