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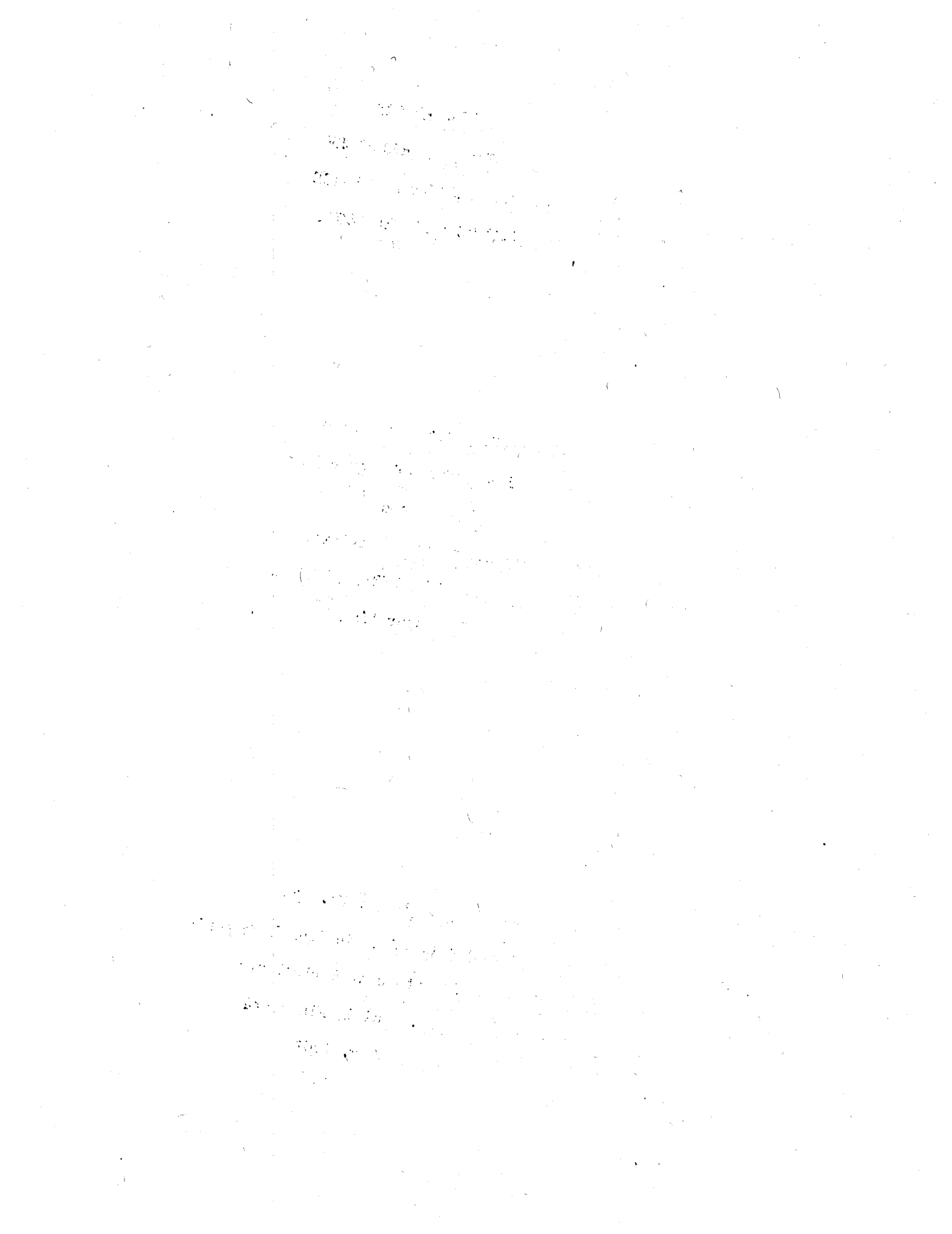
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1956 REPORT
VOCATIONAL AGRICULTURE
FARM MANAGEMENT SERVICE
WEST CENTRAL MINNESOTA

UNIVERSITY OF MINNESOTA
Institute of Agriculture
and
Vocational Division
MINNESOTA DEPARTMENT OF EDUCATION
Cooperating

Report No. 230
Department of Agricultural Economics
Institute of Agriculture
St. Paul 1, Minnesota
May, 1957



1956 REPORT OF THE FARM MANAGEMENT SERVICE FOR VOCATIONAL
AGRICULTURE IN WEST CENTRAL MINNESOTA

Ralph Smith, T. R. Nodland and G. A. Pond

INDEX

	Page
Introduction.	1
Farm Inventories.	2
Farm Earnings	2
Family Living From the Farm	6
Household and Personal Expenses and Receipts.	6
Net Worth	7
Summary of Farm Earnings by Tenure.	9
Returns to Capital and Family Labor	10
Range in Earnings	10
Explanation of "Work Units"	11
Measures of Farm Organization and Management Efficiency	12
Thermometer Chart	13
Distribution of Acres in Farm	14
Crop Yields	15
Power and Machinery Expenses.	15
Amount of Livestock	15
Total Feed Costs and Returns from Livestock Enterprises	16
Hogs	16
Dairy Cattle.	17
Beef Cattle	20
Sheep	21
Chickens.	22
Summary of Miscellaneous Items by Years	23
Summary of Farm Earnings by Years	25

INTRODUCTION.

The Departments of Agricultural Economics and Agricultural Education, the West Central School and Station and the Agricultural Extension Service of the University of Minnesota are cooperating with the Vocational Division, Minnesota Department of Education in maintaining a farm management service. The service was initiated during 1952 and is available to farmers who are enrolled in adult or young farmer classes in the public schools.

The purpose of the project as far as the schools are concerned is (1) to give assistance to the instructors in the mechanics of keeping farm records and (2) to aid in the analysis of the farm business through the use of records as a basis for vocational guidance. The enrollment is on a voluntary basis insofar as the number of schools participating and the number of farmers enrolled in the service.

The analysis of the records and the preparation of the reports for West Central Minnesota are handled by Ralph Smith of the West Central School and Experiment Station at Morris. The project is under the general direction of T. R. Nodland and G. A. Pond of the University of Minnesota Department of Agricultural Economics. The Department of Agricultural Education was represented by M. J. Peterson and the Agricultural Extension Service by E. Hartmans. The State Department of Education was represented by G. R. Cochran, State Supervisor of Agricultural Education.

Each farmer pays an annual fee which covers a portion of the cost. Through a grant of funds from the Hill Family Foundation, Lauren Granger was employed by the Department of Agricultural Education as a co-ordinator for the project. The balance of the costs were defrayed by the University of Minnesota.

This report deals with farmers enrolled in 14 schools in West Central Minnesota. The following tabulation shows by schools the number of 1956 farm records submitted:

<u>SCHOOL</u>	<u>No. of Records</u>	<u>INSTRUCTOR</u>
Appleton	1	Norman Brakken
Alexandria	11	Clarence Hemming
Alberta	2	William Dreschel
Boyd	1	John Malewaja
Canby	5	Dwain Englund
Cyrus	2	Lowell Doebbert
Dawson	1	Melvin Ostby
Echo	4	James Zetah
Elbow Lake	2	Ronald Coleman
Evansville	1	Dennis Lehto
Ivanhoe	2	Norbert Phillips
Madison	2	Dwight L. Quam
Montevideo	1	Lyle E. Benson
Morris	2	Ralph E. Smith
Redwood Falls	2	Ben Broberg

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. All types of tenure arrangements are represented ranging from full owners to partnerships in which the operator furnishes little or no capital.

FARM INVENTORIES

The capital investment per farm varied from \$11,583 to \$122,012. The average investment for all farms included in this report and for the one-fourth high and the one-fourth low in operator's labor earnings is shown in Table 1.

Landlords or partners supplied some capital in 30 out of the 39 cases included in this report. The landlord's investment has been included in Table 1 in order to show the total amount used per farm.

FARM EARNINGS

Operator's earnings is a measure of the relative financial success of a farmer as compared with other farmers and represents the returns above all farm expenses and a charge for the use of farm capital. For purposes of comparison, the earnings are presented on a full-owner basis.

There are two methods of computing operator's 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 in 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.

Table 1. Summary of Farm Inventories, 1956*

Items	Your Farm		Average of 39 Farms	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Size of farm (acres)				
Size of business (work units)**				
Dairy and dual purpose cows			\$ 1746	\$ 1645
Other dairy & dual purpose cattle			674	791
Beef cattle (incl. feeders)			1392	1785
Hogs			745	1220
Sheep (including feeders)			103	106
Poultry (including turkeys)			179	227
Productive livestock (total)			4839	5774
Horses			1	--
Crop, seed and feed			4087	5676
Power mach. (farm share)			2635	2758
Crop and general machinery			3215	3339
Livestock equipment			473	695
Machinery & equipment (total)			6323	6792
Miscellaneous			--	--
Land			19519	19519
Buildings, fences, etc.			8118	7989
Total farm capital			42887	45750

Items	10 most profitable farms		10 least profitable	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Size of farms (acres)	373		278	
Size of business (work units)**				
Dairy and dual purpose cows	\$ 2045	\$ 1983	\$ 2531	\$ 2579
Other dairy & dual purpose cattle	733	1066	880	1099
Beef cattle (incl. feeders)	2534	2681	1325	2173
Hogs	882	1314	356	939
Sheep (including feeders)	44	46	231	213
Poultry (including turkeys)	113	133	288	250
Productive livestock (total)	6351	7223	5611	7253
Horses	--	--	--	--
Crop, seed, and feed	5797	9521	3884	4817
Power mach. (farm share)	3241	3326	3333	3260
Crop & general machinery	4060	4468	3700	3864
Livestock equipment	378	433	833	1375
Machinery & equipment (total)	7679	8227	7866	8499
Miscellaneous	--	--	--	--
Land	32658	32658	13321	13322
Buildings, fences, etc.	10766	10382	7517	7687
Total farm capital	63251	68011	38199	41578

* For the purpose of comparison, all the data shown in this report with the exception of tables 6 and 7 are presented on a full-owner basis. The assets, expenses and receipts of the landlord were included in the records from rented farms.

** See page 11 for an explanation of "work units."

Table 2. Summary of Farm Earnings (Cash Statement), 1956

Items	Your farm	Average of 39 farms	10 most profitable farms	10 least profitable farms
FARM RECEIPTS				
Dairy and dual-purpose cattle		\$ 629	\$ 583	\$ 781
Dairy products		2252	2813	3034
Beef cattle (including feeders)		1569	3072	952
Hogs		2243	3494	879
Sheep and wool (including feeders)		98	-48	265
Horses		1	--	--
Poultry		72	34	54
Eggs		801	426	1145
Corn		2016	2740	1131
Small grain		1080	1604	362
Other crops		1421	2483	915
Mach. & equip. sold & gas tax refund		132	183	152
Income from work off the farm		205	157	348
Miscellaneous		200	298	263
(1) Total farm sales		12819	17935	10281
(2) Increase in farm capital		2863	4760	3379
(3) Family living from the farm		232	182	306
(4) Total farm receipts (1)+(2)+(3)		15914	22877	13966
FARM EXPENSES				
Dairy and dual-purpose cattle bought		154	1	513
Beef cattle bought (incl. feeders)		862	1261	826
Hogs bought		282	376	345
Sheep bought (incl. feeders)		--	--	--
Horses bought		--	--	--
Poultry bought		102	64	98
Misc. livestock expense		242	209	281
Feed bought		1689	1672	1532
Fertilizers		345	605	369
Other crop expenses		515	746	531
Custom work hired		465	593	406
Gas, oil & grease bought (farm share)		719	931	728
Rep. of mechanical power (farm share)		328	404	348
Repair and upkeep of real estate		156	269	194
Rep. & upkeep of crop & gen. mach.		266	444	241
Rep. & upkeep of livestock equip.		84	101	85
Wages of hired labor		295	672	272
Electricity expense (farm share)		143	173	162
Real estate & pers. prop. taxes		535	739	546
General farm expense		166	270	185
(5) Total cash operating expense		7348	9530	7662
(6) Cap. purchases-mech.pow.(f. share)		617	726	537
(7) " " -crop & gen. mach.		745	1127	884
(8) " " -livestock equip.		324	180	707
(9) " " -bldgs. & fencing		410	438	616
(10) Total farm purchases (5) to (9)		9444	12001	10406
(11) Decrease in farm capital		--	--	--
(12) Interest on farm capital		2216	3282	1994
(13) Unpaid family labor		436	340	682
(14) Board furnished hired labor		88	214	73
(15) Total farm expenses (10) to (14)		12184	15837	13155
(16) Labor earnings (4) - (15)		3730	7040	811

Table 3. Summary of Farm Earnings (Enterprise Statement) 1956*

Items	Your Farm	Average of 39 farms	10 most profitable farms	10 least profitable farms
RETURNS AND NET INCREASES				
Dairy and dual-purpose cows		\$ 2300	\$ 2868	\$ 3070
Other dairy & dual-purpose cattle		754	962	1099
Beef breeding herd		270	392	270
Feeder cattle		859	1589	497
Hogs		2479	3601	1144
Sheep-farm flock		100	50	249
Chickens		856	432	1122
All productive livestock		<u>7618</u>	<u>9894</u>	<u>7451</u>
Value of feed fed to livestock		5187	6178	5952
Return over feed from livestock		<u>2431</u>	<u>3716</u>	<u>1499</u>
Crops, seed, and feed		8660	13633	6687
Income from labor off the farm		108	69	175
Agricultural conservation payments		67	101	118
Miscellaneous		133	197	145
(1) Total returns & net increases		<u>11399</u>	<u>17716</u>	<u>8624</u>
EXPENSES AND NET DECREASES				
Horses		\$ --	\$ --	\$ --
Truck		190	272	251
Auto (farm share)		382	424	385
Tractor		811	1101	835
Elec. & gas engine exp. (f. share)		147	173	168
Hired power		200	286	184
Total power		<u>1730</u>	<u>2256</u>	<u>1823</u>
Crop and general machinery		945	1205	936
Livestock equipment		173	197	243
Buildings, fencing, and tiling		694	1091	639
Misc. productive livestock expense		227	209	223
Labor		984	1427	1224
Real estate taxes		427	590	433
Personal property tax		108	149	113
Insurance		62	99	86
General farm		103	171	99
Interest on farm capital		2216	3282	1994
(2) Total expenses & net decreases		<u>7669</u>	<u>10676</u>	<u>7813</u>
(3) Operator's earnings (1)-(2)		<u>3730</u>	<u>7040</u>	<u>811</u>

*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 furnished the farmer and his family by the farm. It is a part of the income of the farm and a part of the expenses 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 income.

The value of the family living as shown in Table 4 amounts to 1.5 percent of the total farm receipts on these farms. 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, 1956

Items	Your farm	Average of 39 farms	Your farm	Average of 39 farms
Adult equiv. - family		2.7		
- others		.3		
Whole milk		791 qts.		\$ 60
Skim milk		42 qts.		1
Cream		39 pts.		9
Beef		410 lbs.		56
Hogs		307 lbs.		42
Lamb and mutton		2 lbs.		--
Poultry		64 lbs.		9
Eggs		91 doz.		27
Potatoes		4 bu.		4
Vegetables & fruit				18
Farm fuel				6
Total				232

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 \$269 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 Keep Complete Accounts of These Expenses, 1956

Items	Your farm	Average of 23 farms	7 most profitable farms	7 least profitable farms
Number of persons - family		4.2	4.3	4.3
Number of adult equiv. - family		2.8	2.6	2.9
- others*		.2	.4	.04
Food and meals bought		\$647	\$798	\$605
Operating and supplies		188	289	148
Furnishings and equipment		336	298	552
Clothing and clothing materials		228	266	171
Personal care, personal spending		65	68	77
Education, recreation and development		172	181	184
Gifts and special events		80	114	66
Medical care and health insurance		231	352	210
Church, welfare		101	158	46
Personal share of auto expense		132	111	141
Operator's share of upkeep of dwelling		21	55	4
Household share of electric expense		60	56	81
Total cash living expense		2261	2746	2285
H.H. & pers. share of new auto		70	--	148
New dwelling		629	2063	--
Taxes and other deductions		29	24	11
Life insurance		128	124	187
Other savings and investments		116	176	33
Total household & personal cash exp.		3233	5133	2664
Total family living from the farm		224	155	242
Total cash expenses and perquisites		3457	5288	2906
Receipts:				
Return to capital and family labor		3953	6035	2216
Miscellaneous income		168	321	169
Income from investments		336	388	180

* Hired help or others boarded.

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 for owners, part owners and renters 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.

Table 6. Net Worth Statement for Those Farmers Who Kept a Complete Record of All Assets and Liabilities, 1956 (Operator's Share)

Items	Your Farm		9 owners	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Total acres in farm			238	
Owned			238	
Rented			--	
Total farm capital			\$34,978	\$38,209
Stocks and bonds			699	671
Life insurance			774	854
Accounts receivable			--	1
Outside real estate			--	--
Other outside investments			494	513
Total outside investments			1,967	2,039
Dwelling			2,095	3,403
Cash on hand and in bank			1,747	1,220
Other household & personal assets			2,359	2,258
Total cash, household & personal assets			6,201	6,881
TOTAL ASSETS			43,146	47,129
Federal Land Bank Mortgage			--	--
Other mortgage on land operated			--	1,438
Mortgages on other real estate			784.9	6,602
FHA chattel mortgages			--	--
Production Credit Association			--	56
Crop loans			--	--
Other chattel mortgages			773	466
Notes payable			1,204	2,390
Accounts payable			480	422
TOTAL LIABILITIES			10,306	11,374
Farmer's net worth			32,840	35,755
Gain in net worth				2,915

Items	11 part owners*		14 renters**	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Total acres in farm	292		268	
Owned	157		--	
Rented	135		268	
Total farm capital	\$35,645	\$39,066	\$11,235	\$13,593
Stocks and bonds	852	830	426	420
Life insurance	627	802	1,096	1,132
Accounts receivable	1,273	1,009	--	--
Other outside investments	395	449	95	103
Total outside investments	3,147	3,090	1,617	1,655
Dwelling	2,358	2,427	--	--
Cash on hand and in bank	3,256	3,083	1,160	1,274
Other household and personal assets	1,890	2,090	1,939	2,014
Total cash, household and pers. assets	7,504	7,600	3,099	3,288
TOTAL ASSETS	46,296	49,756	15,951	18,536
Federal Land Bank Mortgage	909	891	--	--
Other mortgages on land operated	6,736	6,100	--	--
Mortgages on other real estate	--	--	--	--
FHA chattel mortgage	--	--	717	560
Production Credit Association	1,745	1,167	65	43
Crop loans	--	114	96	1,088
Other chattel mortgages	1,047	1,762	1,884	1,806
Notes payable	576	909	1,356	1,548
Accounts payable	69	333	192	538
TOTAL LIABILITIES	11,082	11,276	4,310	5,563
Farmer's net worth	35,214	38,480	11,641	12,953
Gain in net worth		3,266		1,312

*7 cash and crop share, and 4 crop share.
 **7 cash and crop share, 5 crop share, and 2 livestock share.

Table 7. Summary of Farm Earnings by Tenure, 1956 (Operator's Share)

Items	Your farm	9 owners	11 part owners	14 renters
FARM RECEIPTS				
Dairy and dual-purpose cows		\$ 869	\$ 471	\$ 493
Dairy products		3172	2060	1248
Beef cattle (including feeders)		1293	2811	796
Hogs		2253	2412	1998
Sheep and wool (including feeders)		149	9	88
Poultry (including turkeys)		58	82	60
Eggs		1103	515	905
Horses		--	--	--
Corn		1746	1464	1298
Small grain		857	669	758
Other crops		750	1277	1150
Mach. and equip. sold & gas tax refund		151	141	100
Income from work off the farm		256	210	133
Miscellaneous		361	220	112
(1) Total farm sales		<u>13018</u>	<u>12341</u>	<u>9139</u>
(2) Increase in farm capital		3231	3421	2358
(3) Family living from the farm		200	229	208
(4) Total farm receipts (1)+(2)+(3)		<u>16449</u>	<u>15991</u>	<u>11705</u>
FARM EXPENSES				
Dairy and dual-purpose cows bought		\$ 90	\$ 401	\$ 50
Beef cattle bought (incl. feeders)		1185	980	581
Hogs bought		190	534	232
Sheep bought (including feeders)		--	--	--
Horses bought		--	--	--
Poultry bought (including turkeys)		160	72	93
Miscellaneous livestock. expense		287	294	159
Feed bought		1906	1407	1751
Fertilizers bought		305	458	155
Other crop expense		528	482	470
Custom work hired		446	592	350
Gas, oil & grease bought (farm share)		735	769	621
Rep. of mech. power (farm share)		375	305	316
Repair & upkeep of real estate		184	176	27
Rep. & upkeep of crop & gen. mach.		336	295	201
Rep. & upkeep of livestock equip.		110	60	94
Wages of hired labor		493	309	247
Electricity expense (farm share)		175	141	120
Real estate & pers. prop. tax		540	399	57
Cash rent		--	144	196
General farm expense		260	131	134
Interest paid		441	415	149
(5) Total cash operating expense		<u>8746</u>	<u>8364</u>	<u>6003</u>
(6) Capital purchases-mech. pow.(f.share)		265	781	704
(7) Capital purchases-crop & gen.mach.		755	859	666
(8) Capital purchases-livestock equip.		1133	97	73
(9) Capital purchases-bldg. & fencing		1041	391	46
(10) Total farm purchases (5) to (9)		<u>11940</u>	<u>10492</u>	<u>7492</u>
(11) Decrease in farm capital		--	--	--
(12) Interest on farm capital		1389	1453	471
(13) Unpaid family labor		319	284	277
(14) Board furnished hired labor		87	149	64
(15) Total farm expenses (10) to (14)		<u>13735</u>	<u>12378</u>	<u>8304</u>
(16) Labor earnings (4) - (15)		<u>2714</u>	<u>3613</u>	<u>3401</u>
(17) Return to capital & family labor (16)+(12)+(13)		<u>4422</u>	<u>5350</u>	<u>4149</u>

RETURNS TO CAPITAL AND FAMILY LABOR

The return to capital and family labor represents the amount available to the operator for living expenses, payment on indebtedness, and savings. The landlord's expenses and receipts are not included.

The average return to capital and family labor for 9 owners, 11 part owners, and 14 renters is shown in Table 7. The statement includes only the operator's share of the earnings of the partnership. The earnings as shown in Table 7 are on an actual basis as compared to the full-owner basis in Tables 2 and 3.

RANGE IN EARNINGS

Every study of farm earnings shows a wide variation in earnings among farmers in a given year (figure 1). The average operator's earnings of those farmers ranking in the upper 25 percent of the range according to earnings was \$7040 and of those in the lower 25 percent was a \$811. This is a range of \$6229 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: These factors vary from year to year in their relative influence on earnings. ^{1/}

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

Operator's Earnings

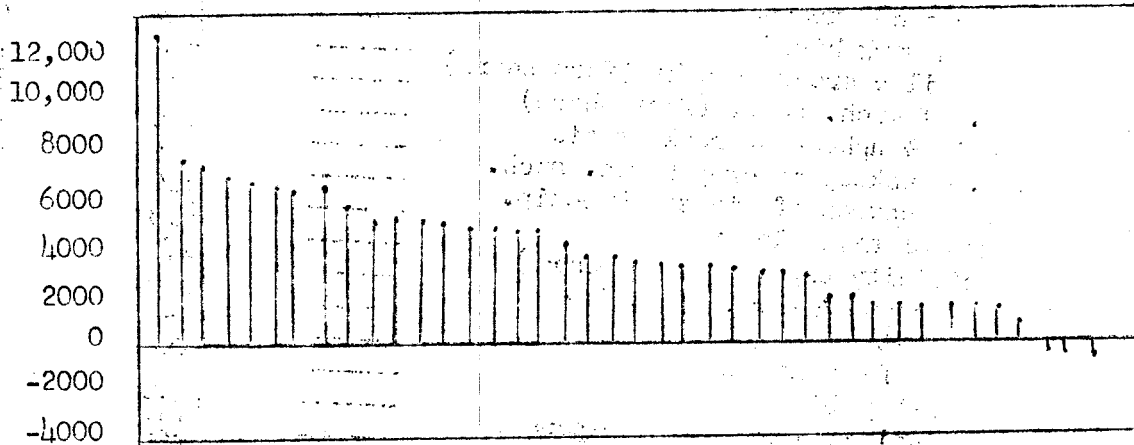


Fig. 1. Range in operator's earnings. Each line represents the earning of one farmer.

^{1/} See Pond, G. A. "Why Farm Earnings Vary." Minn. Agric. 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.

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 or ten hours of work off the farm for pay. The number of work units for each class of livestock and each acre of crop are presented in Table 8.

Table 8. Number of Work Units for Each Class of Livestock and Each Acre of Crop

Item	No. of work units	Item	No. of work units
Dairy and dual-purpose cows	10.0 per cow	Small grain	.5 per acre
Other dairy & du. pur. cattle	3.5 per an. unit*	Sugar beets	1.5 per acre
Beef breeding herd	3.5 per an. unit*	Sweet corn	.7 per acre
Feeder cattle	.25 per 100 lbs.	Corn husked	.7 per acre
Sheep - farm flock	1.5 per an. unit*	Corn, hogged	.4 per acre
Sheep - feeders	.3 per 100 lbs.	Corn, shredded	1.5 per acre
Hogs	.2 per 100 lbs.	Corn, silage	1.0 per acre
Turkeys	.5 per 100 lbs.	Corn, fodder	1.0 per acre
Hens	20.0 per 100 hens	Alfalfa hay	.6 per acre
Canning peas	.5 per acre	Soybean hay	.8 per acre
Soybeans for grain	.5 per acre	Other hay crops	.4 per acre

*Animal-unit represents one dairy cow or bull, two other dairy cattle, 1½ 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 pounds of turkeys produced.

Table 9. Measures of Farm Organization and Management Efficiency, 1956

Measures used in chart on page 13	Your farm	Average of 39 farms	10 most profitable farms	10 least profitable farms
Operator's earnings	\$ _____	\$3730	\$7040	\$ 811
(1) Crop Yields*	_____	100	113	89
(2) Percent tillable land in high ret. crops**	_____	55.7	56.7	51.4
(3) Ret. for \$100 feed to prod. livestock***	_____	100	106	91
(4) Prod. livestock units per 100 a.****	_____	18.9	18.2	21.2
(5) Size of business - work units	_____	334	394	384
(6) Work units per worker	_____	223	232	240
(7) Pow., Mach., equip., & bldg. exp. per work unit	_____	10.97	12.82	9.83

Items related to some of the above measures:

(3) Index of return for \$100 feed from:				
Dairy cattle (see pages 18 & 19)	_____	100	124	89
Beef cattle-breeding herd (see p.20)	_____	100	84	113
Beef cattle-feeders (see page 20)	_____	100	98	80
Hogs (see page 17)	_____	100	110	95
Sheep - farm flock (see page 21)	_____	100	51	116
Capons	_____	--	--	--
Chickens (see page 22)	_____	100	76	121
(4) Number of animal units	_____	43.5	56	46.4
(5) Work units on crops	_____	118	160	116
Work units on productive livestock	_____	206	227	251
Other work units	_____	10	7	17
(6) Number of family workers	_____	1.3	1.2	1.4
Number of hired workers	_____	.2	.5	.2
Total number of workers	_____	1.5	1.7	1.6
(7) Power expense per work unit	_____	5.42	6.05	4.95
Crop machinery expense per work unit	_____	2.91	3.23	2.47
Livestock equip. expense per work unit	_____	.54	.56	.65
Bldgs. & fencing exp. per work unit	_____	2.10	2.98	1.76

* Given as a percentage of the average.

** Crops are marked in Table 10 as (1), (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 percent of tillable land in high return crops.

***In 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 12, locate your standing with respect to the various measures of farm organization and management efficiency. The averages for the 38 farms included in this summary are located between the dotted lines across the center of this page.

Oper. labor earnings	Crop yields	High return crops	Return from productive livestock	Pr. L.S. units per 100 A.	Work units	Work units per worker	Pow., mach. eq., & bldgs. exp. per work unit
7500	140	71.5	140	35	535	305	7.00
7000	135	69.5	135	33	510	295	7.50
6500	130	67.5	130	31	485	285	8.00
6000	125	65.5	125	29	460	275	8.50
5500	120	63.5	120	27	435	265	9.00
5000	115	61.5	115	25	410	255	9.50
4500	110	59.5	110	23	385	245	10.00
4000	105	57.5	105	21	360	235	10.50
3500	100	55.5	100	19	335	225	11.00
3000	95	53.5	95	17	310	215	11.50
2500	90	51.5	90	15	285	205	12.00
2000	85	49.5	85	13	260	195	12.50
1500	80	47.5	80	11	235	185	13.00
1000	75	45.5	75	9	210	175	13.50
500	70	43.5	70	7	185	165	14.00
0	65	42.5	65	5	160	155	14.50
-500	60	40.5	60	3	135	145	15.00

Table 10. Distribution of Acres in Farm, 1956

	Crop ratings*	Your farm	Average of 39 farms
Flax	B	_____	17.2
Barley	C	_____	11.2
Wheat	C	_____	5.7
Oats & oat mixtures	D	_____	28.7
Rye, millet	D	_____	.5
Oat silage	D	_____	2.3
Millet	D	_____	.2
Total small grain and peas		_____	65.8
Corn grain	A	_____	61.6
Soybeans for grain	B	_____	35.1
Corn or sorghum silage	B	_____	7.5
Total cultivated crops		_____	104.2
Alfalfa hay	B	_____	27.0
Other legumes & mixtures	C	_____	.8
Timothy & brome hay & seed	D	_____	.7
Total tillable land in hay		_____	28.5
Alfalfa pasture	A	_____	8.5
Other legumes & mixtures	C	_____	.9
Sudan and/or rape	C	_____	.2
Other tillable pasture	D	_____	1.8
Total tillable land in pasture		_____	11.4
Soil Bank	A	_____	3.2
Tillable land not cropped	D	_____	.4
Total tillable land		_____	213.5
Wild hay		_____	1.9
Non-tillable pasture		_____	24.6
Timber (not pastured)		_____	5.8
Roads and waste		_____	16.4
Farmstead		_____	8.2
Total acres in farm		_____	270.4
Percent land tillable		_____	79.4
Percent tillable land in high return crops		_____	55.7

*The crops are classified as A, B, C, or D crops on the basis of their average net returns per acre.

Table 11. Crop Yields Per Acre, 1956

Crop	Your farm	Average of farms growing each crop
Flax, bu.	_____	12.1
Barley, bu.	_____	34.7
Wheat, bu.	_____	21.6
Oats, bu.	_____	42.5
Rye, bu.	_____	12.5
Oat silage, tons	_____	4.3
Millet, bu.	_____	20.0
Corn grain, bu.	_____	60.0
Soybeans, bu.	_____	18.1
Corn silage, tons	_____	9.9
Alfalfa hay, tons	_____	2.7
Other legumes & mixtures, tons	_____	1.9
Timothy or brome hay, tons	_____	1.8
Wild hay, tons	_____	1.6

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 crop acres per farm ranged from 56 to 467 with an average of 195 (Table 12). The expenses are high on the 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 12. Power and Machinery Expenses Per Crop Acre, 1956

Items	Your farm	Average of 39 farms	10 most profitable farms	10 least profitable farms
Crop acres per farm	_____	195	258	193
Tractor and horse exp. per crop acre	_____	4.41	4.56	4.87
Crop & gen. mach. exp. per crop acre	_____	5.23	5.42	5.60

AMOUNT OF LIVESTOCK

A large proportion of the farmers maintained some dairy cattle and hogs (Table 13). Sixty-four percent of the farmers kept poultry.

Table 13. Amount of Livestock, 1956

	Your farm	Average of 39 farms	10 most profitable farms	10 least profitable farms
Number of milk cows	_____	10.0	11.6	13.7
Number of other dairy cattle	_____	11.4	11.6	17.0
Number of beef cattle (incl. feeders)	_____	15.0	26.5	15.0
Number of sheep*	_____	7.0	3.1	7.0
Number of hens	_____	161	96	161
Litters of pigs raised	_____	6.6	8.9	6.6
Pounds of hogs produced	_____	16349	24698	16349
Pounds of feeder cattle produced	_____	4052	7467	4052

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

TOTAL FEED COSTS AND RETURNS FROM YOUR LIVESTOCK ENTERPRISES

The total "return over feed costs" for each class of livestock is shown in Table 14. 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 or dual purpose cows and in the total feed cost for other dairy or other dual purpose cattle. The value of milk consumed by calves is not included in either the total returns or the feed cost of "all dairy" or "all dual purpose" 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 14. Total Feed Costs and Returns From Your Livestock Enterprises, 1956

	Dairy or dual-purpose cattle		All	Beef breeding herd
	Cows	Other		
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 feed.

HOGS

The return over feed cost per 100 pounds of hogs produced varied from \$7.82 for those farmers ranking in the upper one-fourth in feeding efficiency to a return of \$1.01 for those in the lowest one-fourth. Some of the important factors that affected return over feed were:

1. Quantity of feed required to produce 100 pounds of hogs.
2. Price received.
3. Number of pigs born per litter.
4. Number of pigs weaned per litter.

Table 15. Feed Costs and Returns from Hogs, 1956

Items	Your farm	Average of 29 farms	7 farms	7 farms
			highest in returns above feed	lowest in returns above feed
Feed per cwt. hogs produced, lbs.:				
Corn		260	188	361
Small grain		146	151	200
Commercial feeds		30	22	32
60% alfalfa		7	1	15
Total concentrates		443	362	608
Skim milk and buttermilk		59	9	8
Feed cost per cwt. hogs produced:				
Concentrates	\$	\$10.65	\$ 8.84	\$14.25
Skim milk and buttermilk		.21	.03	.02
Pasture		.09	.08	.11
TOTAL FEED COSTS		10.95	8.95	14.38
Net increase in val. per cwt. hogs prod.		\$15.61	\$16.77	\$15.39
RETURNS ABOVE FEED COST PER CWT. HOGS PRODUCED				
	\$	4.66	7.82	1.01
RETURNS FOR \$100 OF FEED				
	\$	\$149	\$189	\$110
Price received per cwt. hogs sold	\$	14.34	14.44	14.76
No. of spring litters raised		7.4	11.1	4.6
No. of fall litters raised		5.2	6.9	2.8
Total no. of litters raised		12.6	18.0	7.4
No. of pigs born per litter		7.4	8.5	7.1
No. of pigs weaned per litter		6.0	7.0	6.0
Pounds of hogs produced		20944	28104	14482

DAIRY AND DUAL PURPOSE CATTLE

The quantity of feed consumed, value of feeds and returns from dairy cattle are presented in Tables 16, 17, and 18. The statements include one herd which was classified as dual purpose cattle.

The return over feed cost per cow varied from \$19.71 to \$186.31 among the 25 herds covered by this study. Some of the important factors that affected the return over feed were:

1. Rate of production (pounds 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 16. Factors of Cost and Returns from Dairy Cows, 1956

Items	Your farm	Average	6 farms	6 farms
		of 25 farms	highest in butterfat per cow	lowest in butterfat per cow
Pounds of butterfat per cow		300	346	249
Price rec. per lb. B.F. sold (cents)		80.6	76.8	70.1
Price rec. per lb. B.F. -whole milk		86.6	80.9	82.9
Price rec. per lb. B.F. - cream		53.6	56.1	63.9
Feeds per cow, lbs.:				
Corn		841	818	412
Small grain		963	881	882
Commercial feeds		166	64	262
Legume hay		5322	5301	5412
Other hay		35	114	--
Fodder and stover		--	--	--
Total concentrates		1970	1763	1556
Total dry roughage		5357	5415	5412
Silage		8554	11262	9622
Feed cost per cow:				
Concentrates		\$43.93	\$37.92	\$35.17
Roughages		76.49	83.78	78.82
Pasture		10.49	10.26	12.66
TOTAL FEED COSTS		130.91	131.96	126.65
Value of produce per cow:				
B.F. sales		\$214.01	\$245.29	\$154.47
Dairy produce used in house		9.12	7.66	16.20
Milk to livestock		13.15	5.68	34.64
Net increases in value of cows		-10.07	-17.50	.99
TOTAL VALUE PRODUCED		226.21	241.13	206.30
RETURNS ABOVE FEED COST PER COW		95.30	109.17	79.65
RETURNS FOR \$100 OF FEED		175	189	163
Feed cost per lb. B.F. (cents)		44.8	38.1	50.9
Number of cows*		15.4	12.7	13.2

* All dairy cows which have at some time in the past freshened are included in the dairy herd, and affect the average number of cows used in computing this table. There is some variation in the number of months of dry period per cow; however, this variation is small for the majority of farms.

Table 17. Feed Costs and Returns from Other Dairy and Dual Purpose Cattle, 1956

Items	Your farm	Average of 25 farms	6 farms	6 farms
			highest in butterfat per cow	lowest in butterfat per cow
Feeds per head, lbs.:				
Concentrates	_____	396	171	243
Hay and fodder	_____	1863	1805	1616
Silage	_____	1972	1679	1339
Skim milk	_____	579	--	1659
Whole milk	_____	279	187	464
Feed cost per head:				
Concentrates	\$ _____	\$ 9.81	\$ 6.38	\$ 5.15
Roughages	_____	23.18	23.48	18.74
Milk	_____	11.54	5.54	25.97
Pasture	_____	4.19	4.15	4.83
TOTAL FEED COSTS PER HEAD	_____	48.72	39.55	54.69
Net inc. in value of other cattle	_____	65.08	55.26	46.75
RETURNS ABOVE FEED COST PER HEAD	_____	16.36	15.71	-7.94
RETURNS FOR \$100 OF FEED	\$ _____	\$148	\$157	\$ 99
Number of head of other cattle	_____	17.8	18.6	21.0

Table 18. Feed Costs and Returns from All Dairy and Dual Purpose Cattle, 1956

Items	Your farm	Average of 25 farms	6 farms	6 farms
			highest in butterfat per cow	lowest in butterfat per cow
Feeds per animal unit, lbs.:				
Concentrates	_____	1553	1155	1214
Hay and fodder	_____	4969	4840	5297
Silage	_____	6844	7473	7266
TOTAL FEED COSTS PER ANIMAL UNIT	\$ _____	\$ 110.60	\$ 104.13	\$ 101.73
Value of produce per animal unit:				
Dairy products	_____	150.39	149.12	120.43
Net increase in val. of dairy cattle	_____	33.81	36.56	30.57
TOTAL VALUE PRODUCED	_____	184.20	185.68	151.00
RETURNS ABOVE FEED PER ANIMAL UNIT	\$ _____	73.60	81.55	49.27
RETURNS PER \$100 OF FEED	\$ _____	168	183	149
Animal units of cattle	_____	24.3	22.0	23.7

Table 19. Feed Costs and Returns from Beef Cattle, 1956

Items	Your farm	Average of all farms
Beef breeding herd: No. of farms:		8
Feeds per animal unit, lbs.:		
Concentrates	_____	941
Legume	_____	3526
Other hay	_____	1096
Fodder and stover	_____	--
Silage	_____	3934
Feed cost per animal unit:		
Concentrates	\$ _____	23.09
Roughages	_____	48.45
Pasture	_____	19.88
TOTAL FEED COSTS	_____	91.42
Value of product per animal unit:		
Dairy products	\$ _____	5.66
Net increase in value of animals	_____	74.92
TOTAL VALUE PRODUCED	_____	80.58
RETURNS ABOVE FEED COST PER ANIMAL UNIT	_____	-10.84
RETURNS FOR \$100 OF FEED	\$ _____	98
Number of cows and herd bulls	_____	17.3
Number of animal units in the herd	_____	17.0
Lbs. beef produced	_____	7172
Feeding Cattle: No. of farms		10
Feeds per cwt. beef produced, lbs.:		
Corn	_____	435
Small grain	_____	56
Commercial feeds	_____	41
Legume hay	_____	1397
Other hay	_____	110
Total concentrates	_____	532
Total hay and fodder	_____	1507
Silage	_____	1869
Feed cost per cwt. beef produced:		
Concentrates	\$ _____	13.06
Roughages	_____	6.07
Pasture	_____	.83
TOTAL FEED COSTS	_____	19.96
Net increase in value of feeders	_____	21.17
RETURNS ABOVE FEED COST PER CWT. BEEF PROD.	_____	1.21
RETURNS FOR \$100 OF FEED	_____	109
Price paid per cwt. beef bot	_____	15.86
Price recd. for feeder cattle sold	_____	17.80
Number of animal units	_____	31.0
Pounds of beef produced	_____	14928

Table 20. Feed Costs and Returns from a Farm Flock of Sheep, 1956

Items	Your farm	Average of 6 farms
Feeds per head,* lbs.:		
Concentrates		108
Legume hay		597
Other hay		39
Silage		31
Feed cost per head:		
Concentrates	\$	\$ 2.35
Roughages		6.73
Pasture		2.14
TOTAL FEED COSTS		11.22
Value of produce per head:		
Wool	\$	\$ 2.81
Net increase in value of sheep		16.80
TOTAL VALUE PRODUCED		19.61
RETURNS ABOVE FEED COST PER HEAD	\$	8.39
RETURNS FOR \$100 OF FEED	\$	\$ 175
Price per cwt. of lambs sold	\$	\$ 17.51
Price per lb. wool sold (cts.)		32.9
Pounds of wool per sheep sheared		11.8
Number of ewes kept for lambing		33
Percent lamb crop**		90
Percent death loss**		13
Pounds of sheep produced		5322
No. of head of sheep*		54

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

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

CHICKENS

Three out of the 24 farmers raising chickens failed to receive a return large enough to cover the cost of feed. The average return over feed from the 24 flocks included in this report was \$1.28 cents per hen (Table 21).

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. Percent of hens that are pullets
5. Percentage death loss of hens

Table 21. Feed Costs and Returns from Chickens, 1956*

Items	Your farm	Average of 24 farms	6 farms highest in ret. over feed	6 farms lowest in ret. over feed
Feed per hen, lbs.:				
Grain		88	78	88
Commercial feeds		53	60	56
Total concentrates		141	138	144
Skim milk and buttermilk		--	--	--
TOTAL FEED COST PER HEN	\$	\$ 3.80	\$ 3.11	\$ 4.34
Value of produce per hen:				
Eggs sold and used in house	\$	4.98	5.79	4.06
Net increase in value of chickens		.10	.46	-.21
TOTAL VALUE PRODUCED	\$	5.08	6.25	3.85
RETURN ABOVE FEED COST PER HEN	\$	\$ 1.28	\$ 3.14	\$ -.49
RETURNS FOR 100 OF FEED	\$	\$140	\$211	\$ 85
Price rec'd. per doz. eggs sold (cents)		30.5	33.4	29.6
Eggs laid per hen		201	207	167
Ave. no. hens on farm during year		257	280	281
Percent of hens that are pullets		69	58	45
Percent death loss of hens		11	7	12
Number of chicks started:		347	333	467
Lbs. chickens produced		1224	1213	1387

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

Table 22. Summary of Miscellaneous Items by Years

	1953	1954	1955	1956
Acres in farm:				
Small grains	91.4	91.7	68.0	65.8
Cultivated crops	63.3	67.9	81.0	104.2
Tillable land in hay	28.3	34.8	32.5	28.5
Tillable land in pasture	8.5	11.0	11.6	11.4
Tillable land not cropped	.2	5.3	.2	3.6
Total tillable land	191.7	210.7	196.3	213.5
Wild hay & non-tillable pasture	33.0	30.5	34.5	25.5
Other non-tillable land	29.6	33.3	33.9	30.4
Total acres in farm	254.3	274.5	264.7	270.4
Yields per acre:				
Flax, bu.	10.3	9.6	12.0	12.1
Barley, bu.	24.6	29.5	31.5	34.7
Wheat, bu.	10.1	17.6	24.8	21.6
Oats, bu.	35.1	34.1	40.9	42.5
Corn grain, bu.	45.1	47.0	45.1	60.0
Soybeans, bu.	20.4	19.8	19.8	18.1
Corn silage, tons	8.3	8.2	8.4	9.9
Alfalfa hay, tons	2.7	2.4	2.4	2.7
Meas. of farm org. & management:				
Percent of land in high ret. crops	48.2	47.5	52.4	55.7
Prod. L.S. units per 100 A.	18.3	19.7	14.4	18.9
Size of business, work units	324	359	356	334
Work units per worker	220	239	255	223
Exp. per work unit	\$ 10.18	\$ 9.69	\$ 9.40	\$ 10.97
Return above feed cost per:				
Dairy cow	\$ 67.49	\$ 53.17	\$ 56.05	\$ 95.30
1 n. unit in beef breeding herd	-25.29	3.98	-2.25	-10.84
100 lbs. feeder cattle produced	-2.63	8.91	-4.68	1.21
100 lbs. hogs produced	10.07	6.18	.22	4.66
Head native sheep	4.80	2.70	6.43	8.39
Hen	2.27	-.26	1.96	1.28
Feed cost per:				
Dairy cow	\$127.24	\$127.61	\$133.61	\$130.91
1 n. unit in beef breeding herd	80.64	73.14	72.65	80.58
100 lbs. feeder cattle produced	20.86	18.99	24.88	19.96
100 lbs. hogs produced	13.15	13.54	11.44	10.95
Head native sheep	7.63	8.86	10.23	11.22
Hen	4.19	4.20	3.83	3.80
Misc. livestock information:				
No. dairy & dual-purpose cows	10.6	10.9	11.0	10.0
No. beef cows & herd bulls	1.8	?	13.9	6.7
Lbs. feeder cattle & herd bulls	2499	?	3036	4052
Litter of pigs	8	9	9.7	6.6
Lbs. hogs produced	11449	16255	16968	16349
No. of hens	150	191	128	161
Lbs. butterfat per milk cow	255	256	270	300
No. pigs weaned per litter	7.1	7.0	6.2	6.0
Percent lamb crop	99	97	116	90
Eggs per hen	174	174	187	201

Table 22. Summary of Miscellaneous Items by Years (Continued)

	1953	1954	1955	1956
Price received per:				
Lb. butterfat sold as cream	\$.72	\$.74	\$61.5	\$53.6
Lb. butterfat sold as milk	.90		82.4	86.6
100 lbs. fat cattle	18.84	19.62	18.79	17.80
100 lbs. hogs	21.15	21.44	14.57	14.34
100 lbs. lambs	19.21	18.99	19.34	17.51
Lbs. of wool	.50	.46	32.1	32.9
Doz. eggs	.41	.30	33	30.5
Price of feed:				
Corn, bu.	\$ 1.31	\$ 1.34	\$ 1.23	\$ 1.25
Oats, bu.	.71	.70	.61	.63
Barley, bu.	1.11	1.02	.93	.95
Alfalfa hay, ton	17.50	17.00	18.00	18.50
Timothy hay, ton	10.10	9.80	10.40	10.95
Corn silage, ton	5.85	5.75	6.00	6.00
Linseed oilmeal, cwt.	4.05	4.20	4.10	3.68

Table 23. Summary of Farm Earnings By Years

	1953	1954	1955	1956
No. of farms	52	46	38	39
Farm receipts:				
Dairy & dual-purpose cattle	\$ 690	\$ 811	\$ 626	\$ 629
Dairy products	2163	2081	2118	2252
Beef cattle	1094	2145	1291	1669
Hogs	2509	3390	2312	2243
Sheep and wool	147	187	251	98
Horses	2	12	--	1
Poultry	162	149	74	72
Eggs	917	776	680	801
Corn	1023	610	1488	2016
Small grain	1558	1597	1650	1080
Other crops	351	597	488	1421
Mach. & equip. sold	219	234	104	132
Income from work off the farm	309	485	408	205
Miscellaneous	139	204	161	200
Total farm sales	<u>11283</u>	<u>13278</u>	<u>11651</u>	<u>12819</u>
Increase in farm capital	1128	775	495	2863
Family living from the farm	289	294	238	232
Total farm receipts	<u>12700</u>	<u>14347</u>	<u>12385</u>	<u>15914</u>
Farm expenses:				
Dairy & dual-purpose cattle bot	236	118	158	154
Beef cattle bot	402	781	419	862
Hogs bot	130	233	260	282
Sheep bot	9	66	2	--
Horses bot	5	4	--	--
Poultry bot	107	118	79	102
Misc. livestock expense	159	219	254	242
Feed bot	1211	1790	1214	1689
Fertilizers :		361	331	345
Other crop expenses:	620	438	445	515
Custom work hired	414	428	406	465
Gas, oil & grease bot	798	801	759	719
Repairs for mechanical power	304	301	332	328
Repair & upkeep of real estate	161	175	112	156
Rep. & upkeep of crop machinery	276	268	228	266
Rep. & upkeep of livestock equipment	77	98	86	84
Wages of hired labor	341	542	390	295
Electricity expense	113	142	148	143
Real estate & personal property taxes	464	502	546	535
General farm expense	147	182	145	166
Total cash operating expense	<u>5974</u>	<u>7567</u>	<u>6314</u>	<u>7348</u>
Capital purchases - mech. power	592	697	719	617
- crop & gen. mach.	710	1069	765	745
- livestock equipment	123	136	197	324
- bldgs. & fencing	520	465	388	410
Total farm purchases	<u>7919</u>	<u>9934</u>	<u>8383</u>	<u>9414</u>
Decrease in farm capital	--	--	--	--
Interest on farm capital	1655	1972	1982	2216
Unpaid family labor	365	225	260	436
Board furnished hired labor	72	88	84	88
Total farm expenses	<u>10011</u>	<u>12219</u>	<u>10709</u>	<u>12184</u>
Labor earnings	2689	2128	1676	3730
Net cash income	3364	3344	3268	3375

THE HISTORY OF THE UNITED STATES

Year	Event	Location	Significance
1776	Declaration of Independence	Philadelphia	Established the United States as an independent nation.
1781	Treaty of Paris	Paris, France	Officially recognized the United States as an independent nation.
1787	Constitution signed	Philadelphia	Established the framework for the federal government.
1791	Bill of Rights adopted	Philadelphia	Guaranteed the first ten amendments to the Constitution.
1800	Move to Washington D.C.	Washington D.C.	Established the permanent capital of the United States.
1803	Louisiana Purchase	Paris, France	Acquired a vast territory, doubling the size of the United States.
1812	War of 1812	Multiple locations	Asserted national sovereignty and led to the growth of industry.
1820	Missouri Compromise	Washington D.C.	Set the precedent for territorial acquisition and statehood.
1848	Texas Annexation	Washington D.C.	Expanded the territory of the United States.
1849	California Gold Rush	California	Spurred westward expansion and economic growth.
1850	Compromise of 1850	Washington D.C.	Resolved territorial disputes and temporarily eased tensions.
1861	Secession of Southern States	Multiple locations	Led to the outbreak of the Civil War.
1863	Emancipation Proclamation	Washington D.C.	Declared the freedom of enslaved people in the Confederate States.
1865	End of the Civil War	Washington D.C.	Reunited the United States and abolished slavery.
1877	Compromise of 1877	Washington D.C.	Resolved the disputed 1876 presidential election.
1890	Wounded Knee Massacre	South Dakota	Marked the end of the American Indian Wars.
1896	Plessy vs. Ferguson	Supreme Court	Established the "separate but equal" doctrine.
1901	Spanish-American War	Multiple locations	Established the United States as a world power.
1904	Annexation of Hawaii	Washington D.C.	Expanded the United States to the Pacific Ocean.
1914	Outbreak of World War I	Europe	Global conflict that reshaped the world.
1918	Armistice Day	Paris, France	Ended the fighting in World War I.
1929	Stock Market Crash	Wall Street	Triggered the Great Depression.
1933	New Deal	Washington D.C.	Government intervention to combat the economic crisis.
1941	Attack on Pearl Harbor	Hawaii	United States entered World War II.
1945	End of World War II	Germany and Japan	Global conflict that reshaped the world.
1947	Marshall Plan	Washington D.C.	U.S. aid program to rebuild Europe.
1950	Korean War	Korea	First major conflict of the Cold War.
1954	Brown vs. Board of Education	Supreme Court	Overturned Plessy vs. Ferguson, ending legal segregation.
1957	Space Race	Space	Competition between the U.S. and the Soviet Union.
1963	Civil Rights Act	Washington D.C.	Legislation to end racial segregation and discrimination.
1968	Vietnam War	Vietnam	Major conflict during the Cold War.
1971	Watergate Scandal	Washington D.C.	Political scandal that led to the resignation of President Nixon.
1973	Oil Crisis	Middle East	Global energy crisis.
1975	End of the Vietnam War	Vietnam	Major conflict during the Cold War.
1978	Iran Hostage Crisis	Iran	International crisis.
1981	Reagan's Presidency	Washington D.C.	Conservative economic policies.
1984	Los Angeles Olympics	Los Angeles	Major international event.
1987	Reagan's Second Term	Washington D.C.	Continuation of conservative policies.
1991	Gulf War	Middle East	Coalition war against Iraq.
1993	Clinton's Presidency	Washington D.C.	End of the Cold War.
1997	Internet	Global	Revolutionary technology.
1998	Clinton's Second Term	Washington D.C.	Continuation of Clinton's policies.
2001	9/11 Attacks	New York	Major terrorist attacks.
2001	Bush's Presidency	Washington D.C.	Start of the War on Terror.
2003	Iraq War	Middle East	Major conflict during the War on Terror.
2008	Financial Crisis	Global	Global economic crisis.
2009	Obama's Presidency	Washington D.C.	End of the War on Terror.
2011	Arab Spring	Middle East	Major international event.
2013	Obama's Second Term	Washington D.C.	Continuation of Obama's policies.
2016	Trump's Presidency	Washington D.C.	Major international event.
2020	COVID-19 Pandemic	Global	Major international event.