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COST TO PRODUCE CORN AND SOYBEANS IN ILLINOIS—2001

In 2001, the total of all economic costs per acre for growing corn in Illinois averaged \$429 in the northern section, \$430 in the central section for farmland with “high” soil ratings, \$415 in the central section for farmland with “low” soil ratings, and \$374 in the southern section. Soybean costs per acre were \$347, \$351, \$330 and \$292, respectively (see Table 1). Costs were lower in the southern Illinois primarily because of lower land costs. The total of all economic costs per bushel in the different sections of the state ranged from \$2.48 to \$2.70 for corn and from \$6.49 to \$7.23 for soybeans. Variations in this cost were related to weather, yields, and land quality.

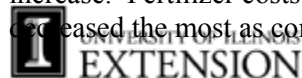
These figures were obtained from farm business records kept by farmers enrolled in the Illinois Farm Business Farm Management Association. The samples included only farms who had no livestock and had more than 260 acres of productive and nearly level soils in each area of the state. Farms located in the 22 counties north and northwest of the Illinois River are included in the sample for northern Illinois. Farms from 36 counties below a line from about Mattoon to Alton are in the sample for southern Illinois. The remaining 44 counties make up the sample for central Illinois. The sample farms averaged 867 tillable acres in northern Illinois, 1,001 acres in the central section with high soil ratings, 1,007 acres in the central section with lower soil ratings, and 1,152 acres in southern Illinois.

COST OF PRODUCTION FOR CORN COMPARED TO 2000

Costs **per bushel** of corn in 2001 were lower for northern and central Illinois with the higher rated soils compared to 2000. Costs **per bushel** in southern Illinois and in the central section with the lower rated soils were higher in 2001. Costs per bushel were 8 cents lower in northern Illinois, 6 cents lower in central Illinois with the higher rated soils, 5 cents higher in central Illinois with the lower rated soils and 8 cents higher in southern Illinois.

The average corn yield in 2001 was 3 bushels per acre higher than 2000 in northern and central Illinois and 2 bushels per acre higher in southern Illinois. The 2001 average corn yield in the different geographical locations were the same to 17 bushels per acre above the four-year average from 1998 to 2001. The southern Illinois region recorded average yields 17 bushels per acre above the four-year average.

Costs **per acre** were lower in northern Illinois and in central Illinois with the higher rated soils compared to 2000. Costs **per acre** were higher in southern Illinois and in central Illinois with the lower rated soils. Across the state total costs per acre to produce corn ranged from a 1 percent decrease to a 4 percent increase. Fertilizer costs increased the most of any cost categories while nonland interest charges decreased the most as compared to the year before.



COST OF PRODUCTION FOR SOYBEANS COMPARED TO 2000

Production costs **per bushel** of soybeans decreased in all areas of the state except southern Illinois compared to 2000. Yields were higher in all areas of the state except in southern Illinois, where they were the same as the year before. Soybean yields ranged from no change to 3 bushels per acre higher in 2001 as compared to 2000. The central Illinois area with the lower rated soils recorded the highest increase (3 bushels per acre) compared to the previous year. Changes in costs per bushel ranged from a 53-cent decrease in northern Illinois to a 13-cent increase in southern Illinois.

Like corn, total costs **per acre** decreased in northern Illinois and in central Illinois with the higher rated soils compared to 2000. Total costs **per acre** increased in central Illinois with the lower rated soils and in southern Illinois. Costs decreased \$10 per acre in northern Illinois and \$9 per acre in central Illinois with the higher rated soils. Costs increased \$7 per acre in central Illinois with the lower rated soils and \$6 per acre in southern Illinois. Average soybean yields in the different areas ranged from 1 bushel per acre below to 3 bushels per acre higher than the four-year average from 1998 to 2001.

STATE AVERAGES

Total costs to produce corn for all combined areas of the state were \$420 per acre. This figure increased 1 percent compared to the year before. Most costs were similar to the year before with fertilizer, pesticides, drying and storage increasing while the nonland interest charge decreased. In 2001, cash costs accounted for 40 percent of the total cost of production for corn, other nonland costs were 31 percent, and land costs were 29 percent. The average corn yield for all combined areas of the state was 161 bushels per acre resulting in a total cost of production of \$2.61 per bushel. The average corn yield was the highest since 1994, when the average was 170 bushels per acre.

Total cost per acre to produce soybeans decreased, from \$341 per acre in 2000 to \$338 per acre in 2001. Generally speaking, the same expenses that increased or decreased for corn also increased or decreased for soybeans. Variable costs accounted for 31 percent of the total cost of production for soybeans, other nonland costs 33 percent and land costs 36 percent. The average soybean yield for all combined areas of the state was 48 bushels per acre resulting in a total cost of production of \$7.04 per bushel.

A more complete discussion of how some of the costs are calculated can be found under narrative reports in the management-enterprise cost section of *farmdoc*.

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Table 1. Cost Per Acre of Growing Corn and Soybeans on Illinois Grain Farms Without Livestock in 2001.

	Corn				Soybeans			
	North	Central ¹	Central ²	South	North	Central ¹	Central ²	South
Number of farms	513	694	376	227	513	694	376	227
Acres in crop	473	490	497	497	396	488	474	532
Nonland Costs								
Variable costs:								
Soil fertility.....	\$ 56	\$ 57	\$ 60	\$ 61	\$ 20	\$ 21	\$ 20	\$ 23
Pesticides.....	33	33	33	32	29	30	30	28
Seed.....	34	34	33	35	20	21	20	21
Drying.....	9	8	8	3	3	2	2	1
Repairs, fuel, and hire	<u>37</u>	<u>31</u>	<u>34</u>	<u>39</u>	<u>31</u>	<u>27</u>	<u>29</u>	<u>35</u>
Total, variable costs.....	\$ 169	\$ 163	\$ 168	\$ 170	\$ 103	\$ 101	\$101	\$ 108
Percent change from 2000.....	5	5	9	7	0	1	7	4
Other nonland costs:								
Labor.....	\$ 37	\$ 36	\$ 36	\$ 41	\$ 35	\$ 34	\$ 33	\$ 39
Buildings.....	11	10	11	10	7	6	7	5
Storage.....	5	7	6	4	3	3	3	2
Machinery depreciation	29	30	30	29	25	26	26	24
Nonland interest.....	29	27	26	25	25	25	23	21
Overhead	<u>22</u>	<u>19</u>	<u>19</u>	<u>20</u>	<u>22</u>	<u>18</u>	<u>18</u>	<u>18</u>
Total, other costs.....	\$ 133	\$ 129	\$ 128	\$ 129	\$ 117	\$ 112	\$ 110	\$ 109
Total, nonland costs.....	\$ 302	\$ 292	\$ 296	\$ 299	\$ 220	\$ 213	\$ 211	\$ 217
Percent change from 2000	-1	-1	5	5	-4	-4	2	2
Land costs								
Taxes.....	\$ 29	\$ 29	\$ 25	\$ 14	\$ 29	\$ 29	\$ 25	\$ 14
Annually adjusted net rent	<u>98</u>	<u>109</u>	<u>94</u>	<u>61</u>	<u>98</u>	<u>109</u>	<u>94</u>	<u>61</u>
Total land cost.....	\$ 127	\$ 138	\$ 119	\$ 75	\$ 127	\$ 138	\$ 119	\$ 75
Total, all costs	\$ 429	\$ 430	\$ 415	\$ 374	\$ 347	\$ 351	\$ 330	\$ 292
Percent change from 2000.....	-1	-1	4	4	-3	-3	2	2
2001 yields, bushels per acre.....	159	168	157	151	48	50	48	45
Nonland cost per bushel.....	\$1.90	\$1.74	\$1.89	\$1.98	\$4.58	\$4.26	\$4.40	\$4.82
Total, all costs per bushel.....	\$2.70	\$2.56	\$2.64	\$2.48	\$7.23	\$7.02	\$6.88	\$6.49
1998-2001 average yield.....	159	163	150	134	49	50	46	42
Nonland cost per bushel.....	\$1.90	\$1.79	\$1.97	\$2.23	\$4.49	\$4.26	\$4.59	\$5.17
Total, all costs per bushel.....	\$2.70	\$2.64	\$2.77	\$2.79	\$7.08	\$7.02	\$7.17	\$6.95

Note: The last two lines of the table are costs based on 1998-2001 average yields.

¹ Soil productivity ratings of 86 to 100.

² Soil productivity ratings of 56 to 85

