## 2001-2002 SUGARBEET COSTS AND RETURNS FROM USDA'S AGRICULTURAL RESOURCE MANAGEMENT SURVEY

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U.S farmers planted sugarbeets on about 1.43 million acres in 2002. Production totaled 27.55 million tons in 2002, up 7 percent from 2001 (USDA-NASS). Planted acres increased most in Minnesota, Idaho, North Dakota, and Nebraska. Minnesota growers planted beets on 505,000 acres, an increase of 37,000 acres over 2001. Planted acres declined in Wyoming, Washington, and Oregon. The largest decline in beet acreage was reported in Wyoming. There, growers planted beets on 40,000 acres, a decrease of 8,500 acres from 2001.

The overall 2002 prices paid index for farm production inputs fell slightly from 2001. The largest decline was in fertilizer prices (12 percent) followed by fuel (11 percent). Prices for agricultural chemicals fell about 2 percent from 2001. Wage rates, seed and farm machinery prices increased. Seed prices were up 8 percent, while wages were 5 percent higher. Prices for farm machinery rose 6 percent over 2001.

Reflecting the reduction in prices paid, average 2002 operating costs of producing sugarbeets were less than in 2001. Average estimated operating costs were \$348 per planted acre among all U.S. beet growers, ranging from \$291 per acre in the Red River Valley to \$505 in the Northwest. The total estimated cost of producing the 2002 beet crop averaged \$843 per acre, a figure that is \$4 per acre below 2001 estimated costs. At the regional level, total estimated costs in 2002 ranged from \$692 per acre in the Red River Valley to \$1,217 in the Northwest. This wide range derives from differences in production practices and input use. Irrigation expenses in the Northwest and the Great Plains increased costs there relative to the other regions.

U.S. sugarbeet yields averaged 20.5 tons per planted acre, similar to that observed in 2001. However, the influence of growing and harvest conditions on yields varied among regions. Sugarbeet yields were higher in 2002 than in 2001 in the Red River Valley, while 2002 beet yields were below 2001 levels in the Great Plains. In the Northwest and Great Lakes, beet yields in 2002 were essentially the same, on average, as they were in 2001.

On a per-ton basis, the operating costs of producing sugarbeets in 2002 were estimated at \$16.98, varying from \$15.30 to \$19.72 per ton among the regions. Among all U.S. beet growers total operating costs averaged \$41.10 per ton, slightly below 2001 levels. Among regions, the Red River Valley region had the cost advantage, producing beets at the lowest total cost (\$36.44 per ton) compared with \$40.73-\$47.80 per ton in other regions. Total costs per ton were highest in the irrigated region of Great Plains and the Northwest.

Sugarbeet cost and return estimates are based on data collected in a special sugarbeet survey as part of the 2000 USDA Agricultural Resource Management Survey (ARMS). Therefore, the 2001 and 2002 estimates reflect the technology that was used in 2000. Annual changes in input-output prices and yields reported by USDA-NASS in *Agricultural Prices* and *Crop Production* were used to update costs and returns to 2001 and 2002 levels. The sugarbeet cost-of-production estimates were developed using accounting methods recommended by the American Agricultural Economics Association's Task Force on Commodity Costs and Returns (1998). Note that the Southwest region is not shown in the table due to insufficient sample size in the 2000 ARMS, but this region's sugarbeet costs and returns were included in the U.S. averages.

ERS' time series costs of production can be found on ERS' webpage. http://www.ers.usda.gov/Data/CostsAndReturns/

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## References

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Sugarbeet production costs and return Item	United	States	Great	Great Lakes		Red River Valley		Great Plains		Northwest	
	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002	
			Ī	Dollars per	planted ac	<u>re</u>					
Gross value of production: 2/											
Beets	809.98	830.73	709.86	706.33	752.49	803.93	811.20	730.80	1,020.44	1,038.51	
Beet tops/grazing	0.12	0.10	0.00	0.00	0.00	0.00	0.79	0.69	0.00	0.00	
Total, gross value of production	810.10	830.83	709.86	706.33	752.49	803.93	811.99	731.49	1,020.44	1,038.51	
Cash expenses:											
Seed	44.55	46.63	41.57	42.77	45.01	48.02	48.32	50.26	41.76	41.79	
Fertilizer	59.24	47.41	85.54	68.04	37.21	29.79	77.60	59.56	89.98	76.37	
Chemicals	96.12	95.96	74.19	74.17	109.80	109.72	78.71	78.05	88.23	86.54	
Custom operations	32.23	32.77	28.99	29.37	23.02	23.53	35.57	35.21	45.72	46.70	
Fuel, lube, and electricity	49.81	47.95	50.91	46.31	24.55	23.07	54.06	46.97	119.56	125.98	
Repairs	43.60	45.78	51.95	55.56	34.59	37.00	50.93	51.66	61.56	64.39	
Purchased irrigation water	4.99	4.86	0.00	0.00	0.06	0.06	9.44	8.94	16.66	16.40	
Freight and dirt hauling	14.75	14.78	19.31	19.80	13.91	13.88	13.01	12.97	14.52	14.65	
Miscellaneous	16.41	16.43	3.23	3.21	13.75	13.65	17.79	17.23	29.01	29.13	
Hauling allowance (-)	7.31	7.43	0.00	0.00	10.44	10.45	7.77	8.23	1.44	1.30	
Interest on operating capital	6.02	2.92	6.04	2.87	4.96	2.44	6.42	2.98	8.59	4.23	
Total, operating costs	360.41	348.06	361.73	342.10	296.42	290.71	384.08	355.60	514.15	504.88	
Allocated overhead:											
Hired labor	60.45	61.76	29.73	31.92	55.21	55.95	55.19	55.30	100.72	102.56	
Opportunity cost of unpaid labor	82.98	83.87	99.63	106.97	52.87	53.70	155.23	154.33	93.27	93.64	
Capital recovery (machinery and quipment)	145.28	149.83	168.95	172.94	117.22	123.34	163.9	163.55	207.55	215.18	
Opportunity cost of land (rental ate)	123.83	124.03	129.81	129.81	86.16	86.27	132.31	135.22	214.97	214.75	
Taxes and insurance	14.96	15.24	14.08	14.42	12.59	12.84	16.17	16.23	21.01	21.52	
General farm overhead	34.31	34.95	27.92	28.57	28.3	28.92	37.93	37.62	45.05	46.18	
Coop share	24.48	24.82	0.00	0.00	40.68	40.64	0.00	0.00	18.19	18.37	

Total, allocated overhead	486.29	494.50	470.12	484.63	393.03	401.66	560.73	562.25	700.76	712.20
Total costs listed	846.70	842.56	831.85	826.73	689.45	692.37	944.81	917.85	1,214.91	1,217.08
Value of production less operating costs	449.69	482.77	348.13	364.23	456.07	513.22	427.91	375.89	506.29	533.63
Value of production less total costs listed	-36.60	-11.73	-121.99	-120.40	63.04	111.56	-132.82	-186.36	-194.47	-178.57
Yield (tons/planted acre) 3/	20.30	20.50	20.40	20.30	17.80	19.00	21.30	19.20	25.20	25.60
Season-average price (dollars/ton)	39.88	40.00	34.80	34.80	42.27	42.25	38.04	38.06	40.50	40.50

Sugarbeet production regions are defined as: Great Lakes (Michigan and Ohio); Red River Valley (Minnesota and eastern North Dakota); Great Plains (Wyoming, Montana, western North Dakota, Colorado, and Nebraska); Northwest (Idaho, Oregon, and Washington); and Southwest (California). Excludes Southwest region due to

insufficient

sample size for disclosure.

Note: available at http://www.ers.usda.gov/Data/CostsAndReturns/

<sup>1/</sup> Developed from survey base year, 2000. 2002 estimates are preliminary.
2/ Excludes payments on acres diverted from production by the PIK program.
3/ Yields are those reported in USDA's Agricultural Resource Management Survey of sugarbeet growers adjusted for year-to-year changes as reported in *Crop* Production, NASS/USDA.