1959 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

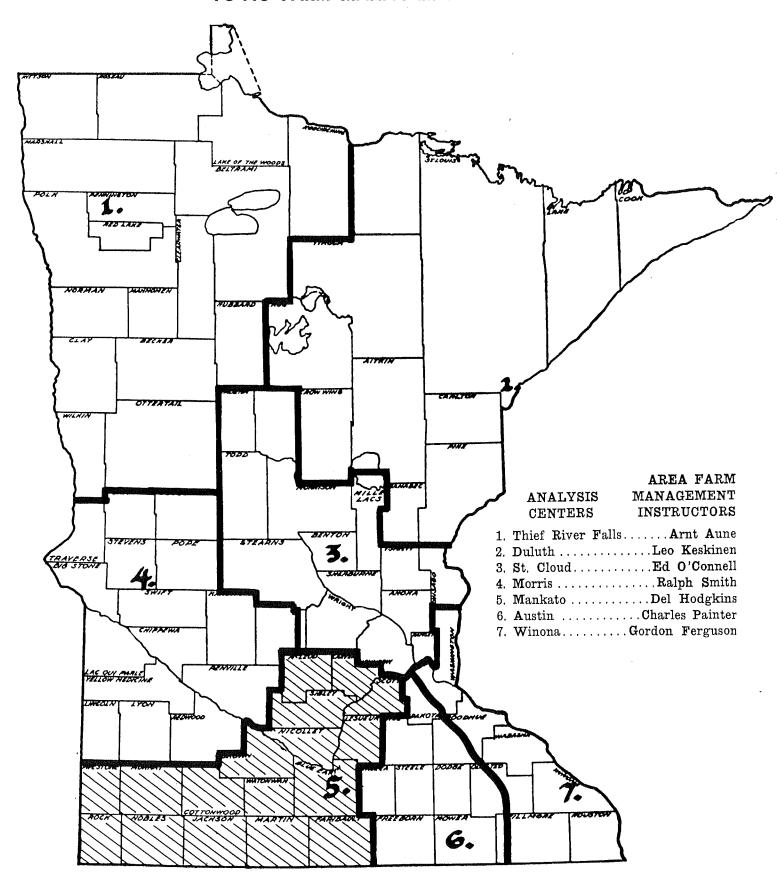
and

AREA VOCATIONAL TECHNICAL SCHOOL
MANKATO, MINNESOTA

Co-operating

APRIL 1960

VO-AG FARM MANAGEMENT AREAS



^{*} Shaded Area Served By The Mankato Analysis Center

1959 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, 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 front 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 Adult Instructor at the Mankato School. Clerical assistants for this project were Mrs. Lucille Kleinbeck, Mrs. Julie Wildasin and Mrs. Rozella Olsen.

The Farm Management Program is supervised locally by Erling O. Johnson, 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 11 schools in the Mankato area. The following tabulation shows the number of 1959 records submitted and the name of the instructor:

SCHOOL		NO. OF RECORDS	INSTRUCTOR
Buffalo		1	W. G. Streiff
Cleveland		1	Al Aho
Howard Lake		2	Leslie Hanson
Lake Crystal		11	Ernest Freier
Madelia		8	Malcomb Brandt
Mankato		13	Ed Tapio
			Del Hodgkins
Mapleton		1	Carl Ziebarth
New Ulm		33	Kermit Kleene
			George Whalin
St. James		5	Gene Bonzer
•			Emery Krech
Sherburn		1	Leo Ardolf
Worthington		1	Walter Larson
-			Kenneth Johnson
	TOTAL	$\overline{77}$	

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 \$23014 to \$182154. 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 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 5.

TABLE 1 - SUMMARY OF FARM INVENTORIES, 1959

	OF FARM INVENTORIES, 19 Your farm	Average of all fam
Items	Jan. 1 - Dec.	
Size of farm (acres) Size of business (work units)*		217 405
Dairy cattle Other dairy cattle Beef cattle (incl. feeders) Hogs Sheep (incl. feeders) Poultry (incl. turkeys) Total Productive Livestock	\$	\$ 1626 \$ 1698 807 861 5263 5548 2636 1894 89 85 248 200
Horses Crop Seed and Feed Auto & truck (farm share) Tractors and motors Crop and general machinery Livestock equipment Total Machinery & Equipment	\$\$ \$\$ \$\$	\$10669 \$10286 \$ \$ 2 \$ 6778 \$ 6264 \$ 1126 \$ 1138 2456 2363 3913 4064 732 1089 \$ 8227 \$ 8654
Miscellaneous Land Buildings, fences, etc. TOTAL FARM CAPITAL	\$	34237 34237 10369 10288 \$70280 \$69731
Items	20% most profitable Jan. l - Dec. 31	e 20% least profitable Jan. 1 - Dec. 31
Size of farm (acres) Size of business (work units)*	243 486	241 381
Dairy cattle Other dairy cattle Beef cattle (incl. feeders) Hogs Sheep (incl. feeders) Poultry (incl. turkeys) Total Productive Livestock	\$ 3955 \$ 3967 1702 2009 269 222 2213 2018 39 23 354 336 \$ 8532 \$ 8572	80 93 7533 8304 3670 2260 148 174 333 208
Horses Crop, Seed and Feed Auto & truck (farm share) Tractors and motors Crop and general machinery Livestock equipment Total Machinery & Equipment	\$ \$ \$ 6259 \$ 6241 \$ 1079 \$ 1487 2162 1905 5034 4618 1083 1450 \$ 9358 \$ 9460	\$ 1262 \$ 1145 5 2681 2369 5 3433 3867 6 893 1053
Miscellaneous Land Buildings, fences, etc. TOTAL FARM CAPITAL	34689 34689 10739 10684 \$69577 \$69646	12573 12603

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

TABLE 2 .. SUMMARY OF FARM EARNINGS (CASH STATEMENT), 1959

TABLE 2 - SUMMARY OF FARM	EARNINGS	(CASH STATE	MENT), 1959	
		Average	20% most	20% least
Items	Your	of all	profitable	profitable
	farm	farms	farms	farms
FARM RECEIPTS		1	A 7070	\$ 107
Dairy cattle	\$	\$ 763	\$ 1812	1
Dairy products		2186	4886	242
Beef cattle (incl. feeders)		8230	1693	11004
Hogs		5727	4760	6976
Sheep and wool		82	45	105
Poultry (incl. turkeys)		1045	4790	116
Turkey eggs		216	1048	
Eggs		706	310	1056
Corn		1965	2457	1445
Small Grain		327	250	425
Other crops		1667	2261	1275
Mach. & equip. sold & gas tax refunds	***************************************	193	187	194
Income from work off the farm		407	122	247
Miscellaneous farm income		126	195	<u>157</u>
(1) Total farm sales	\$	\$23640	\$24816	\$23349
(2) Increase in farm capital	,	منه بين بين	69	
(3) Family living from the farm		215	270	181
(4) Total farm receipts $(1)+(2)+(3)$	\$	\$23855	\$25155	\$23530
		•		
FARM EXPENSES				A 477
Dairy cattle bought	\$	\$ 209	\$ 478	\$ 47
Beef cattle bought (incl. feeders)		4763	1027	6307
Hogs bought		234	51	309
Sheep bought		21	مت حبر نبیه	4 5
Horses bought		. 2		11
Poultry bought (incl. turkeys)		308	1092	146
Miscellaneous livestock expense		510	878	473
Feed bought		4118	4491	4105
Fertilizer		862	728	885
Other crop expense		717	1068	567
Custom Work Hired		641	666	489
Gas, oil, grease bought (farm share)		930	895	864
Repairs for tractors, trucks, and			mmo.	CCE
autos (farm share)		471	378	565
Repair & upkeep of farm real estate		212	152	275
Repair & upkeep of crop & gen. mach.		318	263	336 134
Repair & upkeep of livestock equipment		119	115	419
Wages of hired labor		322	120	201
Electricity expense		211	267	812
Personal property & real estate taxes		770	799	220
Telephone and general farm expense	,	208	221	\$17210
(5) Total cash operating expense	\$	\$15946	\$13689	341
.(6) Mech. power bought (farm share)		629	857	977
(7) Crop and General Machinery bought		875	59 9	385
(8) Livestock equipment bought	 	513	46l	849
(9) New real estate improvements	<u> </u>	521	410 ¢16016	\$19762
(10) Total farm purchases (5) to (9)	\$	\$18484	\$16016	\$19762 2671
(ll) Decrease in farm capital		549	7400	3580
(12) Interest on farm capital		3500	3480 183	3560 86
(13) Unpaid family labor	-	63	183	15
(14) Board furnished hired labor	ф	36 #22672	\$19685	\$26114
(15) Total farm expense (10) to (14)	*	\$22632	\$ 5470	\$ -2 584
(16) Labor earnings (4) - (15)	Ψ	\$ 1223	φυτισ	ψ-2001

TABLE 3 - SUMMARY OF FARM	EARNINGS	(ENTERPRISE	STATEMENT), 1	.959
Items	Your farm	Average of all farms	20% most profitable farms	20% least profitable farms
	TOTH	I allino	I CI IIIO	
RETURNS AND NET INCREASES				
Dairy cows	\$	\$ 2256	\$ 4909	\$ 230
Other dairy cattle	т	751	1846	74
Beef breeding herd		70	29	185
Feeder cattle	**************************************	3712	640	5377
Hogs		4791	4551	5305
Sheep - farm flock		58	29	87
Turkeys	·	983	4763	
Chickens		640	278	916
ALL PRODUCTIVE LIVESTOCK	\$	\$13261	\$17045	\$12174
Value of feed fed to livestock		9542	10273	10640
Return over feed from livestock	\$	\$ 3719	\$ 6772	\$ 1534
Crop, seed, and feed		7280	8897	6112
Income from labor off the farm		148	59	168
Agricultural conservation payments		31	13	46
Miscellaneous		95	182	111
(1) TOTAL RETURNS & NET INCREASES	\$	\$11273	\$15923	\$ 7971
EXPENSES AND NET DECREASES				
Horses	\$	\$	\$	\$ 2
Truck		252	194	249
Auto (farm share)		437	459	422
Tractor		1062	1059	1253
Elec. & gas engine exp. (farm share)	214	273	201
Hired power		315	335	224
Total power	\$	\$ 2280	\$ 2320	\$ 2351
Crop and general machinery	Mary and the last of the last	1062	1379	1003
Livestock equipment		265	209	359
Buildings, fences and tiling		808	618	1065
Misc. productive livestock expense		510	878	473
Labor		647	549	692 500
Real estate taxes		626	662	599
Personal property tax			137 91	213 96
Insurance		92 116	130	96 124
General farm expense		<u> </u>	3480	3580 .
Interest on farm capital	ф <u></u>	\$10050	\$10453	\$10555
(2) TOTAL EXPENSES & NET DECREASES	Φ	<u> </u> φτοροο	άπο ≭ οο	φ±0000
(3) LABOR EARNINGS (1) - (2)	\$	\$ 1223	\$ 5470	\$ -2584

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.

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 4. 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 4 - FAMILY LIVING FROM THE FARM, 1959

	TADLE 4 - LAUTEL	TIATING LIGHTI		U 3	
			Average		Average
Items		Your	of all	Your	of all
		farm	farms	farm	farms
Whole milk			388 qts.	\$	\$ 31
Cream		-	2 pts.	T	' l
Beef		······································	550 lbs.		123
Hogs		**************************************	293 lbs.		40
•			230 IDS.		40
Lamb and mutton					
Poultry			21 lbs.		3
Eggs			35 doz.		8
Potatoes			2 bu.		2
Vegetables & fruit					4
Farm fuel					3
TO THE T					401 C
TOTAL				\$	\$215

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 5. These farmers spent an average of \$288.25 per month for family living in addition to the food, fuel, and housing furnished by the farm.

TABLE 5 - HOUSEHOLD AND PERSONAL EXPENSES FOR THOSE FARMS WHICH KEPT COMPLETE ACCOUNTS OF THESE EXPENSES - 1959

Average Least Items profitable Your of all profitable farm farms farms farms Number of persons - family 4.7 4.5 6.0 Number of adult equiv. - family 3.1 3.2 4.1 Food and meals bought 794 \$ 843 \$ 877 Operating and supplies 283 249 337 Furnishing and equipment 309 254 469 Clothing and clothing materials 266 270 283 Personal care, personal spending 137 167 105 Education, recreation & development 228 .95 347 Gifts and special events 70 50 43 Medical care and health insurance 377 447 401 Church, welfare 154 170 148 Personal share of auto & truck expense 170 182 124 Operator's share of upkeep on dwelling 30 70 27 Household share of electricity and telephone expense 105 TOTAL CASH LIVING EXPENSE \$2934 \$3319 Household & personal share of new auto \$ 87 29 \$ 111 New dwelling 56 ___ 250 Taxes and other deductions 44 13 Life insurance 211 299 165 Other savings and investments 127 86 26 TOTAL HOUSEHOLD & PERSONAL CASH EXP.\$ \$3459 \$3213 \$3884 Total family living from the farm 307 166

NET WORTH

\$3657

\$2973

\$3520

\$6026

\$4050

\$ -557

TOTAL CASH EXPENSE & PERQUISITES

RETURN TO CAPITAL & FAMILY LABOR

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 6. 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.

. made

	L959 (OPERATOR'S SHARE, TENURE BASIS) Your Farm 13 Owners				
Items		1 - Dec. 31		Dec. 31	
Cotal Farm Capital (1)	\$	\$	\$64978	\$65837	
Stocks and Bonds	, ————————————————————————————————————		1266	888	
Life Insurance			957	1019	
Notes & Accounts Receivable	-		299	428	
Shares in Marketing			293	328	
Outside Real Estate	***************************************			39	
Cash on Hand and in Bank	forestive construction of the second of the		400	541	
Household Goods	- december de la constantion de la cons		2231	2440	
Personal Share of Auto		**************************************	615	494	
Farm Dwelling	***************************************		3383	3352	
Miscellaneous			54	92	
otal Non-Farm Assets (2)	\$	s	\$ 9498	\$ 9621	
OTAL ASSETS (1) + (2) = (3)	\$	<u> </u>	\$74476	\$75458	
Fed. Land Bank Mortgages	Ψ		386	347	
F.H.A. Real Estate Mortgages					
Other Mortgages			9924	9431	
Loans on Real Estate	with the same of t				
Production Credit Assoc. Loans			- 645	585	
Miscellaneous					
Crop Loans (Sealed)					
Other Chattel Mortgages			2512	3408	
Notes Payable			- 485l	5501	
Accounts Payable			- 377	279	
OTAL LIABILITIES (4)	¢		\$18695	\$19551	
ARMERS'S NET WORTH = (3) - (4)	ψ <u></u>	\	- \$5578l	\$55907	
hange in Net Worth	Ψ	&	_ \\ \psi \\ \p	\$ 126	
		Ψ	-	'	
		rt_Owners		Renters	
Items		1 - Dec. 31		- Dec. 3	
otal Farm Capital (1)	\$6065		\$21161	\$22331	
Stocks and Bonds	79		300	342	
Life Insurance	101	7 1208	373	437	
Notes & Accounts Receivable			248	248	
Shares in Marketing		0 115	86	154	
Outside Real Estate	376		113	113	
Cash on Hand and in Bank	90		1054	1145	
Household Goods	275		1446	1467	
Personal Share of Auto	54		398	477	
Farm Dwelling	220	5 3646	177	172	
Miscellaneous			***		
otal Non-Farm Assets (2)	\$1201	•	\$ 4195	\$ 4555	
OTAL ASSETS (1) + (2) = (3)	\$7267	1 \$75729	\$25356	\$26886	
Fed. Land Bank Mortgages			~ ~		
F.H.A. Real Estate Mortgages	125	0 1250	261	217	
· Other Mortgages	675	0 6437	104 MB	94	
Loans on Other Real Estate	592	2 5922	non 100		
Production Credit Assoc. Loans		1861	1163	2845	
F.H.A. Chattel Mortgages			war 1888		
Crop Loans (Sealed)	10	2 52	310	200	
Other Chattel Mortgages	673	3 6743	3887	2086	

2000

365

\$23122

\$49549

4383

349

\$ -817

\$26997

\$48732

1565

495

\$ 7681

\$17675

1073

456

\$ 6971

\$19915

\$ 2240

Notes Payable

TOTAL LIABILITIES (4)

Change in Net Worth

Accounts Payable

FARMER'S NET WORTH = (3) - (4)

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 per cent of the range according to earnings was \$5470 and of those in the lower 20 per cent was -\$2584. This is a range of \$8054 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.) 1/2

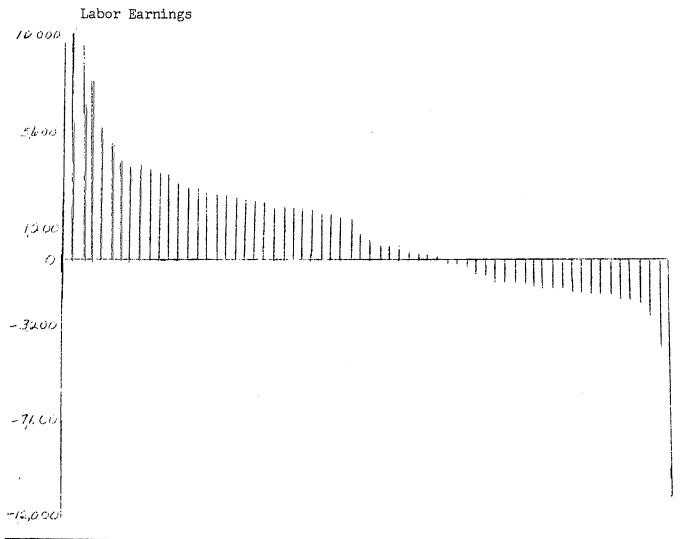


Figure 1. - Range in Labor Earnings
Each line represents the earnings of one farmer.

^{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 7 - MEASURES OF FARM ORGAN	IZATION A	ND MANAGEMEN	T EFFICIENCY	, 1959
	sures used Chart on	Your farm	Average of all farms	20% most profitable farms	20% least
Labo	or earnings	***************************************	\$1223	\$5470	\$ -2584
(1)	Crop yields*		100	106	90
(2)	Per cent tillable land in high return crops**	www.communications.com	70	72	69
(3)	Return for \$100 feed to productive livestock***		100	107	75
(4)	Productive livestock units per 100 acres****		36	34	37
(5)	Size of business - work units		405	486	381
(6)	Work units per worker		303	351	284
(7)	Power, mach., equip., and build. exp. per work unit		\$11.70	\$9.50	\$12.62
Item	as related to some of the above me	asures:			
(3)	Index of return for \$100 feed fr	om:			
	Dairy cattle (see p. 16 & 17) Beef breeding herd (see p. 18) Feeder cattle (see p. 18) Hogs (see p. 15) Sheep - farm flock (see p. 19) Chickens (see p. 20)		100 100 100 100 100	102 95 103 92	87 106 89 82
(4)	Number of animal units	· · · · · · · · · · · · · · · · · · ·	73	67	85
(5)	Work units on crops Work units on prod. livestock Work units from other prod. work		120 270 15	126 354 6	125 239 17
(6)	Number of family workers Number of hired workers Total number of workers		1.2 .1 1.3	1.4 .0 1.4	1.1 .2 1.3
(7)	Power expense per work unit Crop mach. exp. per work unit Livestock equip. exp. per w.u. Bldgs. & fences exp. per w.u.		6.09 2.79 .65 2.17	4.91 2.79 .40 1.40	6.04 2.82 1.00 2.76

Given as percentage of the average

Crops are marked in table 9 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 10, 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.

Labor Earnings	Crop Yields	High Return Crops	Return from pro- ductive livestock	Pr. L.S. units per 100 A.	Work Units	Work Units per Worker	Pow., Mach., eq., bldg. exp. per work unit
8,000	140	94	180	68	800	460	4
6,800	135	91	170	64	750	440	5
5,700	130	88	160	60	700	420	6
4,700	1.25	85	150	56	650	400	7
3,800	120	82	140	52	600	380	8
3,000	115	79	130	48	550	360	9
2,300	110	76	120	44	500	340	10
1,700	105	73	110	40	450	320	11
1,200	1.00	70	100	36	400	300	12
700	95	67	90	32	350	280	13
100	90	64	80	28	300	260	14
-600	85	61	70	24	250	240	15
1,400	80	58	60	20	200	220	16
2,300	75	55	50	16	1.50	200	17
3,300	70	52	40	12	100	180	18
4,400	65	49	30	8	50	160	19
5,600	60	46	20	4		140	20

TABLE 8 - DISTRIBUTION OF ACRES AND YIELD - 1959 Acres Average Average of Number your Acres of Your Crop Crop farms growing yield each crop all farms rating growing farm \$ 62.34 Canning peas В 3 .6 19.7 bu. Wheat С 26 6.3 4.9 tons Oats for silage C 7 1.7 Oats & Mix. for grain 44.0 bu. D 50 17.4 Flax C 12.7 bu. 1 .2 26.2 Total small grain and peas Corn, grain A 60 99.9 57.7 bu. Sweet corn В \$ 36.89 5 1.9 Soybeans for grain 28.2 bu. B 43 25.5 Corn & Cane silage 10.8 tons В 29 7.7 Corn & Cane fodder D 1 .1 Total cultivated crops 135.1 Alf. & alf. mix. hay 3.0 tons В 47 15.2 Other leg. & leg. mix C 2 .2 1.6 tons Other annual hay D 1.5 tons 6 1.3 Total tillable land in hay 16.7 Alf. & Alf. brome past. 2.9 В 14 Other leg. & mix. C 1 .4 Other tillable pasture 9 D 1.5 4.8 Total tillable land in pasture Soil bank Till. land not cropped D Total tillable land 182.8 Wild hay (non-till.) 1.4 13 Non-till. pasture 27 12.2 Timber (not pasture) 11 3.5 Roads & waste 48 9.0 Farmstead 56 8.0 TOTAL ACRES IN FARM 216.9

> 84.3% 70.8%

Per	cent	land till	lable				
Per	cent	tillable	land	in	high	return	crops

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 9.

TABLE 9 - 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, $l_{\frac{1}{4}}^{\frac{1}{4}}$ beef cows or bull, 1 feeder steer or heifer, 3 1/3 other beef cattle, 7 sheep, 14 lambs, $2\frac{1}{2}$ 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 10 - POWER AND MACHINERY EXPENSES PER CROP ACRE, 1959

Items	Your farm	Average of all farms	20% most profitable farms	20% least profitable farms
Crop acres per farm Tractor expense per crop acre	\$	186 \$5.85	193.8 \$5.94	195.6 \$5.77
Crop and general machinery expense per crop acre	\$	\$5.73	\$8.14	\$4.84

AMOUNT OF LIVESTOCK

The farmers cooperating in this study are predominatly livestock farmers. 48% of these farmers maintained dairy cattle, 50% kept poultry, 16% raised sheep, 46% fed beef cattle, and 94% raised hogs.

TABLE 11 - AMOUNT OF LIVESTOCK, 1959

Your farm	Average of all farms	20% most profitable farms	20% least profitable farms
	7.4	15.7	1.2
	8.2	18.3	1.0
Marine Contract of the Contrac	29.5	4.9	45.4
**************************************	5.1	2.1	8.0
	167	71	23
	41130	36390	46780
	19330	3490	29720
		Your of all farm farms 7.4 8.2 29.5 5.1 167 41130	Your of all profitable farm farms farms 7.4 15.7 8.2 18.3 29.5 4.9 5.1 2.1 167 71 41130 36390

TOTAL FEED COSTS AND RETURNS FROM YOUR LIVESTOCK ENTERPRISES

The total "return over feed costs" for each class of livestock is shown in Table 12. 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 12 - TOTAL FEED COSTS AND R	ETURNS FROM	YOUR LIVE	STOCK ENTER	PRISES, 1959
	Da	airy Cattl	.e	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 per cent of the total costs of maintaining dairy cattle and poultry; 50 per cent in the case of a farm flock of sheep; and 75 to 90 per cent 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-four per cent of the farms in this study raised hogs for market. Table 14 below summarizes the results of the hog enterprise analysis.

TABLE 14 - FEE	D COSTS AN			
		Average of	20% of farms	20% of farms
- 1		all farms	highest in	lowest in
Items	Your	raising	returns	returns
	farm	hogs	above feed	above feed
Feed per cwt. hogs produced, lbs	.:			
Corn		296.5	233.7	353.8
Small grain	·	50.5	46.9	58.9
Commercial feeds		54.5	52.8	<u>55.3</u>
Total concentrates*		401.5	333.4	468.0
Alfalfa hay		6.1	5.2	10.2
Milk		3.1	13.0	0.0
Feed cost per cwt. hogs produced	•			
Concentrates*	• \$	\$ 9.50	\$ 7.88	\$ 11.32
Milk	Ψ	.Ol	φ ,. 05	0.00
Pasture	***************************************	.01	.01	,ol
Alfalfa hay		.06	,05	.09
TOTAL FEED COST	\$	\$ 9.58	\$ 7.99	\$ 11.42
Net increase in value per cwt.	Τ	+ • • • • • • • • • • • • • • • • • • •	* . • • •	T
hogs produced	\$	\$ 11.89	\$ 12.70	\$ 10.56
•		. •	,	•
RETURNS ABOVE FEED COST PER CWT.				
HOGS PRODUCED	\$	\$ 2.31	\$ 4.71	\$ 86
		·	•	
RETURNS FOR \$100 OF FEED	\$	\$128.00	\$160.00	\$ 93.00
Price received per cwt. hogs sol	d\$	\$ 13.76	\$ 14.03	\$ 13.57
No. of spring litters raised		15.9	12.5	11.5
No. of fall litters raised	***	13.5	15.5	11.3
Total no. of litters raised		29.4	28.0	22.8
		V U N		•=== • =
No. of pigs born per litter**		8.6	8.6	8.7
No. of pigs weaned per litter**		7.5	7.3	7.2
•				
POUNDS OF HOGS PRODUCED		46,588.7	42,467	34,457.1
			•	

^{*} 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 14, 15, and 16. 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 14 - FACTORS OF COST AND RETURNS FROM DAIRY COWS, 1959 20% of farms 20% of farms Average highest in lowest in Items Your of all butterfat butterfat farm farms per cow per cow Pounds of milk per cow 9703.9 11330.1 8212.3 Pounds of butterfat per cow 343.8 419.9 276.6 Price received per pound butterfat sold (cts.) 88.3¢ 90.8¢ 88.5¢ Feed per cow, lbs.: Corn 2307.4 2628.9 2522.4 Small grain 746.6 754.7 409.7 Commercial feed 347.8 450.9 200.2 Total concentrates* 3401.8 3834.5 3132.3 Legume hay 5383.9 4839.1 5861.6 Other hay 197.2 33.5 Total dry roughages 5581,1 4872.6 5861.6 Silage 6158.9 6117.8 8215.5 Feed cost per cow: Concentrates* \$ 72.47 \$ 81.04 \$ 64.64 Roughages 82.01 78.03 95.99 Pasture 8.06 9.48 6.38 TOTAL FEED COSTS \$162.54 \$168.55 \$167.01 Value of produce per cow: Butterfat sales \$297,45 \$380.20 \$233.06 Dairy produce used in house 4.23 2.21 13.15 Milk fed to livestock 2.94 .43 .63 Net increases in value of cows 1.29 -12.24 1.42 TOTAL VALUE PRODUCED \$305.91 \$370.60 \$248.26 RETURNS ABOVE FEED COST PER COW \$143.37 \$202.05 \$ 81.25 RETURNS FOR \$100 OF FEED \$201.00 \$220.00 \$150.00 Feed cost per 1b. Butterfat (cents) 48.l¢ 40.l¢ 60.5¢ Number of cows 19.8 28.8 13.2

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

TABLE 15 - FEED COSTS AND RETURNS FROM OTHER DAIRY CATTLE, 1959

TABLE 15 - FEED COSTS	S AND RETURNS	FROM OTHER		TA9A
			20% of farms	
		Average	highest in	lowest in
Items	Your	of all	butterfat	butterfat
	farm	farms	per cow	per cow
Feed per head, lbs.:		<u> </u>		
Concentrates*		774.4	897.9	859.3
Hay and fodder		2029.1	2901.9	2102.4
Silage		2216.2	2141.8	2480.5
Whole milk	· · · · · · · · · · · · · · · · · · ·	80.6	14.7	27.6
	***************************************	-		
Feed cost per head:				
Concentrates*	\$	\$ 17.48	\$ 19.34	\$ 17.44
Roughages	· <u></u>	26.95	36.94	29.34
Milk	learniani riiraana dhipiitaanadd	2.41	•44	.83
Pasture	**************************************	1.22	.74	1.04
TOTAL FEED COSTS PER HEAD	\$	\$ 48.06	\$ 57.46	\$ 48.65
	T	+	•	•
Net increase in value of				
other cattle		\$ 99.90	\$ 96.24	\$ 132.68
RETURNS ABOVE FEED COST	***************************************	+	1	'
PER HEAD	\$	\$ 51.84	\$ 38.78	\$ 84.03
	Ψ	Ψ 02.	Ψ σστ.σ	•
RETURNS FOR \$100 OF FEED	\$	\$ 228,00	\$ 173.00	\$ 301.00
	Ψ	Ψ 220,00	· ·	T
No. of head of other cattle		21.7	26.7	11.0
THE THE MODEL OF COUNTY		~	~~.	

TABLE 16 - FEED COSTS AND RETURNS FROM ALL DAIRY CATTLE, 1959

Items	Your	Average of all	20% of farms highest in butterfat	20% of farms lowest in butterfat
	farm	farms	per cow	per cow
Feed per animal unit, lbs.: Concentrates* Hay and fodder Silage TOTAL FEED COSTS PER ANIMAL UNIT	 : \$	2837.3 4961.6 5883.3 \$ 137.76	3158.7 5220.7 6822.9 \$ 151.50	2709.9 5416.8 7358.9 \$ 146.79
Value of produce per animal unit Dairy products Net increase in value of	\$	\$ 197.34	\$ 259.73	\$ 175.25
dairy cattle TOTAL VALUE PRODUCED	\$	67.65 \$ 264.99	52.08 \$ 311.81	77.72 \$ 252.97
RETURNS ABOVE FEED PER ANIMAL UNIT	\$	\$ 127.23	\$ 160.31	\$ 106.18
RETURNS PER \$100 OF FEED	\$	\$ 197.00	\$ 206.00	\$ 174.00
Animal units of cattle		30.6	42.1	18.7

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

TABLE 17 - FEED COSTS AND RETURNS FROM FEEDER CATTLE, 1959

TABLE 17 - FEED COSTS AN	D RE	TURNS F	ROM FEEDE	R CATTLE, 1959	9
				20% of farms	
			Average	highest in	lowest in
Items		Your	of all	_	return above
• • • • • • • • • • • • • • • • • •		farm	farms	feed	feed
Feeds per cwt. beef produced, lbs.:			202110	2004	
Corn			533.9	441.5	689.1
Small grain	-	***************************************	14.3	7.0	10.7
	-				
Commercial feeds			66.5	83.0	69.5
Total Concentrates*			614.7	531.5	769.3
Legume hay			177.1	188.9	250.4
Other hay	-			TOO • 2	20011
v v			9.2	700.0	250.4
Total Hay	•		186.3	188.9	250.4
Silage	•	***************************************	490.4	796.9	583.3
Feed cost per cwt. beef produced:					
Concentrates*	\$		\$ 12.37	ቀ ነገ ሶ፫	\$ 14.78
·	Ψ _		•		•
Roughages			3.50	4.32	4.66
Pasture			.10	.12	
TOTAL FEED COSTS	\$ _		\$ 15.97	\$ 15.49	\$ 19.44
Net increase in value of feeders			19.40	24.98	16.75
RETURNS ABOVE FEED COST PER CWT.					
BEEF PRODUCED	\$		\$ 3.43	\$ 9.49	\$ -2.69
DEEL LICOUGED	Ψ_		φ J.43	ф 9,49	φ -2.03
RETURNS FOR \$100 OF FEED	\$_		\$124.00	\$162.00	\$ 86.00
Price paid per cwt. beef bought	\$		\$ 26.98	\$ 27.63	\$ 25.93
Price received for feeder cattle sold		-	23.66	26.50	15.00
	· -				
Number of animal units	_	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	74.7	40.7	43.1
POUNDS OF BEEF PRODUCED			49,855.5	24,369.6	25,799.4
DEDE I) District	DTNG GA	TOTAL TO		
Deer 1	ממתכ	DING CA		maga of 4 for	rms including
Items		V		Tage of 4 far Carms from Aus	
rcems		Your			stin and
D-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		farm	Wil	ona areas	
Feeds per animal unit, lbs.: Concentrates*				234.0	`

Legume hay			_	2808.	
Other hay			-	294.	
Silage			_	3707.3	3
Feed cost per animal unit:					
Concentrates*	\$			\$ 4.76	5
Roughages	7			38.04	
Pasture			-	18.38	
	ф				
TOTAL FEED COST	\$			\$ 61.18)
Value of produce per animal unit	ı			ı	
Dairy products	\$			\$	
Net increase in value			_	110.5	9
TOTAL VALUE PRODUCED	\$			\$110.59	9
RETURNS ABOVE FEED COST PER A.U.	• .			49.4	
RETURNS FOR \$100 OF FEED			-	184.00	
Number of cows and herd bulls			-	35.0	-
Number of cows and held bulls Number of animal units in the herd				35.0	
Number of animal units in the nerd	+			00.0	

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

TABLE 18 - FEED COSTS AND RETURNS FROM FARM FLOCK OF SHEEP, 1959

Items	Your farm	Average of 5 farms
Feeds per head,* lbs. Concentrates (grain & commercial feeds) Legume hay Other hay Silage Feed cost per head: Concentrates (grain & commercial feeds) Roughages Pasture TOTAL FEED COSTS Value of produce per head: Wool	\$	119.9 509.3 89.5 \$ 3.25 5.25 1.26 \$ 9.76
Value of mutton TOTAL VALUE PRODUCED RETURNS ABOVE FEED COST PER HEAD	\$ \$ \$	\$ 3.57 10.26 \$ 13.83 \$ 4.07
RETURNS FOR \$100 OF FEED	\$	\$166.00
Price per cwt. of lambs sold Price per lb. wool sold (cents) Pounds of wool per sheep sheared	\$¢	\$ 17.95 50.4¢ 9.3
Number of ewes kept for lambing Per cent lamb crop** Per cent death loss**		36.4 130.0% 8.6%
Pounds of sheep produced Head of Native Sheep		3,817 51.4

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

TABLE 19 - FEED COSTS AND RETURNS FROM FEEDER LAMBS, 1959

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	\$ \$

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

Fifty 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:

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

TABLE 20 - FEED COSTS AND	RETURNS FR	OM CHICKE	NS*, 1959	
Items	Your farm	Average of 23 farms	5 farms highest in return above feed	5 farms lowest in return above feed
Feed per hen, lbs.: Grain Commercial feed Total feed TOTAL FEED COST PER HEN	\$	93.1 36.1 129.2 \$ 3.58	87.4 33.0 120.4 \$ 3.40	108.7 58.4 167.1 \$ 4.12
Value of produce per hen: Eggs sold and used in home Net increase in value of chickens Total Value Produced	\$ \$	\$ 4.02 37 \$ 3.65	\$ 4.12 11 \$ 4.01	\$ 4.06 59 \$ 3.47
RETURNS ABOVE FEED COST PER HEN	\$	\$.07	\$.6l	\$65
RETURNS FOR \$100 OF FEED	\$	\$104.00	\$120.00	\$84.00
Price received per dozen eggs sold (cts Eggs laid per hen	<i></i> ¢	23.9¢ 203	24.7¢ 209	24.l¢ 202
Average number hens on farm during year Per cent death loss of hens Per cent of laying flock that		418 1 <i>2</i> %	450.7 12%	402.2 6%
are pullets Number of pullets started		59% 416	70% 460	50% 440
Straight run Cockerels			100 ann	~~ ==

^{*} 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 21 - FEED COSTS AND RETURNS F	OR TUP	RKEYS
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 (cents) Weight per bird sold (lbs.)	\$ _ - -	φ
Pounds of turkey produced	_	-

TABLE 22 - SUMMARY OF FARM EARNINGS BY TENURE, 1959 (OPERATOR'S SHARE)

TABLE 22 - SUMMARY OF FARM RARNING		, TOOO (OFE		1. W. J.
Items	Your	Ormana	Part Owners	Renters
FARM RECEIPTS	Farm	Owners	OMITETS	TOTTO TO
Dairy cattle	\$	\$. 1048	\$ 109	\$ 702
· ·	Ψ	φ. 1048 2953	φ 103 266	2014
Dairy products		5253	15899	5235
Beef cattle (including feeders)		5724	6478	4468
Hogs Shoon and real (including fooders)	March and the Control of the State of the St	146	59	50
Sheep and wool (including feeders) Turkey eggs	14 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	681	00	
· · · · · · · · · · · · · · · · · · ·	Vanderson strap (All Contract of Contract	3191	35	48
Poultry (including turkeys)	San approximate the state of th	779	313	718
Eggs Corn		1621	2120	971
Small grain	***************************************	283	424	214
Other crops		1372	1265	1262
Mach. & equip. sold & gas tax refunds	-	188	210	157
Income from work off the farm	-	145	584	279
Miscellaneous		218	126	49
(1) Total farm sales	¢	\$23602	\$27888	\$16167
(2) Increase in farm capital	Ψ	ψεσσοε	φεισσο	801
(3) Family living from the farm		256	149	201
(4) Total Farm Receipts (1)+(2)+(3)	¢	\$23858	\$28037	\$17169
FARM EXPENSES	Ψ	φωσσσσ	φ2000.	φ
Dairy cattle bought	\$	\$ 399	\$ 22	\$ 153
Beef cattle bought (including feeders)	Ψ	3570	8023	3169
Hogs bought		165	568	129
Sheep bought (including feeders)		57	8	2
Horses bought			11	
Poultry bought (including turkeys)		789	89	80
Miscellaneous livestock expense		680	421	364
Feed bought		4845	3718	3235
Fertilizers	-	819	1285	508
Other crop expense	**************************************	570	879	634
Custom work hired		642	671	442
Gas, oil & grease bought (farm share)		902	1148	754
Repair & operation tractor, truck,	44.00	-		
and auto (farm share)		395	709	340
Repair and upkeep of real estate	***************************************	296	390	68
Repair & upkeep of crop & gen. mach.		281	575	197
Repair & upkeep of livestock equipment		117	170	92
Wages of hired labor		354	621	141
Electricity expense (farm share)	was a second transfer of the second transfer	246	200	174
Real estate & personal property tax		780	751	255
Cash rent		7	441	992
Gen. farm exp. & telephone expense	<u> </u>	255	300	114
Interest paid		758	852	271
Total cash operating expense	\$	\$16927	\$21852	\$12114
Mechanical power bought (farm share)	T	369	984	56l
Crop & general machinery bought		699	851	946
Livestock equipment bought		368	721	501
New real estate improvements		561	844	309
(5) Total farm purchases	\$	\$18924	\$25252	\$14431
(6) Decrease in farm capital	Ψ	1038	1547	1 · · ·
(7) Interest on farm capital		2736	2447	959
(8) Unpaid family labor		91	63	44
(9) Board furnished hired labor	<u> </u>	38	46	21
(10) Total Farm Expenses (5) to (9)	\$	\$22827	\$29355	\$15455
(11) Labor Earnings (4) - (10)	Ψ	1031	-1318	1714
(12) Return to Capital and Family	Married to the state of the sta			
Labor (7)+(8)+(11)	\$	\$ 3858	\$ 1192	\$ 2717
	·	•		

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

Items	1955	1956	1957	1958	1959
FARM RECEIPTS		**************************************			
Dairy cattle	\$ 520	\$ 634	\$ 678	\$ 653	\$ 763
Dairy products	2144	2575	2757	1386	2186
Beef cattle (incl. feeders)	3582	2714	2634	8717	8230
Hogs	4359	3933	4791	6773	5727
Sheep and wool	373	294	156	350	82
Poultry (incl. turkeys)	210	1153	738	98	1045
Turkey Eggs					216
Eggs	968	832	602	1003	706
Corn	3198	2426	1967	1713	1965
Small grain	174	359	254	283	327
Other crops	1025	1717	2049	1782	1667
•		230	195	163	193
Mach. equip. sold & gas tax refund	395		273	167	407
Income from work off the farm	129	145			126
Miscellaneous	130	158	112	83	
(1) Total farm sales	\$17207	\$17170	\$17206	\$23171	\$23640
(2) Increase in farm capital		1706	1933	4198	
(3) Family living from the farm	290	258	271	273	215
(4) Total farm receipts $(1)+(2)+(3)$	\$17497	\$19134	\$19410	\$27642	\$23855
FARM EXPENSES					
Dairy cattle bought	\$ 126	\$ 218	\$ 250	\$ 239	\$ 209
Beef cattle bought (incl. feeders)	1855	1353	1452	5045	4763
Hogs bought	355	193	248	595	234
Sheep bought (incl. feeders)	159	17	16	99	21
Horses bought		3			2
Poultry bought (incl. turkeys)	104	278	220	99	308
Miscellaneous livestock expense	328	364	361	337	510
Feed bought	2597	2734	2774	3221	4118
Fertilizers	456	339	539	825	862
Other crop expense	529	473	480	541	717
Custom work hired	585	515	500	703	641
Gas, oil & grease bought (farm share)	734	740	781	826	930
Repair & oper. of tractor, truck & auto	371	371	346	444	471
	181	208	178	241	212
Repair & upkeep of real estate		274	247	302	318
Repair & upkeep of crop & gen. mach.	250		91	152	119
Repair & upkeep of livestock equipment	86	106		209	322
Wages of hired labor	464	390	299		
Electricity expense	178	169	158	183	211
Real estate & personal property tax	500	529	490	620	770
Telephone & general farm expense	237	190	200	245	208
(5) Total cash operating expense	\$10095	\$ 9464	\$ 9630	\$14926	\$15946
(6) Mech. power bought (farm share)	920	66l	691	727	629
(7) Crop & general machinery bought	706	777	924	1043	875
(8) Livestock equipment bought	147	94	171	189	513
(9) New real estate improvements	465	490	514	780	521
(10) Total farm purchases (5) to (9)	\$12333	\$11486	\$11930	\$17665	\$18484
(11) Decrease in farm capital	630				549
(12) Interest on farm capital	2514	2545	2630	3043	3500
(13) Unpaid family labor	99	177	174	117	63
(14) Board furnished hired labor	62	69	. 59	35	36
	\$15638	\$14277	\$14793	\$20860	\$22632
(15) Total farm expense (10 to (14)		•	4617	φ20000 6782	1223
(16) Labor earnings (4) - (15)	1859	4857	#OT/	0102	エんんじ

AVERAGE PRICES OF FEEDS - 1959

Table 24 lists the average prices of feeds used in livestock summaries in this report. Prices paid for feeds bought were used whenever possible.

TABLE 24 - AVERAGE PRICES OF FEED, 1959

Farm Grown Grai	ns*	Other Roughages	Other Roughages	
Corn	\$.95 per bu.	Corn Silage	\$7.50 per Ton	
Oats	.58 " "	Grass Silage	6,50 " "	
Barley	.86 " "	Pea Silage*	3.50 " "	
Wheat	1.90 " "	Sweet Corn Silage*	3.00 " "	
Rye	.97 " "	-		
Soybeans	1.97 " "	Pasture per Head Per Month		
Flaxseed	2.92 " "			
		Cows	\$2.50	
Hay		Young cattle	1.25	
		Hogs	.16	
Alfalfa	\$20.00 per Ton	Pigs (under 6 mos.)	•08	
Red or	•	Sheep	.40	
Alsike Clover	17.00 " "	Lambs	.20	
Brome or				
Timothy	11.50 " "	Milk For Feed		
Wild Hay	10.00 " "	Makayangan yang sayanay kanahan sa kalifar silka silka sa sa kalifar silka sa sa kalifar silka sa sa kalifar s		
•		Whole Milk	\$3.00 per Cwt.	
		Whole Milk used in home	.08 per Qt.	

^{*} Purchase price used whenever possible.

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 \$-1000 \$1000 \$3000	
0 or 1	8	XXXXXXXXXXXX	\$-1069
2 or 3	25	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	\$1194
4 or 5	23	<u>xxxxxxxxxxxxxxxxxxxxxxxxx</u>	\$1433
6 or 7	7	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	\$3254

Table 25 indicates that it will be worth while for each co-operator to study carefully his ranking on pages 10 and 11, and learn his standing in respect to each of the above factors and the elements of strength and weakness in his farm business.