1961 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

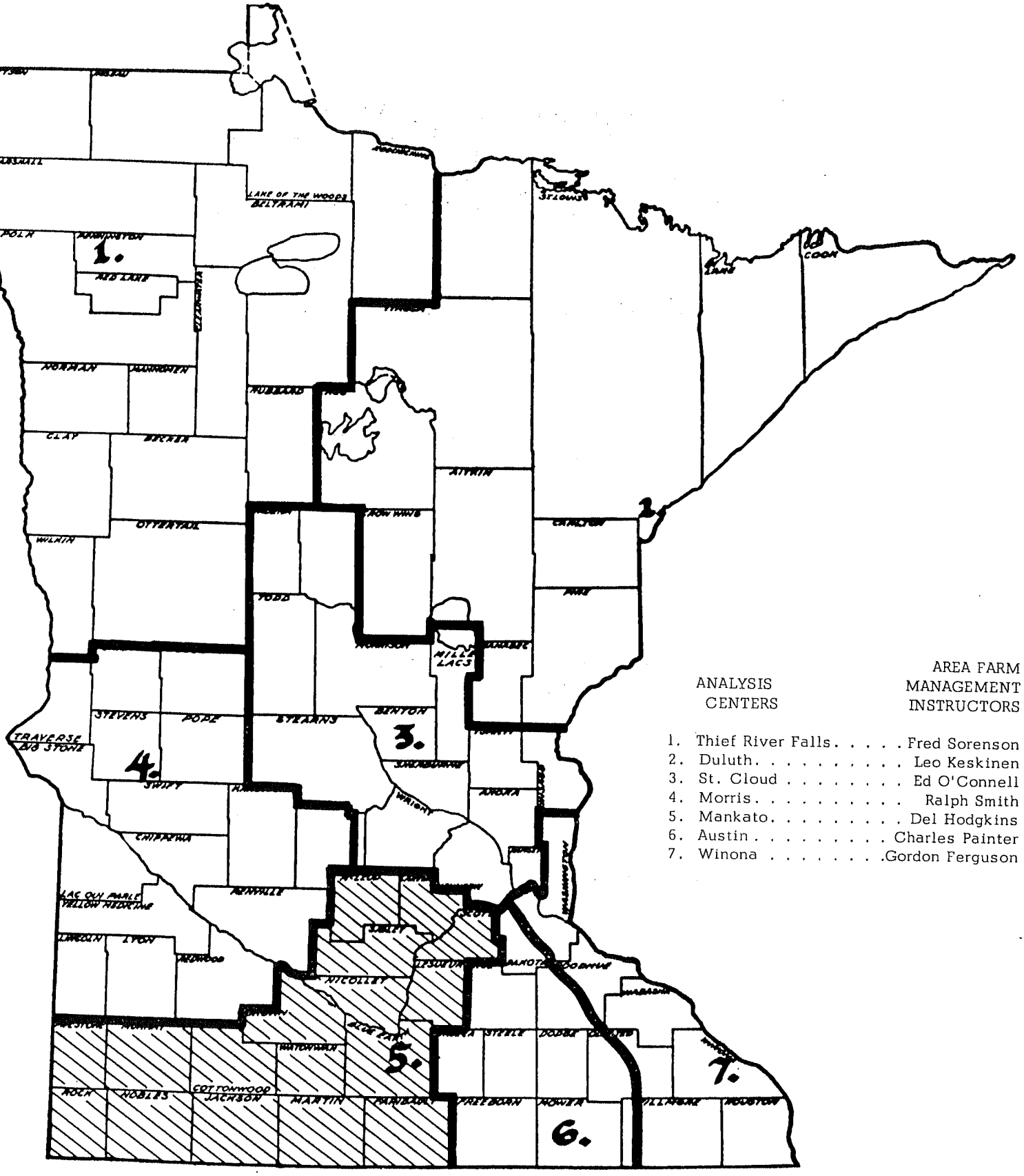
and

AREA VOCATIONAL TECHNICAL SCHOOL
MANKATO, MINNESOTA

Co-operating

APRIL 1962

VO-AG FARM MANAGEMENT AREAS



ANALYSIS CENTERS	AREA FARM MANAGEMENT INSTRUCTORS
1. Thief River Falls	Fred Sorenson
2. Duluth	Leo Keskinen
3. St. Cloud	Ed O'Connell
4. Morris	Ralph Smith
5. Mankato	Del Hodgkins
6. Austin	Charles Painter
7. Winona	Gordon Ferguson

* Shaded Area Served By The Mankato Analysis Center

1961 Report of the Vocational Agriculture Farm Management Program in the Mankato Area of Southern Minnesota

Del Hodgkins

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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, Young Farmer, and Veterans 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 and Mrs. Arlene Martin.

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, S. K. Wick, and William Knaak 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 12 schools in the Mankato area. The following tabulation shows the number of 1961 records submitted and the name of the instructor:

SCHOOL	NO. OF RECORDS	INSTRUCTOR
Blue Earth	3	Ramsey Johnson
Cleveland	1	Ed Tapio
Howard Lake	1	Leslie Hanson
Lake Crystal	15	Ernest Freier
LeCenter	6	Dan Webster, Larry Hobach
Madelia	2	Malcomb Brandt
Mankato	3	
Mapleton	1	Carl Ziebarth
New Ulm	13	Kermit Kleene
St. Peter	2	C. W. Dowling
St. James	4	Emery Krech, Odell Barduson
Worthington	1	Kenneth Johnson
TOTAL	52	

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 $24250 to $200511. 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 sucess 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, 1961

Items	Your farm Jan. 1	Your farm Dec. 31	Average of all farms	
Size of farm (acres)			243	
Size of business (work units)*			433	
Dairy cattle	$		$ 2475	$ 2649
Other dairy cattle			1184	1375
Beef cattle (incl. feeders)			4633	3996
Hogs			3676	4107
Sheep (incl. feeders)			85	94
Poultry (incl. turkeys)			235	169
Total Productive Livestock	$		$12288	$12390
Crop, Seed, and Feed	$		$ 7666	$10089
Auto & truck (farm share)			1054	1112
Tractors and motors			2099	2177
Crop and general machinery			3733	3991
Livestock equipment			1283	1419
Total Machinery & Equipment	$		$ 8169	$ 8699
Miscellaneous			---	---
Land			38217	38217
Buildings, fences, etc.			11066	11388
TOTAL FARM CAPITAL	$		$77406	$80783

Items	20% most profitable Jan. 1	20% most profitable Dec. 31	20% least profitable Jan. 1	20% least profitable Dec. 31
Size of farm (acres)	337		216	
Size of business (work units)*	536		327	
Dairy cattle	$ 2766	$ 2894	$ 1457	$ 1866
Other dairy cattle	1981	2084	822	865
Beef cattle (incl. feeders)	5756	5872	2214	1673
Hogs	3991	5024	4395	3738
Sheep (incl. feeders)	60	70	180	183
Poultry (incl. turkeys)	30	18	119	19
Total Productive Livestock	$14584	$15962	$ 9187	$ 8344
Crop, Seed, and Feed	$10264	$15386	$ 5929	$ 7034
Auto & Truck (farm share)	1111	1288	875	1091
Tractors and motors	2628	2912	1753	1518
Crop and general machinery	4785	5081	2299	2816
Livestock equipment	1693	1943	1373	1314
Total Machinery & Equipment	$10217	$11224	$ 6300	$ 6739
Miscellaneous	---	---	---	---
Land	51453	51453	34123	34123
Buildings, fences, etc.	13058	14568	8682	8677
TOTAL FARM CAPITAL	$99576	$108593	$64221	$64917

* See page 13 for an explanation of "work units".

TABLE 2 - SUMMARY OF FARM EARNINGS (CASH STATEMENT). 1961

Items	Your farm	Average of all farms	20% most profitable farms	20% least profitable farms
FARM RECEIPTS				
Dairy cattle	$_____	$ 1087	$ 1710	$ 946
Dairy products	_____	3676	5452	1806
Beef cattle (incl. feeders)	_____	6940	8811	2321
Hogs	_____	9618	11358	9919
Sheep and wool	_____	82	67	87
Poultry (incl. turkeys)	_____	37	---	14
Eggs	_____	733	85	287
Corn	_____	2674	4752	2308
Small grain	_____	748	1164	564
Other crops	_____	2367	3786	1148
Mach. & equip. sold & gas tax refunds	_____	234	205	207
Income from work off the farm	_____	231	248	292
Miscellaneous farm income	_____	259	165	474
(1) Total farm sales	$_____	$28686	$37803	$20373
(2) Increase in farm capital	_____	3377	9017	696
(3) Family living from the farm	_____	252	223	136
(4) Total farm receipts (1)+(2)+(3)	$_____	$32315	$47043	$21205
FARM EXPENSES				
Dairy cattle bought	$_____	$ 332	$ 35	$ 911
Beef cattle bought (incl. feeders)	_____	3510	4778	642
Hogs bought	_____	634	855	1438
Sheep bought	_____	14	23	3
Poultry bought (incl. turkeys)	_____	64	--	9
Miscellaneous livestock expense	_____	627	729	415
Feed bought	_____	5398	5661	5924
Fertilizer	_____	1485	2670	1227
Other crop expense	_____	888	1306	753
Custom work hired	_____	783	722	610
Gas, oil, grease bought (farm share)	_____	931	1207	795
Repairs for tractors, trucks, and autos (farm share)	_____	544	860	404
Repair and upkeep of farm real estate	_____	294	397	273
Repair and upkeep of crop & gen. mach.	_____	426	690	340
Repair & upkeep of livestock equipment	_____	131	194	60
Wages of hired labor	_____	396	858	216
Electricity expense (farm share)	_____	244	314	195
Personal property & real estate taxes	_____	1005	1418	914
Telephone & general farm expense	_____	288	392	226
(5) Total cash operating expense	$_____	$17994	$23109	$15355
(6) Mech. power bought (farm share)	_____	837	1295	556
(7) Crop & general machinery bought	_____	1084	1412	1053
(8) Livestock equipment bought	_____	400	666	164
(9) New real estate improvements	_____	1039	2508	529
(10) Total farm purchases (5) to (9)	$_____	$21354	$28990	$17657
(11) Decrease in farm capital	_____	---	---	---
(12) Interest on farm capital	_____	3955	5204	3228
(13) Unpaid family labor	_____	94	28	196
(14) Board furnished hired labor	_____	33	38	--
(15) Total farm expenses (10) to (14)	$_____	$25436	$34260	$21081
(16) Labor earnings (4) - (15)	$_____	$ 6879	$12783	$ 124

TABLE 3 - SUMMARY OF FARM EARNINGS (ENTERPRISE STATEMENT), 1961

Items	Your farm	Average of all farms	20% most profitable farms	20% least profitable farms
RETURNS AND NET INCREASES				
Dairy cows	$_____	$ 3773	$ 5866	$ 1909
Other dairy cattle	_____	1168	1588	441
Beef breeding herd	_____	82	--	245
Feeder cattle	_____	2767	4204	906
Hogs	_____	9475	11624	7857
Sheep - farm flock	_____	76	54	89
Turkeys	_____	---	---	---
Chickens	_____	659	77	201
ALL PRODUCTIVE LIVESTOCK	$_____	$18000	$23413	$11648
Value of feed fed to livestock	_____	11157	13437	8566
Return over feed from livestock	$_____	$ 6843	$ 9976	$ 3082
Crop, seed, and feed	_____	11571	18603	5810
Income from labor off the farm	_____	144	127	243
Agricultural conservation payments	_____	34	--	6
Miscellaneous	_____	225	165	468
(1) TOTAL RETURNS & NET INCREASES	$_____	$18817	$28871	$ 9609
EXPENSES AND NET DECREASES				
Truck	$_____	$ 233	$ 395	$ 232
Auto (farm share)	_____	414	416	377
Tractor	_____	1278	1776	981
Elec. & gas engine exp. (farm share)	_____	245	323	197
Hired power	_____	388	342	305
Total power	$_____	$ 2558	$ 3252	$ 2092
Crop and general machinery	_____	1310	1928	881
Livestock equipment	_____	388	610	283
Buildings, fences and tiling	_____	1009	1382	808
Misc. productive livestock expense	_____	627	729	415
Labor	_____	799	1172	638
Real estate taxes	_____	854	1196	801
Personal property tax	_____	151	222	113
Insurance	_____	116	102	97
General farm expense	_____	171	291	129
Interest on farm capital	_____	3955	5204	3228
(2) TOTAL EXPENSES & NET DECREASES	$_____	$11938	$16088	$ 9485
(3) LABOR EARNINGS (1) - (2)	$_____	$ 6879	$12783	$ 124

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 - 1961 (OPERATOR'S SHARE

Items	Your farm	Owners	Part Owners	Renters
FARM RECEIPTS				
Dairy cattle	$_____	$ 768	$ 1129	$ 1028
Dairy products	_____	2486	3192	3904
Beef cattle (including feeders)	_____	4766	11485	4006
Hogs	_____	10730	9610	7915
Sheep and wool (including feeders)	_____	20	42	122
Poultry (including turkeys)	_____	30	88	24
Eggs	_____	432	1769	555
Corn	_____	2948	1460	1301
Small grain	_____	656	681	497
Other crops	_____	1482	2745	1858
Mach. & equip. sold & gas tax refunds	_____	213	194	243
Income from work off the farm	_____	202	120	299
Miscellaneous	_____	389	196	203
(1) Total farm sales	$_____	$25122	$32711	$21955
(2) Increase in farm capital	_____	3104	4964	3025
(3) Family living from the farm	_____	215	432	208
(4) Total Farm Receipts (1)+(2)+(3)	$_____	$28441	$38107	$25188
FARM EXPENSES				
Dairy cattle bought	$_____	$ 407	$ 431	$ 213
Beef cattle bought (including feeders)	_____	2265	6261	1868
Hogs bought	_____	903	102	642
Sheep bought (including feeders)	_____	2	5	26
Poultry bought (including turkeys)	_____	13	168	57
Miscellaneous livestock expense	_____	572	488	595
Feed bought	_____	6001	4704	4459
Fertilizers	_____	1250	2136	994
Other crop expense	_____	610	875	959
Custom work hired	_____	637	725	744
Gas, oil, & grease bought (farm share)	_____	768	1040	902
Repair & operation tractor, truck, and auto (farm share)	_____	484	664	539
Repair and upkeep of real estate	_____	320	464	199
Repair & upkeep of crop. & gen. machinery	_____	267	624	442
Repair & upkeep of livestock equip.	_____	117	144	125
Wages of hired labor	_____	266	856	328
Electricity expense (farm share)	_____	223	234	231
Real estate & personal property tax	_____	799	859	438
Cash rent	_____	33	724	1445
Gen. farm exp. & telephone expense	_____	368	303	191
Interest paid	_____	819	1160	407
Total cash operating expense	$_____	$17124	$22967	$15804
Mechanical power bought (farm share)	_____	1214	521	705
Crop & general machinery bought	_____	1166	1427	793
Livestock equipment bought	_____	219	272	564
New real estate improvements	_____	1344	1482	447
(5) Total farm purchases	$_____	$21067	$26669	$18313
(6) Decrease in farm capital	_____	---	---	---
(7) Interest on farm capital	_____	2202	2733	1057
(8) Unpaid family labor	_____	114	162	18
(9) Board furnished hired labor	_____	16	54	40
(10) Total Farm Expenses (5) to (9)	$_____	$23399	$29618	$19428
(11) Labor Earnings (4) - (10)	$_____	$ 5042	$ 8489	$ 5760
(12) Return to Capital and Family Labor (7) + (8) + (11)	$_____	$ 7358	$11384	$ 6835

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, 1961

Items	Your farm	Average of all farms	Your farm	Average of all farms
Whole milk	_____	509 qts.	$_____	$ 41
Skim milk	_____	---	_____	--
Cream	_____	9 pts.	_____	2
Farm-made butter	_____	---	_____	--
Beef	_____	562 lbs.	_____	108
Hogs	_____	359 lbs.	_____	60
Lamb and mutton	_____	---	_____	--
Poultry	_____	18 lbs.	_____	4
Eggs	_____	55 doz.	_____	15
Potatoes	_____	3 bu.	_____	2
Vegetables and fruit	_____	---	_____	9
Farm fuel	_____	---	_____	11
TOTAL				$252

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 $346.59 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 - 1961

Items	Your farm	Average of 18 farms
Food and meals bought	$ _____	$ 1066
Operating and supplies	_____	327
Furnishing and equipment	_____	196
Clothing and clothing materials	_____	311
Personal care, personal spending	_____	108
Education, recreation & development	_____	218
Gifts and special events	_____	120
Medical care and health insurance	_____	408
Church, welfare	_____	164
Personal share of auto & truck expense	_____	144
Operator's share of upkeep on dwelling	_____	2
Household share of electricity and telephone expense	_____	105
TOTAL CASH LIVING EXPENSE	$ _____	$ 3169
Household & personal share of new auto	$ _____	$ 166
New dwelling	_____	306
Taxes and other deductions	_____	85
Life insurance	_____	294
Other savings and investments	_____	103
TOTAL HOUSEHOLD AND PERSONAL CASH EXPENSE	$ _____	$ 4123
Total family living from the farm	_____	290
TOTAL CASH EXPENSE AND PERQUISITES	$ _____	$ 4413
RETURN TO CAPITAL AND FAMILY LABOR	$ _____	$ 6898

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 - 1961 (OPERATOR'S SHARE, TENURE BASIS)

Items	Your Farm		15 Owners	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Total Farm Capital (1)	$	$	$58205	$60683
Stocks and Bonds			627	722
Life insurance			539	593
Notes & Accounts Receivable			9	9
Shares in Marketing			300	339
Outside Real Estate			522	491
Cash on Hand and in Bank			1347	2401
Household goods			2869	2907
Personal share of Auto			496	573
Farm Dwelling			3602	3864
Miscellaneous			--	--
Total Non-Farm Assets (2)	$	$	$10311	$11899
TOTAL ASSETS (1) + (2) = (3)	$	$	$68516	$72582
Fed. Land Bank Mortgages			284	934
F.H.A. Real Estate Mortgages			4309	4207
Other Mortgages			7547	7660
Loans on Real Estate			--	--
Production Credit Assoc. Loans			--	--
Miscellaneous			--	--
Crop Loans (Sealed)			209	196
Other Chattel Mortgages			1252	1061
Notes Payable			3952	4893
Accounts Payable			2254	1672
TOTAL LIABILITIES (4)	$	$	$19807	$20623
FARMER'S NET WORTH = (3) - (4)	$	$	$48709	$51959
Change in New Worth		$		$ 3250

Items	7 Part-Owners		17 Renters	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Total Farm Capital (1)	$77477	$82444	$26811	$29326
Stocks and Bons	852	884	477	548
Life Insurance	1210	1434	915	1010
Notes & Accounts Receivable	--	--	--	--
Shares in Marketing	32	181	198	225
Outside Real Estate	3731	3295	706	741
Cash on Hand and in Bank	710	499	848	1336
Household Goods	2836	3271	2233	2264
Personal Share of Auto	476	401	385	473
Farm Dwelling	3469	3358	176	166
Miscellaneous	--	--	--	--
Total Non-Farm Assets (2)	$13316	$13323	$ 5938	$ 6763
TOTAL ASSETS (1)+ (2) = (3)	$90793	$95767	$32749	$36089
Fed. Land Bank Mortgages	6067	6005	--	--
F.H.A. Real Estate Mortgages	2728	2643	1059	882
Other Mortgages	5886	5657	--	1147
Loans on Other Real Estate	--	--	--	--
Production Credit Assoc. Loans	--	--	320	704
F.H.A. Chattel Mortgages	--	--	--	300
Crop Loans (Sealed)	--	--	--	--
Other Chattel Mortgages	8964	7855	2206	1757
Notes Payable	5728	6736	5664	5428
Accounts Payable	915	945	566	995
TOTAL LIABILITIES (4)	$30288	$29841	$ 9815	$11213
FARMER'S NET WORTH = (3) - (4)	$60505	$65926	$22934	$24876
Change in Net Worth		$ 5421		$ 1942

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 $12783 and of those in the lower 20 percent was $124. This is a range of $12659 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
2. Choice of Crops
3. Return from Livestock
4. Amount of Livestock
5. Size of Business
6. Work Units per Worker
7. Control over Expense

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

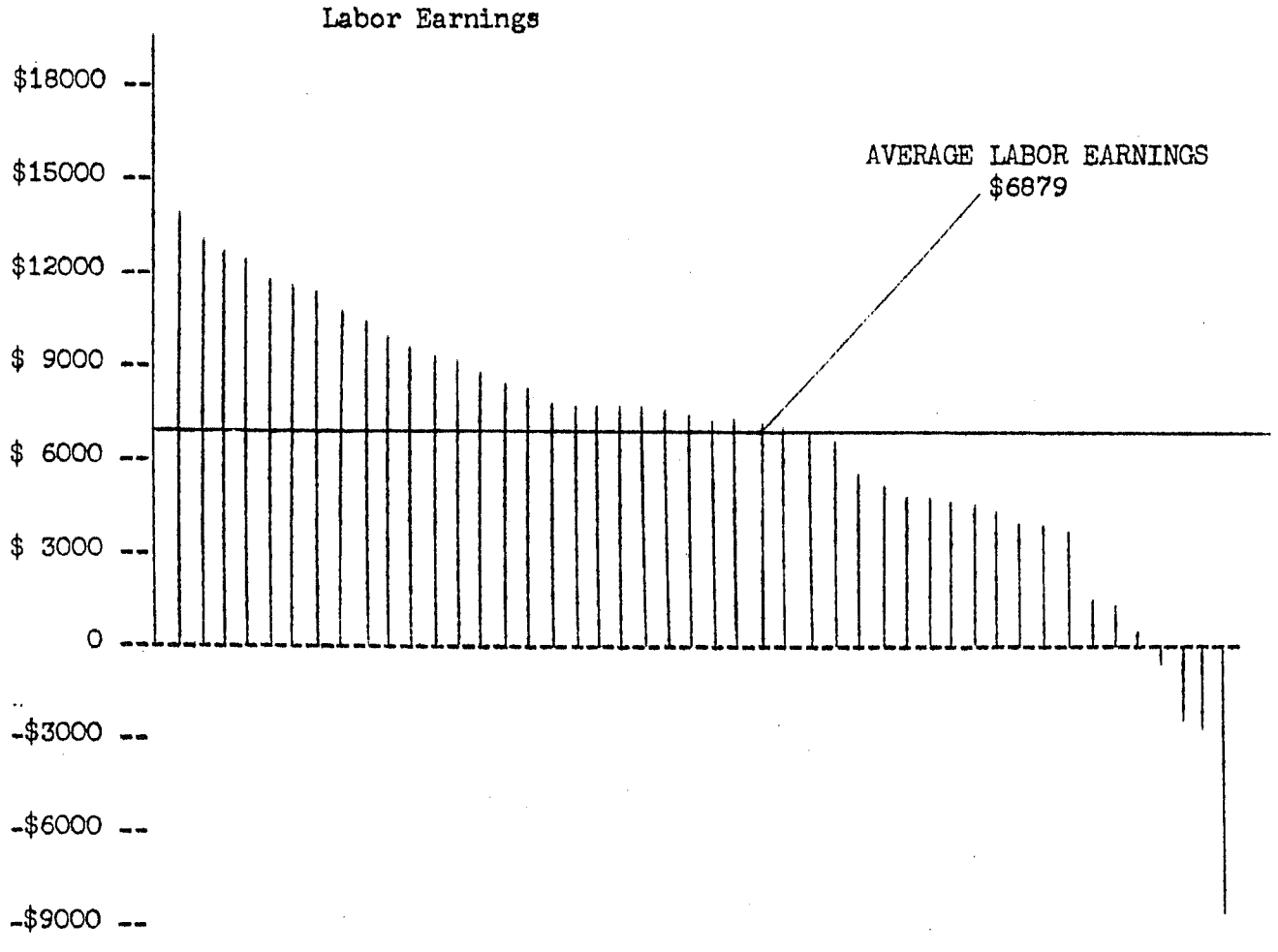

Figure 1. - Range in Labor Earnings
Each line represents the earnings of one farmer

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 - 1961

Measures used in chart on page 12	Your farm	Average of all farms	20% most profitable farms	20% least profitable farms
Labor earnings	$ _____	$ 6879	$12783	$ 124
(1) Crop yields*	_____	100	103	80
(2) Percent tillable land in high return crops**	_____	70	71	72
(3) Return for $100 feed to productive livestock***	_____	100	103	91
(4) Productive livestock units per 100 acres****	_____	39	37	23
(5) Size of business - work units	_____	433	536	327
(6) Work units per worker	_____	333	357	297
(7) Power, mach., equip., and build. exp. per work unit $	_____	$ 13.12	$ 15.75	$ 13.86
Items related to some of the above measures:				
(3) Index of return for $100 feed from:				
Dairy cattle (see p. 17, 18, 19)	_____	100	102	87
Beef breeding herd (see p. 20)	_____	100	---	--
Feeder cattle (see p. 20)	_____	100	106	102
Hogs (see p. 16)	_____	100	102	104
Sheep - Farm flock (see p. 21)	_____	100	---	--
Chickens (see p. 22)	_____	100	---	--
(4) Number of animal units	_____	88	108	67
(5) Work units on crops	_____	122	179	92
Work units on prod. livestock	_____	297	344	211
Work units from other prod. work	_____	14	13	24
(6) Number of family workers	_____	1.2	1.2	1.1
Number of hired workers	_____	.1	.3	--
Total number of workers	_____	1.3	1.5	1.1
(7) Power expense per work unit	_____	$6.37	$6.87	$7.13
Crop mach. exp. per work unit	_____	3.30	4.47	3.03
Livestock equip. exp. per w.u.	_____	.92	1.45	.75
Bldgs. & fences exp. per w.u.	_____	2.53	2.96	2.95

* Given as percentage of the average

** Crops are marked in Table 10 as A, B, C, and D. All of acres in A crops, one half of acres in B crops, and one-fourth of acres in C crops are used in calculating per cent 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.

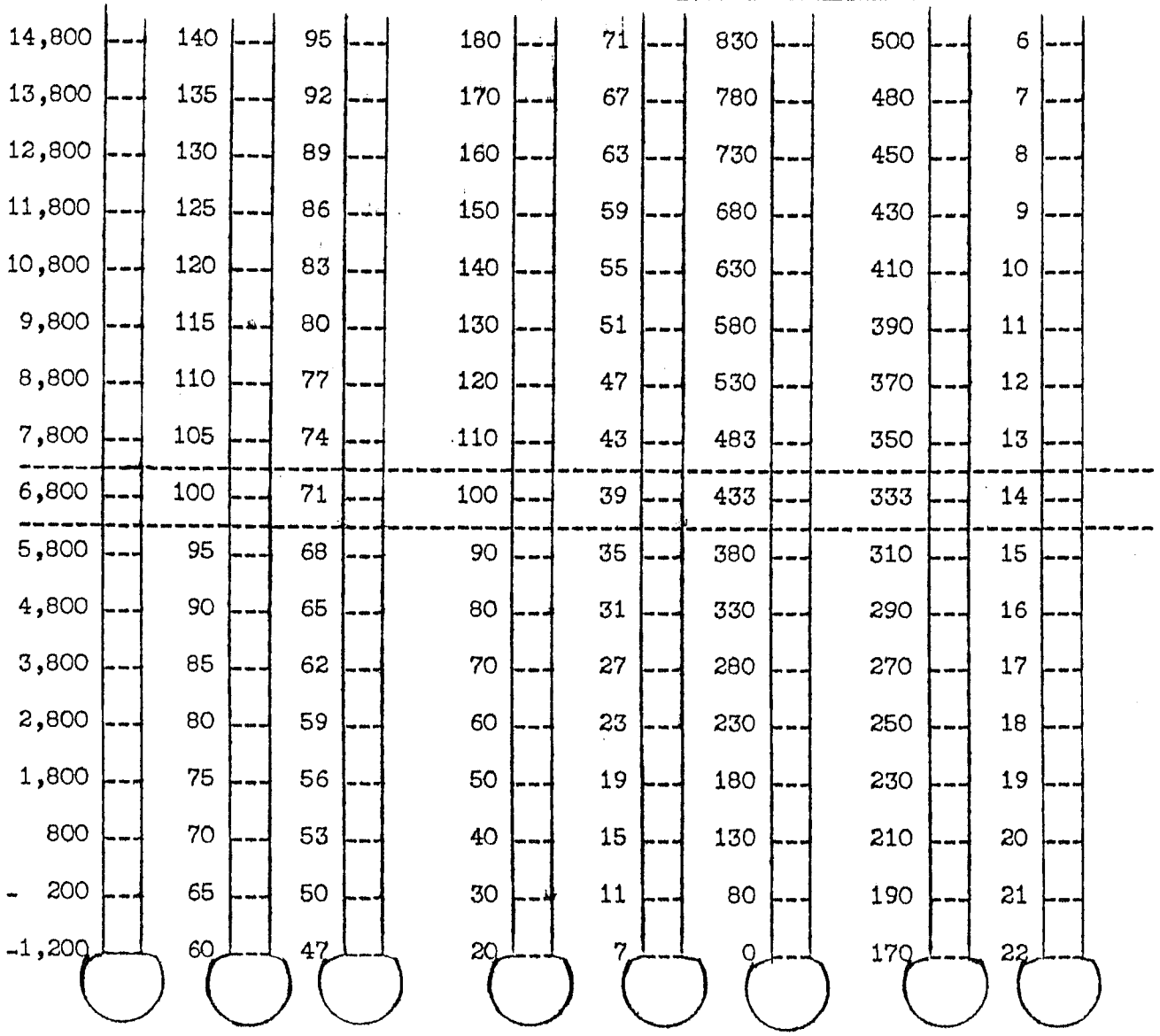

TABLE 9 - DISTRIBUTION OF ACRES AND YIELD - 1961

Crop	Crop rating	Number growing	Acres your farm	Average Acres of all farms	Your Yield	Average Yield Per Acre
Canning peas	B	4	____	1.4	____	$ 34.37
Wheat	C	26	____	7.6	____	33.9 bu.
Oats for silage	C	6	____	1.4	____	7.2 ton
Oats & mix. for grain	D	32	____	14.9	____	58.9 bu.
Barley	D	1	____	1.1	____	62.7 bu.
Total small grain and peas				26.4		
Corn, grain	A	46	____	101.6	____	84.8 bu.
Sweet corn	B	3	____	1.1	____	$ 46.85
Soybeans for grain	B	38	____	39.7	____	29.4 bu.
Corn & cane for silage	B	22	____	4.4	____	14.3 ton
Total cultivated crops				146.8		
Alf. & alf. mix.hay	B	40	____	19.0	____	2.9 ton
Other leg. & leg. mix	C		____		____	
Other annual hay	D		____		____	
Legumes for seed	D		____		____	
Total tillable land in hay				19.0		
Alf. & alf. brom past.	B	11	____	4.4		
Other leg. & mix.	C		____			
Other tillable pasture	D	11	____	2.2		
Total tillable land in pasture				6.6		
Soil bank	A	20	____	12.7		$ 37.23
Tillable land not cropped	D	3	____	.8		
Total tillable land				212.3		
Wild hay (non-till.)		9	____	2.1		.2 ton
Non-till. pasture		11	____	10.3		
Timber (not pasture)		8	____	2.1		
Roads & waste		42	____	8.3		
Farmstead		46	____	8.1		
TOTAL ACRES IN FARM				243.2		
Per cent land tillable					____	86.4%
Per cent tillable land in high-return crops					____	70.3%

EXPLANATION OF WORK UNITS

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.

* One animal unit represents one dairy cow or bull, two other dairy cattle, 1¼ beef cows or bull, 1 feeder steer or heifer, 3-1/3 other beef cattle, 7 sheep, 14 lambs, 2½ 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 - 1961

Item	Your farm	Average of all farms	20% most profitable farms	20% least profitable farms
Crop acres per farm	_____	204	295	170
Tractor expense per crop acre	$_____	$ 6.67	$ 6.20	$ 6.64
Crop and general machinery expense per crop acre	$_____	$ 6.79	$ 6.81	$ 6.00

AMOUNT OF LIVESTOCK

The farmers cooperating in this study are predominantly livestock farmers. 50% of these farmers maintained dairy cattle, 30% kept poultry, 13% raised sheep, 40% fed beef cattle, and 90% raised hogs.

TABLE 12 - AMOUNT OF LIVESTOCK - 1961

Items	Your farm	Average of all farms	20% most profitable farms	20% least profitable farms
Number of milk cows	_____	11.0	14.9	6.0
Number of other dairy cattle	_____	12.3	18.6	8.2
Number of beef cattle (including feeders)	_____	31.2	33.8	12.2
Number of sheep	_____	4.7	4.2	4.7
Number of hens	_____	143.0	273.0	73.0
Pounds of hogs produced	_____	13479	19745	4474
Pounds of beef produced	_____	57367	70010	49314

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 - 1961

	Dairy Cattle			Beef
	Cows	Other	All	Breeding Herd
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. Ninety 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 - 1961

Items	Your farm	Average of 36 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	_____	348.8	333.5	391.3
Small grain	_____	23.5	18.9	19.7
Commercial feeds	_____	65.5	52.9	56.5
Total concentrates*	_____	437.8	405.3	467.5
Alfalfa hay	_____	6.5	3.8	12.4
Milk	_____	---	---	---
Feed cost per cwt. hogs produced:				
Concentrates* $	_____	$ 10.01	$ 8.97	$ 10.61
Milk	_____	---	---	---
Pasture	_____	---	---	---
Alfalfa hay	_____	.06	.03	.11
TOTAL FEED COST		$ 10.07	$ 9.00	$ 10.72
Net increase in value per cwt. hogs produced $	_____	$ 16.60	$19.01	$ 14.10
RETURNS ABOVE FEED COST PER CWT. HOGS PRODUCED $	_____	$ 6.53	$10.01	$ 3.38
RETURNS FOR $100 OF FEED $	_____	$167.00	$211.00	$133.00
Price received per cwt. hogs produced $	_____	$ 16.72	$ 16.92	$ 16.48
No. of spring litters raised**	_____	26.0	18.8	36.7
No. of fall litters raised	_____	19.0	20.2	27.0
Total no. of litters raised	_____	45.0	39.0	63.7
No. of pigs born per litter**	_____	9.2	8.9	8.7
No. of pigs weaned per litter	_____	7.4	7.4	6.4
POUNDS OF HOGS PRODUCED	_____	70,307	53,868	77,168

* 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 or 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 - 1961

Items	Your farm	Average of 21 farms	20% of farms highest in butterfat per cow (4)	20% of farms lowest in butterfat per cow (4)
Pounds of milk per cow	_____	10467.8	11539.8	8083.9
Pounds of butterfat per cow	_____	364.3	430.1	307.0
Price received per pound butterfat sold	____¢	96¢	96¢	96¢
Price received per cwt. milk sold	$_____	$ 3.53	$ 3.44	$ 3.71
Feed per cow, lbs.:				
Corn	_____	2724.3	2922.4	2108.3
Small grain	_____	1008.0	403.2	550.9
Commercial feed	_____	422.5	427.6	414.0
Total concentrates*	_____	4154.8	3753.2	3073.2
Legume hay	_____	5282.3	6731.9	3394.5
Other hay and fodder	_____	134.7	---	66.8
Total dry roughages	_____	5417.0	6731.9	3461.3
Silage	_____	8349.2	8871.9	8219.8
Feed cost per cow:				
Concentrates*	$_____	$ 74.75	$ 76.53	$ 69.74
Roughages	_____	78.25	90.58	60.95
Pasture	_____	6.72	8.13	3.18
TOTAL FEED COSTS	$_____	$159.72	$175.24	$133.87
Value of produce per cow:				
Dairy product sales	$_____	$338.64	$383.32	$282.22
Dairy products used in house	_____	4.17	5.64	2.95
Milk fed to livestock	_____	5.46	6.65	7.19
Net increases in value of cows	_____	1.41	5.89	-13.39
TOTAL VALUE PRODUCED	$_____	$349.68	$401.50	$278.97
RETURNS ABOVE FEED COST PER COW	$_____	$189.96	$226.26	$145.10
RETURNS FOR $100 OF FEED	$_____	$224.00	$232.00	$219.00
Feed cost per cwt. milk produced	$_____	$ 1.63	$ 1.57	$ 1.70
Feed cost per lb. butterfat	____¢	43¢	41¢	44¢
Number of cows		23.1	16.0	27.6

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

DAIRY CATTLE SUPPLEMENT

To provide some supplementary information for those farmers and other 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 - 1961

Items	Your farm	Average of 21 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 milk per cow	_____	10467.8	11127.7	8977.4
Pounds of butterfat per cow	_____	364.3	403.8	328.5
Price received per pound butterfat sold	____¢	96¢	99¢	94¢
Price received per cwt. milk sold	$_____	$3.53	$3.73	$3.53
Feed per cow, lbs.:				
Corn	_____	2724.3	2314.9	3046.3
Small grain	_____	1008.0	838.5	212.7
Commercial feed	_____	422.5	430.4	350.4
Total concentrates*	_____	4154.8	3583.8	3609.4
Legume hay	_____	5282.3	5785.1	5051.9
Other hay and fodder	_____	134.7	---	640.6
Total dry roughages	_____	5417.0	5785.1	5692.5
Silage	_____	8349.2	7682.2	13509.0
Feed cost per cow:				
Concentrates*	$_____	$ 74.75	$ 80.77	$ 73.84
Roughages	_____	78.25	79.64	96.64
Pasture	_____	6.72	6.67	7.65
TOTAL FEED COSTS	$_____	$159.72	$167.08	$178.13
Value of produce per cow:				
Dairy product sales	$_____	$338.64	$400.94	$306.90
Dairy products used in house	_____	4.17	3.14	4.06
Milk fed to livestock	_____	5.46	4.31	3.97
Net increases in value of cows	_____	1.41	25.96	-16.97
TOTAL VALUE PRODUCED	$_____	$349.68	$434.35	$297.96
RETURNS ABOVE FEED COST PER COW	$_____	$189.96	$267.27	$119.83
RETURNS FOR $100 OF FEED	$_____	$224.00	$261.00	$170.00
Feed cost per cwt. milk produced	$_____	$ 1.63	$ 1.52	$ 2.01
Feed cost per lb. butterfat	____¢	43¢	41¢	52¢
Number of cows		23.1	22.1	26.6

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

TABLE 16 - FEED COSTS AND RETURNS FROM OTHER DAIRY CATTLE - 1961

Items	Your farm	Average of 21 farms	20% of farms highest in butterfat per cow (4)	20% of farms lowest in butterfat per cow (4)
Feed per head, lbs.:				
Concentrates*	_____	1076.1	681.1	1184.9
Hay and fodder	_____	2893.2	2939.9	1579.9
Silage	_____	2612.0	3279.2	1951.3
Whole milk	_____	175.4	202.6	289.9
Feed cost per head:				
Concentrates*	$ _____	$ 23.09	$ 16.43	$ 29.47
Roughages	_____	30.66	37.73	21.33
Milk	_____	5.25	6.08	8.61
Pasture	_____	2.34	.64	.65
TOTAL FEED COSTS PER HEAD	$ _____	$ 61.34	$ 60.88	$ 60.06
Net increase in value of other cattle	$ _____	$ 97.14	$ 98.41	$ 81.00
RETURNS ABOVE FEED COST PER HEAD	$ _____	$ 35.80	$ 37.53	$ 20.94
RETURNS FOR $100 OF FEED	$ _____	$158.00	$159.00	$125.00
No. of head of other cattle	_____	25.2	17.1	26.1

TABLE 17 - FEED COSTS AND RETURNS FROM ALL DAIRY CATTLE - 1961

Items	Your farm	Average of 21 farms	20% of farms highest in butterfat per cow	20% of farms lowest in butterfat per cow
Feed per animal unit, lbs.:				
Concentrates*	_____	3481.5	2913.3	2868.9
Hay and fodder	_____	5315.7	6363.5	3383.9
Silage	_____	7414.1	8181.3	6819.4
TOTAL FEED COSTS PER ANIMAL UNIT	$_____	$143.64	$151.83	$124.40
Value of produce per animal unit:				
Dairy products	$_____	$226.39	$256.99	$199.06
Net increase in value of dairy cattle	$_____	$ 66.95	$ 68.52	$ 42.84
TOTAL VALUE PRODUCED	$_____	$293.34	$325.51	$241.90
RETURNS ABOVE FEED PER ANIMAL UNIT	$_____	$149.70	$173.68	$117.50
RETURNS PER $100 OF FEED	$_____	$208.00	$218.00	$204.00
Animal units of cattle	_____	35.7	24.5	40.7

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

TABLE 18 - FEED COSTS AND RETURNS FROM FEEDER CATTLE - 1961

Items	Your farm	Average of 12 farms	20% of farms highest in return above feed (3)	20% of farms lowest in return above feed (3)
Feeds per cwt. beef produced, lbs.:				
Corn	_____	645.6	640.7	658.1
Small grain	_____	12.7	8.2	18.3
Commercial feeds	_____	74.3	61.5	73.9
Total concentrates*	_____	732.6	710.4	750.3
Legume hay	_____	156.4	137.5	170.8
Other hay	_____	10.8	--	14.2
Total hay	_____	167.2	137.5	185.0
Silage	_____	187.8	--	421.9
Feed cost per cwt. beef produced:				
Concentrates*	$_____	$ 14.16	$ 13.12	$ 14.36
Roughages	_____	2.08	.99	3.08
Pasture	_____	--	--	--
TOTAL FEED COSTS	$_____	$ 16.24	$ 14.11	$ 17.44
Net increase in value of feeders	_____	20.21	21.35	16.65
RETURNS ABOVE FEED COST PER CWT. BEEF PRODUCED	$_____	$ 3.97	$ 7.24	$ -.79
RETURNS FOR $100 OF FEED	$_____	$126.00	$152.00	$ 95.00
Price paid per cwt. beef bought	$_____	$ 26.34	$ 27.11	$ 25.01
Price received for feeder cattle sold	$_____	$ 22.91	$ 23.31	$ 22.55
Number of animal units	_____	84.9	106.6	118.9
POUNDS OF BEEF PRODUCED	_____	49890	61436	65582

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 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 - 1961

Items	Your farm	Average of 4 farms
Feed per head,* lbs.		
Concentrates (grain & commercial feeds)	_____	174.6
Legume hay	_____	726.6
Other hay	_____	--
Silage	_____	88.1
Feed costs per head:		
Concentrates (grain & commercial feeds)	$_____	$ 3.56
Roughages	_____	6.96
Pasture	_____	1.32
TOTAL FEED COSTS	$_____	$11.84
Value of produce per head:		
Wool	$_____	$ 3.21
Value of mutton	_____	11.53
TOTAL VALUE PRODUCED	$_____	$14.74
RETURNS ABOVE FEED COST PER HEAD	$_____	$ 2.90
RETURNS FOR $100 OF FEED	$_____	$129.00
Price per cwt. of lambs sold	$_____	$ 16.48
Price per lb. wool sold	_____ ¢	56.9¢
Pounds of wool per sheep sheared	_____	8.1
Number of ewes kept for lambing	_____	32
Per cent lamb crop**	_____	128%
Per cent death loss**	_____	15.9%
Pounds of sheep produced	_____	3307
Head of native sheep	_____	47.1

* 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 - 1961

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	_____

Thirty percent 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 hens

TABLE 21 - FEED COSTS AND RETURNS FROM CHICKENS* - 1961

Items	Your farm	Average of 11 farms
Feed per hen, lbs.:		
Grain	_____	83.2
Commercial feed	_____	27.8
Total feed	_____	111.0
TOTAL FEED COST PER HEN	$_____	$ 3.14
Value of produce per hen:		
Eggs sold and used in home	$_____	$ 5.08
Net increase in value of chickens	_____	-.76
Total value produced	$_____	$ 4.32
RETURNS ABOVE FEED COST PER HEN	$_____	$ 1.18
RETURNS FOR $100 OF FEED	$_____	$141.00
Price received per dozen eggs sold	_____¢	27.7¢
Eggs laid per hen	_____	210
Average number hens on farm during year	_____	556
Percent death loss of hens	_____%	12%
Percent of laying flock that are pullets	_____%	65%
Number of pullets started	_____	387

* 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	_____
Per cent 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	1956	1957	1958	1959	1960	1961
FARM RECEIPTS						
Dairy cattle	$ 634	$ 678	$ 653	$ 763	$ 1013	$ 1087
Dairy products	2575	2757	1386	2186	2923	3676
Beef cattle (incl. feeders)	2714	2634	8717	8230	8962	6940
Hogs	3933	4791	6773	5727	7606	9618
Sheep and wool	294	156	350	82	76	82
Poultry (incl. turkeys)	1153	738	98	1045	42	37
Eggs	832	602	1003	922	478	733
Corn	2426	1967	1713	1965	1827	2674
Small grain	359	254	283	327	357	748
Other crops	1717	2049	1782	1667	1463	2367
Mach.equip. sold,gas tax refund	230	195	163	193	296	234
Income, work off the farm	145	273	167	407	320	231
Miscellaneous	158	112	83	126	273	259
(1) Total farm sales	$17170	$17206	$23171	$23640	$25636	$28686
(2) Increase in farm capital	1706	1933	4198	--	2371	3377
(3) Family living from the farm	258	271	273	215	281	252
(4) Total farm receipts	$19134	$19410	$27642	$23855	$28288	$32315
FARM EXPENSES						
Dairy cattle bought	$ 218	$ 250	$ 239	$ 209	$ 151	$ 332
Beef cattle bought (incl.feeders)	1353	1452	5045	4763	4191	3510
Hogs bought	193	248	595	234	634	634
Sheep bought (incl. feeders)	17	16	99	21	4	14
Horses bought	3	--	--	2	--	--
Poultry bought (incl. turkeys)	278	220	99	308	66	64
Miscellaneous livestock expense	364	361	337	510	518	627
Feed bought	2734	2774	3221	4118	4555	5398
Fertilizers	339	539	825	862	1354	1485
Other crop expense	473	480	541	717	776	888
Custom work hired	515	500	703	641	777	783
Gas, oil & grease (farm share)	740	781	826	930	1039	931
Rep.& opr. of tractor,truck & auto	371	346	444	471	575	544
Rep. & upkeep of real estate	208	178	241	212	167	294
Rep.& upkeep crop & gen. mach.	274	247	302	318	385	426
Rep.& upkeep livestock equipment	106	91	152	119	150	131
Wages of hired labor	390	299	209	322	369	396
Electricity expense	169	158	183	211	227	244
Real estate & per. prop. tax	529	490	620	770	864	1005
Telephone & general farm expense	190	200	245	208	249	288
(5) Total cash oper. expense	$ 9464	$ 9630	$14926	$15946	$17051	$17994
(6) Mech.power bot. (farm share)	661	691	727	629	795	837
(7) Crop. & gen. mach. bought	777	924	1043	875	652	1084
(8) Livestock equip. bought	94	171	189	513	348	400
(9) New real estate improvements	490	514	780	521	477	1039
(10) Total farm purchases	$11486	$11930	$17665	$18484	$19323	$21354
(11) Decrease in farm capital	---	---	---	549	---	---
(12) Interest on farm capital	2645	2630	3043	3500	3761	3955
(13) Unpaid family labor	177	174	117	63	197	94
(14) Board furnished hired labor	69	59	35	36	64	33
(15) Total farm expense	$14277	$14793	$20860	$22632	$23345	$25436
(16) Labor earnings (4) - (15)	4857	4617	6782	1223	4943	6879

AVERAGE PRICES OF FEEDS - 1961

Table 24 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 24 - AVERAGE PRICES OF FEEDS - 1961

Farm Grown Grains	
Corn	$ .87 per bu.
Oats	.58 per bu.

Hay	
Alfalfa	$ 18.00 per ton
Red or Alsike Clover	15.00 per ton
Brome or Timothy	10.00 per ton
Wild hay	9.00 per ton

Other Roughages	
Corn Silage	$7.50 per ton
Grass Silage	6.50 per ton
Pea Silage	3.50 per ton

Pasture per Head per Month	
Cows	$2.50
Young cattle	1.25
Hogs	.16
Pigs (under 6 mos.)	.08
Sheep	.40
Lambs	.20

Milk for Feed	
Whole Milk	$3.00 per CWT.
Whole Milk used in home	.08 per Qt.

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 25. The farmer's earnings are determined to a considerable extent by his accomplishments in these seven factors.

TABLE 25

No. of factors in which farmers excelled	No. of farms	Average labor earnings $3000 • $6000 • $9000 •	
0 or 1	3	XXXXXXXXXX	$2709
2 or 3	25	XXXXXXXXXXXXXXXXXXXXX	$5885
4 or 5	12	XXXXXXXXXXXXXXXXXXXXXXXXXXX	$7625
6 or 7	7	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	$9519

Table 25 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.