

University of Arkansas System, Division of Agriculture

2024 Economic Situation and Outlook for Arkansas Row Crops

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Executive Summary

Increased supplies on generally good weather in the U.S. and South America have pulled grain and cotton prices back to the lowest levels since 2020. Combined with elevated production costs, lower commodity prices will negatively impact farm profitability. Commodity prices falling faster than input costs have pushed many farmers to seek additional financing this growing season, resulting in larger operating loan balances. Farm production costs have stayed relatively flat over the last four years, while crop prices have dropped considerably since 2022.

In the absence of new weather-related or geopolitical shocks, commodity prices are expected to remain near current levels for the upcoming year. This report includes information from USDA price forecasts available in October 2024 and University of Arkansas *Cost of Production Estimates* released earlier this year.

Crop production in 2023 and 2024 is assumed to equal the values reported by USDA in its October *Crop Production* report and macroeconomic assumptions are based on July 2024 forecasts by S&P Global. Current government policies are assumed to continue.

Key Points:

- **Soybeans:** Increased acreage and record yields are expected to result in a record 2024 U.S. soybean crop. Even with a significant increase in crush and a modest rebound in exports, projected year-end stocks of soybeans increase sharply (+62% y/y), pushing projected 2024/25 soybean farm prices down to \$10.80 per bushel, from \$12.40 in 2023 and \$14.20 in 2022.
- **Corn:** Record yields result in the second consecutive 15-billion-bushel U.S. corn crop in 2024, despite a 4 million acre decline in planted area. The projected \$4.10 per bushel 2024/25 farm price of corn is 37% below the price just two years ago.
- **Cotton and Rice:** Projected prices for cotton and rice also decline in 2024/25 in the face of large global crop supplies. The value of crop sales declines in 2024, as the effect of lower prices outweighs the effect of increased production for these crops. The projected 2024/25 cotton price of \$0.66 per pound and long-grain rice price of \$14.50/cwt. are 22% and 13% below their respective prices for the 2022 crop year.
- **2025 Acreage:** Given the projected reduction in prices for a broad range of crops and moderating production costs, there is currently little incentive to sharply change the allocation of crop acreage in 2025. However, at current price levels, some producers anticipate reducing acres 10 to 20 percent in 2025.
- **2025 Price Outlook:** Assuming average growing conditions in the upcoming year, projected prices are expected to remain near 2024/25 levels for the major row crops. For 2025/26, corn prices average \$4.13 per bushel, soybeans average \$10.43 per bushel, cotton \$0.67 per pound and long-grain rice \$14.60 per hundredweight. In June, USDA forecasts that production costs would remain relatively stable in 2024 and slightly lower in 2025 with some decline in fertilizer costs anticipated.

Note: These observations are based on information available in October 2024. New information regarding year-to-year changes in crop revenues as well as weather related quality impacts on Arkansas' 2024 crop have been added to this outlook originally released in September 2024. Additional information can be found in Tables 5 – 7.

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Table 1. Arkansas Corn Cost and Returns, 2018 - 2025F

September-August year	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
Area	(000 acres)							
Planted area ¹	660.0	770.0	620.0	850.0	710.0	850.0	500.0	500.0
Harvested area ¹	645.0	735.0	605.0	830.0	695.0	830.0	485.0	485.0
	(Bushels per harvested acre)							
Yield¹	181.0	175.0	184.0	184.0	173.0	183.0	186.0	184.0
Producer Share 80%	144.8	140.0	147.2	147.2	138.4	146.4	148.8	147.2
Prices, program provisions	(Dollars per bushel)							
Farm price ⁵	\$ 3.80	\$ 3.86	\$ 4.49	\$ 5.95	\$ 6.78	\$ 5.20	\$ 4.10	\$ 4.13
Loan rate ⁶	\$ 1.95	\$ 2.20	\$ 2.20	\$ 2.20	\$ 2.20	\$ 2.20	\$ 2.20	\$ 2.20
Effective reference price ⁶	\$ 3.70	\$ 3.70	\$ 3.70	\$ 3.70	\$ 3.70	\$ 3.70	\$ 4.01	\$ 4.26
Avg. ARC/PLC pmt./a. ⁶	\$61.76	\$57.64	\$34.23	\$7.35	\$ -	\$ -	\$ -	\$ -
Market returns	(Dollars)							
Gross market revenue/a.	\$550.24	\$540.40	\$660.93	\$ 875.84	\$ 938.35	\$ 761.28	\$ 610.08	\$ 607.94
Total expenses/a. ⁷	\$624.85	\$663.87	\$673.15	\$ 603.00	\$ 922.53	\$ 967.56	\$ 892.23	\$ 854.84
Market net return/a.	(\$74.61)	(\$123.47)	(\$12.22)	\$272.84	\$15.82	(\$206.28)	(\$282.15)	(\$246.90)
Producer share ARC/PLC/a.	\$49.40	\$46.11	\$27.39	\$5.88	\$0.00	\$0.00	\$0.00	\$0.00
Net return + ARC/PLC/a.	(\$25.21)	(\$77.36)	\$15.16	\$278.72	\$15.82	(\$206.28)	(\$282.15)	(\$246.90)




Table 2. Arkansas Soybeans Cost and Returns, 2018 - 2025F

September-August year	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
Area	(million acres)							
Planted area ²	3.270	2.650	2.820	3.040	3.180	2.980	3.050	3.014
Harvested area ²	3.210	2.610	2.800	3.000	3.140	2.950	3.020	2.982
	(Bushels per harvested acre)							
Yield²	50.5	49.0	51.5	52.0	52.0	54.0	55.0	52.9
Producer Share 80%	40.4	39.2	41.2	41.6	41.6	43.2	44.0	42.3
Prices, program provisions	(Dollars per bushel)							
Farm price ⁵	\$ 8.81	\$ 8.87	\$ 10.50	\$ 12.90	\$ 14.20	\$ 13.10	\$ 10.80	\$ 10.43
Loan rate ⁶	\$ 5.00	\$ 6.20	\$ 6.20	\$ 6.20	\$ 6.20	\$ 6.20	\$ 6.20	\$ 6.20
Effective reference price ⁶	\$ 8.40	\$ 8.40	\$ 8.40	\$ 8.40	\$ 8.40	\$ 8.40	\$ 9.26	\$ 9.66
Avg. ARC/PLC pmt./a. ⁶	\$61.76	\$57.64	\$34.23	\$7.35	\$ -	\$ -	\$ -	\$ -
Market returns	(Dollars)							
Gross market revenue/a.	\$355.92	\$347.70	\$432.60	\$ 536.64	\$ 590.72	\$ 565.92	\$ 475.20	\$ 441.40
Total expenses/a. ⁷	\$407.06	\$431.33	\$498.20	\$ 434.91	\$ 591.24	\$ 632.87	\$ 632.87	\$ 614.88
Market net return/a.	(\$51.14)	(\$83.62)	(\$65.60)	\$101.73	(\$0.52)	(\$66.95)	(\$157.67)	(\$173.48)
Producer share ARC/PLC/a.	\$49.40	\$46.11	\$27.39	\$5.88	\$0.00	\$0.00	\$0.00	\$0.00
Net return + ARC/PLC/a.	(\$1.73)	(\$37.51)	(\$38.22)	\$107.61	(\$0.52)	(\$66.95)	(\$157.67)	(\$173.48)

Table 3. Arkansas Cotton Cost and Returns, 2018 - 2025F

August-July year	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
Area	(000 acres)							
Planted area ³	485.0	620.0	525.0	480.0	640.0	510.0	650.0 	561.0
Harvested area ³	480.0	610.0	520.0	475.0	625.0	505.0	640.0 	553.0
	(Pounds per harvested acre)							
Yield³	1133.0	1185.0	1179.0	1248.0	1189.0	1295.0	1238.0 	1229.8
Producer Share 80%	906.4	948.0	943.2	998.4	951.2	1036.0	990.4	983.8
Prices, program provisions	(Cents per pound)							
Farm price ⁵	\$ 0.723	\$ 0.614	\$ 0.663	\$ 0.914	\$ 0.848	\$ 0.760	\$ 0.660	\$ 0.670
Loan rate ⁶	\$ 0.52	\$ 0.52	\$ 0.52	\$ 0.52	\$ 0.52	\$ 0.52	\$ 0.52	\$ 0.52
Effective reference price ⁶	\$0.3670	\$0.3670	\$0.3670	\$ 0.3670	\$ 0.3670	\$ 0.3670	\$ 0.3670	\$ 0.3670
Seed cotton farm price ⁶	\$0.3453	\$0.3058	\$0.3393	\$ 0.4675	\$ 0.4533	\$ 0.3910	\$ 0.3427	\$ 0.3415
Seed cotton PLC payment rate ⁶	\$0.0217	\$0.0612	\$0.0277	\$ -	\$ -	\$ -	\$ 0.0243	\$ 0.0255
Avg. PLC payment yield (lbs) ⁶	2002.3	2002.3	2054.1	2055.7	2028.4	2032.8	2032.8	2032.8
Market returns	(Dollars)							
Gross market revenue/a.	\$655.33	\$582.07	\$625.34	\$ 912.54	\$ 806.62	\$ 787.36	\$ 653.66	\$ 659.17
Total expenses/a. ⁷	\$719.37	\$676.29	\$719.80	\$ 651.30	\$ 836.27	\$ 911.70	\$ 908.66	\$ 880.41
Market net return/a.	(\$64.05)	(\$94.22)	(\$94.45)	\$261.23	(\$29.66)	(\$124.34)	(\$255.00)	(\$221.24)
Producer share PLC pmt./a.	\$34.76	\$98.03	\$45.52	\$0.00	\$0.00	\$0.00	\$39.49	\$41.43
Net return + PLC pmt./a.	(\$29.29)	\$3.81	(\$48.93)	\$261.23	(\$29.66)	(\$124.34)	(\$215.51)	(\$179.81)

Table 4. Arkansas Long-Grain Rice Cost and Returns, 2018 - 2025F

August-July year	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
Area	(million acres)							
Planted area ⁴	1.250	0.955	1.325	1.095	1.000	1.220	1.330 	1.194
Harvested area ⁴	1.240	0.935	1.310	1.080	0.990	1.215	1.320 	1.183
	(Pounds per harvested acre)							
Yield⁴	7550.0	7550.0	7530.0	7660.0	7430.0	7600.0	7600.0 	7564.0
Producer Share 80%	6040.0	6040.0	6024.0	6128.0	5944.0	6080.0	6080.0	6051.2
Prices, program provisions	(Cents per pound)							
Farm price ⁵	\$ 0.108	\$ 0.120	\$ 0.126	\$ 0.136	\$ 0.167	\$ 0.159	\$ 0.145	\$ 0.146
Loan rate ⁶	\$ 0.065	\$ 0.07	\$ 0.07	\$ 0.07	\$ 0.07	\$ 0.07	\$ 0.07	\$ 0.07
Effective reference price ⁶	\$0.1400	\$0.1400	\$0.1400	\$ 0.1400	\$ 0.1400	\$ 0.1400	\$ 0.1400	\$ 0.1400
Long-grain PLC payment rate ⁶	\$0.0320	\$0.0200	\$0.0140	\$ 0.0040	\$ -	\$ -	\$ -	\$ -
Avg. PLC payment yield (lbs) ⁶	6141.3	6141.3	6249.6	6249.7	6252.1	6257.2	6257.2	6257.2
Market returns	(Dollars)							
Gross market revenue/a.	\$652.32	\$724.80	\$759.02	\$ 833.41	\$ 992.65	\$ 966.72	\$ 881.60	\$ 880.45
Total expenses/a. ⁷	\$756.97	\$795.80	\$812.61	\$ 782.78	\$1,023.94	\$1,138.37	\$1,128.84	\$1,094.98
Market net return/a.	(\$104.65)	(\$71.00)	(\$53.58)	\$50.62	(\$31.30)	(\$171.65)	(\$247.24)	(\$214.53)
Producer share PLC pmt./a.	\$157.22	\$98.26	\$70.00	\$20.00	\$0.00	\$0.00	\$0.00	\$0.00
Net return + PLC pmt./a.	\$52.57	\$27.26	\$16.41	\$70.62	(\$31.30)	(\$171.65)	(\$247.24)	(\$214.53)

2024 Projected Crop Prices, USDA.

In October, USDA made no adjustments to its outlook for 2024/25 U.S. average producer prices. For the 2024/25 marketing year, average soybean prices are expected to decline \$1.60 per bushel or 13 percent from last year. Prices for other major crops are expected to decline as well with the average producer price for long-grain rice falling \$1.40/cwt. (-9%), cotton 10 cents/lb (-13%), corn 45 cents/bu. (-10%), wheat \$1.26/bu. (-18%) and peanuts 1 cent/lb or 5 percent.

Table 5. U.S. Average Farm Prices, 2023 and 2024 projected.

	Soybeans	Rice (long-grain)	Cotton	Corn	Wheat	Peanuts
2023 Avg. Farm Price, USDA	\$12.40	\$15.90	\$0.76	\$4.55	\$6.96	\$0.27
2024 Avg. Farm Price, USDA	\$10.80	\$14.50	\$0.66	\$4.10	\$5.70	\$0.26
\$ Difference Y/Y	\$(1.60)	\$(1.40)	\$(0.10)	\$(0.45)	\$(1.26)	\$(0.01)
% change Y/Y	-13%	-9%	-13%	-10%	-18%	-5%

Source: USDA, *World Agricultural Supply/Demand Estimates, October 2024.*

Lower Prices Drive Cash Receipts Lower in 2024

There are a number of factors to consider in determining the change in annual receipts from 2023 to 2024. At this point in time, it is anticipated there will be a "price effect" on cash receipts as well as a "yield effect". In 2024, falling prices are projected to have negative effects on cash receipts, while yield increases for some crops in 2024 could have positive effects. Overall, Arkansas' 2024 cash receipts are forecast to decrease by approximately \$546 million in nominal terms at the farm gate level (ie. no additional multiplier effects were included beyond the farm level).

Soybean receipts are expected to fall by \$228 million (-11 percent), as lower forecasted prices outweigh expectations for slightly higher yields in 2024. Lower prices in 2024 should also outweigh an expected increase in rice yields, with receipts forecast to decrease by \$141 million (-8 percent). Falling prices and lower yields are expected to decrease cotton receipts \$124 million (-20 percent) in 2024.

Table 6a. Projected Annual Change in Crop Receipts 2023 and 2024.

		Soybeans		Rice		Cotton	
		2023	2024	2023	2024	2023	2024
A	Avg. Yield, USDA	54	55	7550	7600	1295	1200
B	Avg. Price, USDA	\$12.40	\$10.80	\$1.590	\$1.450	\$0.7610	\$0.6600
C	Revenue (\$/acre) (A*B)	\$669.60	\$594.00	\$1200.45	\$1102.00	\$985.50	\$792.00
D	Y/Y Revenue change (\$/ac)	-\$75.60		-\$98.45		-\$193.50	
E	2024 Harv. Acres, USDA	3,020,000		1,431,000		640,000	
F	Y/Y Projected Change Gross Receipts (\$) (D*E)	-\$228,312,000		-\$140,881,950		-\$123,836,800	

Corn receipts are forecast to decrease \$34 million (-8 percent), as lower prices will outweigh higher yields. Receipts for wheat and peanuts are also expected to fall by a combined \$19 million with wheat prices for the 2024 crop down 18 percent from a year ago and peanut prices down roughly 5 percent from last year.

Table 6b. Projected Annual Change in Crop Receipts 2023 and 2024.

		Corn		Wheat		Peanuts	
		2023	2024	2023	2024	2023	2024
A	Avg. Yield, USDA	183	186	57	50	5800	5300
B	Avg. Price, USDA	\$4.55	\$4.10	\$6.96	\$5.70	\$.2690	\$.2550
C	Revenue (\$/acre) (A*B)	\$832.65	\$762.60	\$396.72	\$285.00	\$1560.20	\$1351.50
D	Y/Y Revenue change (\$/ac)	-\$70.05		-\$111.72		-\$208.70	
E	2024 Harv. Acres, USDA	485,000		90,000		44,000	
F	Y/Y Projected Change Gross Receipts (\$) (D*E)	-\$33,974,250		-\$10,054,800		-\$9,182,800	

The anticipated decline in 2024 crop revenues is expected to lead to further erosion of financial positions on many row crop farms in the state. Furthermore, primary farm safety net programs—such as crop insurance and commodity title programs—are expected to provide relatively low levels of support, if any, for 2023 and 2024. In the interest of assisting crop producers in the upcoming farm loan renewal cycle, an ad hoc assistance program could be very beneficial in assisting producers through this current period of low net returns from significant revenue declines seen over the past year.

Estimated Weather Impacts on the 2024 Crop:

The two key weather events described below have adversely affected the production and quality of the state’s cotton crop and to some extent, soybean production in the state.

Cotton: Prior to the arrival of Hurricane Francine, cotton harvest in Arkansas had begun on a very small percentage of acres. USDA estimated 3% of cotton acres in the state had been harvested as of September 15th, ahead of the rainfall associated with Hurricane Francine. In evaluating the crop quality impact of Francine on the state’s cotton production, the first 2,762 bales classed (ie. graded) by USDA had a marketing loan premium value of \$.0324/lb. By comparison, all bales harvested and classed following the rainfall events from Hurricanes Francine and Helene have had an average loan value of \$.0046/lb, for a net difference of \$.0278/lb. Applying this quality difference to Arkansas’ estimated production, equates to a value loss of approximately \$21.3 million for producers. In addition, USDA reduced Arkansas’ state average cotton yield in its’ October reporting by 38 pounds per acre, which is likely attributed to the excessive rains and high winds from weather events in September as the state’s cotton crop was at 92% “open boll” as of September 15th (per USDA). The estimated value of this lost production is approximately \$19.2 million (lint and seed combined). Total farm gate losses for the state’s cotton producers are currently estimated at \$40.5 million in reduced quality and lost lint and seed production.

Grains: Due to the relatively early harvest of corn in 2024, impacts from September weather events are viewed as limited. Rice “field yield” estimates are favorable at 7600 lb/ac (168.9 bu/ac). However, University specialists

and industry representatives continue to report the likelihood of a second straight year of lackluster milling yields. So, while bushel yields are high, considerably more rice will have to be milled to meet head rice product demand. For 2024, lower milling is common statewide with frequent reports of 50% average head rice yields. Milling discounts are generally 2 cents per bushel per point of head rice. For example, a milling yield of “50” instead of “55” would result in a loss of 10 cents per bushel. Although it is too early to determine an average milling yield for the entire 2024 crop, assuming an average head rice yield of “50” for the state’s estimated production results in grower milling yield losses of approximately \$22.3 million.

Soybeans: It's estimated approximately 40 million bushels of soybean production in the state endured excessive rainfall in September, resulting in varying degrees of quality and moisture discounts. Merchandisers in the state report the majority of soybean quality discounts have been 3 percent or less with localized areas of state seeing discount levels considerably higher. From a small survey of grain merchandisers, soybean samples with 3 percent damage have resulted in discounts ranging from 5 to 15 cents per bushel. Isolated areas have seen soybeans discounts run as high as 90 cents per bushel in areas most impacted by September rainfall events. Estimated quality losses could approach \$6 million. However, approximately 40 percent of the state’s soybean acres remained to be harvested as of October 6th.

Hurricane Francine:

The remnants of Hurricane Francine dropped areas of heavy rain in parts of Arkansas as well as wind gusts up to 50 mph. In the forty-eight-hour period ending at 700 am CDT on September 13th, 6.20 inches was measured near Harrisburg (Poinsett County), 4.17 inches at Jonesboro (Craighead County), and 4.13 inches at West Memphis (Crittenden County). Wind speeds during the event picked up in northeast Arkansas as the remnants of Francine entered the region. A 50-mph gust was reported at Jonesboro (Craighead County), with a 45-mph gust at Blytheville (Mississippi County), a 43-mph gust at West Memphis (Crittenden County), and a 40-mph gust at Newport (Jackson County).

Following the remnants of Francine, a blocking pattern set up with prevailing cloudy conditions, chances of showers, and mild temperatures for several days. Through the morning of September 16th, another two to more than three inches of rain fell in northeast areas of the state at Corning (Clay County), Jonesboro (Craighead County), Marianna (Lee County), Paragould (Greene County), and Saint Francis (Clay County). For the event (five days), totals exceeded six inches in portions of Clay, Craighead, Crittenden, Cross, Greene, Lee, Little River, Mississippi, and Poinsett Counties.

Hurricane Helene:

As the remnants of Helene tracked westward through the Tennessee Valley, there was some interaction with a storm system just to the east of Arkansas. Moisture was pulled toward the system, and rain spread over the northeast half of the state on September 27th. Several sites in the northeast had amounts over two inches.

In the forty-eight-hour period ending at 700 am CDT on the 28th, Saint Francis (Clay County) received 2.81 inches of rain, with 2.33 inches at West Memphis (Crittenden County), 2.12 inches at Beedeville (Jackson County), and 2.10 inches at Paragould (Greene County). The rain was accompanied by breezy northwest winds, and 30 to 40 mph gusts at times.

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