

## **April 11, 2017 - USDA World Supply and Demand Estimates**

### **Corn**

This month's 2016/17 U.S. corn outlook is for increased corn used to produce ethanol, reduced feed and residual use and unchanged ending stocks. Corn used to produce ethanol is raised 50 million bushels to 5,450 million based on the most recent data from the Grain Crushings and Co-Products Production report which estimated the amount of corn used to produce ethanol to be record high during December-February. The pace of weekly ethanol production during March as indicated by Energy Information Administration data has also been above expectations.

Offsetting is a 50 million bushel reduction in projected feed and residual use to 5,500 million bushels based on disappearance indicated during the first half of the marketing year in the March 31 Grain Stocks. With offsetting usage changes, ending stocks are unchanged from last month. The season-average corn price received by producers is unchanged at the midpoint with the range narrowed to \$3.25 to \$3.55 per bushel.

Global coarse grain production for 2016/17 is forecast higher from last month. This month's foreign coarse grain outlook is for increased production, consumption, trade, and stocks relative to last month. Brazil corn production is raised primarily on larger projected second crop area. The latest government data indicate a higher-than-expected expansion of area in both the Center-West and North. Argentina corn production is increased on the latest harvest results indicating better-than-expected yields. Other major corn production changes include increases for Mexico, Indonesia, Pakistan and South Africa, with reductions for Paraguay, Ecuador and Russia.

Major global trade changes for 2016/17 this month include higher projected corn exports for Brazil and Argentina, with increased competition from these countries expected to impact the 2017/18 marketing year in the United States. Corn imports are raised for Mexico, with mostly offsetting reductions for Indonesia, Venezuela, Philippines, and Colombia. Foreign corn ending stocks are raised from last month, with the biggest increases for Mexico, Brazil, Indonesia, and Argentina.

### **Market Reaction:**

May 2017 corn futures closed down ½ cent at \$3.66 ½ with a trading range for the day of \$3.62 ¼ to \$3.69. December 2017 corn futures closed down ½ cent at \$3.90 ½ with a trading range for the day of \$3.85 ½ to \$3.92. Initial market reaction to the report was bearish as futures prices immediately dropped about 5 cents; however by the end of the day prices worked their way back to almost even.

	2012/13	2013/14	2014/15	2015/16 Est.	2016/17 Projected March	2016/17 Projected April	Change 2015/16 to 2016/17	2016/17 Change From Previous Month
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**Planted and Harvested Acres & Yield**

Acres Planted (Million Acres)	97.3	95.4	90.6	88	94	94	6.0	0.0
Acres Harvested (Million Acres)	87.4	87.5	83.1	80.8	86.7	86.7	5.9	0.0
U.S. Average Yield (Bu/Acre)	123.1	158.1	171.0	168.4	174.6	174.6	6.2	0.0

**Supply (Million Bushels)**

Beg. Stocks	989	821	1,232	1,731	1,737	1,737	6	0
Production	10,755	13,829	14,216	13,602	15,148	15,148	1,546	0
Imports	160	36	32	67	55	55	-12	0
Total Supply	11,904	14,686	15,479	15,401	16,940	16,940	1,539	0

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

Feed and Residual	4,315	5,040	5,280	5,120	5,550	5,500	380	-50
Ethanol	4,641	5,124	5,200	5,224	5,400	5,450	226	50
Food, Seed & Industrial	1,397	1,369	1,401	1,422	1,445	1,445	23	0
Exports	730	1,920	1,867	1,898	2,225	2,225	327	0
Total Use	11,083	13,454	13,748	13,664	14,620	14,620	956	0
U.S. Ending Stocks	821	1,232	1,731	1,737	2,320	2,320	583	0
Foreign Stocks	4,619	5,653	6,529	6,602	6,368	6,458	-144	90

**Price and Stocks to Use Ratio**

U.S. Avg. Season Price (\$/Bu)	\$6.89	\$4.46	\$3.70	\$3.61	\$3.20- \$3.60	\$3.25- \$3.55	-\$0.21	\$0.00
U.S. Stocks/Use	7.41%	9.16%	12.59%	12.71%	15.87%	15.87%	3.2%	0.00%

Source: USDA-WASDE April 11, 2017

**World Corn Supply and Use (Million Bushels) 2016/17 (April)**

Country / Region	Beginning Stocks	Production	Imports	Domestic Feed	Domestic Total	Exports	Ending Stocks
World	8,339	41,484	5,395	24,828	41,045	6,079	8,778
US	1,737	15,148	55	5,500	12,395	2,225	2,320
Foreign	6,602	26,336	5,340	19,329	28,651	3,854	6,458
Argentina	41	1,516	0	276	421	1,024	113
Brazil	267	3,681	12	2,008	2,362	1,260	337
South Africa	38	591	4	228	461	79	93
Egypt	87	236	354	500	594	0	83
EU	262	2,374	516	2,181	2,874	79	199
Japan	53	0	591	453	594	0	49
Mexico	205	1,063	583	866	1,567	31	252
Southeast Asia	172	1,161	535	1,394	1,701	36	131
South Korea	76	3	386	299	390	0	75
Canada	88	520	39	295	508	39	100
China	4,361	8,643	118	6,338	9,094	1	4,028
Ukraine	23	1,102	2	276	331	736	61
ROW	929	5,447	2,200	4,215	7,754	568	938

**World Corn Supply and Use (Million Bushels) 2016/17 April-March**

Country / Region	Beginning Stocks	Production	Imports	Domestic Feed	Domestic Total	Exports	Ending Stocks
World	38	178	-6	17	125	59	91
US	-	-	-	-50	-	-	-
Foreign	38	178	-6	67	125	59	90
Argentina	-	39	-	8	8	20	12
Brazil	9	79	-	20	20	39	29
South Africa	-12	16	-	-	-	-	4
Egypt	-	-	-	-	-	-	-
EU	-	-	-	-	-	-	-
Japan	-	-	-	-	-	-	-
Mexico	-	39	39	39	47	-	31
Southeast Asia	-	46	-28	12	4	-	15
South Korea	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-
ROW	41	-42	-18	-12	46	0	-1

Source: USDA-WASDE April 11, 2017

## **Cotton**

The 2016/17 U.S. cotton supply and demand forecasts show higher exports and lower ending stocks relative to last month. Production and domestic mill use are unchanged. The export forecast is raised 800,000 bales to 14.0 million, based on strong export sales during March. This would be the fourth-largest volume ever for U.S. exports, accounting for nearly 40 percent of world trade. Ending stocks are now forecast at 3.7 million bales, equivalent to 21 percent of total disappearance. The marketing year price received by producers is projected to average between 67 and 69 cents per pound, a reduction of 1 cent at the upper end of the range.

The 2016/17 world cotton forecasts include higher production and ending stocks. Higher production estimates for China and Brazil are only partly offset by a slightly smaller crop in Australia. Lower expected exports for India, Australia, and Uzbekistan largely offset increases for the United States, Brazil, and Greece. World ending stocks are now projected at 90.9 million bales, about 400,000 bales higher than forecast a month earlier.

### **Market Reaction:**

May 2017 cotton futures closed down 0.14 cents at 75.01 with a trading range for the day of 74.41 to 75.8 cents. December 2017 cotton futures closed up 0.12 cents at 73.36 with a trading range for the day of 72.81 to 73.7 cents. Futures prices jumped up about 1 cent after the report was released; however prices retreated quickly back to the early morning trade range.

	2012/13	2013/14	2014/15	2015/16 Est.	2016/17 Projected March	2016/17 Projected April	Change 2015/16 to 2016/17	2016/17 Change From Previous Month
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**Planted and Harvested Acres & Yield**

Acres Planted (Million Acres)	12.26	10.41	11.04	8.58	10.07	10.07	1.49	0
Acres Harvested (Million Acres)	9.32	7.54	9.35	8.07	9.52	9.52	1.45	0
U.S. Average Yield (lbs/acre)	892	821	838	766	869	869	103	0

**Supply (Million Bales)**

Beg. Stocks	3.35	3.8	2.35	3.65	3.8	3.8	0.15	0
Production	17.31	12.91	16.32	12.89	17.23	17.23	4.34	0
Imports	0.01	0.01	0.01	0.03	0.01	0.01	-0.02	0
Total Supply	20.67	16.72	18.68	16.57	21.04	21.04	4.47	0

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

Domestic	3.5	3.55	3.58	3.45	3.3	3.3	-0.15	0
Exports	13.03	10.53	11.25	9.15	13.2	14	4.85	0.8
Total Use	16.53	14.08	14.82	12.6	16.5	17.3	4.7	0.8
U.S. Ending Stocks	3.8	2.35	3.65	3.8	4.5	3.7	-0.1	-0.8
Foreign Stocks	86.17	100.63	108.09	93.28	85.98	87.21	-6.07	1.23
Chinese Stocks	50.36	62.71	66.92	58.2	48.9	49.15	-9.05	0.25

**Price and Stocks to Use Ratio**

U.S. Avg. Season Price (\$/lb)	\$0.73	\$0.779	\$0.613	\$0.612	\$0.67- \$0.70	\$0.67- \$0.69	\$0.068	-\$0.005
U.S. Stocks/Use	23%	17%	25%	30%	27%	21%	-8.77%	-5.89%
Chinese Stocks/Use	140%	182%	197%	166%	135%	136%	-30.70%	0.69%

Source: USDA-WASDE April 11, 2017

**World Cotton Supply and Use (Million 480 lb Bales) 2016/17 (April)**

<b>Country / Region</b>	<b>Beginning Stocks</b>	<b>Production</b>	<b>Imports</b>	<b>Domestic Use</b>	<b>Exports</b>	<b>Loss</b>	<b>Ending Stocks</b>
World	97.08	106.3	36.1	112.59	36.1	-0.12	90.91
US	3.8	17.23	0.01	3.3	14	0.04	3.7
Foreign	93.28	89.07	36.09	109.29	22.1	-0.16	87.21
Central Asia	2.09	5.82	0	2.54	2.89	0	2.48
Afr. Fr. Zone	1.37	4.95	0	0.14	4.55	0	1.63
Australia	1.93	4.4	0	0.04	3.9	-0.15	2.55
Brazil	6.26	6.7	0.23	3.2	2.9	-0.15	7.23
India	10.94	27	2.3	23.75	4	0	12.49
Mexico	0.57	0.73	1.08	1.73	0.1	0.03	0.52
China	58.2	22.75	4.5	36.25	0.05	0	49.15
EU	0.25	1.28	0.75	0.77	1.28	0.03	0.21
Turkey	1.58	3.2	3.25	6.3	0.28	0	1.46
Pakistan	2.62	7.7	2.7	10.3	0.2	0.03	2.49
Indonesia	0.53	0.01	3.2	3.1	0.01	0	0.63
Thailand	0.2	0	1.3	1.28	0	0.03	0.2
Bangladesh	1.54	0.12	6.2	6.5	0	0.01	1.35
Vietnam	0.78	0	5.4	5.3	0	0	0.88
ROW	4.42	4.41	5.18	8.09	1.94	0.01	3.94

**World Cotton Supply and Use (Million 480 lb Bales) 2016/17 April-March**

<b>Country / Region</b>	<b>Beginning Stocks</b>	<b>Production</b>	<b>Imports</b>	<b>Domestic Use</b>	<b>Exports</b>	<b>Loss</b>	<b>Ending Stocks</b>
World	-0.01	0.58	0.14	0.16	0.15	-0.02	0.43
US	-	-	-	-	0.8	-	-0.8
Foreign	-0.01	0.58	0.14	0.16	-0.65	-0.02	1.23
Central Asia	-0.1	0.08	-	0.15	-0.2	-	0.02
Afr. Fr. Zone	-	0.04	-	-	0.03	-	0.02
Australia	-	-0.1	-	-	-0.2	-	0.1
Brazil	0.1	0.2	0.03	-	0.1	-	0.22
India	-	-	0.1	-	-0.5	-	0.6
Mexico	-	-	-	-	-	-	-
China	-	0.25	-	-	-	-	0.25
EU	-0.01	0.05	-0.03	-0.02	0.1	-0.02	-0.04
Turkey	-	-	-	-	-0.05	-	0.05
Pakistan	-	-	0.1	0.1	0.05	-	-0.05
Indonesia	-	-	0.1	0.05	-	-	0.05
Thailand	-0.02	-	0.1	0.1	-	-	-0.02
Bangladesh	-	-	-0.2	-0.2	-	-	-
Vietnam	-	-	-	-	-	-	-
ROW	0.02	0.06	-0.06	-0.02	0.02	0	0.03

Source: USDA-WASDE April 11, 2017

## **Soybeans**

U.S. soybean supply and use changes for 2016/17 include higher seed use, reduced residual disappearance, and higher ending stocks. Seed use is raised in line with the record plantings indicated in the March 31 Prospective Plantings report, and residual use is reduced based on indications from the March 31 Grain Stocks report. With exports and crush unchanged, soybean ending stocks are projected at 445 million bushels, up 10 million from last month. Soybean meal balance sheet changes include increased exports and lower domestic use. Soybean oil changes include reduced food, feed, and other industrial use, as well as, increased ending stocks.

Projected prices for soybeans and products are reduced this month. The season-average soybean price is lowered 5 cents at the midpoint to \$9.55 per bushel based on marketings to date and lower expected prices for the second half of the marketing year. Soybean oil prices are projected at 31 to 33 cents per pound, down 1.5 cents at the midpoint. Soybean meal prices are projected at \$310 to \$330 per short ton, down \$5.00 at the midpoint.

The 2016/17 global oilseed supply and demand forecasts show higher production, exports, crush, and ending stocks compared to last month. Global oilseed production is raised mainly on a combined 184-million-bushel increase in soybean production for Brazil, Paraguay, Uruguay, and Argentina. As a result, forecasted global soybean exports are increased 81 million bushels to 5.265 billion. Corresponding to higher exports, soybean imports are raised for China and the EU. Higher soybean production has also led to a 15-million-bushel increase in global forecasted crush and a 169-million-bushel increase in soybean stocks. Global soybean stocks are projected at a record 3.211 billion bushels, 378 million above a year earlier.

### **Futures Market Reaction:**

May 2017 soybean futures were down 2 ½ cents to \$9.39 ¼ with a trading range for the day of \$9.29 ¾ to \$9.45. November 2017 soybean futures closed down 1 ¼ cents at \$9.48 ½ with a trading range for the day of \$9.41 ½ to \$9.53. Soybeans started the morning lower due to anticipation of a bearish report; however after reaching a daily low, immediately following the report, prices climb back up to close down 1-3 cents.

	2012/13	2013/14	2014/15	2015/16 Est.	2016/17 Projected March	2016/17 Projected April	Change 2015/16 to 2016/17	2016/17 Change From Previous Month
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**Planted and Harvested Acres & Yield**

Acres Planted (Million Acres)	77.2	76.8	83.3	82.7	83.4	83.4	0.7	0.0
Acres Harvested (Million Acres)	76.1	76.3	82.6	81.7	82.7	82.7	1.0	0.0
U.S. Average Yield (Bu/Acre)	40.0	44.0	47.5	48	52.1	52.1	4.1	0.0

**Supply (Million Bushels)**

Beg. Stocks	169	141	92	191	197	197	6	0
Production	3,042	3,358	3,927	3,926	4,307	4,307	381	0
Imports	41	72	33	24	25	25	1	0
Total Supply	3,252	3,570	4,052	4,140	4,528	4,528	388	0

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

Crushing	1,689	1,734	1,873	1,886	1,940	1,940	54	0
Exports	1,317	1,638	1,842	1,936	2,025	2,025	89	0
Seed and Residual	105	107	146	122	128	118	-4	-10
Total Use	3,111	3,478	3,862	3,944	4,093	4,093	149	0
U.S. Ending Stocks	141	92	191	197	435	445	248	10
Foreign Stocks	1,948	2,211	2,658	2,637	2,608	2,766	129	158

**Price and Stocks to Use Ratio**

U.S. Average Season Price (\$/Bu)	\$14.40	\$13.00	\$10.10	\$8.95	\$9.30- \$9.90	\$9.40-\$9.70	\$0.60	-\$0.05
U.S. Stocks/Use	4.53%	2.65%	4.95%	4.99%	10.63%	10.87%	5.88%	0.24%

Source: USDA-WASDE April 11, 2017



**World Soybean Supply and Use (Million Bushels) 2016/17 (April)**

<b>Country / Region</b>	<b>Beginning Stocks</b>	<b>Production</b>	<b>Imports</b>	<b>Domestic Crush</b>	<b>Domestic Total</b>	<b>Exports</b>	<b>Ending Stocks</b>
World	2,834	12,712	5,146	10,727	12,214	5,265	3,212
US	197	4,307	25	1,940	2,058	2,025	445
Foreign	2,637	8,405	5,121	8,787	10,157	3,240	2,766
Argentina	1,174	2,058	44	1,664	1,828	331	1,117
Brazil	663	4,079	18	1,525	1,655	2,274	830
Paraguay	11	371	0	143	145	228	10
China	621	474	3,233	3,178	3,715	6	608
EU	36	88	536	562	622	7	30
Japan	10	9	118	85	127	0	9
Mexico	3	19	154	171	173	0	3
ROW	120	1,309	1,016	1,459	1,891	395	159

**World Soybean Supply and Use (Million Bushels) 2016/17 April-March**

<b>Country / Region</b>	<b>Beginning Stocks</b>	<b>Production</b>	<b>Imports</b>	<b>Domestic Crush</b>	<b>Domestic Total</b>	<b>Exports</b>	<b>Ending Stocks</b>
World	20	190	66	15	26	81	169
US	-	-	-	-	-10	-	10
Foreign	19	190	66	15	37	81	158
Argentina	-	18	7	-	-	-	26
Brazil	-	110	6	18	17	33	66
Paraguay	4	34	-	4	4	29	5
China	-	-	37	-	-	-	37
EU	-6	-	29	22	24	2	-2
Japan	-	-	4	4	4	-	-
Mexico	-	1	-	-	-	-	1
ROW	22	27	-17	-33	-11	17	26

Source: USDA-WASDE April 11, 2017

## **Wheat**

U.S. wheat ending stocks for 2016/17 are raised 30 million bushels on lower feed and residual use which more than offsets a slight import reduction. At 1,159 million bushels, ending stocks are projected to reach a near 30-year high. Feed and residual use is lowered 35 million bushels to 190 million which reflects lower-than-expected disappearance for the December-February and September-November quarters, as indicated by March 1 and revised December 1 stocks from the March 31 Grain Stocks report. The import change is based on the pace to date with reductions for soft red winter and durum.

Global 2016/17 wheat supplies are raised 62 million bushels due to higher projected beginning stocks and an 11-million-bushel increase in production. The change to beginning stocks stems from a 51-million-bushel reduction in 2015/16 domestic consumption, primarily in the EU. World exports are lowered 11 million bushels led by 18-million-bushel decreases each for Australia, Canada, Kazakhstan, and Russia. Partly offsetting are higher projected exports for the EU and Ukraine. Total global consumption for 2016/17 is lowered 22 million bushels to 27.22 billion with a 37-million-bushel decrease in the United States, more than offsetting a small net increase for foreign countries. With supplies rising and use declining, global ending stocks are raised 85 million bushels to 9.27 billion.

### **Futures Market Reaction:**

May 2017 wheat futures closed up 4 ½ cents at \$4.33 ¼ with a trading range for the day of \$4.23 ¾ to \$4.34 ¾. July 2017 wheat futures closed up 5 ¾ cents at \$4.47 ½ with a trading range for the day of \$4.36 ¾ to \$4.48 ½. Wheat futures opened flat, dropped 5 cents when the report was released, and then climbed 10 cents from the low to finish up 4-6 cents for the day. The futures market reaction was a little peculiar as the limited new information in the report was slightly bearish.

	2012/13	2013/14	2014/15	2015/16 Est.	2016/17 Projected March	2016/17 Projected April	Change 2015/16 to 2016/17	2016/17 Change From Previous Month
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**Planted and Harvested Acres & Yield**

Acres Planted (Million Acres)	55.3	56.2	56.8	55	50.2	50.2	-4.8	0
Acres Harvested (Million Acres)	48.8	45.3	46.4	47.3	43.9	43.9	-3.4	0
U.S. Average Yield (Bu/Acre)	46.2	47.1	43.7	43.6	52.6	52.6	9	0

**Supply (Million Bushels)**

Beg. Stocks	743	718	590	752	976	976	224	0
Production	2,252	2,135	2,026	2,062	2,310	2,310	248	0
Imports	123	173	151	113	115	110	-3	-5
Total Supply	3,118	3,026	2,768	2,927	3,400	3,395	468	-5

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

Food	951	955	958	957	960	960	3	0
Seed	73	77	79	67	61	61	-6	0
Feed	364	228	114	152	225	190	38	-35
Exports	1,012	1,176	864	775	1,025	1,025	250	0
Total Use	2,400	2,436	2,015	1,952	2,271	2,236	284	-35
U.S. Ending Stocks	718	590	752	976	1,129	1,159	183	30
Foreign Stocks	5,735	6,524	7,243	7,907	8,055	8,110	203	55

**Price and Stocks to Use Ratio**

U.S. Avg. Season Price (\$/Bu)	\$7.77	\$6.87	\$5.99	\$4.89	\$3.80- \$3.90	\$3.80- \$3.90	-\$1.04	\$0.00
U.S. Stocks/Use	29.92%	24.22%	37.32%	50.26%	50.15%	51.83%	1.58%	1.68%

Source: USDA-WASDE April 11, 2017

**World Wheat Supply and Use (Million Bushels) 2016/17 (April)**

Country / Region	Beginning Stocks	Production	Imports	Domestic Feed	Domestic Total	Exports	Ending Stocks
World	8,882	27,608	6,473	5,383	27,221	6,639	9,269
US	976	2,310	110	190	1,211	1,025	1,159
Foreign	7,907	25,298	6,363	5,193	26,010	5,614	8,110
Argentina	23	588	0	4	228	371	12
Australia	207	1,286	6	165	292	919	288
Canada	190	1,165	18	184	375	735	263
EU	554	5,315	202	2,094	4,740	974	358
Brazil	59	247	246	26	423	51	78
China	3,566	4,734	147	588	4,336	29	4,082
Sel. Mideast	510	713	650	172	1,422	20	431
N. Africa	608	519	1,040	84	1,642	24	501
Pakistan	141	941	1	29	900	26	156
Southeast Asia	187	0	911	323	888	37	173
India	534	3,197	220	173	3,613	15	323
Russia	206	2,665	18	588	1,433	1,029	427
Kazakhstan	94	551	3	77	254	257	137
Ukraine	123	985	1	147	397	636	76
ROW	906	2,392	2,898	540	5,068	491	804

**World Wheat Supply and Use (Million Bushels) 2016/17 April-March**

Country / Region	Beginning Stocks	Production	Imports	Domestic Feed	Domestic Total	Exports	Ending Stocks
World	53	11	-17	-67	-21	-12	85
US	-	-	-5	-35	-35	-	30
Foreign	53	10	-12	-32	14	-12	55
Argentina	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-18	18
Canada	-	-	-	-	-	-18	18
EU	40	-	-	-37	11	37	-7
Brazil	-	-	-	-	-	-7	7
China	-	-	-	-	-	-	-
Sel. Mideast	6	-	-1	2	1	-	4
N. Africa	-	-	-11	-	-	-	-11
Pakistan	-	11	-	-	-	-7	18
Southeast Asia	-	-	-7	-	-1	-	-6
India	-	-	18	7	7	-	11
Russia	-	1	-	-	-	-18	19
Kazakhstan	-	-	1	-	-	-18	19
Ukraine	4	-	-	-15	-18	29	-7
ROW	4	-1	-12	10	14	10	-30

Source: USDA-WASDE April 11, 2017

## 2017 Estimated Returns – Non-Irrigated

The profitability outlook has been updated after the release of the April 11, 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, 1104 pounds per acre cotton, and 73 bushels per acre wheat. 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 changed very little since the march 31 Prospective Plantings Report with Corn up 4 cents, Soybeans down 4 cents, Wheat up 13 cents and Cotton down ½ cent. Soybeans and Corn still are showing a profitable Net Return. 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 72 cents that is being used in the profitability outlook. The price of 72 cents is made up of a cash price of 67 cents and gin rebates (seed & hauling) of 5 cents. The cash price of 67 cents is composed of a loan rate of 49.49 cents and a 17.5 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 17 -18 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.

<b>2017 Estimated Returns – Non-Irrigated</b>					
	<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>68 bu./32 bu.</b>
Price (as of 4/11/17)	\$0.72 lb.	\$9.40 bu.	\$3.74 bu.	\$3.44 bu.	\$4.63 bu./\$9.40 bu.
Revenue	\$693	\$414	\$539	\$310	\$616
Variable Expenses	\$403	\$216	\$308	\$229	\$374
Returns Over Variable	<b>\$290</b>	<b>\$197</b>	<b>\$230</b>	<b>\$81</b>	<b>\$241</b>
Land Costs (25% of Revenue-25% crop insurance)	\$171	\$101	\$131	\$75	\$150
Returns Over Variable and Land Costs	<b>\$119</b>	<b>\$96</b>	<b>\$99</b>	<b>\$6</b>	<b>\$91</b>
Fixed Costs Depreciation & interest on machinery	\$130	\$62	\$56	\$62	\$99
Returns Over Specified Costs	-\$12	\$33	\$43	-\$56	-\$8
Breakeven Price at Average Yield and Specified Cost	\$0.73	\$ 8.64	\$3.44	\$4.06	\$5.08/8.72

## 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>68 bu./45 bu.</b>
Price (as of 4/11/17)	\$0.72 lb.	\$9.40 bu.	\$3.74 bu.	\$3.44 bu.	\$4.63 bu./\$9.40 bu.
Revenue	\$792	\$564	\$711	\$447	\$738
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>\$257</b>	<b>\$229</b>	<b>\$223</b>	<b>\$71</b>	<b>\$244</b>
Land Costs (25% of Revenue-25% crop insurance-25% fixed irrigation costs)	\$174	\$118	\$153	\$88	\$159
Returns Over Variable, IR Fixed Cost and Land Costs	<b>\$83</b>	<b>\$111</b>	<b>\$70</b>	<b>-\$16</b>	<b>\$85</b>
Fixed Costs- management labor, depreciation & interest on machinery	\$145	\$77	\$71	\$77	\$114
Returns Over Specified Costs	-\$63	\$34	-\$1	-\$94	-\$29
Breakeven Price at Average Yield and Specified Cost	\$0.78	\$8.84	\$3.74	\$4.16	\$5.08/\$9.57