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1977

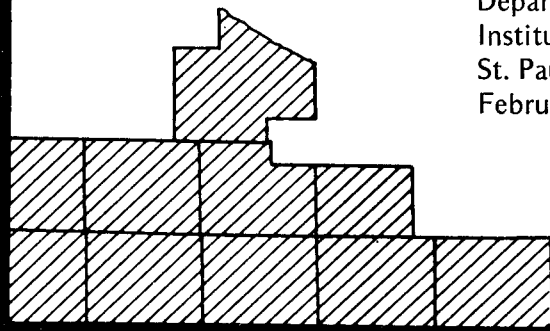
annual report

Southwestern Minnesota Farm Management Association

COOPERATING AGENCIES:

University of Minnesota, Institute of Agriculture
County Extension Services of the 10 Southwestern Counties
Southwestern Minnesota Farm Management Association

Economic Report ER 78-1
Department of Agricultural & Applied Economics
Institute of Agriculture
St. Paul, Minnesota 55108
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1977 ANNUAL REPORT OF THE SOUTHWESTERN MINNESOTA

FARM MANAGEMENT ASSOCIATION

prepared by

Delane E. Welsch, Erlin Weness, and Perry Fales *

INTRODUCTION

The Department of Agricultural and Applied Economics and the Agricultural Extension Service of the University of Minnesota and the Agricultural Extension Agents of several southwestern Minnesota counties are cooperating with the Southwestern Minnesota Farm Management Association in maintaining a farm management service. The Association was organized in the fall of 1939 by farmers in that part of the state for the purpose of studying the farm business through farm records. Each farmer pays an annual fee which covers a large part of the cost, with the balance defrayed by the Agricultural Extension and Research programs of the University of Minnesota. The analysis of the records and the preparation of the report are handled by the Department of Agricultural and Applied Economics under the direction of Delane E. Welsch. Erlin Weness and Perry Fales are the fieldmen for this project. Paul Hasbargen is the Extension Economist in Farm Management working closely with this Association. Arnold Sandager is the District Director of Agricultural Extension for the counties which are served by the Association.

Of the 208 farms in the Southwestern Association, 189 submitted records at the time of this report. The data for 169 farms are shown in the tables on succeeding pages. The rest were omitted from the information in the tables because the records were not sufficiently complete for a full analysis. No claim is made as to whether the farmers who belong to the Association are or are not representative of the southwestern Minnesota. However, this report should be of value to farmers and others interested in agriculture in that it illustrates how farm records may be used as a basis for making an analysis of a farm business. It also shows typical enterprise costs and returns for 1977 and the variation in enterprise earnings as well as in total farm earnings.

The content of this report is somewhat different from previous years. While the roots of the analysis lie in the work of the Department of Agricultural and Applied Economics and its predecessor units over the past 60 years, the more detailed analysis found in this report was developed by Professor Edgar Persons of the University of Minnesota. This analysis is also used by Vocational Agriculture Adult Farm Business Management Education classes throughout Minnesota and in some other states. The computer work was done by Specialized Data Systems, Inc., Madison, Wisconsin.

*Welsch is Professor of Farm Management, Weness and Fales are jointly Area Farm Management Extension Agents and Fieldmen for the Association. The authors wish to thank the following people for their contributions to this report: Dr. Edgar Persons for his encouragement and training during this first season of using a new data processing procedure; Dennis Miller, Gene Metz, Alan Langseth, and Laurine Ziemke for their assistance in account book closing and coding; Wolfgang Vogel for his review of the analyses and correction of errors; Paul Hasbargen and Ken Thomas for much helpful advice; and Michele Wyskocil and Eileen Miley for all of their clerical and secretarial work throughout the project, and especially for putting this report together.

DISTRIBUTION OF MEMBERSHIP - 1977

County	Number of Members	Number Submit. Records	Association Officers	County Extension Directors
Cottonwood	32	30	Norris Mattison DuWayne Falk	Darrell D. Anderson
Faribault	12	12	Barron Weber	Henry C. Bollum
Jackson	22	17	Robert Untiedt Walter Ulbricht	Roger A. Lind
Lyon	3	2		Raymond J. Newell
Martin	13	13	Keith Worthley	Floyd H. Bellin, Jr.
Murray	25	21	Tom Keller John Van Oort	Reuben M. Boxrud
Nobles	39	38	Gary Hibma, President John Widboom, Vice Pres. M. J. Fellows Sec.-Tres Jerry Taylor	Arthur R. Frame
Pipestone	15	12	Steven Hansberger Jim Vanderlugt Arthur Spronk	Robert E. Fritz
Redwood	32	28	Francis Boerboom E. W. Runck	Ernest D. Johnson
Rock	1	0		Byron R. Peters
Watonwan	12	12	Merlyn Froslan	John I. Ankeny
Yellow Medicine	2	1		David S. Johnson
Total	208	186		

1977 ANNUAL REPORT OF THE SOUTHWESTERN MINNESOTA

FARM MANAGEMENT ASSOCIATION

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TABLE 1. FARM INVENTORIES - 1977

ITEMS	Average	
	of 169 Farms	
1 SIZE OF FARM-TOTAL ACRES	501.2	
2 -TILLABLE ACRES	447.0	
3 WORK UNITS-CROPS	219.41	
4 -LIVESTOCK	257.20	
5 -OTHER	38.56	
6 TOTAL SIZE OF BUSINESS IN WORK UNITS	515.17	
7 NUMBER OF WORKERS	1.77	
8 FARM CAPITAL INVESTMENT PER WORKER	\$ 205,099	
	JAN. 1	DEC. 31
9 PRODUCTIVE LIVESTOCK		
10 DAIRY COWS	\$ 2,583	\$ 2,433
11 OTHER DAIRY CATTLE	2,043	1,833
12 BEEF BREEDING CATTLE	2,891	2,971
13 BEEF FEEDER CATTLE	22,257	24,713
14 HOGS	11,216	14,046
15 SHEEP (INCL. FEEDERS) & GOATS	221	264
16 POULTRY-ALL TYPES	590	970
17 OTHER LIVESTOCK	8	7
18 TOTAL PRODUCTIVE LIVESTOCK	\$ 41,809	\$ 47,238
19 CROP, SEED AND FEED	\$ 53,665	\$ 65,706
20 POWER, MACHINERY AND EQUIPMENT		
21 AUTO AND TRUCK (FARM SHARE)	\$ 4,035	\$ 4,575
22 POWER AND MACHINERY	28,710	31,034
23 IRRIGATION EQUIPMENT		
24 CUSTOM WORK EQUIPMENT		
25 LIVESTOCK EQUIPMENT	6,307	6,653
26 TOTAL POWER, MACHINERY AND EQUIPMENT	\$ 39,053	\$ 42,262
27 LAND	\$ 159,069	\$165,011
28 BUILDINGS-FENCES-ETC.	41,888	45,282
29 TOTAL FARM CAPITAL	\$ 335,484	\$ 365,498
30 INCREASE OR DECREASE IN TOTAL FARM CAPITAL		\$ 30,014

TABLE 1 shows the beginning and end of year inventory of farm capital. These inventories include both the value of the operator's assets as well as the land-lord's in the case of rented assets. (Table 5 shows only the operator's share of farm capital.) Values of Productive Livestock, and Crop, Seed and Feed reflect the physical amounts on hand at the beginning and end of year multiplied by a conservative market price at the time. Power, Machinery, and Equipment values are cost less depreciation. Land is usually valued at cost. Measures of farm size other than total farm capital are shown in lines 1 through 7. The concept of Work Units is discussed on page 14. The number of workers shown on line 7 includes operator(s), hired labor, unpaid family labor, and the labor portion of custom work hired.

TABLE 1. FARM INVENTORIES - 1977 (CONT.)

ITEMS	34 Most*			34 Least*	
	Profitable Farms			Profitable Farms	
1 SIZE OF FARM-TOTAL ACRES	745.2			463.0	
2 -TILLABLE ACRES	666.4			398.3	
3 WORK UNITS-CROPS	318.95			204.15	
4 -LIVESTOCK	402.15			203.48	
5 -OTHER	30.16			16.33	
6 TOTAL SIZE OF BUSINESS IN WORK UNITS	751.26			423.96	
7 NUMBER OF WORKERS	2.03			1.64	
8 FARM CAPITAL INVESTMENT PER WORKER	\$ 276,454			\$ 190,515	
		Jan. 1	Dec. 31	Jan. 1	Dec. 31
9 PRODUCTIVE LIVESTOCK					
10 DAIRY COWS	\$ 1,485	\$ 923	\$ 1,445	\$ 1,371	
11 OTHER DAIRY CATTLE	418	339	1,231	1,524	
12 BEEF BREEDING CATTLE	5,404	4,838	4,794	5,749	
13 BEEF FEEDER CATTLE	28,639	36,877	21,572	22,793	
14 HOGS	16,115	22,057	10,735	11,150	
15 SHEEP (INCL. FEEDERS) & GOATS	143	110	280	316	
16 POULTRY-ALL TYPES	2,345	4,199	488	534	
17 OTHER LIVESTOCK	34	34	4	3	
18 TOTAL PRODUCTIVE LIVESTOCK	\$54,582	\$69,378	\$40,549	\$43,440	
19 CROP, SEED AND FEED	\$83,770	\$113,570	\$51,630	\$55,239	
20 POWER, MACHINERY AND EQUIPMENT					
21 AUTO AND TRUCK (FARM SHARE)	\$ 4,351	\$ 5,634	\$ 3,888	\$ 4,628	
22 POWER AND MACHINERY	37,529	41,901	23,756	24,696	
23 IRRIGATION EQUIPMENT					
24 CUSTOM WORK EQUIPMENT					
25 LIVESTOCK EQUIPMENT	6,387	7,448	5,132	4,989	
26 TOTAL POWER, MACHINERY AND EQUIP	\$48,267	\$54,983	\$32,777	\$34,313	
27 LAND	\$233,883	\$242,669	\$132,974	\$134,190	
28 BUILDINGS-FENCES-ETC.	64,814	63,904	34,005	35,728	
29 TOTAL FARM CAPITAL	\$485,316	\$544,503	\$291,934	\$302,910	
30 INCREASE OR DECREASE IN TOTAL FARM CAPITAL		\$ 59,187		\$ 10,976	

* ALL FARMS ARE SORTED INTO HIGH AND LOW CATEGORIES BASED ON SIZE OF LABOR EARNINGS. FOR TABLES 1, 2A, 2B, 3, 8, and 9, THIS IS ON WHOLE FARM BASIS, TAKEN FROM TABLE 2B, LINE 46. FOR TABLES 4,5,6A and 6B, THIS IS ON OPERATORS SHARE BASIS, TAKEN FROM TABLE 6B, LINE 47.

TABLE 2A. TOTAL FARM RECEIPTS - 1977

ITEMS	Average of 169 Farms	34 Most Profitable Farms	34 Least Profitable Farms
1 SALE OF LIVESTOCK AND LIVESTOCK PRODUCTS			
2 DAIRY COWS	\$ 1,088	\$ 893	\$ 356
3 DAIRY PRODUCTS	8,074	3,136	3,908
4 OTHER DAIRY CATTLE	1,606	444	2,083
5 BEEF BREEDING CATTLE	626	1,314	1,046
6 BEEF FEEDER CATTLE	45,754	55,608	49,294
7 HOGS COMPLETE AND MIXED	27,943	43,918	23,855
8 HOGS FINISHING	3,774	7,006	
9 HOGS PRODUCING WEANING PIGS	487		463
10 SHEEP, GOATS AND WOOL, FARM FLOCK	267	153	234
11 SHEEP AND WOOL, FEEDER LAMBS			
12 CHICKENS (INCL. HENS AND BROILERS)	276	532	77
13 TURKEYS	2,387	11,866	
14 EGGS	3,073	13,042	1,767
15 OTHER PRODUCTIVE LIVESTOCK AND PRODUCTS	5		
16 OTHER MISC. LIVESTOCK INCOME	14	2	70
17 TOTAL LIVESTOCK SALES	\$ 95,373	\$137,913	\$ 83,154
18 SALE OF CROPS			
19 WHEAT	\$ 2,022	\$ 3,286	\$ 1,545
20 OTHER SMALL GRAINS	1,352	2,440	620
21 CORN	16,359	23,817	13,695
22 SOYBEANS	25,512	45,348	21,257
23 OTHER ROW CROPS	712	194	513
24 LEGUMES AND OTHER FORAGE	268	411	336
25 GRASS SEED			
26 FRUITS AND NUTS			
27 VEG. ROADSIDE MARKET AND SPECIALTY			
28 NURSERY, TIMBER AND OTHER			
29 SET ASIDE ACRES-GOVERNMENT PAYMENTS			
30 TOTAL CROP SALES	\$ 46,226	\$ 75,497	\$ 37,966
31 CAPITAL ASSETS SOLD	\$ 729	\$ 823	\$ 313
32 GAS TAX REFUND	243	295	239
33 INCOME FROM WORK OFF THE FARM	1,518	1,313	814
34 CUSTOM WORK ENTERPRISE INCOME			
35 PATRONAGE REFUNDS	1,728	2,599	1,625
36 MISCELLANEOUS FARM INCOME	1,076	1,531	1,094
37 TOTAL FARM SALES	\$146,894	\$219,971	\$125,205
38 INCREASE IN FARM CAPITAL	\$ 32,220	\$ 59,446	\$ 14,172
39 FAMILY LIVING FROM THE FARM	454	618	367
40 TOTAL FARM RECEIPTS (37)+(38)+(39)	\$179,568	\$280,035	\$139,743

SEE PAGE 14 FOR EXPLANATORY NOTE FOR THIS TABLE.

TABLE 2B. TOTAL FARM EXPENSES AND LABOR AND MANAGEMENT EARNINGS - 1977

ITEMS	Average of 169 Farms	34 Most Profitable Farms	34 Least Profitable Farms
1 PURCHASE OF LIVESTOCK			
2 DAIRY COWS	\$ 165	\$	\$ 40
3 OTHER DAIRY CATTLE	554		1,700
4 BEEF BREEDING CATTLE	217	195	627
5 BEEF FEEDER CATTLE	25,662	30,528	29,181
6 HOGS COMPLETE AND MIXED	1,356	2,767	480
7 HOGS FINISHING	1,725	3,677	
8 HOGS PRODUCING WEANING PIGS	17		4
9 SHEEP AND GOATS	90	14	20
10 SHEEP, FEEDER LAMBS			
11 CHICKENS (INCL. HENS AND BROILERS)	731	2,927	534
12 TURKEYS	438	2,179	
13 OTHER PRODUCTIVE LIVESTOCK	2		
14 MISCELLANEOUS LIVESTOCK EXPENSE	2,539	3,423	2,330
15 FEED BOUGHT	24,390	41,437	21,868
16 FERTILIZER	6,602	9,543	7,723
17 CHEMICALS	3,801	5,815	3,242
18 OTHER CROP EXPENSE	5,464	8,875	5,462
19 IRRIGATION OPERATION COSTS			
20 CUSTOM WORK ENTERPRISE OPERATOR COSTS, INC. LABOR			
21 CUSTOM WORK HIRED	2,687	3,384	2,297
22 REPAIR + UPKEEP OF LIVESTOCK EQUIPMENT	922	1,408	794
23 REPAIR + UPKEEP OF FARM REAL ESTATE	1,139	1,147	1,466
24 GAS, OIL, GREASE BOUGHT (FARM SHARE)	3,367	4,569	3,155
25 REPAIR + OPERATOR OF MACH., TRACTOR, TRUCK AND AUTO	4,126	5,498	3,806
26 REPAIR + UPKEEP OF IRRIGATION EQUIPMENT			
27 REPAIRS, CUSTOM WORK ENTERPRISE			
28 WAGES OF HIRED LABOR	3,176	5,325	2,892
29 PERSONAL PROPERTY + REAL ESTATE TAXES	3,582	5,263	3,554
30 GENERAL FARM EXPENSE	1,572	2,007	1,644
31 TELEPHONE EXPENSE (FARM SHARE)	221	235	210
32 ELECTRICITY EXPENSE (FARM SHARE)	880	1,127	796
33 TOTAL CASH OPERATING EXPENSE	\$ 95,423	\$141,344	\$ 93,826
34 POWER, CROP AND GENERAL MACH. BOUGHT (FARM SHARE)	\$ 12,947	\$ 17,725	\$ 11,759
35 IRRIGATION EQUIPMENT BOUGHT	16		
36 CUSTOM WORK EQUIPMENT BOUGHT			
37 LIVESTOCK EQUIPMENT BOUGHT	1,934	2,720	1,150
38 NEW REAL ESTATE + IMPROVEMENT	14,257	13,946	9,931
39 TOTAL FARM PURCHASES (33) THRU (38)	\$124,576	\$175,735	\$116,666
40 DECREASE IN FARM CAPITAL	2,206	259	3,195
41 INTEREST ON FARM CAPITAL	21,029	30,895	17,845
42 UNPAID FAMILY LABOR	470	570	157
43 LABOR CHARGE FOR PARTNERS + OTHER OPERATORS	1,762	3,382	1,912
44 BOARD FURNISHED HIRED LABOR	217	207	184
45 TOTAL FARM EXPENSE (39) THRU (44)	\$150,261	\$211,048	\$139,960
46 RETURN TO OPER. LABOR & MGMT.-SINGLE OPER. (WHOLE FARM) (2A/40)-(45)\$	\$ 29,307	\$ 68,987	\$ (-217)
47 NUMBER OF OPERATORS	1	1	2
48 FULL TIME OPERATOR EQUIVALENTS	1.18	1.34	1.15
49 RETURN TO OPER. LABOR & MGMT/FULL TIME OPER. EQUIVALENT	\$ 26,334	\$ 57,312	\$ 1,057

TABLE 3. ENTERPRISE STATEMENT - 1977

ITEMS	Average of 169 Farms	34 Most Profitable Farms	34 Least Profitable Farms
1 RETURNS AND NET INCREASES			
2 PRODUCTIVE LIVESTOCK			
3 DAIRY COWS	\$ 8,168	\$ 3,185	\$ 3,792
4 OTHER DAIRY CATTLE	1,983	781	1,230
5 BEEF BREEDING CATTLE	1,378	2,492	2,278
6 FEEDER CATTLE	21,640	31,761	20,593
7 HOGS, COMPLETE & MIXED	29,162	45,596	23,884
8 HOG FINISHING ENTERPRISE	2,364	4,940	
9 PRODUCING WEANING PIGS	492		427
10 SHEEP AND GOATS	232	108	308
11 SHEEP, FEEDER LAMBS			
12 CHICKENS (INCL. HENS AND BROILERS)	2,694	10,977	1,356
13 TURKEYS	2,257	11,217	
14 OTHER PRODUCTIVE LIVESTOCK	3		(-1)
15 TOTAL ALL PRODUCTIVE LIVESTOCK	\$ 70,373	\$111,055	\$ 53,867
16 VALUE OF FEED FED TO LIVESTOCK	45,663	71,372	37,527
17 RETURN OVER FEED FROM LIVESTOCK	24,710	39,683	16,339
18 CROP, SEED AND FEED	63,599	110,985	40,766
19 COOPERATIVE PATRONAGE REFUNDS	1,728	2,599	1,625
20 MISCELLANEOUS FARM INCOME	1,076	1,531	1,094
21 CUSTOM WORK ENTERPRISE			
22 TOTAL RETURNS AND NET INCREASES	\$ 91,114	\$154,798	\$ 59,824
23 EXPENSES AND NET DECREASES			
24 TRUCK AND AUTO (FARM SHARE)	\$ 3,595	\$ 4,371	\$ 3,521
25 TRACTORS AND CROP MACHINERY	14,498	19,078	14,098
26 IRRIGATION EQUIPMENT	16		
27 ELECTRICITY	880	1,127	796
28 LIVESTOCK EQUIPMENT	2,613	3,379	2,132
29 BUILDINGS, FENCES AND TILING	5,276	6,783	5,763
30 BARE LAND	542	(-112)	2,686
31 MISC. LIVESTOCK EXPENSE	2,539	3,423	2,330
32 LABOR	3,684	5,979	3,550
33 LABOR CHARGE OTHER OPERATOR(S)	1,762	3,382	1,912
34 PROPERTY TAX	3,582	5,263	3,554
35 GENERAL FARM EXPENSE AND TELEPHONE	1,793	2,242	1,853
36 INTEREST ON FARM CAPITAL	21,029	30,895	17,845
37 TOTAL EXPENSES AND NET DECREASES	\$ 61,807	\$ 85,810	\$ 60,040
38 RETURN TO OPERATORS LABOR AND MANAGEMENT	\$ 29,307	\$ 68,987	\$ (-216)
39 NUMBER OF FARM OPERATORS	1	1	2

SEE PAGE 14 FOR EXPLANATORY NOTE FOR THIS TABLE.

TABLE 4. HOUSEHOLD EXPENSE - 1977

ITEMS	Average of 75 Farms	16 Most Profitable Farms	17 Least Profitable Farms
1 NUMBER OF PERSONS - FAMILY	4	4	4
2 NUMBER OF ADULT EQUIVALENT - FAMILY	3.0	3.3	3.3
3 CHURCH AND WELFARE	\$ 1,007	\$ 1,842	\$ 750
4 MEDICAL CARE AND HEALTH INSURANCE	1,442	1,487	1,514
5 FOOD AND MEALS BOUGHT	2,425	2,307	3,072
6 OPERATING EXPENSE AND SUPPLIES	901	820	878
7 FURNISHINGS AND EQUIPMENT	1,039	1,172	1,489
8 CLOTHING AND CLOTHING MATERIALS	1,017	1,130	1,342
9 PERSONAL CARE, PERSONAL SPENDING	506	476	694
10 EDUCATION	302	340	345
11 RECREATION	674	814	779
12 GIFTS AND SPECIAL EVENTS	561	925	625
13 PERSONAL SHARE TRUCK AND AUTO EXP.	742	710	1,085
14 OPER. SHARE UPKEEP ON DWELLING	283	441	38
14A CASH RENT - PERSONAL			
15 PERSONAL SHARE TEL. AND ELECT. EXP.	339	512	259
15A PERSONAL SHARE - GEN. FARM EXPENSE	12	35	
16 TOTAL CASH LIVING EXPENSE	\$ 11,249	\$ 13,011	\$ 12,868
17 PERS. SHARE NEW TRUCK AND AUTO	388	607	281
18 NEW DWELLING BOUGHT	1,774	3,589	1,629
19 TAXES AND OTHER DEDUCTIONS	3,513	5,800	2,472
20 LIFE INSURANCE AND OTHER SAVINGS AND INVEST	3,309	2,960	2,874
21 TOTAL HOUSEHOLD AND PERSONAL (16)-(20)	\$ 20,232	\$ 25,967	\$ 20,124
22 TOTAL FAMILY LIVING FROM THE FARM (33)	452	731	364
23 TOTAL CASH AND NON-CASH EXPENSES (21)+(22)	\$ 20,685	\$ 26,698	\$ 20,488
24	FAMILY LIVING FROM THE FARM		
25	QUANTITY	QUANTITY	QUANTITY
26 MILK AND CREAM (QUARTS)	176	139	42
27 BEEF AND BUFFALO (POUNDS)	933	1,704	905
28 PORK (POUNDS)	185	203	110
30 POULTRY, ALL FOWL (POUNDS)	1	-	-
31 EGGS (DOZEN)	11	12	-
33 TOTAL FAMILY LIVING FROM THE FARM	452	731	364

TABLE 4 reports the cash and non-cash expenses of the farm operator's household. Averages include only those members who kept household and personal accounts complete enough to include at least line 5 (food and meals bought). As a result, only 75 out of the 169 farms were included in the averages. Accurate household and personal accounts are important if a family is to manage its financial affairs wisely and be able to check the accuracy of their financial accounts at the end of the year. If the family is unable or unwilling to keep accurate household records, then a household checking account separate from the farm checking account might be used.

TABLE 5. OPERATOR'S NET WORTH STATEMENT AND SUPPLEMENTARY FINANCIAL INFO. - 1977

ITEMS	Average of 111 Farms	
	Jan. 1	Dec. 31
1 TOTAL PRODUCTIVE LIVESTOCK	\$ 38,639	\$ 42,449
2 CROP, SEED AND FEED	47,079	59,518
3 TOTAL POWER, MACHINERY AND EQUIPMENT	34,779	37,879
4 LAND	58,189	64,013
5 BUILDINGS, FENCES, ETC.	38,529	41,819
6 TOTAL FARM CAPITAL	\$217,215	\$245,679
7 NON-FARM ASSETS	33,647	38,842
7A CASH ON HAND & IN BANK	2,554	3,145
8 DWELLING	12,855	13,922
9 TOTAL ASSETS	\$ 266,271	301,588
10 REAL ESTATE MORTGAGES	54,193	61,877
11 CHATTEL MORTGAGES	37,900	41,826
12 NOTES	14,238	17,014
13 ACCOUNTS PAYABLE	4,988	4,036
14 TOTAL LIABILITIES	\$ 111,319	124,753
15 FARMERS NET WORTH	\$ 154,952	\$176,835
16 GAIN (OR LOSS) IN NET WORTH		\$ 21,884
17 SUPPLEMENTARY FINANCIAL INFORMATION		
18 RETURN TO OPERATORS LABOR & MANAGEMENT (6B/47)	\$ 22,935	
19 RETURN TO CAPITAL AND FAMILY LABOR (6B/48)	30,096	
20 NON-FARM INCOME		
21 OUTSIDE INVESTMENT INCOME	960	
22 OTHER PERSONAL INCOME & INCOME TAX REFUND	2,421	
22A SALE OF PERSONAL SHARE - DWELLING, AUTO & TRUCK	9	
23 TOTAL NON-FARM INCOME	3,389	
24 TOTAL FAMILY FARM AND NON-FARM INCOME	33,485	
25 TOTAL MONEY BORROWED	67,245	
26 TOTAL PAID ON DEBT (PRINCIPAL)	63,306	
27 TOTAL HOUSEHOLD + PERSONAL CASH/NON-CASH EXP (4/23)	\$ 13,753	
28 RATIO TOTAL FARM EXP TO TOTAL FARM REC OPER SHARE	.854	
	JAN. 1	DEC. 31
29 RATIO TOTAL ASSETS TO TOTAL LIABILITIES	2.392	2.417
30 RATIO NON-REAL EST. ASSETS-NON-REAL EST. LIAB.	2.743	2.892
31 RATIO REAL EST. ASSETS TO REAL EST. LIAB.	2.022	1.935
32 RATIO NET WORTH TO TOTAL LIABILITIES	1.392	1.417
33 RATIO CASH OPER. EXP TO ADJ. TOTAL FARM SALES (O.S.)		.784
34 RATIO TOTAL FARM RECEIPTS TO AVE. FARM CAPITAL (W.F.)		.513
35 RATIO TOTAL FARM RECEIPTS TO AVE. FARM CAPITAL (O.S.)		.677

TABLE 5 reports the assets, liabilities and resultant net worth position of the farm operator at the beginning and end of the year. (This asset list differs from TABLE 1 in that it includes the operator's non-farm assets and excludes the landlord's share of farm assets.) It also shows the change in net worth, or the growth in operator's equity (owned capital) during the year. Note that this TABLE 5 does not include addition to net worth resulting from appreciation in land values or

(continued on next page)

TABLE 5. OPERATOR'S NET WORTH STATEMENT AND SUPP. FINANCIAL INFO - 1977 (CONT.)

ITEMS	19 Most		21 Least	
	Profitable Farms		Profitable Farms	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
1 TOTAL PROD LIVESTK	\$ 48,404	\$ 60,177	\$ 40,157	\$ 38,938
2 CROP, SEED AND FEED	71,181	98,962	40,028	44,930
3 TOT PWR MACH EQUIP	48,551	51,062	30,539	34,620
4 LAND	86,535	95,430	65,555	68,734
5 BLDG FENCE TILE ETC	61,431	62,082	34,018	40,383
6 TOTAL FARM CAPITAL	\$316,101	\$367,713	\$210,297	\$227,605
7 NON-FARM ASSETS	27,001	29,270	31,045	35,835
7A CASH ON HAND & BANK	633	2,247	2,490	3,070
8 DWELLING	18,697	20,669	10,315	11,056
9 TOTAL ASSETS	362,433	419,898	254,147	277,566
10 REAL ESTATE MORTGAGE	66,248	71,412	57,525	66,540
11 CHATTEL MORTGAGES	39,034	45,180	49,367	56,002
12 NOTES	14,020	20,457	13,598	14,208
13 ACCOUNTS PAYABLE	6,274	2,724	10,845	12,879
14 TOTAL LIABILITIES	\$125,576	\$139,772	\$131,335	\$149,630
15 FARMER NET WORTH	\$236,857	\$280,126	\$122,812	\$127,936
16 GAIN (LOSS) NET WORTH		\$ 43,269		\$ 5,125
17 SUPPLEMENTARY FINANCIAL INFORMATION				
18 RT OP LAB MGT 6B/47	\$ 55,580		\$ (-2420)	
19 RT CAP FAM LAB 6B/48	68,370		2,565	
20 NON-FARM INCOME				
21 OUTSIDE INV INCOME	1,095		1,340	
22 OTHR PER INC & TX RF	1,830		3,047	
22A SAL PER SHR-DWLNG				
23 TOT NON FM INCOME	2,925		4,388	
24 TOT FAM FM & NEM IN	71,296		6,952	
25 TOTAL MONEY BORROWED	71,416		75,279	
26 TOT PD ON PRINCIPAL	68,546		68,006	
27 TOT HH & PER C & NC 4/23	\$17,076		\$14,698	
28 RATIO: TOT FM EX/REC OS	.759		1.018	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
29 RATIO: TOT ASSETS T/LIAB	2.886	3.004	1.935	1.855
30 RATIO: NON REA/RE LIAB	3.300	3.536	1.954	1.894
31 RATIO: RE ASST/RE LIAB	2.516	2.495	1.910	1.806
32 RATIO: N WRTH/TOT LIAB	1.886	2.004	.935	.855
33 RATIO: CA OP EX/AFSA OF		.740		.897
34 R: T FM REC/AV FM CAP WF		.518		.510
35 R: T FM REC/AV FM CAP OS		.674		.609

other capital assets, so for credit purposes the operator may wish to revalue those classes of assets. While TABLE 1 showed farm assets for all 169 farms included in the Association averages, TABLE 5 includes data from only those 111 sole proprietorships which had complete net worth data. Net worth data for partnerships were excluded when each partner had a separate analysis.

TABLE 6A. OPERATORS SHARE OF TOTAL FARM RECEIPTS - 1977

ITEMS	Average of 169 Farms	34 Most Profitable Farms	34 Least Profitable Farms
1 SALE OF LIVESTOCK AND LIVESTOCK PRODUCTS			
2 DAIRY COWS	\$ 1,057	\$ 1,087	\$ 217
3 DAIRY PRODUCTS	7,931	7,793	2,773
4 OTHER DAIRY CATTLE	1,554	942	1,010
5 BEEF BREEDING CATTLE	626	1,181	958
6 BEEF FEEDER CATTLE	45,436	53,842	69,247
7 HOGS COMPLETE & MIXED	27,358	45,351	28,701
8 HOGS FINISHING	3,723	7,006	440
9 HOGS PRODUCING WEANING PIGS	487	511	463
10 SHEEP, GOATS AND WOOL, FARM FLOCK	262	132	234
11 SHEEP AND WOOL, FEEDER LAMBS			
12 CHICKENS (INCL. HENS AND BROILERS)	276	131	
13 TURKEYS	2,387	11,866	
14 EGGS	3,073	3,342	
15 OTHER PRODUCTIVE LIVESTOCK & PRODUCTS	5		
16 OTHER MISCELLANEOUS LIVESTOCK INCOME	14	1	70
17 TOTAL SALES OF PRODUCTIVE LIVESTOCK	\$ 94,189	\$133,185	\$104,112
18 SALE OF CROPS			
19 WHEAT	1,830	2,410	1,715
20 OTHER SMALL GRAIN	1,141	2,105	844
21 CORN	12,517	14,727	12,857
22 SOYBEANS	21,809	37,136	16,952
23 OTHER ROW. CROPS	678	194	197
24 LEGUMES & OTHER ROUGHAGE	242	434	102
25 GRASS SEED			
26 FRUITS & NUTS			
27 VEGETABLES, ROADSIDE MAKT. & SPECIALTY			
28 NURSERY, TIMBER & OTHER			
29 SET ASIDE ACRES - GOVERNMENT PAYMENTS			
30 TOTAL SALES FROM CROPS	\$ 38,217	\$ 57,005	\$ 32,668
31 CAPITAL ASSETS SOLD	729	445	161
32 GAS TAX REFUND	243	298	254
33 INCOME FROM WORK OFF THE FARM	1,518	1,378	1,063
34 CUSTOM WORK ENTERPRISE INCOME			
35 PATRONAGE REFUNDS	1,725	2,314	1,714
36 MISCELLANEOUS FARM INCOME	1,057	1,459	1,033
37 TOTAL FARM SALES	\$137,679	\$196,085	\$141,006
38 INCREASE IN FARM CAPITAL	33,303	66,646	23,482
39 FAMILY LIVING FROM THE FARM	454	665	379
40 TOTAL FARM RECEIPTS (37)+(38)+(39)	\$171,436	\$263,395	\$164,866
41 ADJUSTED TOTAL FARM SALES (37)-(31)	136,950	195,639	140,844
42 TOTAL CASH FARM OPERATING EXPENSE	107,102	148,533	128,959
43 NET CASH OPERATING INCOME	29,847	47,106	11,886

SEE PAGE 14 FOR EXPLANATORY NOTE FOR THIS TABLE.

TABLE 6B. OPERATOR'S SHARE OF TOTAL FARM EXPENSES - 1977

ITEMS	Average of 169 Farms	34 Most Profitable Farms	34 Least Profitable Farms
1 PURCHASE OF LIVESTOCK			
2 DAIRY COWS	\$ 155	\$ 29	
3 OTHER DAIRY CATTLE	553		100
4 BEEF BREEDING CATTLE	217	200	629
5 BEEF FEEDER CATTLE	25,503	29,756	39,998
6 HOGS COMPLETE	1,266	2,461	824
7 HOGS FINISHING	1,725	3,677	164
8 HOGS PRODUCING WEANING PIGS	17	47	4
9 SHEEP, FARM FLOCK	89	7	20
10 SHEEP, FEEDER LAMBS			
11 CHICKENS	731	340	
12 TURKEYS	438	2,179	
13 OTHER PRODUCTIVE LIVESTOCK	2		
14 MISCELLANEOUS LIVESTOCK EXPENSE	2,516	3,712	2,738
15 FEED BOUGHT	24,063	38,128	29,178
16 FERTILIZER	6,270	8,314	8,091
17 CHEMICALS	3,598	5,140	3,956
18 OTHER CROP EXPENSE	5,335	8,050	4,913
19 IRRIGATION OPERATION COST			
20 CUSTOM WORK OPERATOR COSTS, INCL. LABOR			
21 CUSTOM WORK HIRED	2,666	3,048	2,642
22 REPAIR + UPKEEP OF LIVESTOCK EQUIPMENT	921	1,422	841
23 REPAIR + UPKEEP OF FARM REAL ESTATE	1,111	1,149	1,293
24 GAS, OIL, GREASE BOUGHT (FARM SHARE)	3,360	4,497	3,565
25 RPR & OPN MACH, TRAC, TRUCK, AUTO (FS)	4,122	5,337	4,394
26 REPAIR & UPKEEP OF IRRIGATION EQUIPMENT			
27 REPAIRS, CUSTOM WORK ENTERPRISE			
28 WAGES OF HIRED LABOR	3,176	5,035	3,497
29 PERSONAL PROPERTY + REAL ESTATE TAXES	1,988	2,876	2,248
30 CASH RENT	6,895	10,643	7,049
31 GENERAL FARM EXPENSES	1,572	2,034	1,707
32 TELEPHONE EXPENSE (FARM SHARE)	219	239	238
33 ELECTRICITY EXPENSE (FARM SHARE)	872	1,054	820
34 INTEREST EXPENSE	7,633	9,160	10,049
35 TOTAL CASH OPERATING EXPENSE	\$107,102	\$148,533	\$128,959
36 POWER, CROP & GENERAL MACH. BOUGHT (FS)	12,947	18,021	11,669
37 IRRIGATION EQUIPMENT BOUGHT	16		
38 CUSTOM WORK ENTERPRISE EQUIPMENT BOUGHT			
39 LIVESTOCK EQUIPMENT BOUGHT	1,925	2,793	2,233
40 NEW REAL ESTATE + IMPROVEMENTS	14,056	16,348	17,788
41 TOTAL FARM PURCHASES (35) THRU (40)	\$136,045	\$185,696	\$160,648
42 DECREASE IN FARM CAPITAL	2,132		3,088
43 INTEREST ON FARM CAPITAL (EQUITY)	7,396	11,609	6,049
44 UNPAID FAMILY LABOR	470	555	319
45 BOARD FURNISHED HIRED LABOR	196	148	228
46 TOTAL FARM EXPENSE (41) THRU (45)	\$146,239	\$198,009	\$170,332
47 RETURN TO OPERATOR LABOR & MANAGEMENT (OPERATORS SHARE) (6A/40) - (46)	\$ 25,197	\$ 65,387	\$ (-5466)
48 RETURN TO CAPITAL AND FAMILY LABOR (47)+(44)+(43)	\$ 33,063	\$ 77,551	\$ 902

EXPLANATORY NOTES FOR TABLES 2A, 2B, 3, 6A, 6B.

TABLES 2A & 2B comprise the earnings statement for the whole farm (including both operator's and landlord's shares). Lines 1 through 34 and line 36 of TABLE 2A show all sources of cash income to the farm. Line 38 reflects any increase in farm capital, while line 39 credits the business for any produce used by the family. Line 35 records the amount of patronage refunds credited to the business, part of which may have been received as cash and part as equity shares. TABLE 2B shows in lines 1 through 39 all cash expenses of the farm except principal and interest payments on farm debt. Note that cash rent is also not included, as it is an internal farm transaction between operator and landlord. Line 40 reflects any decrease in inventory while line 41 shows an interest return or charge of 6% for all farm capital. Line 46, Labor Earnings, represents the return for the operator's labor and management after all expenses (cash, accrual and imputed) are deducted. In the case of partnerships, line 43 assigns a fixed return to one partner, with the residual return going to the other (line 46). In line 49, the fixed return to one partner is added back to the residual (line 46) and that number is divided equally among the partners.

TABLE 3 represents another way of categorizing and reporting the receipts, expenses and labor earnings of the total farm business. In lines 2-21, cash receipts are adjusted for changes in inventory for each production enterprise, thus giving a better picture of the "value produced" contribution of each enterprise. In lines 24-30, each category of cash expense is adjusted for inventory. Line 33, fixed return to one partner, and line 36, interest charge on farm capital, are handled in the same manner as comparable items were in TABLE 2B (lines 43 and 41, respectively). Although calculated in a different way, the resulting labor earnings (line 38) is equal to that in TABLE 2B (line 46). Lines 24, 25, 28, and 29 actually report the sum of four cost items for each of these categories of capital assets. They are: depreciation; gas, oil, and grease bought; repair and operation cost; and share of custom work hired that was attributed to this category of asset (i.e., 80% of milk hauling cost might be attributed to truck and auto expense). While depreciation cannot be calculated directly from these tables, it can be approximated by the calculation: beginning inventory (TABLE 1) plus assets bought (TABLE 2B) minus ending inventory (TABLE 1). The number missing for a complete depreciation calculation is capital asset sales, which is not given for each category of assets in these tables (but is given for all assets in TABLE 2A).

TABLES 6A & 6B constitute the earnings statement for the operator. TABLES 6A & 6B therefore, are similar to TABLES 2A & 2B, except 6A & 6B exclude the landlord's share of income and expenses. Thus for the full owner-operator, TABLES 2A & 6A should be identical through line 40. TABLES 2B and 6B differ in that 6B includes cash rent paid (line 30) and interest paid on borrowed money (line 34). Line 43 of TABLE 6B thus contains an interest charge on only the operator's equity farm capital, whereas in line 41, TABLE 2B, interest was charged on all farm capital. Line 48 of TABLE 6B thus represents return to operator and family unpaid labor and management and equity capital. When money spent on family living is subtracted from line 48, the remainder plus non-farm income should be equal to the increase in net worth, shown in line 16 of TABLE 5.

SUPPLEMENTARY INFORMATION USED IN ENTERPRISE ANALYSIS

Number of Work Units for Crop and Livestock Enterprises

Livestock Enterprise	Work Units	Crop Enterprise	Work Units Per Acre
Complete Hog Enterprise	.12/cwt	Oats, wheat	.30
Hog Finishing	.06/cwt	Corn for grain	.55
Dairy Cows	7.00/cow	Grain Sorghum	.50
Other Dairy Cattle	1.20/head	Soybeans	.45
Beef Breeding Cows	1.50/head	Canning Peas	.40
Beef Feeder Cattle	.12/cwt	Alfalfa Hay, Corn Silage	.60
Sheep, Farm Flock	.60/head	Non-tillable Hay	.20
		Silage: Oats, Legume or Grass	.40
		Legume Pasture	.05
		Non-tillable Prairie Pasture	.01

Average Prices Used in Analysis

Product	Feed	Harvest ^{a/}	Beginning	Ending	Pasture per head per mo.	
			Inventory	Inventory		
Oats/bu	\$ 1.20	\$ 1.00	\$ 1.50	\$ 1.15	Cows	\$6.00
Wheat/bu	2.50	2.20	2.60	2.50	Calves	3.00
Corn for Grain/bu	2.00	1.60	2.25	1.85	Hogs	0.40
Soybeans/bu	-	5.00	6.50	5.50	Sheep	1.00
Alfalfa Hay/ton	55.00	45.00	70.00	50.00	Lambs	0.50
All other Hay/ton	55.00	40.00	-	40.00	Products Used at Home	
Silage/ton	16.00	14.00	22.00	15.00	Straw	\$0.50/bale
(corn, oat, grass)					Milk	\$1.00/gal.

Unpaid family labor \$500/mo. or \$2.50/hr.

Board for hired labor \$4/day or \$1/meal.

Second Operator's labor \$10,000/yr.

Land Cost: suggested rental values/acre: Faribault Co. \$95, Nobles \$65, Redwood \$60, Martin & Watonwan \$80, Cottonwood & Jackson \$75, Murry \$50, and Pipestone Co. \$40.

Animal or Livestock Units Used in Analysis

Enterprise	Per Adult	Per Other
Complete Hogs	.40	.20
Hog Finishing	.40	.20
Dairy Cows	1.00	.50
Other Dairy Cattle	1.00	.50
Beef Breeding Cows	.80	.30
Beef Feeder Cattle	1.00	1.00
Sheep, Farm Flock	.143	.071

^{a/} For Crop Enterprise Analysis (TABLE 10's) a constant harvest price was used in some counties and not in others. Therefore when comparing your own individual analysis for a particular crop with the Association average, be sure to check the price used in your analysis with Association average price (line 3 of TABLE 10's) and adjust your returns accordingly.

DESCRIPTION OF MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY

The following explanations and definitions are for use in interpreting Table 8 and the Thermometer Chart.

1. Labor Earnings - A measure of the relative financial return for the operator's labor taking into account all income and expense, cash and non-cash, including a charge for the use of farm capital. This is based on the whole farm business and is found in Table 2B and Table 3.
2. Crop Yield Index - A measure of the crop yield level for all crops produced expressed as a percentage of the Association average.
3. Percent of Tillable Land in High Return Crops - A measure of crop selection based on a rating of individual crops. Crop ratings take into account such things as dollar return, effect on soil, TDN yield, labor required, etc. Ratings can be found on Table 9.
4. Gross Return Per Acre - An additional measure of crop selection based on total production times an average price for the crops.
5. Return per \$100 Feed Fed to Productive Livestock - Measures the general level of efficiency for all livestock. It is expressed as a percentage of the Association average and combines the individual indexes for all livestock enterprises on the farm into one figure.
6. Livestock Units Per 100 Acres - A measure of livestock density or population. Unit values are assigned to the various classes of livestock.
7. Size of Business - Work Units - A measure of the size of farm business, or total work load. A work unit represents the average accomplishment of a worker in one 10 hour day. Work Unit values are assigned to each class of livestock, each crop, and to other tasks utilizing farm labor. Total work units may also be interpreted differently for different farm situations such as work efficiency, degree of mechanization, careful planning, or hours worked. While it does not measure how hard a farmer works, it does measure how much is being accomplished on the farm.
8. Work Units Per Worker - Measures labor efficiency. Total work units divided by the number of workers including the operator, hired labor, and family labor.
9. Power, Machinery, Equipment and Building Expense Per Work Unit - A measure of expense control. It is the total cost of items listed in Table 3 divided by the number of work units.
10. Farm Capital Investment Per Worker - Indicates size of business. Useful in comparing a farm business to other industries or businesses.

Other items listed on Table 8 are related to the above measures and serve to further define and describe the efficiency level of a farm business. Note should be taken that items listed in Table 8 and the Thermometer Chart are to be considered in light of the individual farm and farm operator. Although in general, an above-average level for each factor listed would indicate an above average earnings, this may not be true when individual farms are considered. The inter-relationship of factors varies from farm to farm.

TABLE 8. MEASURES OF FARM ORGANIZATION AND EFFICIENCY

ITEMS	Average of 169 Farms	34 Most Profitable Farms	34 Least Profitable Farms
1 RETURN TO OPERATORS LABOR & MANAGEMENT	\$ 29,307	\$ 68,987	\$ (-217)
2 CROP YIELD INDEX	100.9	108.5	104.6
3 PERCENT TILLABLE LAND IN HIGH RETURN CROP	83.5	85.8	79.2
4 GROSS RETURN PER TILL ACRE (EXCL PASTURE)	\$ 178.97	\$ 193.29	\$ 176.96
5 RET PER \$100 FEED FED PROD LVSTOCK INDEX	100.0	\$ 101.0	\$ 96.8
6* LIVESTOCK UNITS PER 100 ACRES	34.94	35.05	37.47
7 SIZE OF BUSINESS-WORK UNITS	515.17	751.26	423.96
8 WORK UNITS PER WORKER	291.06	370.08	258.51
9 PWR MACH EQUIP BLDG EXPENSE/WORK UNIT	\$ 52.17	\$ 46.24	\$ 62.06
10 FARM CAPITAL INVESTMENT PER WORKER	\$198,018	\$253,650	\$181,355
11 INDEX OF RETURN PER \$100 FEED FED			
12 6100 BEEF BREEDING, FARM, WHOLE HERD	100	111.4	98.1
13 6140 BEEF FEEDERS, FEEDLOT	100	104.3	96.6
14 6290 DAIRY COWS, COMMERCIAL, COMPLETE	100	131.6	91.0
15 6310 OTHER DAIRY, COMM. REPLACEMENTS	100	117.0	92.6
16 6470 HOGS, FARROW TO FINISH, COMPLETE	100	100.7	97.7
17 6490 HOGS, FINISHING	100	105.1	
18 6670 SHEEP, FARM FLOCK	100	58.0	87.2
19 NUMBER OF ANIMAL UNITS	160.06	240.97	157.00
20 WORK UNITS			
21 CROPS	219.41	318.95	204.15
22 PRODUCTIVE LIVESTOCK	257.20	402.15	203.48
23 OTHER PRODUCTIVE WORK UNITS	38.56	30.16	16.33
24 EXPENSES PER WORK UNIT :			
25 TRACTOR & CROP MACHINERY EXPENSE	\$ 28.17	\$ 25.39	\$ 33.25
26 FARM SHARE OF AUTO & TRUCK EXPENSE	6.98	5.82	8.31
27 FARM SHARE OF ELECTRIC EXPENSE	1.71	1.50	1.88
28 LIVESTOCK EQUIPMENT EXPENSE	5.07	4.50	5.03
29 BUILDING, FENCE & TILING EXPENSE	10.24	9.03	13.59
30**TRACTOR & CROP MACH EXPENSE/CROP ACRE	32.38	28.58	35.30
31 FARM PWR & MACH COST ALLOCATED TO LVSTK	1708.93	2276.32	1528.53
32 BUILDING, FENCE TILE COST ALLOC TO CROPS BCAF	2472.41	3053.21	3133.20

* ACRES INCLUDE ALL TILLABLE LAND, NON-TILLABLE HAY & PASTURE

** ACRES INCLUDE ALL TILLABLE LAND PLUS ACRES IN NON-TILLABLE HAY

TABLE 9. CROP ACRES, YIELDS, RETURNS AND SUPPLEMENTARY MANAGEMENT INFORMATION

CROP	Average	34 Most	34 Least
	of 169 Farms	Profitable Farms	Profitable Farms
	acres	acres	acres
SMALL GRAIN & CANNING PEAS	45.3	60.2	38.5
ROW CROPS	337.2	516.9	297.5
LEGUMES, INCLUDING SEED	22.0	24.1	21.6
SILAGE & FODDER	38.8	47.9	50.9
TILLABLE PASTURE	4.4	3.0	10.7
FALLOW & IDLE LAND	-0.8 ^{a/}	14.3	-21.1 ^{a/}
TILLABLE LAND	446.9	666.4	398.3
NON TILLABLE HAY/PASTURE	11.2	21.1	20.7
WILD HAY NOT HARVESTED (NON TILLABLE)	2.8	.1	10.1
PASTURE NOT HARVESTED	9.1	8.5	7.5
TIMBER NOT HARVESTED	1.1	1.9	0.1
ROADS & WASTE	16.9	28.3	14.4
FARMSTEAD	13.2	19.0	11.8
LAND NOT HARVESTED	43.1	57.8	43.9
NON TILLABLE LAND	54.3	78.9	64.6
LAND IN FARM OR RANCH	501.2	745.3	462.9
SUPPLEMENTARY MANAGEMENT INFORMATION			
PERCENT LAND TILLABLE	89.2	89.4	86.0
PERCENT LAND IN HIGH RETURN CROPS	83.5	85.8	79.2
FERTILIZER COST PER ACRE	\$14.57	\$14.24	\$15.45
CROP CHEMICALS PER ACRE	\$ 8.93	\$ 9.34	\$ 8.97
SEED & OTHER COSTS PER ACRE	\$12.64	\$13.04	\$12.97
GAS, OIL & GREASE BOUGHT PER ACRE	\$ 5.30	\$ 5.14	\$ 5.21

Crop	Crop Rank	No. Farms Growing	Acres	Total Acres	Ave.	Return Over
			Per Farm		Yield Per Acre	Direct Costs Per Acre
Oats	D	112	42.2	4,727	82.6 bu.	\$ 66.91
Spring Wheat	C	54	44.9	2,425	54.3 bu.	104.60
Canning Peas	B	6	25.8	155	\$126.51	121.70
Corn Grain	A	172	184.4	31,717	105.5 bu.	124.88
Grain Sorghum	C	7	20.0	140	71.4 cwt	118.20
Soybeans	A	165	157.4	25,971	39.1 bu.	174.20
Alfalfa Hay	B	108	35.8	3,974	3.4 t	132.15
Corn Silage	A	102	44.1	4,498	14.4 t	162.55
Oats Silage	C	51	23.3	1,188	5.9 t	73.56
Legume Silage	B	14	46.0	644	5.5 t	131.31

^{a/} Negative sign means that area double cropped exceeded area not cropped by the amount shown.

DESCRIPTION OF CROPS TABLES

The following tables for each individual crop represent an attempt to calculate the costs and returns for these enterprises. Returns include the value of the crop produced --line 4-- (which was calculated as measured yield multiplied by a common harvest-time price--see footnote for exceptions) plus other crop income. The latter has two components: a cash component, such as diverted acre payments, deficiency payments, crop insurance payments for a loss, sale of a by-product (such as straw) etc; and a non-cash component, which is the operator's estimate of the value of straw, corn stalks, and other crop by-products and residues used in livestock enterprises.

Two categories of costs are calculated. The first consists of costs that are "directly" attributable to that crop, such as fertilizer, chemicals, seed, etc., and are normally recorded on pages 38-39 of the Account Book. These are normally all cash costs, although some may have been actually paid in a previous year, i.e., fertilizer paid for last year but used on this year's crop. Thus the sum of fertilizer costs for all crops may not necessarily equal total fertilizer purchased in the current year as reported in TABLES 2B and 6B. The costs in this "direct" category may also be called variable costs, in two ways. The first is in that the level of these costs per acre can be varied by the farmer, such as varying the amount of fertilizer per acre, etc. The second is in that the total of these costs usually vary in direct proportion to the number of acres grown. For example, if 10% fewer acres of corn were planted, expenses for corn seed and fertilizer might decrease by 10%. The second category of costs represents an attempt to "allocate" some costs that are not easily attributable to a specific enterprise. Some are cash costs and others are non-cash, some are variable and others are fixed or overhead costs. For example, the ownership cost of farm power and machinery consists of depreciation, which is a non-cash, fixed cost that continues even if corn acreage is cut back by 10%. In contrast, the operation cost of farm power and machinery, which, includes fuel, lubricants, and repair, is a cash variable cost.

The power and machinery costs (both ownership and operation) were allocated among crop (and livestock when present) enterprises on the basis of work units. The ownership costs and the total operation costs are each divided by the sum of total crop work units plus one-tenth of the total livestock work units (or one-twelfth if livestock work units are greater than 400) because livestock use relatively less power per work unit than crops. The resulting ownership cost per work unit is then multiplied by the standard work unit per acre figure to obtain the allocated cost per acre. The same procedure is followed for operation costs. If the operator feels that this procedure does not adequately reflect his relative use of power among enterprises, or if he wants some enterprises to carry a relatively heavier cost burden than others, then he may modify the allocation by the use of different values for the Power Cost Allocation Factor (PCAF).

Land cost shown is an attempt to measure the opportunity cost of the land. For the tenant, the cash rent or equivalent was reported. For the owner-operator, the amount that could be received for renting out the land was obtained. Interest on machinery and equipment investment was calculated at 6% on the average amount held during the year (beginning plus ending inventories divided by two).

TABLE 10-0105 - CROP DATA FOR OATS - FEED - 1977

ITEMS	Average of 112 Farms	56 Farms Highest in Yield	56 Farms Lowest in Yield
1 ACRES	42.2	40.9	43.6
2 YIELD PER ACRE, BUSHELS	82.6	95.4	70.5
3 VALUE PER BUSHEL	\$ 1.04	\$ 1.04	\$ 1.04
4 CROP PRODUCT RETURN	85.90	99.17	73.30
5 OTHER CROP INCOME	3.18	3.47	2.87
6 TOTAL CROP RETURN PER ACRE	89.08	102.64	76.17
7 DIRECT COSTS PER ACRE			
8 FERTILIZER	6.80	7.73	5.94
9 CHEMICALS	.64	.46	.78
10 SEED & OTHER	8.74	9.07	8.42
11 SPECIAL HIRED LABOR	.33	.05	.60
12 CUSTOM WORK HIRED	5.66	4.65	6.58
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS PER ACRE	22.17	21.96	22.32
15 RETURN OVER DIRECT COSTS PER ACRE	66.91	80.68	53.85
16 ALLOCATED COSTS PER ACRE			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 10.48	\$ 10.26	\$ 10.66
18 FARM POWER & MACHINERY - OPERATION	8.68	8.24	9.07
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	63.88	63.04	64.73
21 MISCELLANEOUS COSTS			
22 INTEREST ON MACH. & EQUIP. INVESTMENT	2.46	2.62	2.30
23 TOTAL ALLOCATED COSTS PER ACRE	85.50	84.16	86.76
24 RETURN OVER ALL LISTED COSTS PER ACRE	(-18.59)	(-3.48)	(-32.91)
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	\$.30	\$.30	\$.30
27 POWER COSTS ALLOCATION FACTOR	1.82	1.76	1.89
28 TOTAL LISTED COST PER BUSHEL	1.30	1.11	1.55
29 RETURN OVER LISTED COSTS PER BUSHEL	(-.23)	(-.04)	(-.47)
30 * BREAKEVEN YIELD	103.53bu	102.04bu	104.88bu
31 TOTAL LISTED COSTS PER ACRE	\$ 107.67	\$ 106.12	\$ 109.08

*TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

TABLE 10-0195 - CROP DATA FOR SPRING WHEAT - 1977

ITEMS	Average of 54 Farms	27 Farms Highest in Yield	27 Farms Lowest in Yield
1 ACRES	44.9	42.3	47.4
2 YIELD PER ACRE, BUSHELS	54.3	65.2	44.7
3 VALUE PER BUSHEL	\$ 2.28	\$ 2.28	\$ 2.28
4 CROP PRODUCT RETURN	123.85	148.61	102.03
5 OTHER CROP INCOME	4.14	3.71	4.54
6 TOTAL CROP RETURN PER ACRE	127.99	152.32	106.57
7 DIRECT COSTS PER ACRE			
8 FERTILIZER	\$ 9.67	\$ 10.95	\$ 8.54
9 CHEMICALS	1.05	1.35	.78
10 SEED & OTHER	10.16	12.65	7.95
11 SPECIAL HIRED LABOR	.04		.06
12 CUSTOM WORK HIRED	2.47	1.96	2.91
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS PER ACRE	23.39	26.91	20.24
15 RETURN OVER DIRECT COSTS PER ACRE	104.60	125.41	86.33
16 ALLOCATED COSTS PER ACRE			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 12.28	\$ 11.65	\$ 12.87
18 FARM POWER & MACHINERY - OPERATION	7.73	8.14	7.39
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	65.19	65.19	65.19
21 MISCELLANEOUS COSTS	.04		.08
22 INTEREST ON MACH. & EQUIP. INVESTMENT	2.53	2.46	2.59
23 TOTAL ALLOCATED COSTS PER ACRE	87.77	87.44	88.12
24 RETURN OVER ALL LISTED COSTS PER ACRE	\$ 16.83	\$ 37.97	\$ (-1.79)
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.30	.30	.30
27 POWER COSTS ALLOCATION FACTOR	1.79	1.74	1.83
28 TOTAL LISTED COST PER BUSHEL	\$ 2.05	\$ 1.75	\$ 2.42
29 RETURN OVER LISTED COSTS PER BUSHEL	\$.31	\$.58	\$ (-.04)
30 * BREAKEVEN YIELD, BUSHELS	48.75bu	50.15bu	47.53bu
31 TOTAL LISTED COSTS PER ACRE	\$ 111.16	\$ 114.35	\$ 108.36

*TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

TABLE 10-0275 - CROP DATA FOR CORN FOR GRAIN - 1977

ITEMS	Average of 172 Farms	86 Farms Highest in Yield	86 Farms Lowest in Yield
1 ACRES	184.4	198.3	170.5
2 YIELD PER ACRE, BUSHELS	105.5	118.1	90.9
3 VALUE PER BUSHEL	\$ 1.69	\$ 1.71	\$ 1.66
4 CROP PRODUCT RETURN PER ACRE	178.37	201.98	150.95
5 OTHER CROP INCOME PER ACRE	4.57	5.52	3.46
6 TOTAL CROP RETURN PER ACRE	182.94	207.50	154.41
7 DIRECT COSTS PER ACRE			
8 FERTILIZER	\$ 27.18	\$ 32.00	\$ 21.57
9 CHEMICALS	11.63	12.07	11.11
10 SEED & OTHER	16.13	16.95	15.17
11 SPECIAL HIRED LABOR	.12	.18	.05
12 CUSTOM WORK HIRED	3.00	2.79	3.23
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS PER ACRE	58.06	63.99	51.13
15 RETURN OVER DIRECT COSTS PER ACRE	124.88	143.51	103.28
16 ALLOCATED COSTS PER ACRE			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 21.66	\$ 22.33	\$ 20.87
18 FARM POWER & MACHINERY - OPERATION	15.68	15.70	15.65
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	66.89	70.12	63.66
21 MISCELLANEOUS COSTS	.24	.45	.01
22 INTEREST ON MACH. & EQUIP. INVESTMENT	4.74	4.67	4.81
23 TOTAL ALLOCATED COSTS PER ACRE	109.21	113.27	105.00
24 RETURN OVER ALL LISTED COSTS PER ACRE	\$ 15.67	\$ 30.24	\$ (-1.72)
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.55	.55	.55
27 POWER COSTS ALLOCATION FACTOR	1.80	1.86	1.73
28 TOTAL LISTED COST PER BUSHEL	\$ 1.58	\$ 1.50	\$ 1.72
29 RETURN OVER LISTED COSTS PER BUSHEL	\$.15	\$.26	\$ (-.02)
30 * BREAKEVEN YIELD, BUSHELS	98.98bu	103.66bu	94.05bu
31 TOTAL LISTED COSTS PER ACRE	\$ 167.27*	\$ 177.26*	\$ 156.13*

*TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

TABLE 10-0325 - CROP DATA FOR GRAIN SORGHUM - 1977

ITEMS	Average of 7 Farms	3 Farms Highest in Yield	3 Farms Lowest in Yield
1 ACRES	20.0	24.3	18.3
2 YIELD PER ACRE, BUSHELS	71.4	89.2	48.4
3 VALUE PER BUSHEL	\$ 1.89	\$ 1.49	\$ 2.46
4 CROP PRODUCT RETURN PER ACRE	134.95	132.88	118.96
5 OTHER CROP INCOME PER ACRE			
6 TOTAL CROP RETURN PER ACRE	134.95	132.88	118.96
7 DIRECT COSTS PER ACRE			
8 FERTILIZER	\$ 5.45	\$ 7.49	\$ 3.93
9 CHEMICALS	3.25	2.26	5.25
10 SEED & OTHER	7.00	6.30	9.45
11 SPECIAL HIRED LABOR			
12 CUSTOM WORK HIRED	1.05	2.06	
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS PER ACRE	16.75	18.11	18.63
15 RETURN OVER DIRECT COSTS PER ACRE	\$ 118.20	\$ 114.77	\$ 100.33
16 ALLOCATED COSTS PER ACRE			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 21.88	\$ 18.54	\$ 24.32
18 FARM POWER & MACHINERY - OPERATION	15.14	13.84	17.72
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	64.29	68.33	60.00
21 MISCELLANEOUS COSTS			
22 INTEREST ON MACH. & EQUIP. INVESTMENT	3.70	2.90	3.98
23 TOTAL ALLOCATED COSTS PER ACRE	105.01	103.61	106.02
24 RETURN OVER ALL LISTED COSTS PER ACRE	\$ 13.19	\$ 11.16	\$ (-5.69)
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.50	.50	.50
27 POWER COSTS ALLOCATION FACTOR	.99	.95	1.03
28 TOTAL LISTED COST PER BUSHEL	\$ 1.71	\$ 1.36	\$ 2.58
29 RETURN OVER LISTED COSTS PER BUSHEL	\$.18	\$.13	\$ (-.12)
30* BREAKEVEN YIELD/BUSHELS	64.42	81.69	50.67
31 TOTAL LISTED COSTS PER ACRE	\$ 121.76	\$ 121.72	\$ 124.65

*TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

TABLE 10-0335 - CROP DATA FOR SOYBEANS - 1977

ITEMS	Average of 165 Farms	82 Farms Highest in Yield	82 Farms Lowest in Yield
1 ACRES	157.4	167.3	147.6
2 YIELD PER ACRE - BUSHELS	39.1	44.3	33.2
3 VALUE PER BUSHEL	\$ 5.09	\$ 5.11	\$ 5.06
4 CROP PRODUCT RETURN PER ACRE	198.88	226.18	167.95
5 OTHER CROP INCOME PER ACRE	.83	.78	.89
6 TOTAL CROP RETURN PER ACRE	199.71	226.96	168.84
7 DIRECT COSTS PER ACRE			
8 FERTILIZER	\$ 1.42	\$ 1.85	\$.95
9 CHEMICALS	9.66	9.56	9.71
10 SEED & OTHER	10.99	11.77	10.08
11 SPECIAL HIRED LABOR	1.25	1.46	.94
12 CUSTOM WORK HIRED	2.14	1.32	3.10
13 IRRIGATION OPERATION	.05	.10	
14 TOTAL DIRECT COSTS PER ACRE	25.51	26.06	24.78
15 RETURN OVER DIRECT COSTS PER ACRE	\$ 174.20	\$ 200.90	\$ 144.06
16 ALLOCATED COSTS PER ACRE			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 17.66	\$ 19.12	\$ 16.06
18 FARM POWER & MACHINERY - OPERATION	12.71	13.59	11.72
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	68.33	71.95	64.82
21 MISCELLANEOUS COSTS	.06	.12	
22 INTEREST ON MACH. & EQUIP. INVESTMENT	3.76	4.05	3.45
23 TOTAL ALLOCATED COSTS PER ACRE	102.52	108.83	96.05
24 RETURN OVER ALL LISTED COSTS PER ACRE	\$ 71.68	\$ 92.07	\$ 48.01
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.45	.45	.45
27 POWER COSTS ALLOCATION FACTOR	1.87	1.74	2.01
28 TOTAL LISTED COST PER BUSHEL	\$ 3.28	\$ 3.05	\$ 3.64
29 RETURN OVER LISTED COSTS PER BUSHEL	\$ 1.83	\$ 2.08	\$ 1.45
30 * BREAK-EVEN YIELD, BUSHELS	25.15 bu.	26.40 bu.	23.88 bu.
31 TOTAL LISTED COSTS PER ACRE	\$ 128.03	\$ 134.89	\$ 120.83

*TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

TABLE 10-0365 - CROP DATA FOR CANNING PEAS - 1977

ITEMS	Average of 6 Farms	3 Farms Highest in Yield	3 Farms Lowest in Yield
1 ACRES	25.8	32.3	19.3
2 YIELD PER ACRE, DOLLARS	\$ 126.51	\$ 139.10	\$ 105.44
3 VALUE PER PRODUCTION UNIT	1.00	1.00	1.00
4 CROP PRODUCT RETURN	126.51	139.10	105.44
5 OTHER CROP INCOME	11.63	18.58	
6 TOTAL CROP RETURN PER ACRE	138.14	157.68	105.44
7 DIRECT COSTS PER ACRE			
8 FERTILIZER	\$ 7.56	\$ 12.07	\$
9 CHEMICALS	2.60	1.21	4.92
10 SEED & OTHER	6.28	2.29	12.95
11 SPECIAL HIRED LABOR			
12 CUSTOM WORK HIRED			
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS	16.44	15.57	17.87
15 RETURN OVER DIRECT COSTS	\$ 121.70	\$ 142.11	\$ 87.57
16 ALLOCATED COSTS PER ACRE			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 9.32	\$ 11.31	\$ 6.00
18 FARM POWER & MACHINERY - OPERATION	7.04	5.79	9.12
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	73.33	73.33	73.33
21 MISCELLANEOUS COSTS			
22 INTEREST ON MACH. & EQUIP. INVESTMENT	2.46	2.39	2.58
23 TOTAL ALLOCATED COSTS	92.15	92.82	91.03
24 RETURN OVER ALL LISTED COSTS	\$ 29.55	\$ 49.29	\$ (-3.46)
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.40	.40	.40
27 POWER COSTS ALLOCATION FACTOR	1.52	.70	2.33
28 TOTAL LISTED COST PER UNIT OF PRODUCTION	\$.86	\$.78	\$ 1.03
29 RETURN OVER LISTED COSTS PER UNIT	\$.23	\$.35	\$ (-.03)
30 * BREAKEVEN YIELD, DOLLARS	\$108.59	\$108.39	\$108.90
31 TOTAL LISTED COSTS PER ACRE	\$108.59	\$108.39	\$108.90

*TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

TABLE 10-0400 - CROP DATA FOR ALFALFA HAY - 1977

ITEMS	Average of 104 Farms	54 Farms Highest in Yield	54 Farms Lowest in Yield
1 ACRES	35.8	34.2	37.4
2 YIELD PER ACRE, TONS	3.4	4.5	2.3
3 VALUE PER TON	\$ 46.44	\$ 46.11	\$ 46.76
4 CROP PRODUCT RETURN PER ACRE	\$155.67	\$206.29	\$107.51
5 OTHER CROP INCOME PER ACRE			
6 TOTAL CROP RETURN PER ACRE	\$155.67	\$206.29	\$107.51
7 DIRECT COSTS PER ACRE			
8 FERTILIZER	\$ 9.39	\$ 12.84	\$ 6.20
9 CHEMICALS	.22	.44	.03
10 SEED & OTHER	8.07	8.22	7.97
11 SPECIAL HIRED LABOR	.45	.70	.21
12 CUSTOM WORK HIRED	5.39	6.32	4.52
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS PER ACRE	23.52	28.52	18.93
15 RETURN OVER DIRECT COSTS PER ACRE	\$132.15	\$177.77	\$ 88.58
16 ALLOCATED COSTS PER ACRE			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 23.12	\$ 25.11	\$ 21.31
18 FARM POWER & MACHINERY - OPERATION	18.47	18.28	18.64
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	66.06	71.02	61.11
21 MISCELLANEOUS COSTS	.06		.08
22 INTEREST ON MACH. & EQUIP. INVESTMENT	5.02	5.57	4.52
23 TOTAL ALLOCATED COSTS PER ACRE	112.73	119.98	105.66
24 RETURN OVER ALL LISTED COSTS PER ACRE	\$ 19.42	\$ 57.79	\$ 17.08
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.60	.60	.60
27 POWER COSTS ALLOCATION FACTOR	1.86	1.95	1.76
28 TOTAL LISTED COST PER TON	\$ 40.65	\$ 33.20	\$ 54.19
29 RETURN OVER LISTED COSTS PER TON	\$ 5.79	\$ 12.92	\$ (-7.43)
30 * BREAKEVEN YIELD, TONS	2.93	3.22	2.66
31 TOTAL LISTED COSTS PER ACRE	\$136.25	\$148.50	\$124.59

*TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

TABLE 10-0530 - CROP DATA FOR NON-TILLABLE HAY - 1977

ITEMS	Average of 18 Farms	9 Farms Highest in Yield	9 Farms Lowest in Yield
1 ACRES	8.9	8.4	9.3
2 YIELD PER ACRE, TONS	1.2	1.8	.8
3 VALUE PER TON	\$ 39.44	\$ 41.67	\$ 37.22
4 CROP PRODUCT RETURN PER ACRE	48.76	74.40	28.06
5 OTHER CROP INCOME PER ACRE			
6 TOTAL CROP RETURN PER ACRE	48.76	74.40	28.06
7 DIRECT COSTS PER ACRE			
8 FERTILIZER			
9 CHEMICALS			
10 SEED & OTHER	\$ 1.19	\$ 2.26	
11 SPECIAL HIRED LABOR	.12	.36	
12 CUSTOM WORK HIRED	2.86	2.26	3.45
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS PER ACRE	4.17	4.88	3.45
15 RETURN OVER DIRECT COSTS PER ACRE	\$ 44.59	\$ 69.52	\$ 24.61
16 ALLOCATED COSTS PER ACRE			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 5.71	\$ 4.25	\$ 7.16
18 FARM POWER & MACHINERY - OPERATION	4.50	3.69	5.30
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	41.67	52.78	30.56
21 MISCELLANEOUS COSTS			
22 INTEREST ON MACH. & EQUIP. INVESTMENT	1.01	.90	1.11
23 TOTAL ALLOCATED COSTS PER ACRE	52.89	61.62	44.13
24 RETURN OVER ALL LISTED COSTS PER ACRE	\$ (-8.30)	\$ 7.90	\$(-19.52)
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.18	.20	.16
27 POWER COSTS ALLOCATION FACTOR	.97	.47	1.48
28 TOTAL LISTED COST PER TON	\$ 43.55	\$ 37.27	\$ 66.64
29 RETURN OVER LISTED COSTS PER TON	\$ (-4.09)	\$ 4.40	\$(-23.14)
30 * BREAKEVEN YIELD, TONS	1.57	1.60	1.53
31 TOTAL LISTED COSTS PER ACRE	\$ 57.06	\$ 66.50	\$ 47.58

*TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

TABLE 10-0535 - CROP DATA FOR LEGUME, LEGUME-GRASS SILAGE - 1977

ITEMS	Average of 14 Farms	7 Farms Highest in Yield	7 Farms Lowest in Yield
1 ACRES	46.0	36.9	55.1
2 YIELD PER ACRE, TONS	5.5	8.2	3.7
3 VALUE PER TON	\$ 27.57	\$ 26.43	\$ 28.71
4 CROP PRODUCT RETURN PER ACRE	151.63	217.02	106.30
5 OTHER CROP INCOME PER ACRE			
6 TOTAL CROP RETURN PER ACRE	151.63	217.02	106.30
7 DIRECT COSTS PER ACRE			
8 FERTILIZER	\$ 11.28	\$ 6.69	14.36
9 CHEMICALS	.15		.24
10 SEED & OTHER	4.65	4.50	4.75
11 SPECIAL HIRED LABOR			
12 CUSTOM WORK HIRED	4.24	6.29	2.87
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS PER ACRE	20.32	17.48	22.22
15 RETURN OVER DIRECT COSTS PER ACRE	\$ 131.31	\$ 199.54	\$ 84.08
16 ALLOCATED COSTS PER ACRE			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 18.58	\$ 17.94	\$ 19.01
18 FARM POWER & MACHINERY - OPERATION	13.55	14.03	13.23
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	67.50	67.86	67.14
21 MISCELLANEOUS COSTS			
22 INTEREST ON MACH. & EQUIP. INVESTMENT	4.24	4.36	4.16
23 TOTAL ALLOCATED COSTS PER ACRE	103.87	104.19	103.54
24 RETURN OVER ALL LISTED COSTS PER ACRE	\$ 27.44	\$ 95.35	\$ (-19.46)
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.40	.40	.40
27 POWER COSTS ALLOCATION FACTOR	1.27	1.56	.98
28 TOTAL LISTED COST PER TON	\$ 22.58	\$ 14.82	\$ 33.97
29 RETURN OVER LISTED COSTS PER TON	\$ 4.99	\$ 11.61	\$ (-5.25)
30 * BREAKEVEN YIELD, TONS	4.50	4.60	4.38
31 TOTAL LISTED COSTS PER ACRE	\$ 124.19	\$ 121.67	\$ 125.76

*TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

TABLE 10-0545 - CROP DATA FOR GRAIN (OATS) SILAGE - 1977

ITEMS	Average of 51 Farms	25 Farms Highest in Yield	25 Farms Lowest in Yield
1 ACRES	23.3	23.4	23.8
2 YIELD PER ACRE, TONS	5.9	8.0	3.9
3 VALUE PER TON	\$ 14.98	\$ 14.96	\$ 15.00
4 CROP PRODUCT RETURN PER ACRE	88.71	120.17	58.61
5 OTHER CROP INCOME PER ACRE			
6 TOTAL CROP RETURN PER ACRE	88.71	120.17	58.61
7 DIRECT COSTS PER ACRE			
8 FERTILIZER	\$ 3.86	\$ 4.96	\$ 2.82
9 CHEMICALS	.69	.77	.63
10 SEED & OTHER	6.65	6.24	7.06
11 SPECIAL HIRED LABOR			
12 CUSTOM WORK HIRED	3.95	3.68	4.29
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS PER ACRE	15.15	15.65	14.80
15 RETURN OVER DIRECT COSTS PER ACRE	\$ 73.56	\$ 104.52	\$ 43.81
16 ALLOCATED COSTS PER ACRE			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 14.28	\$ 11.47	\$ 17.03
18 FARM POWER & MACHINERY - OPERATION	11.60	11.83	11.48
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	63.73	61.00	66.40
21 MISCELLANEOUS COSTS			
22 INTEREST ON MACH. & EQUIP. INVESTMENT	3.23	2.84	3.60
23 TOTAL ALLOCATED COSTS PER ACRE	92.84	87.14	98.51
24 RETURN OVER ALL LISTED COSTS PER ACRE	\$ (-19.28)	\$ 17.38	\$ (-54.70)
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.40	.40	.40
27 POWER COSTS ALLOCATION FACTOR	1.74	1.77	1.58
28 TOTAL LISTED COST PER TON	\$ 18.23	\$ 12.80	\$ 28.99
29 RETURN OVER LISTED COSTS PER TON	\$ (-3.25)	\$ 2.16	\$ (-13.99)
30 * BREAKEVEN YIELD, TONS	7.21	6.87	7.55
31 TOTAL LISTED COSTS PER ACRE	\$ 107.99	\$ 102.79	\$ 113.31

*TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

TABLE 10-0550 - CROP DATA FOR CORN SILAGE - 1977

ITEMS	Average of 102 Farms	51 Farms Highest in Yield	51 Farms Lowest in Yield
1 ACRES	44.7	35.1	53.0
2 YIELD PER ACRE, TONS	14.4	18.3	11.8
3 VALUE PER TON	\$ 14.67	\$ 14.94	\$ 14.39
4 CROP PRODUCT RETURN PER ACRE	211.22	274.10	169.70
5 OTHER CROP INCOME PER ACRE			
6 TOTAL CROP RETURN PER ACRE	211.22	274.10	169.70
7 DIRECT COSTS PER ACRE			
8 FERTILIZER	\$ 21.93	\$ 23.50	\$ 20.94
9 CHEMICALS	10.32	10.57	10.17
10 SEED & OTHER	12.36	13.65	11.51
11 SPECIAL HIRED LABOR	.16	.06	.21
12 CUSTOM WORK HIRED	3.90	4.39	3.58
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS PER ACRE	48.67	52.17	46.41
15 RETURN OVER DIRECT COSTS PER ACRE	\$ 162.55	\$ 221.93	\$ 123.29
16 ALLOCATED COSTS PER ACRE			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 21.57	\$ 21.51	\$ 21.65
18 FARM POWER & MACHINERY - OPERATION	18.77	18.94	18.70
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	63.97	67.35	60.59
21 MISCELLANEOUS COSTS	.25		.43
22 INTEREST ON MACH. & EQUIP. INVESTMENT	4.86	4.48	5.11
23 TOTAL ALLOCATED COSTS PER ACRE	109.42	112.28	106.48
24 RETURN OVER ALL LISTED COSTS PER ACRE	\$ 53.13	\$ 109.65	\$ 16.81
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.60	.60	.60
27 POWER COSTS ALLOCATION FACTOR	1.64	1.59	1.70
28 TOTAL LISTED COST PER TON	\$ 10.98	\$ 8.96	\$ 12.96
29 RETURN OVER LISTED COSTS PER TON	\$ 3.69	\$ 5.98	\$ 1.43
30 * BREAKEVEN YIELD, TONS	10.78	11.01	10.62
31 TOTAL LISTED COSTS PER ACRE	\$ 158.09	\$ 164.45	\$ 152.89

*TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

TABLE 10-0570 - CROP DATA FOR LEGUME PASTURES* - 1977

ITEMS	Average of 15 Farms	7 Farms Highest in Yield	7 Farms Lowest in Yield
1 ACRES	23.5	11.9	37.90
2 YIELD PER ACRE	28.77	53.70	20.58
3 VALUE PER PRODUCTION UNIT	\$ 1.15	\$.69	\$ 1.63
4 CROP PRODUCT RETURN	33.06	37.06	33.54
5 OTHER CROP INCOME			
6 TOTAL CROP RETURN	33.06	37.06	33.54
7 DIRECT COSTS PER ACRE			
8 FERTILIZER	\$ 2.41		\$ 3.98
9 CHEMICALS			
10 SEED & OTHER	4.90	10.84	1.24
11 SPECIAL HIRED LABOR			
12 CUSTOM WORK HIRED	1.31	3.45	
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS	8.62	14.29	5.22
15 RETURN OVER DIRECT COSTS PER ACRE	\$ 24.44	\$ 22.77	\$ 28.32
16 ALLOCATED COSTS PER ACRE			
17 FARM POWER & MACHINERY - OWNERSHIP	\$.84	\$.78	\$.90
18 FARM POWER & MACHINERY - OPERATION	.86	.88	.86
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	59.33	60.00	60.00
21 MISCELLANEOUS COSTS			
22 INTEREST ON MACH. & EQUIP. INVESTMENT	.17	.20	.16
23 TOTAL ALLOCATED COSTS	61.20	61.86	61.92
24 RETURN OVER ALL LISTED COSTS PER ACRE	\$ (-36.76)	\$ (-39.09)	\$ (-33.60)
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.05	.05	.04
27 POWER COSTS ALLOCATION FACTOR	.65	1.12	.23
28 TOTAL LISTED COST PER UNIT OF PRODUCTION	\$ 1.79	\$ 1.42	\$ 2.31
29 RETURN OVER LISTED COSTS PER UNIT	\$ (-.42)	\$ (-.73)	\$.04
30** BREAKEVEN YIELD/UNITS OF PRODUCTION	64.65	110.36	45.06
31 TOTAL LISTED COSTS PER ACRE	\$ 69.82	\$ 76.15	\$ 67.14

*INCLUDES PASTURE CODES 0810, 0811, 0820, 0821.

**TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

TABLE 10-0860 - CROP DATA FOR NON-TILLABLE PRAIRIE PASTURE - 1977

ITEMS	Average of 24 Farms	12 Farms Highest in Yield	12 Farms Lowest in Yield
1 ACRES	72.4	79.5	65.3
2 YIELD PER ACRE	8.51	7.43	9.83
3 VALUE PER PRODUCTION UNIT	\$ 1.91	\$ 2.65	\$ 1.17
4 CROP PRODUCT RETURN	16.26	19.70	11.50
5 OTHER CROP INCOME	.32		.72
6 TOTAL CROP RETURN PER ACRE	16.58	19.70	12.22
7 DIRECT COSTS PER ACRE			
8 FERTILIZER	\$.39	\$.42	\$.34
9 CHEMICALS	.64	.90	.29
10 SEED & OTHER	.16	.01	.34
11 SPECIAL HIRED LABOR			
12 CUSTOM WORK HIRED	.24		.55
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS PER ACRE	1.43	1.33	1.52
15 RETURN OVER DIRECT COSTS PER ACRE	\$ 15.15	18.37	10.70
16 ALLOCATED COSTS PER ACRE			
17 FARM POWER & MACHINERY - OWNERSHIP	\$.21	\$.36	\$.01
18 FARM POWER & MACHINERY - OPERATION	.11	.18	.02
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	32.50	47.92	17.08
21 MISCELLANEOUS COSTS			
22 INTEREST ON MACH. & EQUIP. INVESTMENT	.03	.05	
23 TOTAL ALLOCATED COSTS PER ACRE	32.85	48.51	17.11
24 RETURN OVER ALL LISTED COSTS PER ACRE	\$ (-17.70)	(-30.14)	(-6.41)
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.01	.01	.01
27 POWER COSTS ALLOCATION FACTOR	.35	.66	.04
28 TOTAL LISTED COST PER UNIT OF PRODUCTION	\$ 4.15	\$ 6.73	\$ 1.98
29 RETURN OVER LISTED COSTS PER UNIT	\$ (-1.99)	\$ (-3.96)	\$ (-.53)
30* BREAKEVEN YIELD/UNIT OF PRODUCTION	18.33	19.39	15.92
31 TOTAL LISTED COSTS PER ACRE	\$ 34.28	\$ 49.84	\$ 18.63

*TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

DESCRIPTION OF LIVESTOCK TABLES

Livestock provide an important source of farm income, especially on farms with relatively small acreages, or acreages not well suited to the production of cash crops. If the crop land area is limited, and/or the farm family is short of capital relative to labor, livestock may be needed to provide the volume of earnings necessary for family living and to meet goals that the farm family hopes to achieve.

The following tables provide cost and return calculations for the livestock enterprises on the farms included in this report. Since feed is the largest single item of cost for all classes of livestock, return above feed cost was used to classify farms into high or low in the following tables. The reader is cautioned to remember that farms are classified into the high or low return above feed cost categories for each table, so that a particular farm might be in the low category in one livestock table and in the high category in another livestock table. And these classifications are separate and independent of the classifications based on labor earnings used in TABLES 1 through 6B. Feed costs are determined from feed records kept by the farm operator. Given the overwhelming importance of feed as the major cost of livestock production, it is suggested that the livestock producer try to keep an accurate set of feed records for each major livestock enterprise,

Purchase price is used for all feeds purchased from off the farm. An average price, shown elsewhere in this report, is charged for each kind of home-grown feed.

In general, the net increase in value of animals is calculated as: ending inventory plus sales plus transfers out plus butchered minus beginning inventory minus purchases minus transfers in. For fed livestock, pounds or cwt produced is calculated in the same way. Since inventory values play such an important role in determining net increase in value, producers are urged to be extremely careful in changing inventory prices, especially of breeding livestock which may be on hand during the whole year. This is, paper gains and losses from changing prices of inventory should be avoided.

Return over feed costs, because of the proportion of total costs represented by feed, is an important overall measure, and very useful in comparing an enterprise over time on the same farm or with other farms in a given year. It is a general measure that indicates success in getting top dollar for products sold, as well as in holding down feed costs. The relative size of the return over feed cost, or a companion measure, return for \$100 feed fed, varies by kind of enterprise, depending upon the size of non-feed costs. For example, dairy cows, with high labor and building and equipment costs, need a higher return above feed cost and return per \$100 feed fed than a low labor, low building/equipment cost enterprise such as feeder cattle. It also varies by year as both commodity prices and feed prices vary.

A few of the other direct cash costs, such as veterinary costs, bedding, etc. are shown in each livestock table. Certain overhead costs were also allocated among enterprises, using the work unit procedure described for the crops tables, which again can be modified by use of power and machinery, livestock equipment, and building and fences cost allocation factors. (PCAF, ECAF, AND BCAF, respectively).

TABLE 11A-6470 - COSTS AND RETURNS FROM COMPLETE HOG ENTERPRISE* - 1977

ITEMS	Average of 79 Farms	16 Farms	16 Farms
		Highest in Return Above Feed Cost	Lowest in Return Above Feed Cost
1 POUNDS OF HOGS PRODUCED	145,474	114,237	129,294
	Per Cwt	Per Cwt	Per Cwt
2 NET INCREASE IN VALUE OF HOGS	\$ 40.86	\$ 44.42	\$ 37.35
3 OTHER MISCELLANEOUS HOG INCOME			
4 TOTAL VALUE PRODUCED	40.86	44.42	37.35
5 POUNDS OF FEED FED			
6 CORN	275.4	260.1	289.3
7 SMALL GRAIN	20.3	12.5	26.0
8 COMPLETE RATION	56.7	20.9	118.2
9 PROTEIN, SALT & MINERAL & MILK	85.2	70.5	61.3
10 TOTAL CONCENTRATES	437.6	364.0	494.8
11 FORAGES	3.8	.9	1.3
12 FEED COST			
13 GRAINS	\$ 10.57	\$ 9.75	\$ 11.31
14 COMPLETE RATION	3.90	2.66	6.92
15 PROTEIN, SALT & MINERAL & MILK	8.60	7.37	7.24
16 FORAGES	.03	.02	.04
17 PASTURE	.04	.04	.01
18 TOTAL FEED COSTS	23.14	19.84	25.52
19 RETURN OVER FEED COSTS	\$ 17.72	\$ 24.58	\$ 11.83
20 OTHER DIRECT COSTS			
21 MISCELLANEOUS LIVESTOCK EXPENSE	\$.73	\$ 1.00	\$.56
22 VETERINARY EXPENSE	.79	.90	.72
23 CUSTOM WORK	.28	.15	.31
24 SPECIAL HIRED LABOR	.06		
25 TOTAL OTHER DIRECT COSTS	1.86	2.05	1.59
26 RETURN OVER FEED & OTHER DIRECT COSTS	\$ 15.86	\$ 22.53	\$ 10.24
27 ALLOCATED COSTS			
28 POWER & MACHINERY COSTS	\$.83	\$.87	\$ 1.09
29 LIVESTOCK EQUIPMENT COSTS	1.41	1.44	1.29
30 BUILDING & FENCES	1.51	1.30	2.17
31 TOTAL ALLOWED COSTS	3.75	3.61	4.55
32 RETURN OVER ALL LISTED COSTS	\$ 12.11	\$ 18.92	\$ 5.69
33 SUPPLEMENTARY MANAGEMENT INFORMATION			
34 RETURN FOR \$100 FEED FED	\$ 176.59	\$ 223.90	\$ 146.36
35 PRICE RECEIVED PER CWT. ALL ANIMALS	\$ 40.16	\$ 40.99	\$ 39.76
36 PRICE RECEIVED/CWT SOLD MKT ONLY	\$ 40.68	\$ 40.55	\$ 40.17
37 NUMBER OF LITTERS FARROWED	87	73	79
38 NUMBER OF PIGS BORN PER LITTER	9.6	9.5	9.1
39 NUMBER OF PIGS WEANED PER LITTER	7.9	7.7	7.4
40 PERCENT DEATH LOSS	14.4	13.8	14.4
41 AVERAGE WEIGHT OF ALL HOGS SOLD	225.0	215.7	210.6
42 AVERAGE WEIGHT OF MKT. HOGS SOLD	225.6	227.1	229.9
43 PRICE PER CWT. CONCENTRATE FED	\$ 5.28	\$ 5.43	\$ 5.16
44 PRICE/CWT PROT SALT MIN. FED	\$ 10.09	\$ 10.45	\$ 11.81
45 POUNDS OF PORK PURCHASED	2,819	3,185	3,224
46 TOTAL LISTED COSTS/CWT PORK PROD.	\$ 28.75	\$ 25.50	\$ 31.66

*FARMS INCLUDED IN TABLE 11A CARRIED OUT A COMPLETE PROGRAM OF FARROWING AND MARKETING THEIR OWN HOGS. THE FEED COSTS INCLUDE FEED FOR THE BREEDING HERD AND MARKET ANIMALS.

Table 11B-6490 - COSTS AND RETURNS FROM HOG FINISHING ENTERPRISE* - 1977

ITEMS	Average of 12 Farms	6 Farms	
		Highest in Return Above Feed Cost	Lowest in Return Above Feed Cost
1 AVERAGE NUMBER OF PIGS ON HAND	230.9	308.9	151.9
2 POUNDS OF HOGS PRODUCED	18,433	142,071	74,795
	Per Cwt.	Per Cwt.	Per. Cwt.
3 NET INCREASE IN VALUE OF HOGS	\$ 30.63	\$ 31.88	\$ 28.24
4 OTHER MISCELLANEOUS HOG INCOME			
5 TOTAL VALUE PRODUCED	30.63	31.88	28.24
6 POUNDS OF FEED FED			
7 CORN	287.1	287.2	286.9
8 SMALL GRAIN	14.6	10.9	21.7
9 COMPLETE RATION	2.1		6.1
10 PROTEIN, SALT & MINERAL & MILK	56.7	50.9	67.6
11 TOTAL CONCENTRATES	360.5	349.0	382.3
13 FEED COST			
14 GRAINS	\$ 10.56	\$ 10.28	\$ 11.08
15 COMPLETE RATION	.16		.45
16 PROTEIN, SALT & MINERAL & MILK	8.99	8.68	9.58
17 FORAGES			
18 PASTURE			
19 TOTAL FEED COSTS	19.71	18.96	21.11
20 RETURN OVER FEED COSTS	\$ 10.92	\$ 12.92	\$ 7.13
21 OTHER DIRECT COSTS			
22 MISCELLANEOUS LIVESTOCK EXPENSE	\$.17	\$.15	\$.21
23 VETERINARY EXPENSE	.54	.68	.27
24 CUSTOM WORK	.21	.10	.44
25 SPECIAL HIRED LABOR			
26 TOTAL OTHER DIRECT COSTS	.92	.93	.92
27 RETURN OVER FEED & OTHER DIRECT COSTS	\$ 10.00	\$ 11.99	\$ 6.21
28 ALLOCATED COSTS			
29 POWER & MACHINERY COSTS	\$.39	\$.35	\$.45
30 LIVESTOCK EQUIPMENT COSTS	.89	.80	1.01
31 BUILDING & FENCES	1.04	1.20	.64
32 TOTAL ALLOCATED COSTS	2.32	2.35	2.10
33 RETURN OVER ALL LISTED COSTS	\$ 7.68	\$ 9.64	\$ 4.11
34 SUPPLEMENTARY MANAGEMENT INFORMATION			
35 RETURN FOR \$100 FEED FED	\$ 155.39	\$ 168.15	\$ 133.78
36 PRICE RECEIVED PER CWT.	\$ 41.07	41.52	40.32
37 AVERAGE WEIGHT OF PIGS SOLD, LBS	222.1	223.6	219.1
38 AVERAGE PRICE PAID PER PIG BOUGHT	\$ 37.69	\$ 36.85	\$ 39.38
39 AVERAGE WEIGHT PER PIG BOUGHT, LBS	42.6	42.6	42.7
40 NUMBER OF PIGS PURCHASED	643	860	426
41 NO. PIGS TRANSFERRED IN			1
42 AVE. WT. PIGS TRANSFERRED IN			27.0
43 POUNDS OF PORK PURCHASED, LBS	27,402	36,632	18,172
44 PERCENT DEATH LOSS	3.0	2.6	3.5
45 PRICE PER CWT. CONCENTRATE FED	\$ 5.47	\$ 5.43	\$ 5.52
46 PRICE/CWT. PROT. SALT MIN FED	\$ 15.86	\$ 17.04	\$ 14.17
47 EFFECTIVE DAILY GAIN LB/DAY/PIG	1.29	1.26	1.35
48 TOTAL LISTED COST/CWT PORK PROD	\$ 22.95	\$ 22.24	\$ 24.13

*FARMS INCLUDED IN TABLE 11B EITHER PURCHASED FEEDER PIGS OR TRANSFERRED HOME FARROWED PIGS TO THE FINISHING LOTS. FEED COSTS AND RETURNS DO NOT INCLUDE ANY BREEDING HERD MAINTENANCE COSTS.

TABLE 12-6290 - COSTS AND RETURNS FROM DAIRY COWS, COMMERCIAL HERDS - 1977

ITEMS	Average of 30 Farms	10 Farms	10 Farms
		Highest in Return Above Feed Costs	Lowest in Return Above Feed Costs
1 AVERAGE NUMBER OF COWS	43.0	44.6	35.0
	Per Cow	Per Cow	Per Cow
2 POUNDS OF MILK	12,748	14,160	11,260
3 POUNDS OF BUTTERFAT	453.2	498.2	377.8
4 PERCENT OF BUTTERFAT IN MILK	3.6	3.5	3.4
5 VALUE OF PRODUCE			
6 DAIRY PRODUCTS SOLD	\$ 1,099.49	\$ 1,233.43	\$ 939.57
7 DAIRY PRODUCTS USED IN HOME	9.05	7.78	8.40
8 MILK FED TO LIVESTOCK	10.56	10.34	10.00
9 NET INCREASES IN VALUE OF COWS	(-10.44)	44.82	(-21.06)
10 OTHER MISCELLANEOUS DAIRY INCOME			
11 TOTAL VALUE PRODUCED	1,108.66	1,296.37	936.91
12 POUNDS OF FEED FED			
13 CORN	3,687.2	3,801.3	3,100.3
14 SMALL GRAIN	459.8	352.6	439.8
15 COMPLETE RATION	997.2	1,052.9	1,355.4
16 PROTEIN, SALT & MINERAL	576.1	787.1	475.3
17 TOTAL CONCENTRATES	5,720.3	5,993.9	5,370.8
18 LEGUME HAY	5,133.0	5,878.9	4,937.7
19 OTHER HAY & DRY ROUGHAGE	27.9	47.1	2.9
20 SILAGE	13,805.1	10,428.3	15,344.6
21 FEED COSTS			
22 GRAINS	\$ 147.91	\$ 148.95	\$ 126.89
23 COMPLETE RATION	65.49	71.57	101.94
24 PROTEIN, SALT & MINERAL	58.98	79.44	48.83
25 ALL HAY & DRY ROUGHAGE	133.26	158.92	131.91
26 SILAGE	115.77	82.24	126.37
27 PASTURE	3.95	2.09	4.14
28 TOTAL FEED COSTS	525.36	543.21	540.08
29 RETURN OVER FEED COSTS	583.30	753.16	396.83
30 OTHER DIRECT COSTS			
31 MISCELLANEOUS LIVESTOCK EXPENSE	\$ 48.14	\$ 50.99	\$ 44.06
32 VETERINARY EXPENSE	17.33	18.83	18.54
33 CUSTOM WORK HIRED	42.98	41.41	37.29
34 SPECIAL HIRED LABOR	5.12		.06
35 TOTAL OTHER DIRECT COSTS	113.57	111.23	99.95
36 RET. OVER FEED & OTHER DIRECT COSTS	\$ 469.73	\$ 641.93	\$ 296.88
37 ALLOCATED COSTS			
38 POWER & MACHINERY COSTS	\$ 46.99	\$ 51.82	\$ 40.42
39 LIVESTOCK EQUIPMENT COSTS	56.00	64.85	52.41
40 BUILDING & FENCES	56.76	52.36	65.26
41 TOTAL ALLOCATED COSTS	159.75	169.03	158.09
42 RETURN OVER ALL LISTED COSTS	309.98	472.90	138.79
43 SUPPLEMENTARY MANAGEMENT INFORMATION			
44 RETURN FOR \$100 FEED FED	\$ 211.03	\$ 238.65	\$ 173.48
45 FEED COST PER CWT. MILK	\$ 4.12	\$ 3.83	\$ 4.80
46 FEED COST PER POUND OF BUTTERFAT	\$ 1.16	\$ 1.09	\$ 1.43
47 POUNDS OF MILK/POUND OF CONCEN	\$ 2.23	\$ 2.36	\$ 2.10
48 AVERAGE PRICE PER CWT. MILK SOLD	\$ 8.76	\$ 8.82	\$ 8.51
49 AVERAGE PRICE/POUND OF BUTTERFAT	\$ 2.46	\$ 2.51	\$ 2.54
50 TOTAL LISTED COSTS/CWT MILK PRO	\$ 6.27	\$ 5.82	\$ 7.09
51 DAIRY COW TURNOVER PERCENTAGE	44.2	42.6	40.0
52 TOTAL LISTED COSTS PER COW	\$ 798.68	\$ 823.47	\$ 798.12

TABLE 13-6310 - COSTS AND RETURNS FROM OTHER DAIRY CATTLE, COMMERCIAL HERD
REPLACEMENTS - 1977

ITEMS	Average of 32 Farms	11 Highest in Return Above Feed Per Cow	11 Lowest in Return Above Feed Per Cow
1 NUMBER OF HEAD	52.7	43.3	51.9
	Per Cow	Per Cow	Per Cow
2 NET INCREASE IN VALUE	\$ 204.35	\$ 286.84	\$ 170.40
3 OTHER MISCELLANEOUS INCOME			
4 TOTAL INCOME	204.35	286.84	170.40
5 POUNDS OF FEED FED			
6 CORN	979.5	584.0	1,156.4
7 SMALL GRAIN	230.4	136.4	340.1
8 COMPLETE RATION	48.6	132.7	22.4
9 PROTEIN, SALT & MINERALS	145.7	67.0	201.7
10 HAY & DRY ROUGHAGE	1,963.8	1,391.6	3,010.7
11 SILAGE	6,842.8	6,458.1	8,096.0
12 MILK	86.1	106.9	65.9
13 FEED COST			
14 GRAINS	\$ 43.06	\$ 25.43	\$ 53.91
15 COMPLETE RATION	4.17	7.53	2.58
16 PROTEIN, SALT & MINERALS	\$ 16.74	\$ 7.32	\$ 23.41
17 HAY & DRY ROUGHAGE	49.30	24.80	80.50
18 SILAGE	55.22	53.05	66.13
19 MILK	7.74	6.24	7.57
20 PASTURE	3.40	3.86	3.64
21 TOTAL FEED COSTS	179.63	128.23	237.74
22 RETURN OVER FEED COSTS	\$ 24.72	\$ 158.61	\$ (-67.34)
23 OTHER DIRECT COSTS			
24 MISCELLANEOUS EXPENSE	\$ 3.93	\$ 2.86	\$ 4.82
25 VETERINARY EXPENSE	3.43	3.51	2.35
26 CUSTOM WORK HIRED	1.95	1.78	2.62
27 SPECIAL HIRED LABOR	1.25	4.41	
28 TOTAL OTHER DIRECT COSTS	10.56	12.56	9.79
29 RET OVER FEED & OTHER DIRECT COSTS	\$ 14.16	\$ 146.05	\$ (-77.13)
30 ALLOCATED COSTS			
31 POWER & MACHINERY COSTS	\$ 8.14	\$ 5.52	\$ 7.33
32 LIVESTOCK EQUIPMENT COSTS	10.72	10.77	6.65
33 BUILDING & FENCES	9.48	8.76	8.55
34 TOTAL ALLOCATED COSTS	28.34	25.05	22.53
35 RETURN OVER ALL LISTED COSTS	\$ (-14.18)	\$ 121.00	\$ (-99.66)
36 SUPPLEMENTARY MANAGEMENT INFORMATION			
37 RETURN FOR \$100 FEED FED	\$ 113.75	\$ 223.70	\$ 71.68
38 PERCENT DEATH LOSS - TOTAL	9.9	11.8	7.7
39 PERCENT CALF DEATH LOSS	24.4	28.2	20.0
40 TOTAL LISTED COSTS PER COW	\$ 218.53	\$ 165.84	\$ 270.06

TABLE 13-6310 PERTAINS TO YOUNG DAIRY CATTLE ONLY. THE HIGH AND LOW CATEGORIES ARE BASED ON RETURNS ABOVE FEED COST OF THE COWS (TABLE 12) FOR THESE SAME FARMS.

TABLE 14 - COSTS AND RETURNS FROM ALL DAIRY CATTLE - 1977

ITEMS	Average of 30 Farms	10 Farms	10 Farms
		Highest in Return Above Feed Costs	Lowest in Return Above Feed Costs
1 AVERAGE NUMBER OF COWS	43.0	50.7	37.1
	Per Cow	Per Cow	Per Cow
2 VALUE OF DAIRY PRODUCTS	\$ 1,119.12	\$ 1,205.35	\$ 1,042.80
3 NET INCREASE IN VALUE	245.86	291.79	247.41
4 MISCELLANEOUS DAIRY INCOME			
5 TOTAL VALUE PRODUCED	1,364.98	1,497.14	1,290.21
6 POUNDS OF FEED FED PER COW			
7 GRAINS	5,663.0	4,897.2	6,801.0
8 COMPLETE RATIONS	1,060.8	2,185.4	658.8
9 PROT SALT MIN INCL MILK EQUIV	766.8	777.2	826.0
10 HAY & DRY ROUGHAGE	7,680.2	6,921.9	8,457.1
11 SILAGE	22,442.0	17,357.0	29,253.9
12 FEED COST PER COW			
13 GRAINS	\$ 201.84	\$ 175.15	\$ 238.19
14 COMPLETE RATIONS	70.93	137.46	53.72
15 PROT, SALT & MIN, INCL MILK	89.40	79.64	104.45
16 HAY & DRY ROUGHAGE	196.35	180.51	232.29
17 SILAGE	185.63	137.18	234.61
18 PASTURE COSTS	8.37	4.46	17.90
19 TOTAL FEED COSTS	752.52	714.40	881.16
20 RETURN OVER FEED COSTS PER COW	\$ 612.46	\$ 782.74	\$ 409.05
21 OTHER DIRECT COSTS			
22 MISCELLANEOUS LIVESTOCK EXPENSE	\$ 52.95	\$ 53.27	\$ 55.66
23 VETERINARY EXPENSE	21.74	27.59	21.37
24 CUSTOM WORK	45.40	47.02	38.30
25 SPECIAL HIRED LABOR	6.74		
26 TOTAL OTHER DIRECT COSTS	126.83	127.88	115.33
27 RET OVER FEED & OTHER DIRECT COSTS	\$ 485.68	\$ 654.86	\$ 293.72
28 ALLOCATED COSTS			
29 POWER & MACHINERY COSTS	\$ 56.53	\$ 63.44	\$ 56.68
30 LIVESTOCK EQUIPMENT COSTS	67.01	76.79	57.23
31 BUILDING & FENCES	67.63	68.92	67.89
32 TOTAL ALLOCATED COSTS	191.17	209.15	181.80
33 RETURN OVER ALL LISTED COSTS	\$ 294.46	\$ 445.71	\$ 111.92
34 SUPPLEMENTARY MANAGEMENT INFORMATION			
35 RETURN FOR \$100 FEED FED	\$ 181.39	\$ 209.57	\$ 146.42
36 TOTAL LISTED COSTS PER COW	\$ 1,070.52	\$ 1,051.43	\$ 1,178.29

TABLE 14 PRESENTS A PICTURE OF THE COSTS AND RETURNS FROM THE WHOLE DAIRY HERD, I.E., IT IS THE SUM OF TABLES 12 AND 13. THE INFORMATION IS PRESENTED ON A PER COW BASIS, WITH THE NUMBER OF COWS TAKEN FROM TABLE 12. RETURN ABOVE FEED COST IN TABLE 12 WAS USED IN TABLE 14.

TABLE 15A-6100 - COST AND RETURNS FROM BEEF BREEDING CATTLE, FARM, COMMERCIAL
HERD - 1977

ITEMS	Average of 23 Farms	11 Highest in Return Above Feed Cost	11 Lowest in Return Above Feed Cost
1 AVERAGE NUMBER OF BEEF COWS	57.7	56.4	63.2
2 AVE. NO. OTHER BEEF ANIMALS AND BULLS	40.5	54.7	29.0
3 POUNDS OF BEEF PRODUCED	27,059	30,884	25,398
	Per Cow	Per Cow	Per Cow
4 NET INCREASE IN VALUE	\$ 171.20	\$ 226.77	\$ 121.82
5 OTHER MISCELLANEOUS BEEF INCOME	.40	.87	
6 TOTAL VALUE PRODUCED	171.60	227.64	121.82
7 POUNDS OF FEED FED			
8 GRAIN	249.5	394.3	124.5
9 PROTEIN, SALT & MINERAL	162.6	178.9	148.5
10 LEGUME HAY	2326.3	1234.4	3339.2
11 OTHER HAY & DRY ROUGHAGE	828.9	555.4	1021.9
12 SILAGE	5720.6	6385.5	5221.8
13 FEED COST			
14 GRAIN	\$ 8.96	\$ 14.11	\$ 4.49
15 PROTEIN, SALT & MINERAL	15.20	17.30	13.20
16 LEGUME HAY	47.14	31.70	61.69
17 OTHER HAY & DRY ROUGHAGE	6.83	3.14	9.13
18 SILAGE	47.12	48.97	46.27
19 PASTURE	27.57	28.35	26.87
20 TOTAL FEED COSTS	152.82	143.57	161.65
21 RETURN OVER FEED COST	\$ 18.78	\$ 84.07	\$ (-39.83)
22 OTHER DIRECT COSTS			
23 MISCELLANEOUS LIVESTOCK EXPENSE	\$ 14.07	\$ 16.54	\$ 12.10
24 VETERINARY EXPENSE	5.39	5.44	5.44
25 CUSTOM WORK	4.00	5.00	3.18
26 SPECIAL HIRED LABOR			
27 TOTAL OTHER DIRECT COSTS	23.46	26.98	20.72
28 RETURN OVER FEED & OTHER DIRECT COSTS	\$ (-4.68)	\$ 57.09	\$ (-60.55)
29 ALLOCATED COSTS			
30 POWER & MACHINERY COSTS	\$ 10.16	\$ 9.53	\$ 10.05
31 LIVESTOCK EQUIPMENT COSTS	14.90	9.93	16.19
32 BUILDING & FENCES	16.70	12.82	16.51
33 TOTAL ALLOCATED COSTS	41.76	32.28	42.75
34 RETURN OVER ALL LISTED COSTS	\$ (-46.44)	\$ 24.81	\$ (-103.30)
35 SUPPLEMENTARY MANAGEMENT INFORMATION			
36 RETURN FOR \$100 FEED FED	\$ 112.28	\$ 158.56	\$ 75.36
37 PRICE PER CWT. SOLD	\$ 39.95	\$ 41.37	\$ 38.54
38 PRICE/CWT CALVES SOLD OR TRANS.	\$ 35.15	\$ 38.66	\$ 33.26
39 AVERAGE WEIGHT PER HEAD SOLD	876.2	1076.2	748.6
40 AVER. WEIGHT PER CALF SOLD OR TRANS.	473.0	534.8	445.3
41 PERCENT DEATH LOSS	4.2	5.4	2.7
42 PERCENT CALF CROP	105.6	107.7	103.3
43 TOTAL LISTED COSTS PER COW	\$ 218.04	\$ 202.83	\$ 225.12

TABLE 15A-6100 INCLUDES ONLY THOSE FARMS WITH TEN OR MORE COWS IN THE BEEF BREEDING HERD. NET INCREASE IN VALUE INCLUDES THE VALUE OF CALVES WHETHER SOLD OR TRANSFERRED TO THE FEED LOT.

TABLE 15B-6140 - COST AND RETURNS FROM BEEF FEEDER CATTLE, FEEDLOT - 1977

ITEMS	Average of 90 Lots	18 Lots	18 Lots
		Highest in Return Above Feed Costs	Lowest in Return Above Feed Costs
1 AVERAGE NUMBER OF BEEF FEEDERS	154.2	193.8	84.3
2 POUNDS OF BEEF PRODUCED	96,666	128,212	41,617
	PER CWT	PER CWT	PER CWT
3 NET INCREASE IN VALUE OF ANIMALS	\$ 43.33	\$ 48.90	\$ 39.97
4 OTHER MISCELLANEOUS BEEF INCOME			
5 TOTAL VALUE PRODUCED	43.33	48.90	39.97
6 POUNDS OF FEED FED			
7 GRAIN	502.4	536.7	514.9
8 PROTEIN, SALT & MINERAL	72.1	58.1	70.1
9 LEGUME HAY	129.6	71.5	602.1
10 OTHER HAY & DRY ROUGHAGE	13.0		89.7
11 SILAGE	1,043.8	778.5	2,032.2
12 FEED COST			
13 GRAIN	\$ 18.05	\$ 18.85	\$ 18.30
14 PROTEIN, SALT & MINERAL	5.04	4.28	7.40
15 LEGUME HAY	2.34	1.63	5.01
16 OTHER HAY & DRY ROUGHAGE	.24		1.37
17 SILAGE	8.63	5.94	16.56
18 PASTURE	.04		.31
19 TOTAL FEED COST	34.34	30.70	48.95
20 RETURN OVER FEED COST	\$ 8.99	\$ 18.20	\$ (-8.98)
21 OTHER DIRECT COSTS			
22 MISCELLANEOUS LIVESTOCK EXPENSE	\$.30	\$.46	\$.28
23 VETERINARY EXPENSE	.77	.78	.67
24 CUSTOM WORK HIRED	.73	.39	.74
25 SPECIAL HIRED LABOR	.02		.06
26 TOTAL OTHER DIRECT COSTS	1.82	1.63	1.75
27 RET OVER FEED & OTHER DIRECT COSTS	\$ 7.17	\$ 16.57	\$ (-10.73)
28 ALLOCATED COSTS			
29 POWER & MACHINERY COSTS	\$.83	\$.86	\$ 1.09
30 LIVESTOCK EQUIPMENT COSTS	1.36	1.59	2.09
31 BUILDINGS & FENCES	1.39	1.39	1.67
32 TOTAL ALLOCATED COSTS	3.58	3.84	4.85
33 RETURN OVER ALL LISTED COSTS	\$ 3.59	\$ 12.73	\$ (-15.58)
34 SUPPLEMENTARY MANAGEMENT INFORMATION			
35 RETURN FOR \$100 FEED FED	\$ 126.18	\$ 159.29	\$ 81.66
36 PRICE PER CWT. SOLD	\$ 38.85	\$ 39.25	\$ 38.23
37 AVERAGE WEIGHT PER HEAD SOLD	1,063.3	1,075.8	1,099.7
38 PRICE PER CWT. BOUGHT	\$ 39.44	\$ 37.24	\$ 41.14
39 AVERAGE WEIGHT PER HEAD BOUGHT	577.9	602.3	570.6
40 NUMBER OF HEAD BOUGHT	215	294	77
41 PERCENT DEATH LOSS	.8	.8	.6
42 EFFECTIVE DAILY GAIN-LB/HEAD/DAY	1.72	1.81	1.35
43 TOTAL LISTED COST/CWT. PRODUCED	\$ 39.74	\$ 36.17	\$ 55.55

TABLE 16A-6670 - COST AND RETURNS FROM SHEEP, FARM, FLOCK, COMMERCIAL - 1977

ITEMS	Average of 8 Farms
1 AVERAGE NUMBER OF EWES	50.4
2 POUNDS OF LAMB & MUTTON PRODUCED	5,330
3 POUNDS OF WOOL PRODUCED	771
4 VALUE OF PRODUCE	Per Ewe
5 WOOL	\$ 10.36
6 NET INCREASE IN VALUE OF ANIMALS	73.63
7 OTHER MISCELLANEOUS SHEEP INCOME	4.70
8 TOTAL VALUE PRODUCED	\$ 88.69
9 POUNDS OF FEED FED	
10 GRAIN	514.6
11 PROTEIN, SALT & MINERAL	26.0
12 LEGUME HAY	1,012.9
13 OTHER HAY & DRY ROUGHAGE	
14 SILAGE	168.7
15 FEED COST	
16 GRAIN	21.21
17 PROTEIN, SALT & MINERAL	2.82
18 LEGUME HAY	24.27
19 OTHER HAY & DRY ROUGHAGE	
20 SILAGE	1.25
21 PASTURE	4.56
22 TOTAL FEED COSTS	\$ 54.11
23 RETURN OVER FEED COSTS	\$ 34.58
24 OTHER DIRECT COSTS	
25 MISCELLANEOUS LIVESTOCK EXPENSE	3.41
26 VETERINARY EXPENSE	1.17
27 CUSTOM WORK	1.15
28 SPECIAL HIRED LABOR	.26
29 TOTAL OTHER DIRECT COSTS	\$ 5.99
30 RETURN OVER FEED AND OTHER DIRECT COSTS	\$ 28.59
31 ALLOCATED COSTS	
32 POWER & MACHINERY COSTS	10.55
33 LIVESTOCK EQUIPMENT COSTS	14.80
34 BUILDING & FENCES	6.67
35 TOTAL ALLOCATED COSTS	\$ 32.02
36 RETURN OVER ALL LISTED COSTS	\$ (-3.43)
37 SUPPLEMENTARY MANAGEMENT INFORMATION	
38 RETURN FOR \$100 FEED FED	\$ 163.92
39 PRICE PER CWT. LAMB & MUTTON SOLD	\$ 61.77
40 PRICE PER CWT. LAMB SOLD OR TRANSFERRED	\$ 48.32
41 AVERAGE WEIGHT OR LAMBS SOLD OR TRANSFERRED	103.2
42 POUNDS OF WOOL PER SHEEP SHEARED	7.6
43 NUMBER OF EWES KEPT FOR LAMBING	58
44 PERCENT LAMB CROP	119.0
45 PERCENT DEATH LOSS	12.4
46 TOTAL LISTED COSTS PER EWE	\$ 92.12

Southwestern Minnesota Farm Management Association
1977 County Averages

County	S.W. Assn.	Cottonwood	Jackson	Martin Faribault Watowan	Pipestone Murray	Nobles	Redwood
Number of Farms	169	28	16	32	28	35	30
Size of farm acres total	501	496	516	400	545	472	600
Tillable acres	447	452	480	366	478	430	503
Farm capital invested /worker	\$205099	\$262210	\$217991	\$194748	\$167564	\$169386	\$232657
Total farm capital 12/31	365498	393573	418938	348416	344446	334723	384567
Increase in farm capital 1/1 - 12/31	\$ 30014	\$ 24828	\$ 35578	\$ 15540	\$ 34809	\$ 33472	\$ 38815
Total farm receipts	179568	199229	195450	158005	182120	178214	174948
Total farm expense	150261	171007	164880	128937	156742	150112	139975
Return to labor & management	29307	28222	30570	29068	25378	28102	34973
Total cash living expense	\$ 11249	\$ 12695	\$ 14383	\$ 11781	\$ 9025	\$ 11480	\$ 9608
Total household & personal living expenses	20685	27494	19221	21523	18303	19178	16072
Farmers net worth 12/31	176835	122230	218233	172014	183178	120710	186948
Gain in net worth	21884	17119	18606	18022	33296	15978	28656
Ratio of assets to liabilities 12/31	2.417	2.670	2.682	2.301	2.422	1.981	2.673
Operators share - return to labor & mgt.	\$ 22935	\$ 19761	\$ 14810	\$ 21473	\$ 23184	\$ 20454	\$ 32287
Return to capital & family labor	30096	27354	25513	27746	32559	25013	39414
Oats yield per acre (bu.)	82.6	87.8	85.3	86.1	78.7	79.9	85.0
Total crop return per acre (\$1.04)	\$ 89.08	\$101.32	\$ 88.03	\$ 88.63	\$ 83.42	\$ 81.95	\$ 98.74
Return over all listed costs per acre	-18.59	-22.11	-46.31	-48.53	-2.68	-22.40	-.56
Cost of production per bu.	1.30	1.41	1.57	1.59	1.09	1.31	1.17
Wheat yield per acre (bu.)	54.3	61.6	58.2	40.9	55.1	52.0	53.9
Total crop return per acre (\$2.28)	\$127.99	\$145.82	\$131.66	\$ 89.95	\$122.77	\$116.58	\$135.02
Return over all listed costs per acre	16.83	27.98	-6.08	-45.27	26.19	8.20	33.34
Cost of production per bu.	2.05	1.91	2.37	3.31	1.75	2.09	1.89
Alfalfa hay yield per acre (tons)	3.4	2.6	3.7	4.8	2.7	3.8	3.4
Total crop return per acre (\$45)	\$155.67	\$125.78	\$168.00	\$217.94	\$121.70	\$170.93	\$167.37
Return over all listed costs per acre	19.42	-15.64	-7.29	52.73	9.99	36.83	43.29
Cost of production per ton	40.65	53.97	46.95	34.32	41.70	35.31	36.67
Corn silage yield per acre (tons)	14.4	14.2	14.8	18.2	13.3	13.7	14.9
Total crop return per acre (\$14)	\$211.22	\$210.74	\$207.41	\$254.60	\$158.40	\$212.71	\$225.19
Return over all listed costs per acre	53.13	42.68	3.76	39.35	58.11	49.85	86.31
Cost of production per ton	10.98	11.84	13.75	11.84	9.77	11.89	9.31

County	S.W. Assn.	Cottonwood	Jackson	Martin Faribault Watonwan	Pipestone Murray	Nobles	Redwood
Corn yield per acre (bu.)	105.5	116.9	103.7	116.1	96.1	97.5	106.5
Total crop return per acre (\$1.69)	\$182.94	\$218.05	\$165.88	\$186.04	\$158.07	\$156.23	\$214.08
Fertilizer (cost per acre)	27.18	31.38	32.43	41.67	20.63	18.69	23.74
Chemicals	11.63	12.46	12.15	13.77	10.32	12.19	9.09
Seed & other	16.13	17.35	17.41	18.08	12.74	16.30	15.54
Custom work hired	3.00	1.90	6.04	3.49	3.44	2.14	2.29
Machinery - ownership	21.66	20.77	23.11	23.32	19.97	22.06	21.05
Machinery - operation	15.68	16.63	14.90	17.65	14.73	15.09	15.12
Interest on machinery	4.74	4.68	4.33	5.20	4.73	5.21	3.99
Land cost	66.89	75.00	74.69	84.68	47.83	63.43	59.84
Return over all listed costs	15.67	36.90	-19.18	-21.89	23.58	1.04	62.43
Cost of production per bu.	1.58	1.55	1.79	1.79	1.40	1.59	1.42
Soybean yield per acre (bu.)	39.1	43.1	36.7	43.0	35.1	35.1	39.8
Total crop return per acre (\$5.00)	\$199.71	\$225.71	\$183.62	\$217.31	\$177.05	\$175.40	\$210.47
Fertilizer (costs per acre)	1.42	.90	1.29	2.98	.86	.86	1.59
Chemicals	9.66	10.58	8.49	10.02	10.41	9.30	9.05
Seed & other	10.99	8.90	11.31	14.09	10.96	9.68	11.51
Special hired labor	1.25	1.67	1.92	.65	.71	.35	2.23
Custom work hired	2.14	1.38	5.08	1.97	2.02	1.58	1.93
Machinery - ownership	17.66	17.81	17.06	19.52	15.81	16.88	18.23
Machinery - operation	12.71	13.50	11.82	14.34	12.57	11.57	12.38
Interest on machinery	3.76	4.13	3.20	4.21	3.86	3.83	3.25
Land cost	68.33	75.00	75.00	85.76	49.35	64.12	59.03
Return over all listed costs	71.68	91.43	48.45	63.77	70.50	57.23	91.09
Cost of production per bu.	3.28	3.11	3.68	3.57	3.03	3.37	3.00
RETURN OVER LISTED COSTS							
Hogs -farrow - finish per cwt	\$ 12.11	\$ 11.61	\$ 13.20	\$ 11.73	\$ 13.27	\$ 11.07	\$ 12.59
Dairy cows per head	309.98	316.94	*	301.04	278.41	349.84	*
Beef cows per head	-46.44	6.52	*	-85.55	-70.89	-78.52	-38.44
Beef feeders per cwt	3.59	4.03	2.21	-.24	7.80	3.73	2.20
TOTAL LISTED COST PER UNIT PRODUCED							
Hogs - farrow - finish per cwt	\$ 28.75	\$ 28.10	\$ 28.03	\$ 27.11	\$ 29.99	\$ 31.41	\$ 27.21
Dairy cows per cwt milk	6.28	6.15	*	6.43	6.41	6.10	*
Beef cows per head	218.04	188.65	*	263.00	300.98	205.83	176.14
Beef feeders per cwt	39.74	37.57	41.44	41.64	36.98	41.28	40.94

*Not enough farms to average

Southwestern Minnesota Farm Management Association
1977 Averages by Type of Farm

ITEM	Average		Cash	Cash Crop	Cash Crops	Cash Crop
	All Farms	Cash Crop	Crop Plus Dairy	Cash Crop Plus Hog Complete	Plus Beef Feeder Hogs	Plus Beef Feeder Cattle
Number of farms	169	40	13	38	11	16
Land						
Acres per farm	501	513	438	515	571	654
Acres tillable	447	468	396	466	486	565
% tillable in high return crops	83.5	88.4	79.9	87.8	75.0	80.1
% tillable in corn & corn silage	47.3	41.6	44.2	46.6	47.0	46.5
% tillable in soybeans	34.3	42.4	26.9	37	25.0	31.4
% tillable in alfalfa	4.9	1.8	15.3	1.9	7.8	3.2
Labor						
Number of workers	1.77	1.47	2.19	1.72	1.57	2.12
Total work units	515	300	664	483	589	549
Work units in crops	219	224	206	229	245	274
Work units in livestock	257	29	429	222	317	226
Units per worker	291	204	303	281	375	259
Capital						
Average farm capital managed	350,491	292,197	304,638	370,448	412,714	442,170
Capital managed per worker	198,018	189,263	142,613	218,500	289,842	237,918
Earnings						
Net cash income	29,847	24,652	31,865	27,437	31,646	24,394
Labor and management earnings	29,307	25,680	26,759	35,279	37,972	30,359
Rate earned on investment whole farm (%)	11.6	11.5	11.6	12.9	12.9	12.9
Total farm sales	146,894	82,693	105,905	139,579	195,704	208,933
Total value added	91,114	72,036	88,938	101,733	108,994	103,814
Proportion of Sales						
From livestock	27.1	1.7	32.5	29.2	31.1	18.3
From crops	69.8	94.9	64.9	68.0	66.6	78.5
Expenses						
Cash exp./\$100 sales	65	47	56	55	72	76
Purchases/\$100 sales	85	62	87	78	89	91
Yields						
Corn/bu.	105.5	110.3	104.2	105.2	105.2	105.2
Soybeans/bu.	39.1	38.9	36.4	39.4	38.7	39.9
Alfalfa/ton	3.4	3.3	3.5	3.1	2.8	4.2
Corn silage/ton	14.4	15.5	16.7	13.9	12.2	15.2

Summary by Years

ITEMS	Average 1955-59	Average 1960-64	Average 1965-69	Average 1970-74	1972	1973	1974	1975	1976	1977
Number of farms	135	135	145	146	156	144	145	140	124	169
Total farm capital managed	\$75246	\$99907	\$138418	\$205954	208980	\$257743	\$308466	\$313913	\$331851	\$350491
Monthly charge for:										
Unpaid family labor ^{a/}	134	147	160	390	300	350	400	450	500	500
Second operator ^{a/}	134	167	295	<u>d/</u>	600	<u>d/</u>	<u>d/</u>	<u>d/</u>	<u>d/</u>	833
Board for hired labor ^{a/}	38	40	45	69	60	75	90	120	130	120
FARM EXPENSES										
Dairy cattle bought	\$ 151	\$ 146	\$ 157	\$ 536	\$ 746	\$ 605	\$ 782	\$ 403	\$ 393	\$ 719
Beef cattle bought	7619	11153	13576	24804	26764	33917	21197	21073	24419	25879
Hogs bought	473	723	901	1542	1818	2208	1702	3294	3058	3098
Sheep bought (incl. feeders)	517	69	51	20	8	31	40	18	52	90
Poultry bought (incl. turkeys)	225	244	186	358	231	458	564	660	863	1169
Horses bought	5	3	2	9	8	9	14	7	10	2
Miscellaneous livestock expense	525	592	778	1401	1345	1699	1783	2156	2726	2539
Fertilizer bought	906	1223	2566	5457	3985	6256	9458	8727	6967	6602
Miscellaneous crop expenses ^{b/}	908	1184	2602	5697	4844	6930	8423	8768	7283	9465
Feed bought	5503	7225	8589	13002	10337	17768	18169	20120	24350	24390
Custom work hired	694	874	1221	1928	1835	2000	2467	2556	2206	2687
Power, crop & irrig. equip. (new)	1891	2057	4431	8290	6741	10972	12137	12761	11990	12963
Power & crop machinery (upkeep)	2200	2718	3587	5519	4953	6310	7316	7957	7558	8373
Livestock equipment (new)	327	415	590	1334	991	1682	2648	1880	3203	1934
Livestock equipment (upkeep)	194	207	254	473	421	596	575	757	866	922
New real estate & improvements	832	1018	1670	3555	3140	4665	5605	6693	4519	14257
Buildings and fencing (upkeep)	320	338	434	799	624	998	1072	1269	1318	1139
Hired Labor	993	1092	1436	2592	2381	3228	3208	3832	3655	3176
Taxes	910	1449	1898	2625	2613	2701	2742	3178	3089	3582
Gen. farm exp. & telephone	364	430	594	1005	905	1119	1319	1541	1819	1793
Total farm purchases	\$25557	33160	45523	80946	74690	104152	101221	107650	110344	124576
Decrease in farm capital	-	-	-	-	-	-	3418	-	1666	-
Interest on farm capital ^{c/}	3762	4991	7372	14174	12539	15465	21592	21974	23230	21029
Unpd fam lab + oper over one	379	500	652	3326	1284	8179	5244	4156	2498	2232
Board furnished hired labor	92	82	84	150	110	176	206	189	155	217
Total farm expense	\$ 29790	\$ 38733	\$ 53631	\$ 98596	\$ 88623	\$127972	\$131681	\$ 133969	\$ 137893	\$150261

a/ These adjustments should be considered in comparing 1976 with previous years.

b/ Includes chemicals.

c/ Interest was calculated at the rate of 5% on capital managed from 1950 to 1966, at 5.5% from 1967 to 1969, at 6% in 1970-3, and at 7% in 1974-76.

d/ Labor earnings were divided between the various partners.

Summary by Years (continued)

ITEMS	Average 1955-59	Average 1960-64	Average 1965-69	Average 1970-74	1972	1973	1974	1975	1976	1977
FARM RECEIPTS										
Dairy cattle sold	\$ 585	\$ 563	\$ 790	\$ 1787	\$ 2075	\$ 1958	\$ 2665	\$ 2438	\$ 2391	\$ 2694
Dairy products sold	1450	1888	3244	5914	4891	6464	8075	7607	8996	8074
Beef cattle sold	13025	20180	23994	43593	36866	54096	54426	43137	46808	46380
Hogs sold	7158	8431	12206	18760	16461	26762	27113	34326	34551	32204
Sheep and wool sold	981	263	182	113	96	168	98	128	265	267
Poultry (incl. turkeys) sold	530	505	388	1210	975	2229	1725	2516	2629	2663
Eggs sold	1013	1074	871	1011	761	1250	1161	1234	1683	3073
Horses sold	5	4	1	2	1	3	3	-	2	5
Corn sold	3149	3401	5585	14843	10049	19099	27025	22319	14561	16359
Soybeans sold	-	-	4217	12489	9260	15284	23555	19132	21973	25512
Small grain sold	807	882	575	783	395	648	1770	1908	2683	3374
Other crops sold ^{a/}	1759	3855	3681	3408	5460	3155	1509	1683	3097	980
Machinery & equipment sold and gas tax refund	266	373	431	646	587	771	965	702	1179	972
Agricultural adjustment payment	44	43	7	-	-	-	-	-	-	-
Income from work off the farm	398	396	742	1194	1194	1176	1587	1352	1370	1518
Miscellaneous farm income	306	386	813	1470	1253	1593	2606	3482	3510	2818
Total farm sales	\$ 31476	\$ 42244	\$ 57727	\$107223	\$ 90324	\$134656	\$154283	\$141964	\$144798	\$146894
Increase in farm capital	1157	1205	6390	15439	23969	46257	-	9624	-	30,014
Family living from the farm	278	288	293	416	354	547	535	503	501	454
Total farm receipts	\$ 32911	\$ 43737	\$ 64410	\$123078	\$114647	\$181460	\$154818	\$152091	\$145299	\$179568
Total farm expenses	29790	38733	53631	98596	88623	127972	131681	133969	137893	150261
Labor earnings	\$ 3121	\$ 5004	\$ 10779	\$ 24482	\$ 26024	\$ 53488	\$ 23137	\$ 18122	\$ 7406	\$ 29307
MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY										
Percent land in high ret. crops ^{b/}	63.4	68.1	67.2	70.5	70.7	70.8	70.7	69.6	64.8	83.5
Livestock units per 100 acres ^{c/}	39.4	43.0	36.5	38.5	37.7	40.3	39.5	36.4	40.4	34.9
Work units ^{d/}	469	533	498	483	460	522	542	515	531	515
Work units per worker ^{d/}	279	318	303	276	270	285	301	287	312	291
Expenses per work unit ^{d/}	\$12.81	\$13.42	\$20.31	\$35.82	\$34.65	\$40.29	\$43.36	\$52.82	\$52.14	52.17

^{a/} Includes soybeans 1950-1965, and crop disaster payments 1976.

^{b/} The crop ratings used in calculating the percentage of the tillable land in high return crops were considerably changed in 1957 and in 1977.

^{c/} The basis for computing animal units was revised in 1951.

^{d/} The basis for computing work units was revised in 1953, 1967, and 1970.

Summary of Miscellaneous Items by Years

Item	Average 1955-59	Average 1960-64	Average 1965-69	Average 1970-74	1972	1973	1974	1975	1976	1977
RETURN ABOVE FEED COST PER										
Dairy cow	\$125.34	\$140.97	\$226.79	\$330.58	\$331.38	\$371.53	\$303.48	\$301.13	\$523.31	\$583.30
100 lbs. feeder cattle prod.	5.88	1.94	5.74	2.91	12.26	7.54	-21.16	8.77	-7.43	8.99
Ewe	*	6.80	10.24	8.85	11.67	13.34	-1.63	4.56	12.99	34.58
100 lbs. hogs produced	4.52	4.28	8.71	10.41	14.63	20.53	7.28	22.95	11.95	17.20
Hen	1.05	.91	.78	1.04	-.04	2.08	2.82	1.10	2.98	-
Beef cow	*	*	*	33.63	106.38	106.05	-138.58	-77.73	-46.45	18.78
FEED COST PER										
Dairy cow	\$147.40	\$181.72	\$232.80	\$342.83	\$257.28	\$391.42	\$556.89	\$590.41	\$634.35	\$525.36
100 lbs. feeder cattle prod.	17.70	18.32	20.28	28.37	20.45	30.90	46.09	46.49	44.94	34.34
Ewe	*	13.42	16.58	26.45	23.20	38.14	28.37	22.32	46.76	54.11
100 lbs. hogs produced	10.48	10.65	12.31	17.37	13.73	20.89	25.44	26.68	23.96	23.14
Hen	3.89	2.45	3.51	3.75	3.19	4.44	4.32	4.29	5.37	-
Beef cow	*	*	*	116.30	81.99	132.91	162.25	198.50	198.62	152.82
MISCELLANEOUS LIVESTOCK INFORMATION										
Number of dairy cows ^{a/}	5.2	5.7	6.8	8.8	8.4	9.0	9.4	8.6	8.1	7.6
Head in beef breeding herd ^{a/}	10.6	4.9	7.1	11.9	12.3	13.6	13.6	14.1	7.0	13.4
Pounds of feeder cattle prod. ^{a/}	37685	41929	46386	59187	59416	64272	55990	44630	58323	51479
Litters of pigs ^{a/}	24.6	28.0	28.8	34.1	33.4	36.6	36.4	35.9	38.8	44.8
Pounds of hogs produced ^{a/}	44369	52828	55947	61096	54435	68052	72927	68451	75048	68002
Number of hens ^{a/}	204	219	174	165	173	153	142	144	170	-
Pounds of butterfat per dairy cow	311	349	387	409	411	411	405	427	448	453
Pigs weaned per litter	7.2	7.0	7.4	7.3	7.3	7.3	7.5	7.5	8.0	8.0
Percent lamb crop	111	103	111	105	102	108	102	83	124	119
Eggs per hen	200	208	208	218	236	207	221	189	244	-

* Information not available

^{a/} The reader is cautioned that these six items are calculated as follows. The total number of head, pounds, litters, hens, etc., reported by all farmers whose records are included in the summary averages, is divided by the number of records included in the analysis (first line, table 23). Thus, these items are not averages per farm reporting this item, instead they are averages for all farms included in the summary, regardless of whether all farms had that particular livestock enterprise or not. The correct interpretation of such information is to display trends over time in agriculture in the areas in which record keepers live whose records are included in the summary. For example, the number of hens is decreasing, the number of litters being farrowed is increasing, etc., in the general area covered by the Southwest Minnesota Farm Management Association. Method of calculation changed slightly in 1977.

Summary of Miscellaneous Items by Years

Item	Average 1955-59	Average 1960-64	Average 1965-69	Average 1970-74	1972	1973	1974	1975	1976	1977
PRICE RECEIVED PER										
Pound of butterfat in milk	\$.91	\$.94	\$ 1.19	\$ 1.64	\$ 1.45	\$ 1.77	\$ 2.11	\$ 2.16	\$ 2.49	\$ 2.46
100 pounds of fat cattle	22.51	22.86	25.32	35.53	34.50	42.76	40.44	40.95	37.07	38.85
Pound of wool	.51	.58	.54	.72	.97	1.02	.41	.28	.63	1.36
Dozen of eggs	.29	.27	.27	.31	.20	.42	.42	.34	.47	-
100 pounds of hogs sold	15.96	15.45	20.90	27.97	25.71	36.69	34.56	47.41	42.21	40.45
PRICE OF FEED										
Corn, bu.	1.11	.99	1.10	1.57	1.08	1.70	2.75	2.65	2.45	2.00
Oats, bu.	.59	.61	.62	.83	.65	.90	1.40	1.45	1.45	1.20
Barley, bu.	.92	.91	.97	1.05 <u>c/</u>	.92	1.55	-	-	-	-
Alfalfa hay, ton	18.20	19.40	20.80	26.20	21.00	30.00	40.00	60.00	70.00	55.00
Timothy hay	10.58	11.22	12.00	10.70 <u>c/</u>	11.60	18.70	-	-	-	-
Corn silage, ton	6.08	6.60	7.36	9.15	7.25	10.00	14.00	20.00	22.00	16.00
ACRES PER FARM										
Small grains	48.8	39.5	27.1	24.2	15.8	22.8	30.8	29.2	55.5	45.3
Cultivated crops	153.7	187.0	251.5	331.2	309.2	370.7	391.2	391.7	350.5	376.0
Tillable land in hay	34.9	31.0	27.5	22.9	21.1	23.4	24.9	25.3	26.5	22.0
Tillable land in pasture	13.2	6.8	4.5	3.6	3.5	3.2	3.4	3.6	4.9	4.4
Tillable land not cropped	2.2	25.9 <u>a/</u>	44.1 <u>a/</u>	33.9 <u>a/</u>	67.7 <u>a/</u>	9.8 <u>a/</u>	1.6	1.3	1.0	-0.8 <u>d/</u>
Total tillable land	252.8	290.2	354.7	415.8	417.3	429.9	451.9	451.1	438.4	446.9
Non-tillable land	40.5	44.6	48.5	55.9	57.7	55.8	59.1	60.9	53.4	54.3
Total acres per farm	293.3	334.8	403.2	471.7	475.0	485.7	511.0	512.0	491.8	501.2
YIELD PER ACRE										
Flax, bu	13.0	13.6	16.4	15.8 <u>b/</u>	17.5	-	-	-	9.5	-
Oats, bu.	51.7	54.8	61.1	71.0	75.1	77.2	73.0	74.8	57.8	82.6
Corn grain, bu.	57.1	71.3	84.3	91.7	107.4	95.4	67.8	72.5	57.6	105.5
Corn silage, tons	9.7	11.8	13.1	15.1	16.6	16.1	12.0	12.2	9.6	14.4
Soybeans, bu.	22.5	25.5	25.4	31.9	37.2	32.6	27.9	33.5	24.4	39.1
Alfalfa hay, tons	2.5	3.0	3.1	3.7	4.2	3.6	3.6	3.6	2.1	3.4

a/ Including feed grain program

b/ 3-year average

c/ 4-year average

d/ Negative sign means that area double cropped exceeded area not cropped by the amount shown.