

1963 ANNUAL REPORT

VOCATIONAL AGRICULTURE FARM MANAGEMENT PROGRAM

MANKATO AREA OF SOUTHERN MINNESOTA

UNIVERSITY OF MINNESOTA
INSTITUTE OF AGRICULTURE

and

MINNESOTA DEPARTMENT OF EDUCATION
VOCATIONAL DIVISION

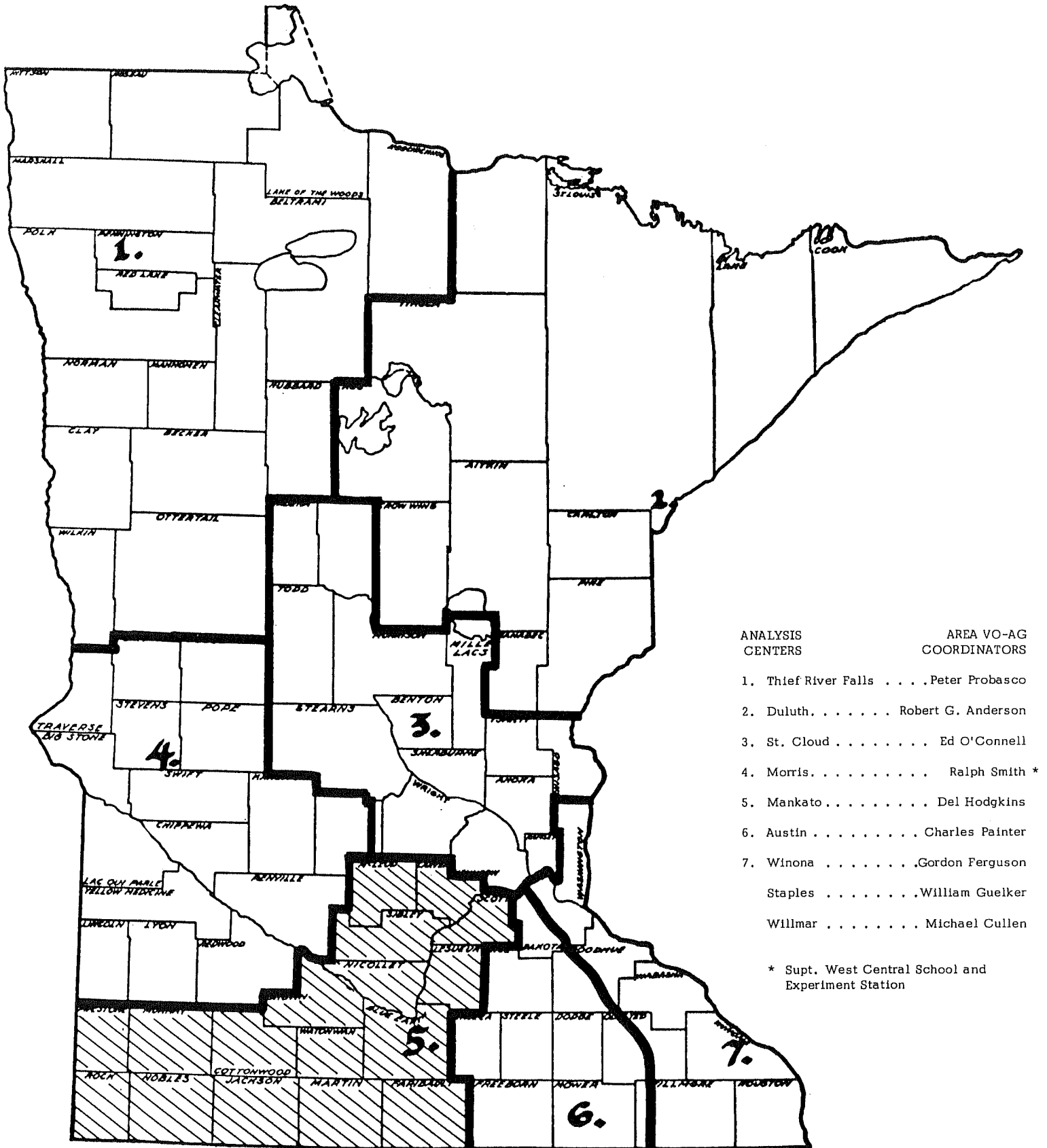
and

AREA VOCATIONAL TECHNICAL SCHOOL
MANKATO, MINNESOTA

Co-operating

APRIL 1964

VO-AG FARM MANAGEMENT AREAS



Shaded Area Served By The Mankato Analysis Center

1963 Report of the Vocational Agriculture Farm Management
Program in the Mankato Area of Southern Minnesota

Del Hodgkins

INDEX

Introduction.	1
Schools Participating	2
Farm Inventories.	2
Farm Earnings	2
Summary of Farm Inventories	3
Summary of Farm Earnings (Cash Statement)	4
Summary of Farm Earnings (Enterprise Statement)	5
Summary of Farm Earnings on Tenure Basis.	6
Family Living From the Farm	7
Household and Personal Expense and Receipts	7
Net Worth	8
Range in Earnings	10
Measures of Farm Organization & Management Efficiency	11
Thermometer Chart	12
Distribution of Acres and Crop Yields	13
Explanation of Work Units	14
Power & Machinery Expense	14
Amount of Livestock	14
Total Feed Costs & Returns from Livestock Enterprises	15
Hogs.	16
Dairy Cattle.	17
Beef Cattle	20
Sheep	21
Chickens.	22
Turkeys	23
Summary of Farm Earnings by Years	24
Summary of Miscellaneous Items by Years	25
Average Prices of Feeds	27
Labor Earnings Correlated with Excelled Factors	28

INTRODUCTION

The University of Minnesota and the Mankato Area Vocational-Technical School, in cooperation with the Vocational Division, Minnesota Department of Education, operate and maintain the Vocational Agriculture Farm Management Program in the Mankato area of Southern Minnesota. This program was initiated in 1955 and is available to farmers who are enrolled in Vocational Agriculture, Adult and Young Farmer classes in the Public Schools. The area served by the Mankato analysis center is indicated on the map inside the back cover.

The purpose of the Program as far as the area school is concerned is: (1) to give assistance to the instructors in the mechanics of keeping farm records, (2) to aid in the analysis of the farm business through the use of records as a basis for vocational guidance. Enrollment is on a voluntary basis insofar as the number of schools participating and the number of farmers enrolled in the program.

The analysis of the records and the preparation of the reports for the Mankato Area are done under the direction of Delbert Hodgkins, Vocational Agriculture Program Coordinator at the Mankato School. Clerical assistants for this project were Mrs. Julie Wildasin, Mrs. Arlene Martin and Mrs. Mary Humphrey.

The Farm Management Program is supervised locally by William J. Nigg, Superintendent of Schools, and F. G. Kalin, Director of Vocational and Adult Education at Mankato.

Cooperating Agencies are represented by G. R. Cochran and S. K. Wick of the State Department of Education, and Dr. Milo J. Peterson of the University of Minnesota Department of Agricultural Education. Dr. T. R. Nodland of the University Agricultural Economics Department has been available as a consultant.

Each farmer pays an annual fee which covers a portion of the cost of the record analysis. This fee covers the clerical costs of the analysis and the cost of publishing the report.

We are indebted to Truman Nodland for his assistance and advice in setting up this program and for many years of service rendered to vocational agriculture. Dr. Nodland and his associates in the Agriculture Economics Department have been most cooperative in this and other programs.

This report deals with farmers enrolled in 19 schools in the Mankato area. The following tabulation shows the number of 1963 records submitted and the name of the instructor:

<u>SCHOOL</u>	<u>NO. OF RECORDS</u>	<u>INSTRUCTOR</u>
Amboy	5	John Hogan
Blue Earth	5	Ramsey Johnson
Fairmont	3	J. H. Tschetter
Fulda	3	Ken Ziebarth
Garden City	1	Verl Rollings
Howard Lake	1	Curtis Stillwell
Jackson	1	Wm. Hohenhaus
Keister	2	Dean F. Lindgren
LeCenter	1	Lawrence Hobach
Madelia	1	Malcom Brandt
Mankato (area and local)	11	Ernest Freier
		Harold Sandhoff
Mapleton	4	Carl Ziebarth
Montgomery	3	Lyle Phelps
New Prague	1	Peter Dylla
New Ulm	11	Kermit Kleene
St. James	6	Emery Krech
St. Peter	3	C. W. Dowling
Waseca So. Sch. of Ag.	2	Boyd Fuller
Worthington	<u>2</u>	Ken Johnson
TOTAL	66	

The records kept included farm inventories, cash receipts and expenses, feed consumed by the various classes of livestock, family living secured from the farm, household and personal expenses and receipts, and the operator's liabilities and assets other than farm capital.

FARM INVENTORIES

The Capital investment per farm varied from \$23277 to \$294,753. The average investment for all farms included in this report and for the high 20% and the low 20% in labor earnings is shown in Table 1.

FARM EARNINGS

Labor earnings is a measure of the relative financial success of a farm as compared with other farms and represents the returns above all farm expenses and a charge for the use of the farm capital.

There are two methods of computing labor earnings. Table 2 shows the earnings statement on a cash basis and Table 3 shows the earnings on an enterprise or accrual basis. The principal difference in the two statements is the method of handling the net increase or decrease in the value of farm capital. In the cash statement the net increase or decrease in farm capital is entered as one item. In the enterprise statement the net change in the inventory has been included in each enterprise in order to compute "total returns and net increases," or "total expenses and net decreases" by enterprises.

RETURNS TO CAPITAL

The return to capital and family labor represents the amount available to the operator for living expenses, payment on indebtedness and savings. These figures are found in Table 4 and Table 6.

TABLE 1 - SUMMARY OF FARM INVENTORIES - 1963

Items	Your farm		Average of all	
	Jan. 1	Dec. 31	farms	
Size of farm (acres)			288	
Size of business (work units)*			483	
Dairy cattle	\$		\$ 1988	\$ 2019
Other dairy cattle			877	868
Beef cattle (incl. feeders)			4605	4811
Hogs			4572	4298
Sheep (incl. feeders)			72	58
Poultry (incl. turkeys)			125	131
Total Productive Livestock	\$		\$12239	\$12185
Crops, Seed, and Feed	\$		\$ 9513	\$11732
Auto & truck (farm share)	\$		\$ 1148	\$ 1386
Tractors and motors			2632	2974
Crop and general machinery			4495	4690
Livestock equipment			1555	1688
Total Machinery & Equipment	\$		\$ 9830	\$10738
Land			\$50500	\$50500
Buildings, fences, etc.			13145	13050
TOTAL FARM CAPITAL	\$		\$95227	\$98205

Items	20% most profitable		20% least profitable	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Size of farm (acres)	470		261	
Size of business (work units)*	557		490	
Dairy cattle	\$ 560	\$ 519	\$ 1883	\$ 1874
Other dairy cattle	221	237	802	699
Beef cattle (incl. feeders)	2533	2212	7007	7135
Hogs	6379	6782	4735	3621
Sheep (incl. feeders)	30	28	186	168
Poultry (incl. turkeys)	71	28	1	1
Total Productive Livestock	\$ 9794	\$ 9806	\$14614	\$13498
Crops, Seed, and Feed	\$12665	\$18112	\$ 9309	\$ 9543
Auto and truck (farm share)	\$ 1531	\$ 2409	\$ 948	\$ 1206
Tractors and motors	4442	4121	2225	2507
Crop and general machinery	6566	7227	3985	4123
Livestock equipment	1659	1693	1219	1414
Total Machinery & Equipment	\$14198	\$15450	\$ 8377	\$ 9250
Land	\$84818	\$84818	\$53775	\$53775
Buildings, fences, etc.	18471	17995	11196	11242
TOTAL FARM CAPITAL	\$139946	\$146181	\$ 97271	\$97308

* See page 14 for an explanation of "work units."

TABLE 2 - SUMMARY OF FARM EARNINGS (CASH STATEMENT) - 1963

Items	Your farm	Average of all farms	20% most profitable farms	20% least profitable farms
<u>FARM RECEIPTS</u>				
Dairy cattle	\$ _____	\$ 829	\$ 173	\$ 720
Dairy products	_____	2908	582	2872
Beef cattle (incl. feeders)	_____	6051	5721	9217
Hogs	_____	10476	15281	9011
Sheep and wool	_____	93	33	252
Poultry (incl. turkeys)	_____	40	22	--
Eggs	_____	632	150	--
Corn (incl. Feed Grain Program)	_____	5775	14155	3275
Small grain	_____	655	1290	614
Other crops	_____	4058	9895	2401
Mach. & equip. sold & gas tax refund	_____	341	300	294
Income from work off the farm	_____	442	726	900
Miscellaneous farm income	_____	342	317	212
(1) Total farm sales	\$ _____	\$32642	\$48645	\$29768
(2) Increase in farm capital	_____	2978	6235	37
(3) Family living from the farm	_____	258	117	301
(4) Total farm receipts (1)+(2)+(3)	\$ _____	\$35878	\$54997	\$30106
<u>FARM EXPENSES</u>				
Dairy cattle bought	\$ _____	\$ 182	\$ 38	\$ 455
Beef cattle bought (incl. feeders)	_____	3520	2779	5418
Hogs bought	_____	510	930	895
Sheep bought	_____	3	3	2
Poultry bought (incl. turkeys)	_____	118	14	--
Miscellaneous livestock expense	_____	596	575	770
Feed bought	_____	5781	7690	4808
Fertilizer	_____	1557	2507	1224
Other crop expense	_____	1124	2040	822
Custom work hired	_____	755	587	1179
Gas, oil, grease bought (farm share)	_____	1105	1386	1160
Repairs for tractors, trucks, and autos (farm share)	_____	667	1022	714
Repair and upkeep of farm real estate	_____	385	558	214
Repair and upkeep of crop & gen. mach.	_____	513	640	418
Repair & upkeep of livestock equip.	_____	130	164	105
Wages of hired labor	_____	649	1217	497
Electricity expense (farm share)	_____	285	315	274
Personal property & real estate taxes	_____	1513	2455	1287
Telephone & general farm expense	_____	332	366	292
(5) Total cash operating expense	\$ _____	\$19725	\$25286	\$20534
(6) Mech. power bought (farm share)	_____	1507	2062	1385
(7) Crop & Gen. machinery bought	_____	1268	2431	958
(8) Livestock equipment bought	_____	442	314	476
(9) New real estate improvements	_____	740	426	742
(10) Total farm purchases (5) to (9)	_____	\$23682	\$30519	\$24095
(11) Decrease in farm capital	_____	--	--	--
(12) Interest on farm capital	_____	4836	7153	4864
(13) Unpaid family labor	_____	192	336	177
(14) Board furnished hired labor	_____	76	107	79
(15) Total farm expenses (10 to (14))	\$ _____	\$28786	\$38115	\$29215
(16) Labor earnings (4) - (15)	_____	\$ 7092	\$16882	\$ 891

TABLE 3 - SUMMARY OF FARM EARNINGS (ENTERPRISE STATEMENT)- 1963

Items	Your farm	Average of all farms	20% most profitable farms	20% least profitable farms
<u>RETURNS AND NET INCREASES</u>				
Dairy cows	\$ _____	\$ 2847	\$ 515	\$ 2564
Other dairy cattle	_____	908	187	614
Beef breeding herd	_____	186	217	---
Feeder cattle	_____	2604	2452	4045
Hogs	_____	9746	14814	7059
Sheep - farm flock	_____	75	28	232
Sheep - feeders	_____	2	--	--
Chickens	_____	572	120	1
ALL PRODUCTIVE LIVESTOCK	\$ _____	\$16940	\$18333	\$14515
Value of feed fed to livestock	_____	12856	13404	13268
Return over feed from livestock	\$ _____	\$ 4084	\$ 4929	\$ 1247
Crops, seed, and feed	_____	17059	31948	12909
Income from labor off the farm	_____	265	296	792
Miscellaneous	_____	342	317	212
(1) TOTAL RETURNS & NET INCREASES	\$ _____	\$21750	\$37490	\$15160
<u>EXPENSES AND NET DECREASES</u>				
Truck	\$ _____	\$ 383	\$ 886	\$ 350
Auto (farm share)	_____	543	477	672
Tractor	_____	1375	1939	1372
Elec. & gas engine exp. (farm share)	_____	285	315	275
Hired power	_____	340	252	511
Total power	\$ _____	\$ 2926	\$ 3869	\$ 3180
Crop and general machinery	_____	1624	2428	1359
Livestock equipment	_____	423	434	380
Buildings, fences and tiling	_____	1218	1460	910
Misc. productive livestock expense	_____	596	575	770
Labor	_____	1190	1868	1227
Real estate taxes	_____	1336	2252	1103
Personal property tax	_____	177	203	184
Insurance	_____	148	139	115
General farm expense	_____	184	227	177
Interest on farm capital	_____	4836	7153	4864
(2) TOTAL EXPENSES & NET DECREASES	\$ _____	\$14658	\$20608	\$14269
(3) LABOR EARNINGS (1) - (2)	\$ _____	\$ 7092	\$16882	\$ 891

Cash receipts and expenses are adjusted for changes in inventory for each enterprise and for each item of expense in order to show total receipts and net increases and total expenses and net decreases. The operator's earnings are the same as those on page 4.

TABLE 4 - SUMMARY OF FARM EARNINGS BY TENURE - 1963 (OPERATOR'S SHARE)

Items	Your farm	Owners	Part Owners	Renters
<u>FARM RECEIPTS</u>				
Dairy cattle	\$ _____	\$ 1,195	\$ 550	\$ 615
Dairy products	_____	4216	1927	2017
Beef cattle (including feeders)	_____	6974	3005	5106
Hogs	_____	10584	9978	9111
Sheep and wool (including feeders)	_____	51	40	132
Poultry (including turkeys)	_____	28	69	27
Eggs	_____	327	1365	358
Corn (including Feed Grain Program)	_____	3443	7979	2085
Small grain	_____	490	705	321
Other crops	_____	2228	5236	2131
Mach. & equip. sold & gas tax refunds	_____	432	265	250
Income from work off the farm	_____	110	730	443
Miscellaneous	_____	542	231	283
(1) Total farm sales	\$ _____	\$30620	\$32080	\$22879
(2) Increase in farm capital	_____	3596	3654	2319
(3) Family living from the farm	_____	322	231	207
(4) Total Farm Receipts (1)+(2)+(3)	_____	\$34538	\$35965	\$25405
<u>FARM EXPENSES</u>				
Dairy cattle bought	\$ _____	\$ 130	\$ 333	\$ 112
Beef cattle bought (including feeders)	_____	5131	1504	2840
Hogs bought	_____	1251	1052	331
Sheep bought (including feeders)	_____	1	4	3
Poultry bought (including turkeys)	_____	33	353	37
Miscellaneous livestock expense	_____	600	480	516
Feed bought	_____	5304	5310	5162
Fertilizers	_____	1691	1425	956
Other crop expense	_____	1062	1555	648
Custom work hired	_____	871	669	536
Gas, oil, & grease bought (farm share)	_____	1057	1258	898
Repair & operation tractor, truck, and auto (farm share)	_____	583	932	508
Repair and upkeep of real estate	_____	444	610	132
Repair & upkeep of crop & gen. machinery	_____	413	687	423
Repair & upkeep of livestock equipment	_____	158	119	98
Wages of hired labor	_____	648	1029	417
Electricity expense (farm share)	_____	320	279	219
Real estate & personal property tax	_____	1259	1200	212
Cash rent	_____	--	557	1620
Gen. farm exp. & telephone expense	_____	438	403	197
Interest paid	_____	1143	1543	603
Total cash operating expense	\$ _____	\$21537	\$21302	\$16468
Mechanical power bought (farm share):	_____	1358	2062	1230
Crop & general machinery bought	_____	1135	1716	1100
Livestock equipment bought	_____	651	374	347
New real estate improvements	_____	1465	622	243
(5) Total farm purchases	\$ _____	\$26146	\$26076	\$19388
(6) Decrease in farm capital	_____	--	--	--
(7) Interest on farm capital	_____	3213	3019	787
(8) Unpaid family labor	_____	244	310	107
(9) Board furnished hired labor	_____	56	141	54
(10) Total Farm Expenses (5) to (9)	_____	\$29659	\$29546	\$20336
(11) Labor Earnings (4) - (10)	_____	\$ 4879	\$ 6419	\$ 5069
(12) Return to Capital and Family Labor (7) + (8) + (11)	\$ _____	\$ 8336	\$ 9748	\$ 5963

FAMILY LIVING FROM THE FARM

The family living from the farm is the estimated value of the farm produce used in the house and shelter furnished the farmer and his family by the farm. It is a part of the income of the farm and a part of the expense of operating the household even though cash transactions are not involved. The omission of the farm produce used in the home results in an incomplete record of both farm income and personal expense.

The value of the family living is shown in Table 5. The values assigned are a conservative market price on the farm. If these products had been purchased, the amount paid out would have been considerably higher.

TABLE 5 - FAMILY LIVING FROM THE FARM - 1963

Items	Your farm	Average of all farms	Your farm	Average of all farms
Whole milk	_____	500 qts.	\$ _____	\$ 50
Cream	_____	2 pts.	_____	1
Beef	_____	568 lbs.	_____	129
Hogs	_____	367 lbs.	_____	54
Lamb and mutton	_____	2 lbs.	_____	--
Poultry	_____	35 lbs.	_____	6
Eggs	_____	28 doz.	_____	8
Potatoes	_____	1 bu.	_____	1
Vegetables and fruit	_____		_____	4
Farm fuel			_____	5
TOTAL			\$ _____	\$258

HOUSEHOLD AND PERSONAL EXPENSES AND RECEIPTS

Household and personal accounts are important if the family is to manage its financial affairs wisely. The household and personal expenses and receipts are presented in Table 6. These farmers spent an average of \$376.33 per month for family living in addition to the food, fuel, and housing furnished by the farm.

TABLE 6 - HOUSEHOLD AND PERSONAL EXPENSES FOR THOSE FARMS WHICH KEPT
COMPLETE ACCOUNTS OF THESE EXPENSES - 1963

Items	Your farm	Average of 34 farms
Food and meals bought	\$ _____	\$ 1204
Operating and supplies	_____	326
Furnishing and equipment	_____	245
Clothing and clothing materials	_____	428
Personal care, personal spending	_____	128
Education, recreation & development	_____	270
Gifts and special events	_____	137
Medical care and health insurance	_____	407
Church, welfare	_____	216
Personal share of auto & truck expense	_____	182
Operator's share of upkeep on dwelling	_____	63
Household share of electricity and telephone expense	_____	122
TOTAL CASH LIVING EXPENSE	\$ _____	\$ 3728
Household & personal share of new auto	\$ _____	\$ 84
Taxes and other deductions	_____	16
Life insurance	_____	85
Other savings and investments	_____	381
TOTAL HOUSEHOLD AND PERSONAL CASH EXPENSE	\$ _____	\$ 4294
Total family living from the farm	_____	222
TOTAL CASH EXPENSE AND PERQUISITES	\$ _____	\$ 4516
RETURN TO CAPITAL AND FAMILY LABOR	\$ _____	\$ 7752

NET WORTH

A net worth statement includes a listing of all the assets and liabilities as of a given date. The difference between the farmer's total assets and his liabilities is his net worth. A net worth statement on a tenure basis is presented in Table 7. Both the farm and personal assets and liabilities are included.

The difference between the operator's net worth at the beginning and at the end of the year shows the gain in net worth. It represents the financial progress that has been made during the year.

TABLE 7 - NET WORTH STATEMENT FOR THOSE FARMERS WHO KEPT A COMPLETE RECORD OF ALL ASSETS AND LIABILITIES - 1963 (OPERATOR'S SHARE - TENURE BASIS)

Items	Your Farm		12 Owners	
	Jan. 1 - Dec. 31		Jan. 1 - Dec. 31	
Total Farm Capital (1)	\$	\$	\$78526	\$82840
Stocks and Bonds			474	561
Life Insurance			1386	1324
Notes & Accounts Receivable			333	300
Shares in Marketing			549	611
Outside Real Estate			---	---
Cash on Hand and in Bank			587	1145
Household goods			3245	3311
Personal share of Auto			517	438
Farm Dwelling			3183	3015
Miscellaneous			---	---
Total Non-Farm Assets (2)	\$	\$	\$10274	\$10705
TOTAL ASSETS (1) + (2) = (#)	\$	\$	\$88800	\$93545
Fed. Land Bank Mortgages			1589	1223
F.H.A. Real Estate Mortgages			1940	1914
Other Mortgages			16240	16069
Loand on Other Real Estate			5383	5217
Production Credit Assoc. Loans			320	121
F.H.A. Chattel Mortgages			---	---
Crop Loans (Sealed)			---	---
Other Chattel Mortgages			6225	7045
Notes Payable			2951	4323
Accounts Payable			1373	2364
TOTAL LIABILITIES (4)	\$	\$	\$36021	\$38276
FARMER'S NET WORTH = (3) - (4)	\$	\$	\$52779	\$55269
Change in Net Worth		\$		\$ 2490

Items	11 Part-Owners		22 Renters	
	Jan. 1 - Dec. 31		Jan. 1 - Dec. 31	
Total Farm Capital (1)	\$85198	\$87520	\$28106	\$30848
Stocks and Bonds	934	1220	472	464
Life Insurance	2173	2349	679	650
Notes & Accounts Receivable	--	36	130	167
Shares in Marketing	843	876	432	559
Outside Real Estate	700	782	455	789
Cash on Hand and in Bank	1349	1013	1299	1275
Household Goods	4374	4736	2232	2416
Personal Share of Auto	231	417	312	412
Farm Dwelling	4076	4394	---	---
Miscellaneous	---	---	---	---
Total Non-Farm Assets (2)	\$14680	\$15823	\$ 6011	\$ 6732
TOTAL ASSETS (1) + (2) = (3)	\$99878	\$103343	\$34117	\$37580
Fed. Land Bank Mortgages	16862	16614	409	409
F.H.A. Real Estate Mortgages	---	---	---	---
Other Mortgages	12509	12831	---	---
Loans on Other Real Estate	5512	5306	---	139
Production Credit Assoc. Loans	427	791	340	420
F.H.A. Chattel Mortgages	---	---	859	791
Crop Loans (Sealed)	---	---	---	---
Other Chattel Mortgages	5172	5067	6628	6322
Notes Payable	2716	2155	3649	3623
Accounts Payable	382	553	1366	1995
TOTAL LIABILITIES (4)	\$43580	\$43317	\$13251	\$13699
FARMER'S NET WORTH = (3) - (4)	\$56298	\$60026	\$20866	\$23881
Change in Net Worth		\$ 3728		\$ 3015

RANGE IN EARNINGS

Every study of farm earnings shows a wide variation in earnings among farmers in a given year (Figure 1). The average labor earnings of those farmers ranking in the upper 20 percent of the range according to earnings was \$16882 and of those in the lower 20 percent was \$891. This is a range of \$15991 between the average earnings of these two groups. Some of the causes for these differences in earnings, such as weather, may be beyond the control of the individual farmer. Other factors are within his control. The more important management factors affecting earnings are as follows:

- | | |
|--------------------------|--------------------------|
| 1. Crop Yields | 5. Size of Business |
| 2. Choice of Crops | 6. Work Units per Worker |
| 3. Return from Livestock | 7. Control over Expense |
| 4. Amount of Livestock | |

(These factors vary from year to year in their relative influence on earnings.) 1]

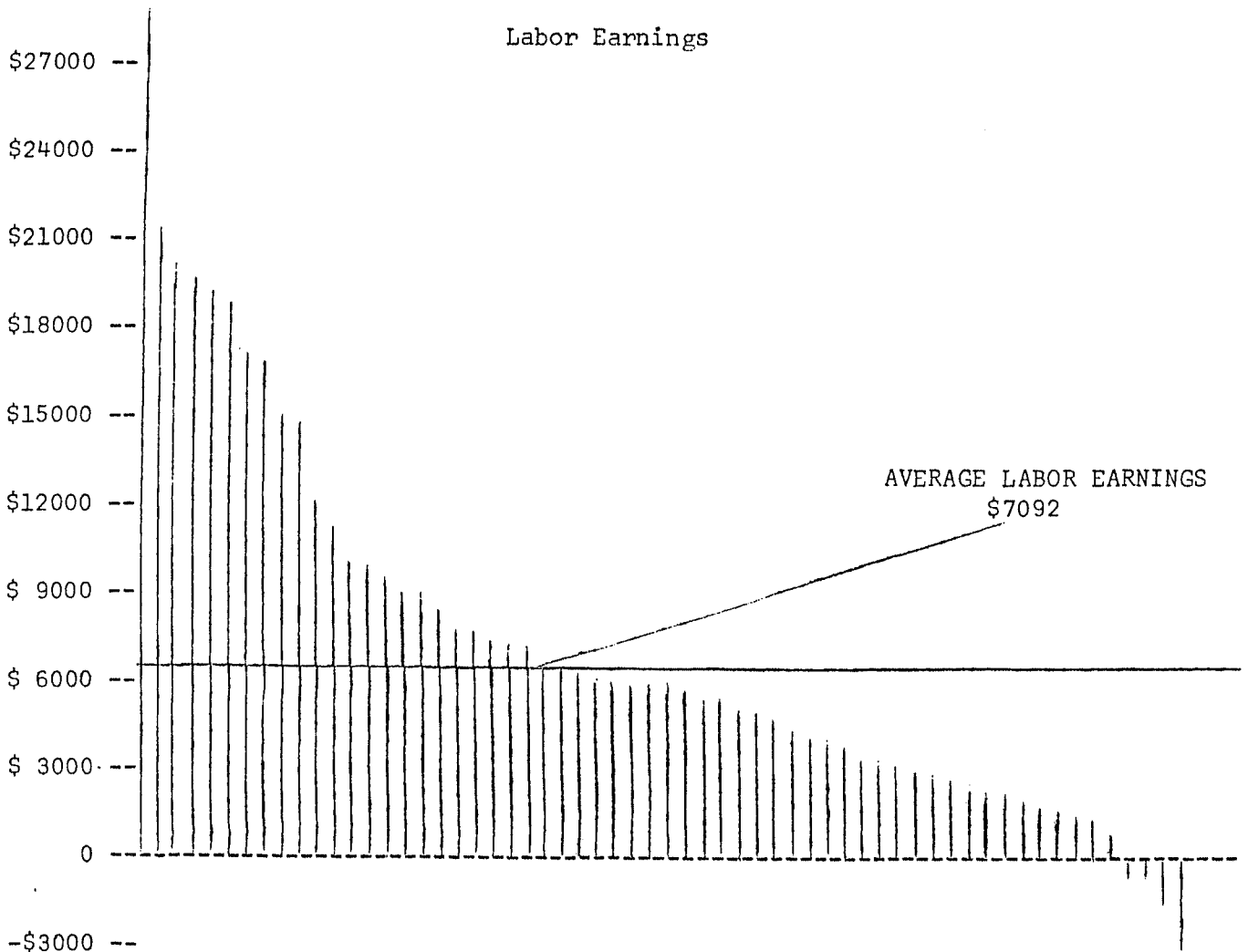


Figure 1. - Range in Labor Earnings. Each line represents the earnings of one farm.

1] See Pond, G. A. "Why Farm Earnings Vary." Minn. Agri. Expt. Sta. Bul.386, June, 1945.

Nodland, T. R. and Pond, G. A. "Some Factors Affecting the Earnings of Farmers in Southwestern Minnesota." Univ. of Minn. Dept. of Ag. Econ., Report No. 219, November, 1954.

TABLE 8 - MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY - 1963

Measures used in chart on page 12	Your farm	Average of all farms	20% most profitable farms	20% least profitable farms
Labor earnings	\$ _____	\$7092	\$16882	\$ 891
(1) Crop yields*	_____	100	106	91
(2) Percent tillable land in high return crops**	_____	72	75	69
(3) Return for \$100 feed fed to productive livestock***	_____	100	106	100
(4) Productive livestock units per 100 acres****	_____	36	27	40
(5) Size of business - work units	_____	483	557	490
(6) Work units per worker	_____	356	370	362
(7) Power, mach., equip., and build, exp. per work unit	\$ _____	\$ 13.34	\$ 14.93	\$ 12.60

Items related to some of the above measures:

(3) Index of return for \$100 feed from:

Dairy cattle (see p. 17, 18, 19)	_____	100	77	95
Beef breeding herd (see p. 20)	_____	100	--	--
Feeder cattle (see p. 20)	_____	100	129	77
Hogs (see p. 16)	_____	100	101	106
Sheep - Farm flock (see p. 21)	_____	100	--	111
Chickens (see p. 22)	_____	100	91	--
(4) Number of animal units	_____	84	86	92
(5) Work units on crops	_____	150	256	126
Work units on prod. livestock	_____	306	271	285
Work units from other prod. work	_____	27	30	79
(6) Number of family workers	_____	1.2	1.2	1.1
Number of hired workers	_____	.1	.4	.2
Total number of workers	_____	1.3	1.6	1.3
(7) Power expense per work unit	\$ _____	\$6.46	\$7.07	\$6.79
Crop.mach. exp. per work unit	_____	3.39	4.39	2.84
Livestock equip. exp. per w.u.	_____	.89	.77	.85
Bldgs. & fences exp. per w.u.	_____	2.60	2.70	2.12

* Given as percentage of the average

** Crops are marked in Table 10 as A, B, C, and D. All of the acres in A crops, one-half of acres in B crops, and one-fourth of acres in C crops are used in calculating percent of tillable land in high return crops.

*** An index weighted by the animal units of livestock.

**** Acres in timber not pastured, roads, waste and farmstead were not included.

THERMOMETER CHART

Using your figures from page 11, locate your standing with respect to the various measures of farm organization and management efficiency. The averages for the farms included in this summary are located between the solid lines across the center of this page.

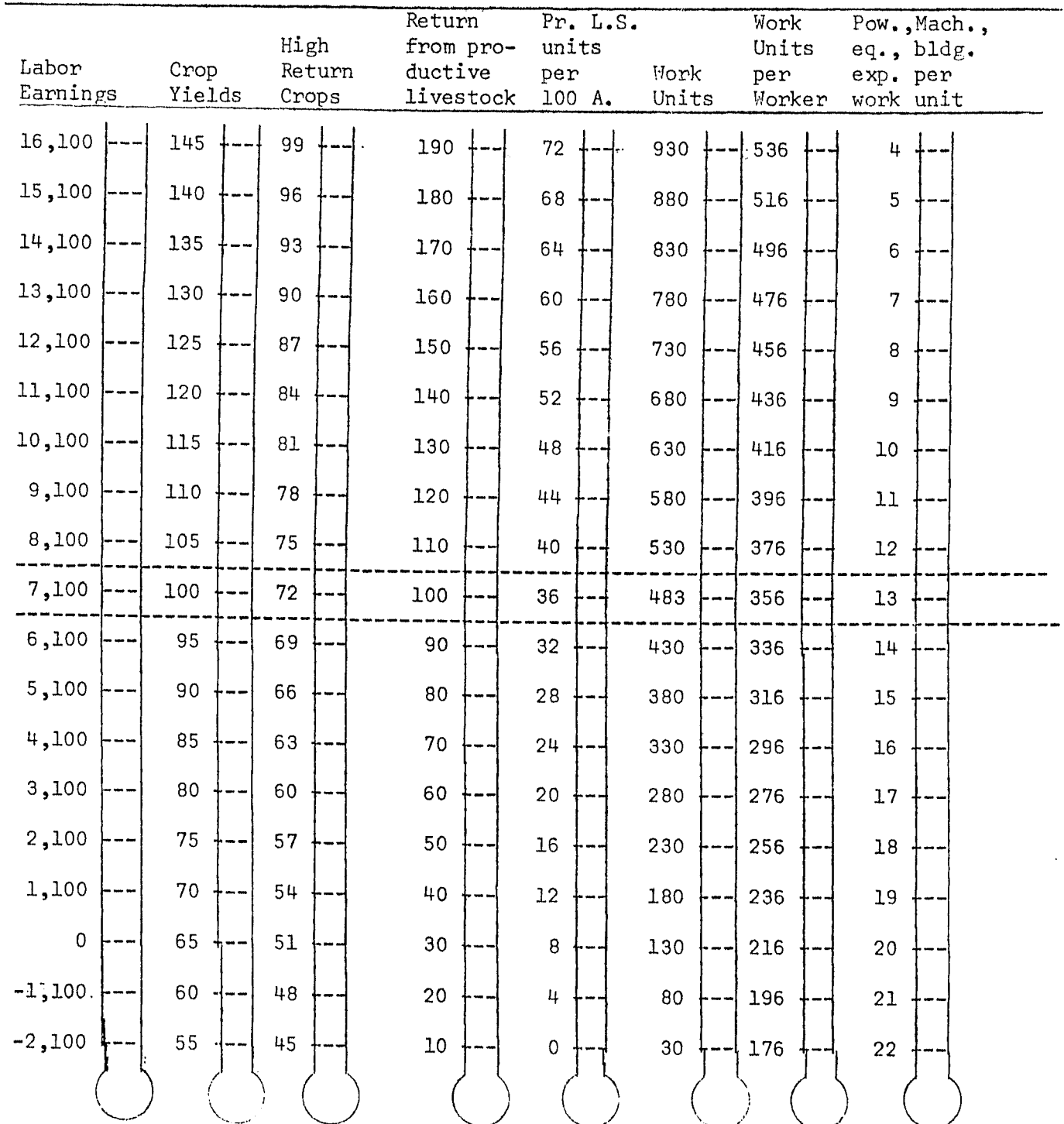


TABLE 9 - DISTRIBUTION OF ACRES AND YIELD - 1963

Crop	Crop rating	Number growing	Acres your farm	Average acres of all farms	Your yield per acre	Average yield per acre
Canning peas	B	4	_____	1.1	\$ _____	\$28.82
Wheat	C	32	_____	9.5	_____	30.3 bu.
Oats for silage	C	4	_____	1.2	_____	6.6 ton
Oats & mix. for grain	D	43	_____	11.9	_____	62.8 bu.
Barley	D	1	_____	.7	_____	40.0 bu.
Flax	C	1	_____	.2	_____	13.5 bu.
Total small grain and peas			_____	24.6		
Seed corn	A	1	_____	1.8		
Corn, grain	A	60	_____	109.8		90.2 bu.
Sweet corn	B	5	_____	3.5	_____	\$58.57
Soybeans for grain	B	53	_____	57.7	_____	30.5 bu.
Corn and cane for silage	B	27	_____	5.3	_____	12.6 ton
Total cultivated crops			_____	178.1		
Alf. & alf. mix. hay	B	47	_____	17.7	_____	3.5 ton
Other leg. & leg. mix.	C	3	_____	.4	_____	1.1 ton
Annual hay	D	1	_____	.1	_____	2.5 ton
Total tillable land in hay			_____	18.2		
Alf. & alf. brome past.	B	17	_____	2.9		
Other leg. & mix.	C	1	_____	.1		
Other tillable pasture	D	3	_____	.8		
Green chop	B	1	_____	.7		
Total tillable land in pasture			_____	4.5		
Soil Bank	A	44	_____	24.2	\$ _____	\$53.81
Tillable land not cropped	D	1	_____	---		
Total tillable land			_____	249.6		
Wild hay (non-till.)		11	_____	2.2		
Non-till. pasture		30	_____	9.6		
Timber (not pasture)		11	_____	2.9		
Roads & waste		53	_____	14.6		
Farmstead		60	_____	9.3		
TOTAL ACRES IN FARM			_____	288.2		
Percent land tillable						85.9
Percent tillable land in high-return crops						72.2

The total "work units" for any one farm is a measure of the size of that farm business. A work unit as used in this report is the average accomplishment of a farm worker, in a ten hour day, working on crops and productive livestock at an average efficiency. The number of work units for each class of livestock and each acre of crop are presented in Table 10.

TABLE 10 - NUMBER OF WORK UNITS FOR EACH CLASS OF LIVESTOCK & EACH ACRE OF CROP

Item	No. of Work Units	Item	No. of Work Units
Dairy cattle	10.0 per cow	Peas, small grain	.5 per A.
Other dairy cattle	3.5 per an. unit*	Hybrid seed corn	2.0 per A.
Beef breeding herd	3.5 per an. unit*	Corn, husked	.7 per A.
Feeder cattle	.25 per 100 lbs.	Corn silage	1.0 per A.
Sheep - farm flock	1.5 per an. unit	Sweet corn	.7 per A.
Sheep - feeders	.3 per 100 lbs.	Soybean grain	.5 per A.
Hogs	.2 per 100 lbs.	Alfalfa hay	.6 per A.
Hens	20.0 per 100 hens	Other hay & seed	.4 per A.
Turkeys	.5 per 100 lbs.	Grass silage	.4 per A.
		Soil bank	.4 per A.

* One animal unit represents one dairy cow or bull, two other dairy cattle, 1-1/4 beef cows or bull, 1 feeder steer or heifer, 3-1/3 other beef cattle, 7 sheep, 14 lambs, 2-1/2 hogs, 5 pigs, 50 hens, or 1,100 lbs of turkeys produced.

POWER AND MACHINERY EXPENSES

Power and machinery expense per crop acre is an indication of the economy with which capital is invested in these items. The expenses are high on farms with a small acreage. In some cases, low expenses for labor might be offset by high power and equipment costs. The farmer is interested in operating at the lowest cost for power, machinery and labor combined.

TABLE 11 - POWER AND MACHINERY EXPENSES PER CROP ACRE - 1963

Item	Your farm	Average of all farms	20% most profitable farms	20% least profitable farms
Crop acres per farm		245	415	206
Tractor expense per crop acre	\$ _____	\$6.09	\$4.84	\$6.58
Crop and general machinery expense per crop acre	\$ _____	\$6.86	\$5.48	\$6.75

AMOUNT OF LIVESTOCK

The farmers cooperating in this study are predominantly livestock farmers. 44% of these farmers maintained dairy cattle, 24% kept poultry, 19% raised sheep, 46% fed beef cattle, and 88% raised hogs.

TABLE 12 - AMOUNT OF LIVESTOCK - 1963

Items	Your Farm	Average of all farms	20% most profitable farms	20% least profitable farms
Number of milk cows	_____	8.1	2.6	9.6
Number of other dairy cattle	_____	8.7	2.4	9.2
Number of beef cattle (including feeders)	_____	26.5	15.0	44.4
Number of sheep	_____	4.4	2.5	13.5
Number of feeder lambs	_____	--	--	--
Number of hens	_____	126.0	40.0	4.0
Pounds of beef produced	_____	15582	9865	29440
Pounds of hogs produced	_____	70312	10241	50805

TOTAL FEED COSTS AND RETURNS FROM YOUR LIVESTOCK ENTERPRISES

The total "return over feed costs" for each class of livestock is shown in Table 13. This differs from the "return over feed" shown in the enterprise statement in that it is the total for each class of livestock instead of a return "per head", "per unit", or "per 100 pounds". These data indicate the relative importance of different classes of livestock as a source of income and as a market for feed. The total return is the same as the returns and net increases shown on page 5. The value of milk consumed by calves is included in the total returns from dairy cows and in the total feed cost for other dairy cattle. The value of milk consumed by calves is not included in the total returns or the feed cost of "all dairy" cattle. The return over feed is not a net return, but rather the amount available from the gross income, after paying the feed bill, to cover the outlay for hired labor, power, equipment, taxes, insurance, interest and veterinary bills and to provide a return for the use of family labor and capital.

TABLE 13 - TOTAL FEED COSTS AND RETURNS FROM YOUR LIVESTOCK ENTERPRISES - 1963

	Dairy Cattle			Beef Breeding Herd
	Cows	Other	All	
Total returns	\$ _____	_____	_____	\$ _____
Total feed cost	_____	_____	_____	_____
Total return over feed	\$ _____	_____	_____	\$ _____

	Feeder Cattle	Hogs	Farm Flock of Sheep	Chickens
Total returns	\$ _____	\$ _____	\$ _____	\$ _____
Total feed cost	_____	_____	_____	_____
Total return over feed	\$ _____	\$ _____	\$ _____	\$ _____

Feed is the largest single item of cost for all classes of livestock. However, the proportion of the total cost represented by feed varies considerably between classes of livestock. Feed makes up approximately 45 percent of the total costs of maintaining dairy cattle and poultry; 50 percent in the case of a farm flock of sheep; and 75 to 90 percent for hogs, feeder cattle and feeder lambs. Consequently, it is necessary to secure a relatively higher return over feed from dairy cattle and poultry than from the other livestock enterprises in order to be able to cover all the costs other than food.

HOGS

Raising hogs is a major enterprise on most farms in Southern Minnesota. Eighty-eight percent of the farms in this study raised hogs for market. Table 14 below summarizes the results of the hog enterprise analysis.

TABLE 14 - FEED COSTS AND RETURNS FROM HOGS - 1963

Items	Your farm	Average of 43 farms raising hogs	20% of farms highest in returns above feed	20% of farms lowest in returns above feed
Feed per cwt. hogs produced, lbs.:				
Corn		331.4	276.6	376.5
Small grain		21.5	19.4	33.2
Commercial feeds		65.1	63.4	71.0
Total concentrates*		418.0	359.4	480.7
Alfalfa hay		6.5	4.6	8.3
Feed cost per cwt. hogs produced:				
Concentrates	\$	\$ 11.02	\$ 9.37	\$ 12.79
Pasture		--	--	.01
Alfalfa hay		.06	.04	.08
TOTAL FEED COST	\$	\$ 11.08	\$ 9.41	\$ 12.88
Net increase in value per cwt. hogs produced	\$	\$ 14.40	\$ 15.10	\$ 13.67
RETURNS ABOVE FEED COST PER CWT. HOGS PRODUCED				
	\$	\$ 3.32	\$ 5.69	\$.79
RETURNS FOR \$100 OF FEED				
	\$	\$133.00	\$163.00	\$107.00
Price received per cwt. hogs produced				
	\$	\$ 15.00	\$ 15.43	\$ 15.05
Total number of litters raised				
		46.4	66.8	32.1
No. of pigs born per litter**				
		9.7	10.3	8.7
No. of pigs weaned per litter				
		7.8	8.4	6.5
POUNDS OF HOGS PRODUCED				
		85769	115292	68903

* Concentrates refer to the total of corn, small grain, and commercial feeds fed.
 ** From records with accurate litter information only.

DAIRY CATTLE

The quantity of feed consumed, value of feeds and returns from dairy cattle are presented in Tables 15, 16 and 17. Some of the important factors that affected the return over feed were:

1. Rate of production (pounds of milk and butterfat per cow)
2. Price received for butterfat
3. Feeding efficiency
4. Quality of ration
5. Economy of ration (feed cost per pound butterfat)

TABLE 15A - FACTORS OF COST AND RETURNS FROM DAIRY COWS - 1963

Items	Your farm	Average of 20 farms	20% of farms highest in butterfat per cow	20% of farms lowest in butterfat per cow
Pounds of butterfat per cow	_____	370.4	457.5	291.8
Pounds of milk per cow	_____	9649.6	10323.0	7932.3
Percent of butterfat in milk	_____	3.6	3.6	3.7
Price received per pound butterfat sold	_____	92¢	94¢	93¢
Price received per cwt. milk sold	_____	\$ 3.35	\$ 3.36	\$ 3.46
Feed per cow, lbs.:	_____	3165.1	3297.3	3453.3
Small grain	_____	572.2	748.9	555.6
Commercial feed	_____	351.4	522.8	330.7
Total concentrates*	_____	4088.7	4569.0	4339.6
Legume hay	_____	5884.9	6180.9	4293.9
Other hay	_____	30.8	123.3	---
Total dry roughages	_____	5915.7	6304.2	4293.9
Silage	_____	7292.3	6448.6	7713.9
Feed cost per cow:				
Concentrates*	\$ _____	\$ 94.72	\$103.19	\$ 96.96
Roughages	_____	82.59	81.50	72.02
Pasture	_____	9.59	13.38	13.28
TOTAL FEED COSTS	\$ _____	\$186.90	\$198.07	\$182.26
Value of produce per cow:				
Dairy product sales	\$ _____	\$330.59	\$418.07	\$263.56
Dairy products used in house	_____	6.21	8.36	5.42
Milk fed to livestock	_____	5.66	6.11	3.37
Net increases in value of cows	_____	-8.73	-19.49	-21.48
TOTAL VALUE PRODUCED	\$ _____	\$333.73	\$413.05	\$250.87
RETURNS ABOVE FEED COST PER COW	\$ _____	\$146.83	\$214.98	\$ 68.61
RETURNS FOR \$100 OF FEED	\$ _____	\$182.00	\$213.00	\$141.00
Feed cost per lb. butterfat	_____	52¢	43¢	63¢
Feed cost per cwt. milk produced	_____	\$ 1.86	\$ 1.49	\$ 2.32
Number of cows	_____	21.7	23.3	19.5

* Concentrates refer to total of corn, small grain and commercial feed fed.

DAIRY CATTLE SUPPLEMENT

To provide some supplementary information for those farmers and others who wish to use it, the following tables present the summary of dairy herds on the basis of RETURN OVER FEED COST, rather than butterfat per cow.

TABLE 15B - FEED COST AND RETURNS FROM DAIRY COWS - 1963

Items	Your farm	Average of 20 farms	20% of farms highest in return over feed cost per cow	20% of farms lowest in return over feed cost per cow
Pounds of butterfat per cow	_____	370.4	441.2	303.4
Pounds of milk per cow	_____	9649.6	10051.9	8782.9
Percent of butterfat in milk	_____	3.6	3.5	3.5
Price received per pound butterfat sold	_____	92¢	95¢	93¢
Price received per cwt. milk sold	_____	\$ 3.35	\$ 3.34	\$ 3.25
Feed per cow, lbs.:				
Corn	_____	3165.1	2583.4	4067.6
Small grain	_____	572.2	796.1	517.7
Commercial feed	_____	351.4	506.2	329.4
Total concentrates*	_____	4088.7	3885.7	4914.7
Legume hay	_____	5884.9	5837.9	5905.7
Other hay and fodder	_____	30.8	123.3	---
Total dry roughages	_____	5915.7	5961.2	5905.7
Silage	_____	7292.3	7978.6	8859.7
Feed cost per cow				
Concentrates*	\$ _____	\$ 94.72	\$ 89.46	\$120.11
Roughages	_____	82.59	83.60	94.09
Pasture	_____	9.59	10.51	10.81
TOTAL FEED COSTS	\$ _____	\$186.90	\$183.57	\$225.01
Value of produce per cow:				
Dairy product sales	\$ _____	\$330.59	\$407.40	\$273.30
Dairy products used in house	_____	6.21	8.96	5.58
Milk fed to livestock	_____	5.66	6.11	6.02
Net increases in value of cows	_____	-8.73	-8.69	-11.75
TOTAL VALUE PRODUCED	\$ _____	\$333.73	\$413.78	\$273.15
RETURNS ABOVE FEED COST PER COW	\$ _____	\$146.83	\$230.21	\$-48.14
RETURNS FOR \$100 OF FEED	\$ _____	\$182.00	\$229.00	\$112.00
Feed cost per lb. butterfat	_____	52¢	41¢	74¢
Feed cost per cwt. milk produced	_____	\$ 1.86	\$ 1.40	\$ 2.59
Number of cows	_____	21.7	24.8	22.6

* Concentrates refer to total of corn, small grain and commercial feed fed.

TABLE 16.- FEED COSTS AND RETURNS FROM OTHER DAIRY CATTLE - 1963

Items	Your farm	Average of 20 farms	20% of farms highest in butterfat per cow	20% of farms lowest in butterfat per cow
Feed per head, lbs.:				
Concentrates*	_____	863.9	947.3	615.0
Hay and fodder	_____	2632.1	3419.3	1414.9
Silage	_____	1671.2	2244.3	1113.4
Whole milk	_____	206.3	144.7	184.1
Feed cost per head:				
Concentrates*	\$ _____	\$ 21.23	\$ 22.63	\$ 16.80
Roughages	_____	30.30	40.26	16.36
Milk	_____	6.43	4.99	5.83
Pasture	_____	2.52	2.98	2.68
TOTAL FEED COSTS PER HEAD	\$ _____	\$ 60.48	\$ 70.86	\$ 41.67
Net increase in value of other cattle	\$ _____	\$ 87.15	\$119.04	\$ 72.08
RETURNS ABOVE FEED COST PER HEAD	\$ _____	\$ 26.67	\$ 48.18	\$ 30.41
RETURNS FOR \$100 OF FEED	\$ _____	\$162.00	\$174.00	\$202.00
No. of head of other cattle	_____	22.4	28.2	16.6

TABLE 17 - FEED COSTS AND RETURNS FROM ALL DAIRY CATTLE - 1963

Items	Your farm	Average of 20 farms	20% of farms highest in butterfat per cow	20% of farms lowest in butterfat per cow
Feed per animal unit, lbs.:				
Concentrates*	_____	5013.4	5708.4	4984.8
Hay and fodder	_____	8278.7	8477.6	5890.5
Silage	_____	9298.5	9282.2	9004.1
TOTAL FEED COSTS PER ANIMAL UNIT	\$ _____	\$245.98	\$276.28	\$222.52
Value of produce per animal unit:				
Dairy products	\$ _____	\$342.46	\$432.54	\$272.36
Net increase in value of dairy cattle	\$ _____	\$ 85.72	\$121.17	\$ 56.21.
TOTAL VALUE PRODUCED	\$ _____	\$428.18	\$553.71	\$328.57
RETURNS ABOVE FEED PER ANIMAL UNIT	\$ _____	\$182.20	\$277.43	\$106.05
RETURNS PER \$100 OF FEED	\$ _____	\$180.00	\$204.00	\$162.00
No. of cows in herd	_____	21.7	23.3	19.5

* Concentrates refer to total of corn, small grain, and commercial feed fed.

TABLE 18 - FEED COSTS AND RETURNS FROM FEEDER CATTLE - 1963

Items	Your farm	Average of 15 farms
Feeds per cwt. beef produced. lbs.:		
Corn	_____	527.7
Small grain	_____	13.9
Commercial feeds	_____	49.7
Total concentrates*	_____	591.3
Legume hay	_____	174.6
Other hay	_____	17.1
Total hay	_____	191.7
Silage	_____	292.9
Feed cost per cwt. beef produced:		
Concentrates*	\$ _____	\$ 13.19
Roughages	_____	2.63
TOTAL FEED COSTS	\$ _____	\$ 15.82
Net increase in value of feeders	\$ _____	\$ 18.70
RETURNS ABOVE FEED COST PER CWT. BEEF PRODUCED	\$ _____	\$ 2.88
RETURNS FOR \$100 OF FEED	\$ _____	\$124.00
Price paid per cwt. beef bought	\$ _____	\$ 24.92
Price received for feeder cattle sold	\$ _____	\$ 22.15
Number of animal units	_____	73.9
POUNDS OF BEEF PRODUCED	_____	52391

BEEF BREEDING CATTLE

Items	Your farm
Feeds per animal unit, lbs.:	
Concentrates*	_____
Legume hay	_____
Other hay	_____
Silage	_____
Feed cost per animal unit:	
Concentrates*	\$ _____
Roughages	_____
Pasture	_____
TOTAL FEED COST	\$ _____
Value of produce per animal unit	
Dairy products	\$ _____
Net increase in value	_____
TOTAL VALUE PRODUCED	\$ _____
RETURNS ABOVE FEED COST PER ANIMAL UNIT	\$ _____
RETURNS FOR \$100 OF FEED	\$ _____
Number of cows and herd bulls	_____
Number of others	_____
Number of animal units in the herd	_____

* Concentrates refer to total of corn, small grain and commercial feed fed.

TABLE 19 - FEED COSTS AND RETURNS FROM FARM FLOCK OF SHEEP - 1963

Items	Your farm	Average of five farms
Feed per head, *lbs.		
Concentrates (grain & commercial feeds)	_____	163.5
Legume hay	_____	1082.7
Silage	_____	171.4
Feed costs per head:		
Concentrates (grain and commercial feeds)	\$ _____	\$ 3.34
Roughages	_____	10.83
Pasture	_____	2.39
TOTAL FEED COSTS	\$ _____	\$ 16.56
Value of produce per head:		
Wool	\$ _____	\$ 4.34
Value of mutton	_____	16.36
TOTAL VALUE PRODUCED	\$ _____	\$ 20.70
RETURNS ABOVE FEED COST PER HEAD	\$ _____	\$ 4.14
RETURNS FOR \$100 OF FEED	\$ _____	\$128.00
Price per cwt. of lambs sold	\$ _____	\$ 18.15
Price per lb. wool sold	_____¢	65.3¢
Pounds of wool per sheep sheared	_____	8.3
Number of ewes kept for lambing	_____	26.2
Percent lamb crop**	_____	130%
Percent death loss**	_____	16%
Pounds of sheep produced	_____	2364
Head of ewes kept	_____	26.2

* Two lambs under six months of age considered as one head.

** Lambs which die during month of birth are not included.

TABLE 20 - FEED COSTS AND RETURNS FROM FEEDER LAMBS - 1963

Items	Your farm
Feed per cwt. lambs produced, lbs.:	
Concentrates	_____
Legume hay	_____
Other hay	_____
Fodder and stover	_____
Silage	_____
Feed cost per cwt. lambs produced	\$ _____
Net increases in value per cwt. produced	\$ _____
Return above feed cost per cwt. produced	\$ _____
RETURN FOR \$100 OF FEED	\$ _____
Price paid per cwt. lambs produced	\$ _____
Price received per cwt. lambs sold	\$ _____
% death loss	_____
Pounds of lambs produced	_____

Twenty-four per cent of the farmers cooperating in this analysis kept some chickens. In most cases poultry is a so-called minor enterprise, providing eggs and poultry meat for family consumption plus an additional amount of cash income.

Some of the important factors that affected the return over feed were:

1. Quantity of feed required per hen
2. Price received per dozen eggs sold
3. Eggs laid per hen
4. Percentage of death loss of hen

TABLE 21 - FEED COSTS AND RETURNS FROM CHICKENS* - 1963

Items	Your farm	Average of 9 farms
Feed per hen, lbs.:		
Grain		100.3
Commercial feed		35.8
Total commercial feed		136.1
Alfalfa hay		.3
TOTAL FEED COST PER HEN	\$	\$ 3.96
Value of produce per hen:		
Eggs sold and used in home	\$	\$ 4.76
Net increase in value of chickens		-.07
Total value produced	\$	\$ 4.69
RETURNS ABOVE FEED COST PER HEN	\$	\$.73
RETURNS FOR \$100 OF FEED	\$	\$119.00
Price received per dozen eggs		25.9¢
Eggs laid per hen		220
Average number hens on farm during year		775
Percent of laying flock that are pullets	%	93%
Percent death loss of hens	%	12%
Number of pullets started		256
Number of straight run started		62
Number of cockerels started		22

* Includes feeds and returns from laying flock and rearing flock.

Turkeys are produced on many farms in the Mankato area. Not enough suitable records were available, however, to calculate averages for this enterprise.

TABLE 22 - FEED COSTS AND RETURNS FOR TURKEYS

Items	Your Farm
Feed per cwt. turkeys produced, lbs.:	
Grain	_____
Commercial feed	_____
Total concentrates	_____
Feed cost per cwt. turkeys produced	\$ _____
Net increase in value per cwt. turkeys produced	_____
RETURNS ABOVE FEED COST PER CWT. PRODUCED	_____
RETURNS PER \$100 OF FEED	\$ _____
No. of poults put on feed	_____
Price paid per poult purchased	_____
Percent death loss	_____
Price received per lb. turkeys sold	_____¢
Weight per bird sold (lbs.)	_____
Pounds of turkey produced	_____

TABLE 23 - SUMMARY OF FARM EARNINGS BY YEARS - MANKATO AREA

Items	1958	1959	1960	1961	1962	1963
<u>FARM RECEIPTS</u>						
Dairy cattle	\$ 653	\$ 763	\$ 1013	\$ 1087	\$ 845	\$ 829
Dairy products	1386	2186	2923	3676	3298	2908
Beef cattle *incl. feeders)	8717	8230	8962	6940	7818	6051
Hogs	6773	5727	7606	9618	9865	10476
Sheep and wool	350	82	76	82	169	93
Poultry (incl. turkeys)	98	1045	42	37	50	40
Eggs	1003	922	478	733	636	632
Corn (incl. Feed Grain Program)	1713	1965	1827	2674	4127	5775
Small grain	283	327	357	748	627	655
Other crops	1782	1667	1463	2367	3004	4058
Mach. equip. sold, gas tax refund	163	193	296	234	483	341
Income from work off the farm	167	407	320	231	358	442
Miscellaneous	83	126	273	259	387	342
(1) Total farm sales	\$23171	\$23640	\$25636	\$28686	\$31667	\$32642
(2) Increase in farm capital	4198	--	2371	3377	3553	2978
(3) Family living from the farm	273	215	281	252	272	258
(4) Total farm receipts	\$27642	\$23855	\$28288	\$32315	\$35492	\$35878
<u>FARM EXPENSES</u>						
Dairy cattle bought	\$ 239	\$ 209	\$ 151	\$ 332	\$ 162	\$ 182
Beef cattle bought (incl. feeders)	5045	4763	4191	3510	4197	3520
Hogs bought	595	234	634	634	699	510
Sheep bought (incl. feeders)	99	21	4	14	14	3
Horses bought	--	2	--	--	--	--
Poultry bought (incl. turkeys)	99	308	66	64	73	118
Miscellaneous livestock expense	337	510	518	627	664	596
Feed bought	3221	4118	4555	5398	5358	5781
Fertilizers	825	862	1354	1485	1497	1557
Other crop expense	541	717	776	888	878	1124
Custom work hired	703	641	777	783	812	755
Gas, oil & grease bought (farm share)	826	930	1039	931	1146	1105
Rep. & opr. of tractor, truck & auto	444	471	575	544	716	667
Rep. & upkeep of real estate	241	212	167	294	377	385
Rep. & upkeep crop & gen. mach.	302	318	385	426	535	513
Rep. & upkeep livestock equipment	152	119	150	131	145	130
Wages of hired labor	209	322	369	396	687	649
Electricity expense	183	211	227	244	264	285
Real estate & per. prop. tax	620	770	864	1005	1310	1513
Telephone & general farm expense	245	208	249	288	361	332
(5) Total cash operating expense	\$14926	\$15946	\$17051	\$17994	\$19895	\$19725
(6) Mech. power bought (farm share)	727	629	795	837	1246	1507
(7) Crop. & gen. mach. bought	1043	875	652	1084	1431	1268
(8) Livestock equip. bought	189	513	348	400	698	442
(9) New real estate improvements	780	521	477	1039	1427	740
(10) Total farm purchases	\$17665	\$18484	\$19323	\$21354	\$24697	\$23682
(11) Decrease in farm capital	--	549	--	--	--	--
(12) Interest on farm capital	3043	3500	3761	3955	4821	4836
(13) Unpaid family labor	117	63	197	94	115	192
(14) Board furnished hired labor	35	36	64	33	85	76
(15) Total farm expense	\$20860	\$22632	\$23345	\$25436	\$29718	\$28786
(16) Labor earnings (4) - (15)	\$ 6782	\$ 1223	\$ 4943	\$ 6879	\$ 5774	\$ 7092

TABLE 24 - SUMMARY OF MISCELLANEOUS ITEMS BY YEARS

Items	1958	1959	1960	1961	1962	1963
<u>MEASURES OF FARM ORGANIZATION AND MANAGEMENT</u>						
Percent High Return Crops	67	70	69	70	70	72
Livestock Units per 100 Acres	34	36	43	39	39	36
Work Units	354	405	416	433	474	483
Work Units per Worker	282	303	317	333	365	356
Expenses per Work Unit	\$ 13.31	\$ 11.70	\$ 13.05	\$ 13.12	\$ 13.78	\$ 13.34
<u>RETURN ABOVE FEED COST PER:</u>						
Dairy Cow	\$124.71	\$143.37	\$161.01	\$189.96	\$155.70	\$146.83
Cwt. Feeder Cattle produced	11.63	3.43	5.56	3.97	9.13	2.88
Head of Sheep	5.83	4.07	12.20	2.90	4.11	4.14
Cwt. Hogs produced	8.82	2.31	7.34	6.53	5.31	3.32
Hen	1.41	.07	1.68	1.18	.79	.73
<u>FEED COST PER:</u>						
Dairy Cow	\$137.95	\$162.54	\$163.66	\$159.72	\$174.78	\$186.90
Cwt. Feeder Cattle produced	15.18	15.97	14.75	16.24	16.81	15.82
Head of Sheep	10.53	9.76	10.14	11.84	10.60	16.56
Cwt. Hogs produced	9.78	9.58	9.61	10.07	10.75	11.08
Hen	3.83	3.58	3.43	3.14	3.47	3.96
<u>MISCELLANEOUS LIVESTOCK INFORMATION</u>						
Number of Dairy Cows	5.9	7.4	8.9	11.0	10.2	8.1
Pounds Feeder Cattle produced	18727	19330	17830	13479	15571	15582
Pounds Hogs produced	40004	41130	52110	57367	60740	70312
Number of Hens	198	167	90	143	131	126
Pounds Butterfat per Cow	318.3	343.8	371.6	364.3	363.1	370.4
No. Pigs Weaned per Litter	7.8	7.5	7.4	7.4	7.6	7.8
Percent Lamb Crop	117%	130%	149%	128%	101%	130%
Eggs per Hen	187	203	191	210	209	220
<u>PRICE RECEIVED PER:</u>						
Pound Butterfat in Milk	88.4¢	88.3¢	90¢	96¢	93¢	92¢
Cwt. fat Cattle	\$ 23.97	\$ 23.66	\$ 23.55	\$ 22.91	\$ 25.59	\$ 22.15
Dozen eggs	28.5¢	23.9¢	28¢	27.7¢	20.8¢	25.9¢
Cwt. Hogs sold	\$ 19.95	\$ 13.76	\$ 15.49	\$ 16.72	\$ 16.52	\$ 15.00
<u>PRICE OF FEED</u>						
Corn, bu.	\$.98	\$.95	\$.90	\$.87	\$.96	\$ 1.05
Oats, bu.	.53	.58	.58	.58	.60	.60
Barley, bu	.90	.86	.83	.86	.96	.84
Alfalfa Hay, ton	17.50	20.00	18.00	18.00	18.00	19.00
Corn Silage, ton	6.00	7.50	7.50	7.50	7.00	7.00
<u>ACRES PER FARM</u>						
Small Grain	26.9	26.2	26.3	26.4	25.4	24.6
Cultivated Crops	124.2	135.1	148.2	146.8	161.1	178.1
Tillable land in Hay	16.0	16.7	19.3	19.0	18.0	18.2
Tillable land in Pasture	5.0	4.8	5.8	6.6	5.7	4.5

TABLE 24 - SUMMARY OF MISCELLANEOUS ITEMS BY YEARS (Cont.)

Items	1958	1959	1960	1961	1962	1963
<u>ACRES PER FARM (Cont.)</u>						
Tillable land not Cropped	.1	--	1.0	.8	1.5	--
Soil Bank	.4	--	--	12.7	20.9	24.2
Total Tillable Land	172.6	182.8	200.6	212.3	232.6	249.6
Non-Tillable Land	37.2	34.1	27.1	30.9	37.0	38.6
Total Acres in Farm	209.8	216.9	227.7	243.2	269.6	288.2
<u>YIELDS PER ACRE</u>						
Canning Peas	\$ 83.41	\$ 62.34	\$ 26.83	\$ 34.37	\$ 38.13	\$ 28.82
Wheat, bu.	37.5	19.7	26.8	33.9	26.9	30.3
Oats, bu.	58.5	44.0	53.6	58.9	55.8	62.8
Corn grain, bu.	70.1	57.7	67.6	84.8	81.5	90.2
Sweet Corn	\$ 45.87	\$ 36.89	\$ 37.72	\$ 46.85	\$ 41.12	\$ 58.57
Soybeans, bu.	21.9	28.2	24.5	29.4	25.9	30.5
Corn Silage, ton	10.9	10.8	10.8	14.3	12.2	12.6
Alfalfa Hay, ton	3.0	3.0	3.2	2.9	3.8	3.5

AVERAGE PRICES OF FEEDS - 1963

Table 25 lists the average prices of farm grown feeds used in livestock summaries in this report. Prices paid for feeds bought were used whenever possible.

TABLE 25 - AVERAGE PRICES OF FEEDS - 1963

<u>Farm Grown Grains</u>		<u>Other Roughages</u>	
Corn	\$1.05 per bu.	Corn Silage	\$7.00 per ton
Oats	.60 per bu.	Grass Silage	6.00 per ton
Barley	.84 per bu.		
<u>Hay</u>		<u>Pasture per Head per Month</u>	
Alfalfa	\$19.00 per ton	Cows	\$3.00
Red or		Young Cattle	1.50
Alsike Clover	16.00 per ton	Hogs	.20
Brome or		Pigs (under 6 mos.)	.10
Timothy	11.00 per ton	Sheep	.50
Wild Hay	9.00 per ton	Lambs	.25
Unpaid Family Labor	\$150.00 per mo.	Whole Milk	\$3.00 per cwt.
Board Furnished		Whole Milk used in home	.10 per qt.
Hired Labor	\$ 40.00 per mo.		

LABOR EARNINGS CORRELATED WITH EXCELLED FACTORS

Studies of earnings of farmers in this area show that there are seven major management factors causing variations in earnings among farmers within a given year. These seven factors are (1) crop yields, (2) choice of crops, (3) returns from livestock, (4) amount of livestock, (5) size of business, (6) work accomplishments per worker, and (7) control over expenses. The combined or cumulative influence of these seven management factors on earnings is shown in Table 26. The farmer's earnings are determined to a considerable extent by his accomplishments in these seven factors.

TABLE 26

No. of factors in which farmers excelled	No. of farms	Average labor earnings		
		\$4000	\$7000	\$10000
		.	.	.
0, 1, or 2	21	XXXXXXXXXXXXX		
				\$ 4841
3, 4, or 5	33	XXXXXXXXXXXXXXXXXXXXX		
				\$ 7879
6 or 7	6	XXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
				\$10652

Table 26 indicates that it will be worth while for each co-operator to study carefully his ranking on pages 11 and 12, and learn his standing in respect to each of the above factors and the elements of strength and weakness in his farm business.