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Agricultural Economics Report

NUMBER 598

MICHIGAN FARM
BUSINESS ANALYSIS SUMMARY -
ALL TYPES OF FARMS

1995 TELFARM DATA

by

Myron P. Kelsey
and
Nancy Creed

Department of
Agricultural Economics
MICHIGAN STATE
UNIVERSITY
East Lansing

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Myron P. Kelsey¹

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¹Professor. Co-workers in the Telfarm Project were: D. Stein, S. Harsh, R. Betz, J. Jones, T. Purdy, E. Hepker, R. Clark, R. Hepp, S. Nott, P. Ruesink, W. Schauer, G. Schwab, A. Shapley, and G. Kole with the assistance of County Agents in Michigan.

Table 1.

AVERAGE LABOR INCOME ON MICHIGAN
MAIL-IN RECORD FARMS, 1929-1995

1929 . . .	\$ 585	1952 . . .	\$ 2,926	1975 . . .	\$ 1,303
1930 . . .	-263	1953 . . .	2,447	1976 . . .	112
1931 . . .	-676	1954 . . .	1,755	1977 . . .	-2,799
1932 . . .	-595	1955 . . .	993	1978 . . .	20,219
1933 . . .	249	1956 . . .	2,646	1979 . . .	17,802
1934 . . .	565	1957 . . .	2,360	1980 . . .	17,258
1935 . . .	764	1958 . . .	3,426	1981 . . .	-19,268
1936 . . .	1,318	1959 . . .	2,049	1982 . . .	-16,304
1937 . . .	569	1960 . . .	2,339	1983 . . .	-11,591
1938 . . .	571	1961 . . .	3,309	1984 . . .	-25,308
1939 . . .	780	1962 . . .	3,183	1985 . . .	-25,537
1940 . . .	787	1963 . . .	2,644	1986 . . .	-7,033
1941 . . .	1,675	1964 . . .	2,189	1987 . . .	6,854
1942 . . .	2,303	1965 . . .	2,403	1988 . . .	11,291
1943 . . .	1,900	1966 . . .	5,743	1989 . . .	28,986
1944 . . .	2,406	1967 . . .	4,916	1990 . . .	28,671
1945 . . .	2,483	1968 . . .	6,697	1991 . . .	20,188
1946 . . .	3,370	1969 . . .	6,918	1992 . . .	17,749
1947 . . .	3,486	1970 . . .	8,340	1993 . . .	24,817
1948 . . .	2,735	1971 . . .	2,698	1994 . . .	8,810
1949 . . .	1,815	1972 . . .	11,944	1995 . . .	18,342
1950 . . .	2,688	1973 . . .	31,184		
1951 . . .	3,782	1974 . . .	11,896		

5-YEAR AVERAGES

1931-35	\$ 62	1966-70	\$ 6,523
1936-40	805	1971-75	11,815
1941-45	2,153	1976-80	10,518
1946-50	2,819	1981-85	-19,602
1951-55	2,381	1986-90	13,754
1956-60	2,564	1991-95	17,981
1961-65	2,746		

SUMMARY OF THIS REPORT

The data in this report are the most detailed and accurate financial records available of what is happening on Michigan commercial farms. These figures are averages of actual records on 223 farms for the year 1995. The farms are also summarized by 4 types of farms or enterprises.

The data can be studied to learn how profitable farming was in 1995. It shows which types of farms did best and how well. The averages can be compared with data from your farm to show strong and weak points in management results.

For those who wish to do forward planning, these results can be used as basic data and then adjusted for current conditions. Labor, machinery, buildings, services or supplies, land, and miscellaneous costs are stated per crop acre or per unit of livestock production. There are also data on production standards, feed fed, capital investments, and hours of labor.

Data for this report are compiled from records of farm families enrolled in Telfarm. This is a management education program based on compiling and analyzing farm financial and production records. The farms are mainly commercial farms in Economic Classes I and II (over \$20,000 gross sales). Although about 750 families were enrolled in Telfarm in 1995, less than half of the farms could be included in this report because of a mixture of enterprises or incomplete data.

TYPE OF FARM SUMMARY DATA

The standardized format of the summary tables in the Telfarm Business Analysis Report is used for the data in the type of farm Tables 2 through 5. The line numbers are those used in the analysis summary. The data are the averages of all farms included. There may be some small variance in this data and that in individual reports due to editing.^{1/}

Table 2.

SUMMARY: ALL TYPES, 1995

Line No.	Item	All Type Farms		
		Total Farm	Crop Program Per Acre	Livestock Program Per Livestock Unit ^{2/}
1.	Value of Production	\$330,627	\$ 342	\$1,557
	<u>Costs</u>			
2.	Labor	\$ 75,359	81	335
3.	Power and Machinery	74,078	100	174
4.	Improvements.	24,283	22	138
5.	Crop Supplies	58,118	98	0
6.	Livestock Services.	45,357	0	554
7.	Land Charge	37,961	62	10
8.	Other	12,487	7	101
9.	Total Cost.	\$327,643	\$ 370	\$1,312
10.	Management Income	2,984	-28	245
11.	Labor Income.	18,342	-12	311
12.	Rate Earned Owned Capital	6.6	2.5	15.3
	<u>Capital</u>			
19.	Total Owned Capital	\$679,558	\$1,050	\$2,588
26.	Total Rented Capital.	180,789	705	80
27.	Total Capital	\$860,347	\$1,755	\$2,668
	<u>Labor</u>			
29.	Operator Labor, Hours	2,292		
30.	Family Labor, Hours	1,683		
31.	Hired Labor, Hours.	5,589		
32.	Total Labor, Hours.	9,564	10.2	42.5
35.	Income/Total Hours, 1/32.	\$ 34.57		
36.	Cost/Hour, 9/32	\$ 34.26		
37.	Labor Income/Hour, Operator	\$ 8.00		
56.	Total Tillable Acres.	595.7		
57.	Number of Full-Time Equivalent FTE) of Labor	3.2		
	<u>Feed Fed</u>			
60.	Corn.	\$ 24,727		\$ 303
61.	Corn Silage	13,717		168
62.	Oats.	387		5
64.	Barley.	503		6
65.	Hay Equivalent.	33,550		411
67.	Pasture	855		10
68.	Other (Supplement Blend).	54,931		672
69.	Total Feed Fed.	\$128,670		\$1,575

^{1/}Capital per acre has been calculated by an alternative method.

^{2/}Based on 77 livestock units (dairy and beef cows are per head, cattle and hogs per 100 pounds produced, etc.).

Table 3.

DAIRY AND FRUIT FARMS

Line No.	Item	137 Dairy Farms			28 Fruit Farms	
		Total Farm	Per Acre	Per Cow	Total Farm	Crops Per Acre
1.	Value of Production	\$342,599	\$ 279	\$ 1,342	\$230,878	\$ 1,261
	<u>Costs</u>					
2.	Labor	\$ 87,785	\$ 66	\$ 369	\$ 92,146	\$ 503
3.	Power and Machinery	77,229	97	152	50,257	274
4.	Improvements	28,375	22	118	17,490	96
5.	Crop Supplies	44,277	75	0	59,305	324
6.	Livestock Services	69,473	0	522	79	--
7.	Land Charge	31,907	52	10	15,990	88
8.	Other	13,939	5	83	11,346	62
9.	Total Cost	\$352,985	\$ 317	\$1,254	\$246,613	\$1,347
10.	Management Income	-10,386	-38	88	-15,735	-86
11.	Labor Income	7,314	-25	164	-3,017	-16
12.	Rate Earned Owned Capital (%)	4.6	0.5	9.7	2.2	--
	<u>Capital</u>					
19.	Total Owned Capital	\$720,859	\$ 884	\$2,352	\$341,898	\$1,867
26.	Total Rented Capital	124,024	486	78	30,641	168
27.	Total Capital	\$844,883	\$1,370	\$2,430	\$372,539	\$2,035
	<u>Labor</u>					
29.	Operator Labor, Hours	2,642			1,898	
30.	Family Labor, Hours	2,131			848	
31.	Hired Labor, Hours	6,189			9,757	
32.	Total Labor, Hours	10,961	8.2	46.1	12,503	68.3
35.	Income/Total Hours, 1/32	\$ 31.26			\$ 18.47	
36.	Cost/Hour, 9/32	\$ 32.20			\$ 19.72	
37.	Labor Income/Hour, Operator	\$ 2.77			\$ -1.59	
56.	Total Tillable Acres	588.4			183.1	
57.	Number of FTE of Labor	3.7			4.2	
		Total Farm	Per Cow Dollar	Quantity		
	<u>Feed Fed</u>					
60.	Corn	\$ 30,291	\$ 288	104 bu.		
61.	Corn Silage	22,287	168	8.4 ton		
62.	Oats	564	4	3.0 bu.		
64.	Barley	803	6	2.4 bu.		
65.	Hay Equivalent	54,255	408	6.1 ton		
67.	Pasture	1,366	10	.4 ton		
68.	Other (Supplement Blend)	76,998	579			
69.	Total Feed Fed	\$186,564	\$1,403			
	<u>Dairy Factors</u>					
80.	Number of Cows	133.0				
81.	Milk Sold, lbs.	2,640,127	19,855			
82.	Milk Sales, \$	\$342,009	\$2,572			
83.	Cattle Income, \$	\$ 23,214	\$ 175			
86.	Non-Feed Cost, \$	\$166,647	\$1,253			
89.	Percent Calf Death Loss	11.9				
90.	Price Received/Cwt. Milk	\$ 12.95				
91.	Net Cost/Cwt. Milk	\$ 12.50				
93.	Percent Cull Rate	32.6				
	<u>Ratios</u>					
180.	Total Investment/FTE	\$228,347			\$ 88,700	
181.	Operator's Investment/FTE	\$194,826			\$ 81,404	
182.	Value of Production/FTE	\$ 92,594			\$ 54,971	
183.	Value of Prod./\$100 Cost	\$ 97.06			\$ 93.62	
184.	Value of Prod./\$1000 Mach. Invest	\$ 4,436			\$ 4,594	
185.	Total Tillable Acres/FTE	159.0			43.6	

Table 4.

SAGINAW VALLEY CASH CROP AND CASH GRAIN

Line No.	Item	15 Saginaw Valley		28 Cash Grain	
		Total Farm	Per Acre	Total Farm	Per Acre
1.	Value of Production	\$423,105	\$ 365	\$272,221	\$ 345
	<u>Costs</u>				
2.	Labor	\$ 51,554	\$ 45	\$ 21,457	\$ 27
3.	Power and Machinery	93,077	80	63,428	80
4.	Improvements.	18,116	16	10,673	14
5.	Crop Supplies	131,623	114	83,319	106
6.	Livestock Services.	7	--	418	1
7.	Land Charge	110,781	96	44,919	57
8.	Other	9,353	8	5,413	7
9.	Total Cost.	\$414,513	\$ 358	\$229,627	\$ 292
10.	Management Income	8,592	7	42,594	54
11.	Labor Income.	22,144	19	52,099	66
12.	Rate Earned Owned Capital (%)	6.2	5.7	12.9	--
	<u>Capital</u>				
19.	Total Owned Capital	\$1,232,326	\$1,064	\$595,486	\$ 754
26.	Total Rented Capital.	911,290	787	217,366	275
27.	Total Capital	\$2,143,616	\$1,851	\$812,852	\$1,029
	<u>Labor</u>				
29.	Operator Labor, Hours	2,023		1,419	
30.	Family Labor, Hours	1,348		1,076	
31.	Hired Labor, Hours.	3,584		500	
32.	Total Labor, Hours.	6,955	6.0	2,995	3.8
35.	Income/Total Hours, 1/32.	\$ 60.84		\$ 90.90	
36.	Cost/Hour, 9/32	\$ 59.60		\$ 76.68	
37.	Labor Income/Hour, Operator, 11/29. .	\$ 10.95		\$ 36.72	
38.	Total Tillable Acres.	1,157.8		789.4	
39.	Number of FTE of Labor.	2.3		1.0	
	<u>Crop Yields, Owned Acres</u>				
40.	Corn, Bushels	137.1		121.6	
42.	Oats, Bushels	87.0		34.6	
44.	Hay Equivalent, Tons.	1.5		4.1	
47.	Wheat, Bushels.	74.3		62.3	
48.	Sugar Beets, Tons	16.2		--	
49.	Navy Beans, Cwt.	18.9		13.3	
54.	Soybeans, Bushels	47.1		42.5	
	<u>Ratios</u>				
180.	Total Investment/FTE.	\$932,007		\$812,852	
181.	Operator's Investment/FTE	\$535,794		\$595,486	
182.	Value of Production/FTE	\$183,959		\$272,221	
183.	Value of Production/\$100 Cost	\$ 102.07		\$ 118.55	
184.	Value of Production/\$1,000 Machine Investment.	\$ 4,546		\$ 4,292	
185.	Total Tillable Acres/FTE.	503.4		789.4	

Table 5.

HOG FARMS

Line No.	Item	15 Hog Farms			
		Total Farm	Per Acre	Per Live-stock Unit	
1.	Value of Production	\$384,512	\$ 380	\$24.34	
	<u>Costs</u>				
2.	Labor	\$ 54,953	\$ 45	\$ 4.10	
3.	Power and Machinery	90,620	135	2.80	
4.	Improvements	31,106	23	2.50	
5.	Crop Supplies	62,289	123	--	
6.	Livestock Services	40,009	--	5.13	
7.	Land Charge	48,398	98	.15	
8.	Other	17,705	7	1.81	
9.	Total Cost	\$345,080	\$ 425	\$16.49	
10.	Management Income	39,432	-45	\$ 7.85	
11.	Labor Income	51,070	-35	8.72	
12.	Rate Earned Owned Capital (%)	15.8	2.2	36.0	
	<u>Capital</u>				
19.	Total Owned Capital	\$567,599	\$ 935	\$28.04	
26.	Total Rented Capital	180,746	693	2.20	
27.	Total Capital	\$748,345	\$1,628	\$30.24	
	<u>Labor</u>				
29.	Operator Labor, Hours	1,737			
30.	Family Labor, Hours	619			
31.	Hired Labor, Hours	3,840			
32.	Total Labor, Hours	6,196	5.0	.46	
35.	Income/Total Hours, 1/32	\$ 62.06			
36.	Cost/Hour, 9/32	\$ 55.70			
37.	Labor Income/Hour, Operator	\$ 29.40			
56.	Total Tillable Acres	507.5			
57.	Number of FTE of Labor	2.1			
		<u>Head</u>	<u>Total Cwt.</u>	<u>Quantity or Dollars</u>	<u>Dollars per Head</u>
	<u>Feed Fed</u>				<u>Dollars per Cwt.</u>
60.	Corn	\$121,306	\$15.40	6.5 bu.	
65.	Hay Equivalent	584	.07		
67.	Pasture	112	.01		
68.	Other Feed Costs	112,263	14.25		
69.	Total Feed Fed	\$234,265	\$29.73		
	<u>Hog Factors</u>				
140.	Average Number of Breeding Sows . . .	223	--	--	--
141.	Ending Inventory, Number Head/Cwt. . .	2,281	2,962	159,984	70.10
142.	Sales, Breeding Stock	\$ 141	\$ 543	\$ 24,200	171.70
143.	Sales, Market Hogs	3,426	7,040	356,204	104.10
144.	Sales, Feeders	205	68	8,431	41.10
145.	Total	\$ 6,053	\$10,613	\$548,818	--
146.	Beginning Inventory	1,956	2,723	116,446	--
147.	Purchases Mature	16	10	6,155	383.10
148.	Purchases Feeders	0	0	0	0
149.	Total	1,972	2,733	122,601	--
150.	Production	--	7,879	426,217	--
151.	Non-Feed Cost	--	--	129,915	--
152.	Total Cost	\$ --	\$ --	\$364,180	--
153.	Litters Farrowed	445	--	--	--
154.	Pigs Born	4,448	--	--	--
155.	Pigs Died	422	--	--	--
156.	Pigs Weaned/Litter	9.0	--	--	--
	<u>Ratios</u>				
180.	Total Investment/FTE	\$356,355			
181.	Operator's Investment/FTE	\$270,285			
182.	Value of Production/FTE	\$183,101			
183.	Value of Prod./\$100 Cost	\$ 111.43			
184.	Value of Prod./\$1000 Mach. Invest . .	\$ 5,042			
185.	Total Tillable Acres/FTE	241.7			

Table 6. EARNINGS ON MICHIGAN TELFARM RECORD FARMS BY TYPE OF FARM FOR 1991-1995

Items	All Farms	Dairy	Saginaw Valley Cash Crop	Cash Grain	Tree Fruit	Swine*
Labor Income						
1995	\$ 18,342	\$ 7,314	\$ 22,144	\$ 52,099	\$ -3,017	\$ 51,070
1994	8,810	8,474	14,628	17,552	6,724	-13,557
1993	24,817	24,692	41,584	26,672	13,413	7,261
1992	17,749	14,754	36,978	3,413	-4,691	--
1991	20,188	14,025	18,995	27,437	50,527	24,651
5-Year Average: 1991-1995 . . .	\$ 17,981	\$ 13,852	\$ 26,866	\$ 25,435	\$ 12,591	\$ 17,356
Rate Earned on Investment in %:						
1995	6.6	4.6	6.2	12.9	2.2	15.8
1994	5.0	4.6	5.7	7.3	4.3	3.5
1993	7.2	6.7	9.5	9.3	7.2	5.7
1992	6.4	5.2	9.9	4.4	.1	--
1991	7.1	5.4	7.1	9.5	22.7	8.6
5-Year Average: 1991-1995	6.5	5.3	7.7	8.7	7.3	8.4

*4-year average.

Table 7. VALUE OF FARM PRODUCTION FROM VARIOUS SOURCES FOR MICHIGAN TELFARM RECORD FARMS BY TYPE, 1995

Items	All Farms	Dairy	Saginaw Valley Cash Crop	Cash Grain	Tree Fruit	Swine*
Number of Farms	223	137	15	28	28	15
Dairy Cattle.	\$ 16,972	\$ 23,214	\$ --	\$ --	\$ --	\$ --
Hogs.	28,694	16	--	--	--	426,216
Other Livestock	69	-189	--	1,929	71	-182
Feed Crops.	36,869	25,878	84,701	131,943	423	-24,232
Cash Crops.	72,357	11,115	306,807	117,274	206,936	74,753
Dairy Products.	210,113	342,009	--	--	--	--
Refunds	2,838	3,022	3,153	2,121	2,767	2,308
Custom Income	2,159	1,390	3,468	1,652	4,850	3,791
Government Payments	13,137	11,244	16,574	16,181	15,831	16,270
Other Income.	2,350	1,898	8,402	1,649	931	-2,196
Purchased Feed.	-54,931	-76,998	--	-528	--	-112,216
Value of Farm Production. . . .	\$330,627	\$342,599	\$423,105	\$272,221	\$230,878	\$384,512

Table 8. CASH AND NONCASH COSTS FOR MICHIGAN TELFARM RECORD FARMS BY TYPE, 1995

Items	All Farms	Dairy	Saginaw Valley Cash Crop	Cash Grain	Tree Fruit	Swine
Number of Farms	223	137	15	28	28	15
<u>Labor:</u>						
Operator's.	\$ 15,358	\$ 17,699	\$ 13,552	\$ 9,505	\$ 12,719	\$ 11,638
Family.	11,275	14,275	9,030	7,210	5,681	4,148
Hired	48,726	55,812	28,972	4,742	73,747	39,167
<u>Power and Machinery:</u>						
Repairs and Supplies.	24,871	27,062	37,431	15,862	17,661	22,560
Gas and Oil	7,808	8,377	12,116	5,384	5,590	6,974
Lease and Custom Hire	8,628	7,214	8,990	9,838	9,140	17,969
Depreciation.	27,231	28,511	29,532	27,889	14,303	36,141
<u>Improvements:</u>						
Conservation.	110	135	53	161	7	39
Repairs	3,650	4,637	2,647	2,230	1,342	2,601
Insurance	4,238	4,896	3,575	2,907	2,673	4,296
Depreciation and Lease.	11,963	13,874	9,876	4,099	8,291	18,130
<u>Crop Expense:</u>						
Fertilizer and Lime	20,600	18,246	52,310	30,877	6,786	17,011
Supplies and Packages	1,852	18	6,166	639	10,470	472
Seeds and Plants.	10,356	8,763	21,349	17,154	3,515	13,997
Spray Material.	15,221	9,248	33,335	19,398	29,556	17,098
Marketing	614	116	2,155	1,063	2,005	152
Other + Dryer and Irr. Fuel	1,833	792	4,971	3,725	1,825	4,691
<u>Livestock Expense:</u>						
Breeding Fees	2,209	3,290	--	14	--	2,774
Veterinary and Medicine	8,326	12,405	4	42	37	10,320
Marketing	13,719	21,999	--	30	--	2,975
Other	11,684	17,670	3	119	5	12,074
<u>Other Expenses:</u>						
Taxes	5,751	6,008	8,315	5,383	4,279	4,274
Utilities	7,913	9,851	3,187	2,418	3,971	12,554
Other	4,574	4,088	6,165	2,995	7,375	5,150
<u>Charge for Assets:</u>						
Rent.	17,525	14,287	52,298	21,919	4,889	27,720
Interest Paid	18,017	18,514	16,667	10,274	11,894	40,703
Interest on Owned Assets.	<u>23,810</u>	<u>25,213</u>	<u>51,814</u>	<u>23,731</u>	<u>10,535</u>	<u>9,452</u>
Value of Farm Production.	\$327,862	\$352,996	\$414,513	\$229,627	\$248,296	\$345,080

Table 9. CASH INCOME, EXPENSES AND CAPITAL PURCHASES FOR MICHIGAN TELFARM RECORD FARMS
BY TYPE, 1995

Items	All Farms	Dairy	Saginaw Valley Cash Crop	Cash Grain	Tree Fruit	Swine
Number of Farms	223	137	15	28	28	15
Cash Farm Income.	\$382,608	\$420,611	\$416,206	\$241,494	\$259,726	\$494,710
Cash Farm Expense	<u>307,886</u>	<u>341,218</u>	<u>308,435</u>	<u>163,635</u>	<u>219,510</u>	<u>442,267</u>
Net Cash Farm Income.	\$ 64,722	\$ 79,393	\$107,771	\$ 77,859	\$ 40,216	\$ 52,443
Depreciable Livestock Purchases	\$ 6,241	\$ 9,476	\$ --	\$ 43	\$ --	\$ 6,155
Net Machinery Purchases	\$ 26,418	\$ 25,100	\$ 40,544	\$ 37,388	\$ 14,298	\$ 26,493
Net Improvement Purchases . . .	\$ 7,610	\$ 11,783	\$ 32,006	\$ 2,679	\$ 6,723	\$ 7,273
Net Farm Cash for Family Living and Principal Payments (Additional Borrowing Not Included) . . .	\$ 24,453	\$ 33,034	\$ 35,221	\$ 37,749	\$ 19,195	\$ 12,522

Cash Farm Income = Cash Sales of Crops and Livestock and Other.

Cash Farm Expense = Cash Expense + Feed Purchases + Purchases for Resale (Other Than Depreciable Livestock).

Depreciable Livestock Purchases = Dairy Cows and Bulls, Beef Cows and Bulls, and Hog and Sheep Breeding Stock.

Improvement Purchases = Buildings, Fruit Trees and Vines, and Land Improvements.

Table 10.

KINDS OF CROPS, PERCENTAGES OF LAND IN DIFFERENT CROPS, AND
YIELDS ON MICHIGAN TELFARM RECORD FARMS BY TYPE, 1995

Items	All Farms	Dairy	Saginaw Valley Cash Crop	Cash Grain	Tree Fruit	Swine
Number of Farms	223	137	15	28	28	15
Tillable Acres.	595.7	588.4	1,157.8	789.4	183.1	507.5
<u>Percent of Tillable Acres</u>						
Corn.	30.8	29.7	19.8	42.7	--	54.1
Corn Silage	7.5	12.4	--	--	--	--
Oats.	1.2	1.4	--	1.1	--	--
Wheat	6.5	4.0	12.2	12.7	--	6.6
Hay	23.3	37.8	--	1.5	--	1.6
Pasture	2.6	4.0	--	--	--	.1
Sugar Beets	2.5	--	18.6	--	--	--
Field Beans	2.6	--	21.9	2.9	--	--
Soybeans.	11.6	4.9	14.9	34.3	--	16.8
Vegetable Crops	1.4	.4	7.1	--	4.6	3.7
Apples.9	--	--	--	24.2	--
Cherries.	1.3	--	--	--	35.7	--
Other Tree Fruit.2	--	--	--	18.0	--
Other Crops	3.6	1.7	.8	2.6	2.9	10.6
Idle Tillable + Rented Out. .	4.0	3.7	4.7	2.2	14.6	6.5
<u>Crop Yield Per Acre (Owned)</u>						
Corn Grain, Bushels	118.7	113.9	137.1	121.6	--	127.7
Corn Silage, Tons	15.4	15.4	--	13.5	--	--
Oats, Bushels	43.8	46.6	87.0	34.6	--	--
Wheat, Bushels.	59.0	49.6	74.3	62.3	--	56.5
Hay, Tons	4.4	4.4	--	4.1	--	4.4
Pasture, Tons	2.5	2.5	--	--	--	1.3
Sugar Beets, Tons	16.0	--	16.2	--	--	--
Navy Beans, Cwt.	18.2	--	18.9	13.3	--	--
Soybeans, Bushels	42.6	39.7	47.1	42.5	--	45.4
Apples, Bushels	857.0	--	--	--	857.0	--
Tart Cherries, Tons	4.9	--	--	--	4.9	--
Peaches, Bushels.	166.5	--	--	--	166.5	--

DEFINITIONS OF TERMS USED IN THIS REPORT

(Does not include landlord's income or costs)

General Farm Business Factors

Tillable acre: This includes the land harvested crops, land devoted to crops that failed, tillable pasture, tillable land reserved for government programs, and idle tillable land.

Person equivalent: The number of hours of hired labor, operator's labor, and family labor divided by 3,000.

Total investment: This is the average inventory value of land, buildings (less the farm dwelling), machinery, livestock and feed. The inventory value of buildings and machinery is based on cost less depreciation claimed for income tax purposes. Bare land is assigned a conservative market value based on quality.

Crop value: Crop value is calculated by multiplying the yield of each crop by a value suggested by the farm owner when completing a crop inventory or by the following prices:

Corn open market	\$ 2.95	per bu.	Wheat.	\$ 4.35	per bu.
Oats	1.60	per bu.	Alfalfa hay (med. qual). .	75.00	per ton
Navy beans	17.00	per cwt.	Soybeans	6.40	per bu.
Dark red beans	26.00	per cwt.	Growing wheat.	60.00	per acre
Light red beans.	22.00	per cwt.	Corn silage (untreated). .	20.00	per ton

The crop value for other crops is calculated by subtracting the total of purchases and the beginning inventory from the total of cash sales and ending inventory.

Crop income: This is the sale of the crop plus the change in inventory.

Value of farm production: This is cash sales in the farm business minus the purchases of feed, feed crops, and livestock plus the change in inventory of crops and livestock.

Income Factors

(Does not include landlord's income)

Livestock income: This is computed on the accrual basis. That is, it is the sale less the purchase plus the change in inventory.

Crop income: This is the sale of the crop plus the change in inventory. On feed crops which are fed to livestock, the crop income will sometimes show as a negative figure because the amount fed is not accounted for in computing the income from the individual crop.

Value of farm production: This is cash sales in the farm business minus the purchases of feed, feed crops, and livestock plus the change in inventory of crops and livestock. The allocation of the value of farm production to crops and livestock is explained below.

Value of farm production from livestock: Cash sales of livestock and livestock products minus purchases of livestock minus purchased feed and raised feed fed.

Value of farm production from crops: Cash sales of crops less purchases of feed crops (in dairy reports, feed crops purchased are included with feed purchases) plus raised feed fed to livestock. In dairy reports, the income from the custom work and "other" income is credited to crops.

Cost Factors

(Does not include landlord's costs)

Total cost: This is the sum of items listed below. It includes cash expenses and changes in inventory for supply items that are inventories such as power, fuel, fertilizer, pesticides, etc. It also includes non-cash costs for operator's and unpaid family labor, depreciation on improvements and machinery, and interest on the owner's equity.

Labor: This includes the cash cost for hired labor including paid perquisites and social security plus the value of operator's and unpaid family labor at \$6.70 per hour.

Power and machinery (sometimes called machinery expense): This includes the following items: repairs and supplies for upkeep on machinery including tractors; repairs and upkeep on trucks and farm share of automobiles including fuel for these if so reported; gas, oil, and grease for tractors, custom hire of machinery, depreciation on machinery, and interest¹ on investment in machinery.

Improvements: This includes repairs on buildings, fences and wells and bulldozing, cleaning ditches, fence rows, etc., which are classified as conservation expense for income tax purposes. It includes fire and wind insurance premiums, depreciation, and interest on improvement investment. Interest on trees is primarily for fruit orchards.

Crop expense: This includes fertilizer, lime, seed and plants, spray materials and herbicides, crop insurance, crop marketing, interest on the crop inventory, and other crop expense.

Livestock expense: This includes breeding, veterinary and medicine, milk and livestock marketing, milkhous supplies, registration, advertising, heat for livestock buildings, and other livestock service and supply items.

Land charge: This is interest for the investment in land plus taxes paid. Land values are estimated by Extension staff members. An effort is made to keep them comparable between farms. An attempt is made to use an agricultural value and not reflect urban real estate values.

Other expenses: These include utilities and other miscellaneous expenses not included elsewhere.

Earning Factors

(Does not include landlord's earnings)

Management income: Value of farm production less total costs.

Labor income: Management income plus the value of operator's labor.

Rate earned on investment: Management income plus interest on investment divided by the total operator's investment times 100.

¹Interest on total investment is reported in two segments--interest paid and interest on equity. Interest paid is reported by Telfarmers. The amount of debt is estimated by capitalizing the amount of interest reported at 7.5 percent. The estimated debt is subtracted from the total investment to determine equity. Interest is computed on the equity at 5.0 percent. Interest is allocated to machinery, improvements, land, livestock, and crop and orchard inventory according to investment.

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Dept. of Applied Economics
University of Minnesota
1994 Buford Ave - 232 ClaOff
St. Paul MN 55108-6040 USA