

May 2, 2001

FEFO 01-10

COST TO PRODUCE CORN AND SOYBEANS IN ILLINOIS—2000

In 2000, the total of all economic costs per acre for growing corn in Illinois averaged \$433 in the northern section, \$433 in the central section with the higher soil ratings, \$399 in the central section with the lower soil ratings, and \$358 in the southern section. The soybean costs per acre were \$357, \$360, \$323 and \$286 respectively (see Table 1). Costs were lower in the southern section primarily because land costs are lower there. The total of all economic costs per bushel in the different sections of the state ranged from \$2.40 to \$2.78 for corn and from \$6.36 to \$7.76 for soybeans. Variations in this cost were related to weather factors, 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 with more than 260 acres of productive and nearly level soils in each area of the state; these are farms without livestock. 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 858 tillable acres in northern Illinois, 933 acres in the central section with high soil ratings, 977 acres in the central section with lower soil ratings, and 1,152 acres in southern Illinois.

COST PER BUSHEL FOR CORN

Costs per bushel were higher for northern and central Illinois with the higher rated soils compared to 1999. However, higher corn yields in southern and in the central Illinois area with the lower rated soils resulted in lower costs per bushel in those areas. Southern Illinois had significantly lower costs per bushel in 2000 compared to the year before due to excellent yields. Costs per bushel were 4 cents higher in northern Illinois, 6 cents higher in central Illinois with the higher rated soils, 3 cents lower in central Illinois with the lower rated soils and 62 cents lower in southern Illinois.

The average corn yield in 2000 was 1 bushel per acre higher than 1999 in northern Illinois, 34 bushels higher in southern Illinois and 1 bushel lower to 5 bushels per acre higher in central Illinois. The 2000 average corn yield in the different geographical locations was 2 to 25 bushels per acre above the four-year average from 1997 to 2000.

Costs per acre were higher for corn in all areas of the state in 2000 compared to 1999. Across the state total costs per acre to produce corn increased about 2 to 3 percent. Fuel costs and nonland interest charges increased the most of any cost categories while land costs decreased as compared to the year before

COST PER BUSHEL FOR SOYBEANS

Production costs per bushel of soybeans increased in all areas of the state except southern Illinois. Yields were lower in northern and central Illinois and higher in southern Illinois. Soybean yields ranged from 4 bushels per acre lower to 8 bushels per acre higher in 2000 than in 1999. The southern Illinois area recorded the highest increase (8 bushels per acre) compared to the previous year. Changes in costs per bushel ranged from a 78-cent increase in northern Illinois to a \$1.13 decrease in southern Illinois.

Like corn, total costs per acre increased in all areas of the state. Costs increased \$8 per acre in northern Illinois, \$7 to \$10 per acre in central Illinois, and \$9 per acre in southern Illinois. Basically the same costs increased for soybeans as increased for corn. Average soybean yields in the different areas ranged from 4 bushels per acre below to 4 bushels per acre higher than the four-year average from 1997 to 2000.

STATE AVERAGES

Total costs to produce corn for all combined areas of the state were \$416 per acre. This figure increased 2 percent compared to the year before. Most costs were similar to the year before with fuel, labor, machinery depreciation and nonland interest costs increasing while land costs decreased. In 2000, cash costs accounted for 38 percent of the total cost of production for corn, other nonland costs were 33 percent, and land costs were 29 percent. The average corn yield for all combined areas of the state was 158 bushels per acre resulting in a total cost of production of \$2.63 per bushel.

Total cost per acre to produce soybeans also increased, from \$333 per acre in 1999 to \$341 per acre in 2000. Generally speaking, the same expenses that increased for corn also increased for soybeans. Variable costs accounted for 29 percent of the total cost of production for soybeans, other nonland costs 35 percent and land costs 36 percent. The average soybean yield for all combined areas of the state was 47 bushels per acre resulting in a total cost of production of \$7.29 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 farm.doc.

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Table 1. Cost Per Acre of Growing Corn and Soybeans on Illinois Grain Farms Without Livestock in 2000.

	Corn				Soybeans			
	North	Central ¹	Central ²	South	North	Central ¹	Central ²	South
Number of farms	509	721	383	249	509	721	383	249
Acres in crop	454	462	475	491	376	449	467	528
Nonland Costs								
Variable costs:								
Soil fertility	\$ 49	\$ 53	\$ 52	\$ 56	\$ 18	\$ 19	\$ 17	\$ 21
Pesticides	31	32	29	30	32	33	30	30
Seed	35	33	35	33	18	19	18	20
Drying	7	6	6	3	2	2	2	1
Repairs, fuel, and hire	<u>39</u>	<u>31</u>	<u>32</u>	<u>37</u>	<u>33</u>	<u>27</u>	<u>27</u>	<u>32</u>
Total, variable costs	\$ 161	\$ 155	\$ 154	\$ 159	\$ 103	\$ 100	\$ 94	\$ 104
Percent change from 1999	2	2	3	6	3	4	4	5
Other nonland costs:								
Labor	\$ 36	\$ 38	\$ 35	\$ 36	\$ 34	\$ 36	\$ 33	\$ 34
Buildings	12	10	10	10	8	6	6	5
Storage	5	7	6	3	2	3	3	2
Machinery depreciation	31	30	27	26	26	26	24	22
Nonland interest	37	34	32	31	33	31	28	26
Overhead	<u>23</u>	<u>20</u>	<u>19</u>	<u>19</u>	<u>23</u>	<u>19</u>	<u>19</u>	<u>19</u>
Total, other costs	\$ 144	\$ 139	\$ 129	\$ 125	\$ 126	\$ 121	\$ 113	\$ 108
Total, nonland costs	\$ 305	\$ 294	\$ 283	\$ 284	\$ 229	\$ 221	\$ 207	\$ 212
Percent change from 1999	4	4	4	5	6	5	6	6
Land costs								
Taxes	\$ 30	\$ 29	\$ 25	\$ 15	\$ 30	\$ 29	\$ 25	\$ 15
Annually adjusted net rent	<u>98</u>	<u>110</u>	<u>91</u>	<u>59</u>	<u>98</u>	<u>110</u>	<u>91</u>	<u>59</u>
Total land cost	\$ 128	\$ 139	\$ 116	\$ 74	\$ 128	\$ 139	\$ 116	\$ 74
Total, all costs	\$ 433	\$ 433	\$ 399	\$ 358	\$ 357	\$ 360	\$ 323	\$ 286
Percent change from 1999	2	2	2	3	2	2	3	3
2000 yields, bushels per acre	156	165	154	149	46	49	45	45
Nonland cost per bushel	\$1.96	\$1.78	\$1.84	\$1.91	\$4.98	\$4.51	\$4.60	\$4.71
Total, all costs per bushel	\$2.78	\$2.62	\$2.59	\$2.40	\$7.76	\$7.35	\$7.18	\$6.36
1997-2000 average yield	154	158	145	124	50	50	46	41
Nonland cost per bushel	\$1.98	\$1.88	\$1.95	\$2.29	\$4.58	\$4.42	\$4.50	\$5.17
Total, all costs per bushel	\$2.81	\$2.74	\$2.75	\$2.89	\$7.14	\$7.20	\$7.02	\$6.98

Note: The last two lines of the table are costs based on 1997-2000 average yields.

¹ Soil productivity ratings of 86 to 100.

² Soil productivity ratings of 56 to 85