

The World's Largest Open Access Agricultural & Applied Economics Digital Library

# This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<a href="http://ageconsearch.umn.edu">http://ageconsearch.umn.edu</a>
<a href="mailto:aesearch@umn.edu">aesearch@umn.edu</a>

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

1960 REPORT

ANNUAL REPORT

WEST CENTRAL MINNESOTA

FARM MANAGEMENT SERVICE

UNIVERSITY OF MINNESOTA

Institute of Agriculture

and

Vocational Division

MINNESOTA DEPARTMENT OF EDUCATION

Ceoperating

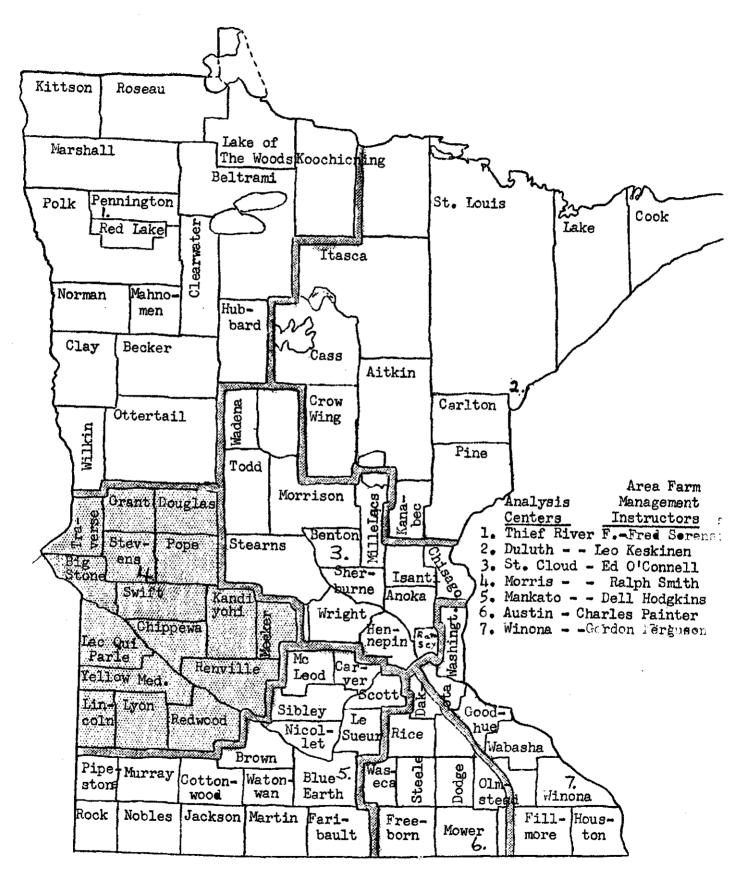
Report No. 257

Department of Agricultural Economics

Institute of Agriculture

St. Paul 1, Minnesota

April, 1961



\* Shaded Area Served By The Morris Analysis Center

# 1960 REPORT OF THE FARM MANAGEMENT SERVICE FOR VOCATIONAL AGRICULTURE IN WEST CENTRAL MINNESOTA

# Ralph Smith and T. R. Nodland

#### INDEX

rag	zе
Introduction	1
Farm Inventories	2
Farm Earnings	2
Family Living From the Farm	
Household and Personal Expenses and Receipts	
Net Worth	
Summary of Farm Farnings by Tenure	
Returns to Capital and Family Labor	
Range in Earnings.	
Cumulative Effect of Excelling Factors	
Explanation of "Work Units"	
Measures of Farm Organization and Management Efficiency	
Thermometer Chart	
Distribution of Acres in Farm	
Crop Yields	L5
Power and Machinery Expense	
Amount of Livestock	
Total Feed Costs and Returns from Livestock Engerprises	
Hogs	
Dairy Cattle	
	7.V
Beef Cattle	
Sheep	
Chickens	32
Summary of Miscellaneous Items by Years	23
Summary of Farm Farnings 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 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 Hal Routhe. 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. The balance of the costs were defrayed by the University of Minnesota.

This report deals with farmers enrolled in 8 schools in West Bentral Minnesota. The following tabulation shows by schools the number of 1960 farm records submitted:

SCHOOL

									_	-	_				~					TWDIIMOIOÜ
Alexandria .		•	•	•		•			•	•	5	•	•	•	•	•	•	•		Bernard Sonstegard
prid ratand .		•	•	•		•	•				- 2	_	_	_	_	_	_	_	_	Frank Soundone
cancy		٠	٠	٠							-5		•	_	_		_	_	_	Dewein England
natione		•	٠				•				2	_		_	_	_				Roger Heller
HOTTHRIB	•	•	•	•	•		•			4	2			_	_	_	_	_	_	Edger Pareone
megraon		•	•	•						_	16	ì		_	_	_	_			Kermit Christonson
MOTTIS	•		٠								Z.		_	_		_				Ralph Smith
Dacred Heart	•	•	•	•	•	٠	•	•	•	•	2	•	•	•	٠	٠			•	Earl Northouse

No. of Records

TNSTRIICTOR

The records kept included farm inventories, cash receipts and expense, 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 \$19,793 to \$211,403. The average investment for all farms included 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 29 out of the 38 cases included in this report. The landlord's investment has been included in Table 1 in order to show the tatal 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, 1960\*

<b>T</b> .	Your	Farm	Average (	of 38 Farms
Items	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Size of farm (acres)		<u> </u>	280	····
Sime of business (work Units)	)**		3 <b>119</b> 469	
Dairy and dual purpose cows		<del></del>		_
Other dairy & dual purpose			\$1938	\$2159
Beef cattle (incl. feeders)			1102	1149
Hogs			4250	4943
Sheep (incl. feeders		****	1176	1997
Poultry (incl. turkeys)	<del></del>		211	537
Productive livestock (total)		<del></del>	<u> 367</u>	<u> 351</u>
Horses	<del></del>	*	9044	11135
Crop, seed, and feed		<del></del>	13	15
Power mach. (farm share)			<i>"5427</i>	7059
Crop and general machinery			3568	3270
Livestock equipment			4239	4597
Machinery & equipment (total)	<del></del>		952	1134
Land			8759	9001
Buildings, fences, etc.			30610	30610
	,	· · · · · · · · · · · · · · · · · · ·	8917	8994
Total farm capital			62770	66814
8	mact prof			
<del>-</del> '	mon btot	itable farms	8 least prof	table
	Jan. 1	Dec. 31	8 least profi Jan. 1	
	Jan. 1	Dec. 31	Jan. 1	
Size of farms (acres)	Jan. 1	Dec. 31	<u>Jan. 1</u> 235	
Size of farms (acres) Size of business (work units) Sairy and dual purpose cows	Jan. 1 392 569	Dec. 31	<u>Jan. 1</u> 235 396	Dec. 31
Size of farms (acres) Size of business (work units) Siry and dual purpose cows	Jan. 1 392 569 \$ 384	Dec. 31	Jan. 1 235 396 #2317	Dec. 31
Size of farms (acres) Size of business (work units) Sairy and dual purpose cows Other dairy & dual purpose	Jan. 1 392 569 \$ 384 48	Dec. 31 \$ 370 132	Jan. 1 235 396 \$2317 1622	Dec. 31 \$2967 1536
Size of farms (acres) Size of business (work units) Siry and dual purpose cows Other dairy & dual purpose Seef cattle (incl. feeders)	Jan. 1 392 569 \$ 384 48 6256	Dec. 31 \$ 370 132 10305	Jan. 1 235 396 #2317 1622 4826	\$2967 1536 4603
Size of farms (acres) Size of business (work units) Siry and dual purpose cows Other dairy & dual purpose Seef cattle (incl. feeders) Sogs Sheep (incl. feeders)	Jan. 1 392 569 \$ 384 48 6256 1647	\$ 370 132 10305 2150	Jan. 1 235 396 #2317 1622 4826 544	\$2967 1536 4603 903
Size of farms (acres) Size of business (work units) Siry and dual purpose cows Other dairy & dual purpose Seef cattle (incl. feeders) Sogs Sheep (incl. feeders)	Jan. 1 392 569 \$ 384 48 6256 1647 70	\$ 370 132 10305 2150 90	Jan. 1  235 396 \$2317 1622 4826 544 88	\$2967 1536 4603 903 60
Size of farms (acres) Size of business (work units) Sairy and dual purpose cows Other dairy & dual purpose Seef cattle (incl. feeders) Sogs Sheep (incl. feeders) Coultry (incl. turkeys)	Jan. 1  392 569 \$ 384 48 6256 1647 70 915	\$ 370 132 10305 2150 90 917	Jan. 1  235 396 \$2317 1622 4826 544 88 179	\$2967 1536 4603 903 60 159
Size of farms (acres) Size of business (work units) Siry and dual purpose cows Other dairy & dual purpose Seef cattle (incl. feeders) Hogs Sheep (incl. feeders) Coultry (incl. turkeys) Croductive livestock (total)	Jan. 1 392 569 \$ 384 48 6256 1647 70	\$ 370 132 10305 2150 90	Jan. 1  235 396 \$2317 1622 4826 544 88	\$2967 1536 4603 903 60
Size of farms (acres) Size of business (work units) Siry and dual purpose cows Other dairy & dual purpose Seef cattle (incl. feeders) Sogs Sheep (incl. feeders) Coultry (incl. turkeys) Productive livestock (total) orses	Jan. 1  392 569 \$ 384 48 6256 1647 70 915 99320	\$ 370 132 10305 2150 90 917 13964	Jan. 1  235 396 \$2317 1622 4826 544 88 179 9576	\$2967 1536 4603 903 60 159 10228
Size of farms (acres) Size of business (work units) Siry and dual purpose cows Other dairy & dual purpose Seef cattle (incl. feeders) Sogs Sheep (incl. feeders) Coultry (incl. turkeys) Productive livestock (total) Sorses Trop, seed, and feed	Jan. 1  392 569 \$ 384 48 6256 1647 70 915 99320 7619	\$ 370 132 10305 2150 90 917 13964	Jan. 1  235 396 \$2317 1622 4826 544 88 179 9576	\$2967 1536 4603 903 60 159 10228
Size of farms (acres) Size of business (work units) Size of business (work units) Siry and dual purpose cows Sther dairy & dual purpose Seef cattle (incl. feeders) Sogs Sheep (incl. feeders) Soultry (incl. turkeys) Troductive livestock (total) Sorses Trop, seed, and feed Sower mach. (farm share) Trop & gen machinery	Jan. 1  392 569 \$ 384 48 6256 1647 70 915 99320 7619 3658	\$ 370 132 10305 2150 90 917 13964 	Jan. 1  235 396 \$2317 1622 4826 544 88 179 9576 4191 3547	\$2967 1536 4603 903 60 159 10228  3486 3033
Size of farms (acres) Size of business (work units) Sairy and dual purpose cows Other dairy & dual purpose Seef cattle (incl. feeders) Sogs Sheep (incl. feeders) Coultry (incl. turkeys) Productive livestock (total) Sorses Trop, seed, and feed Sower mach. (farm share) Trop & gen machinery Trop & gen machinery Trop & seed, equipment	Jan. 1  392 569 \$ 384 48 6256 1647 70 915 99300 -7619 3658 4874	\$ 370 132 10305 2150 90 917 13964 	Jan. 1  235 396 \$2317 1622 4826 544 88 179 9576 4191 3547 4391	\$2967 1536 4603 903 60 159 10228  3486 3033 4179
Size of farms (acres) Size of business (work units) Size of business (work units) Siry and dual purpose cows Sther dairy & dual purpose Seef cattle (incl. feeders) Sogs Sheep (incl. feeders) Soultry (incl. turkeys) Troductive livestock (total) Sorses Trop, seed, and feed Sower mach. (farm share) Trop & gen machinery Trop & gen machinery Trop & equipment (total)	Jan. 1  392 569 \$ 384 48 6256 1647 70 915 99320 7619 3658 4874 1033	\$ 370 132 10305 2150 90 917 13964 	Jan. 1  235 396 \$2317 1622 4826 544 88 179 9576 4191 3547 4391 1097	\$2967 1536 4603 903 60 159 10228  3486 3033 4179 1210
Size of farms (acres) Size of business (work units) Siry and dual purpose cows Other dairy & dual purpose Seef cattle (incl. feeders) Sogs Sheep (incl. feeders) Coultry (incl. turkeys) Productive livestock (total) Sorses Trop, seed, and feed Sower mach. (farm share) Trop & gen machinery Trop & gen machinery Trop & equipment Tachinery & equipment (total) Tand	Jan. 1  392 569 \$ 384 48 6256 1647 70 915 99320 7619 3658 4874 1033 9565	\$ 370 132 10305 2150 90 917 13964 	Jan. 1  235 396 \$2317 1622 4826 544 88 179 9576 4191 3547 4391 1097 9035	\$2967 1536 4603 903 60 159 10228  3486 3033 4179 1210 8422
Size of farms (acres) Size of business (work units) Size of business (work units) Siry and dual purpose cows Other dairy & dual purpose Seef cattle (incl. feeders) Soultry (incl. feeders) Soultry (incl. turkeys) Froductive livestock (total) Sorses Frop, seed, and feed Sower mach. (farm share) Frop & gen machinery Sivestock equipment Sachinery & equipment (total) Sand Suildings, fences, etc.	Jan. 1  392 569 \$ 384 48 6256 1647 70 915 99320 7619 3658 4874 1033 9565	\$ 370 132 10305 2150 90 917 13964  10808 3477 4833 1288 9598 44203	Jan. 1  235 396 \$2317 1622 4826 544 88 179 9576 4191 3547 4391 1097 9035 17531	\$2967 1536 4603 903 60 159 10228  3486 3033 4179 1210 8422 17531
ize of farms (acres) ize of business (work units) iter dairy & dual purpose cef cattle (incl. feeders) iogs heep (incl. feeders) ioultry (incl. turkeys) roductive livestock (total) iorses rop, seed, and feed iower mach. (farm share) rop & gen machinery ivestock equipment achinery & equipment (total) and iildings, fences, etc.	Jan. 1  392 569 \$ 384 48 6256 1647 70 915 99320 7619 3658 4874 1033 9565	\$ 370 132 10305 2150 90 917 13964 	Jan. 1  235 396 \$2317 1622 4826 544 88 179 9576 4191 3547 4391 1097 9035	\$2967 1536 4603 903 60 159 10228  3486 3033 4179 1210 8422

<sup>\*</sup> 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.

<sup>\*\*</sup> See page 11 for an explanation of work units.

Table 2. Summary of Farm Earnings (cash statement), 1960

tems	Cour	Average	8 most	8 least
•		of 38	profitable	profitable
ARM RECEIPTS	arn	<u>farms</u>	farms	farms
Dairy and dual-purpose cattle		<b>\$</b> ~768	<b>#</b> 00	4
Dairy Products			<b>\$</b> 90	\$1108
Beef cattle (incl. feeders)		2856 6022	420	3491
Hogs -		6033	10849	8907
Sheep and wool (incl. feeders		4535	<b>79</b> 63	1865
Horses -		182	55	60
Poultry	<del></del>	**************************************		
Eggs		112	213	8 <del>9</del>
Corn		1364	2865	881
Small grain	-	3268	5385	1082
Other crops	-	1342	1925	991
		15 <b>58</b>	2495	989
Mach. & equip. sold & gas tas		256	302	257
Income from work off the farm Miscellaneous		347	242	387
		<u> 180</u>	211	_ 1999
(1) Total farm sales		22081	33015	20306
(2) Increase in farm capital		4044	7662	
(3) Family living from the farm		286	238	_ 281
(4) Total farm receipts 1+2+3		27131	40915	20587
TRE DIFFERENCE			40/2/	20,01
AFM EXPENSES				
Dairy & dual purpose cattle bot		236	103	217
Beef cattle bought (feeders too)		3549	9394	5190
Hogs bought		745	1387	302
Sheep bought (incl. Feeders)		345		6
norses bought				O
Poultry bought		118	246	<u></u> 68
Misc. livestock expense		482	823	298
Feed bought		3877	5203	
rertilizers		714	1011	3085
owner crop expenses	<del></del>	790	1158	452 505
Custom work hired	<del></del>	588	461	587
Gas, oil, grease (farm share)		1130	=	933
Rep. of mech. power " "	-	562	1341	847
Repair & upkeep real estate		166	791	330
Rep. & upkeep crop-gen. mach.	-	388	324	97
Rep. & upkeep livestock equip.			540	278
Wages of hired labor		92	168	50
Electricity (farm share)		431	163	255
Real Estate-Per. Prop. taxes	<del></del>	238	248	201
deneral farm expense		966	1121	737
(5) Total cash operating opposes	<del></del>	240	<u> 275</u>	<u> 189</u>
(6) Cap. pur-mech pww.(f.share)		15657	24757	14122
7) " " crop & gen. mach		487	677	352. ·
(8) 11 11 34	<del></del>	1214	803	868
O) II II 133		369	<i>5</i> 20	256
		602	<u>460</u>	_659
(10) Total farm purchases 5-9		18329	27217	16257
11) Decrease farm capital		₩-	***	482
12) Interest farm capital	<del></del>	3240	4224	2448
13) Unpaid family labor		381	440	215
14) Board for hired labor		40	22	7
15) Total farm expense 10-14 16) Labor earnings 4 - 15		21990	31903	19409
AUI LADOR OSMNINAS / 16		5141	9012	** / **** /

Table 3. Summary of Farm Earnings (Enterprise Statement) 1960\*

	<b>17</b>	Average	8 most	8 least
Items	Your	of 38	profitable	profitable
ETURNS AND NET INCREASES	Farm	farms	farms	farms
Dairy & dual purpose cows	à	#na/a		_
Other dairy & dual purpose cows	<del></del>	<b>\$</b> 2869	\$ 461	<b>\$</b> 3652
Beef breeding herd			119	1548
Feeder cattle		495	223	
Hogs			5336	3544
Sheep-farm flock & feeders			7132	1948
Chickens		. · · · · · · · · · · · · · · · · · · ·	75	26
All productive livestock		<u>1362</u>	<u> 2838</u>	_897
Value of feed fed to livestock		13260	16184	11615
Return over feed from livestock		8234	11014	7790
Crops, seed, and feed		5026	5170	3825
Invomo from labor see		10628	16661	5960
Invome from labor off farm	-	132	94	152
Agricultural Conservation pay Miscellaneous		16		22
		<u> 164</u>	211	_177
(1) Total Rets & Net Increases		15966	22136	10136
PENSES AND NET DECREASES				_
Horses		2		
Truck		-2 205	••••	
Auto (farm share)	-	285	563	187
Tractor		481	608	374
Elec. & gas engine exp. (farm)		1348	1519	1135
Hired Power		238	248	201
Total Power		<u> 269</u>	<u> 179</u>	462
Crop and general machinery		2619	3117	2359
Livesteck equipment		1269	1371	1401
Buildings, fencing, tiling		263	434	168
disc. productive livestock exp.		692	<del>9</del> 88	572
abor		482	824	298
Real estate taxes		1054	<b>77</b> 0	786
ersonal preperty tax		<b>791</b>	914	611
nsurance		175	207	126
eneral farm		123	142	97
naerest on farm capital		117	133	92
•		3240	4224	2448
2) Total expenses & net dec.	<del></del>	10825	13124	8958
3) Operator's earnings (1) - (2)		5141	9012	1178

<sup>\*</sup>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 1.1 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, 1960

Items	Your Farm	Average of 38 farms	Your Farm	Average of 38 farms
Adult equiv family - others	-	3.2 .2		
Whole milk Cream Beef Hogs Lamb and mutten Poultry Eggs Potatoes Vegetables & fruit Farm fuel Total		719 qts. 10 pts 327 lbs. 271 lbs. 13 lbs. 48		\$ 63 3 129 47 6 13 22 3

# 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 \$273 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 Kent Complete Assessment of Those Parks

Those Farms Which Kept Cor		Average	12 most	12 least
Item	Your	of 24	profitable	profitable
z vem	Farm	farms	farms	farms
Number of persons - family				
the persons - raming		3.9	4.1	3.7
Number of adult equiv family	•	3.2	3.4	2.0
- other*		.2		3.0
		e &.	.1	•3
Food and meals bought		\$838	<b>\$</b> 831	<b>#01</b> /
Operating and supplies		198	182	<b>\$</b> 846
Furnishings and equipment		148	_	214
Clathing and clothing materials	***************************************	308	218	77
Personal care, personal spending	***************************************	70	305	311
Education, recreation and devel.			73	66
lifts and special events	<del></del>	227	228	225
Medical care & health ins.		126	86	165
hurch, welfare	-	344	255	433
Personal share auto expense		114	111	116
perator's share of upkeep dwell.		154	170	138
ousehold share of ele. exp.		83	30	137
Total angle of eie. exp.		<u>96</u>	101	. 93
Total cash living expense		2706	2590	2821
.H. & pers. share of new auto ew dwelling		62	124	
ew dwerring		125	250	
axes & other deductions		56	34	79
ife insurance		191	198	185
ther savings & investments		_135	42	_228
Total Household & per. cash ex	P	3275	3238	3313
otal family living from the farm				
Total cash own		<u> 279</u>	<u> 226</u>	331
Total cash exp. & prequis.		3554	3464	3644
eceipta:				
Return to capital & fam. labor		1511	# . m	
Miscellaneous income		4544	6479	2609
Income from investments		171	169	173
TTACO MIGHT		6		12

<sup>\*</sup>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, 1960 (Operator's Share)

Record of all Ass	<u>ets and Li</u>	abilities, 19		s Share)
<u>Items</u>		our Farm		owners
Total acres in farm	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Owned	****	<del></del>	344	
Rented		_	344	
Total farm capital		<del></del>	——————————————————————————————————————	
Stocks & bonds	-		\$84475	<b>\$</b> 95855
Life insurance	***************************************	-	4857	5052
Accounts receivable	<del></del>		1994	2111
Outside real estate	<del></del>			
Other outside investments	<del></del>	-	****	
Total outside investments		<del></del>	<u> 184</u>	_249_
Dwelling			7035	7412
Cash on hand and in bank	<del></del>	* ************************************	4783	4633
Other household &		-	13 <b>5</b> 4	1022
Other household & pers. ass	ers		<u> 2731</u>	<u> 2798</u>
Total cash, h.h. & pers. asset			15903	15865
	*****	-	100378	111720
Federal Land Bank Mortgage			1833	<b>433</b> 3
Other mortgage on land oper	ated	-	22550	21150
Mortgage on other real esta	te			-
FHA chattel mortgages	<del></del>	-	2769	2567
Production Credit Associati	on	· •		***
Crop leans	<del></del>	***********		
Other chattel mortgages			8688	15612
Notes payable		•	3667	4505
Accounts payable TOTAL LIABILITIES	<del></del>		4389	5610
Promonic and	···		43896	53777
Farmer's net worth			56482	57943
Gain in net WORTH		<del></del>		1461
	Q nan	t owners*	12	w w
tems	Jan, 1	Dec. 31	13 rent Jan. 1.	
otal acres in farm	341		307	Dec. 31.
Owned	187			
Rented	154		307	
otal farm capital	\$42874	\$42941	\$ <b>1</b> 4988	<b>6</b> 2.002.0
Stocks & bonds	634	905	φ#4300 8	<b>\$1881</b> 2
Life insurance	2608	2814		6
Accounts receivable	150	147	824	833
Other outside investments	417	515	4	····
otal outside investments	3809	4381	<u>50</u>	<u>65</u>
Dwelling	6324	6009	886	<del>9</del> 04
Cash on hand & in bank	450	971	420	
Other h.h. & pers. assets	<u> 2562</u>	2512	439	202
otal cash, h.h. & pers. assets	13145		<u> 2741</u>	2708
OTAL ASSETS	56019	13873 56814	4066	3814
Federal Land Bank Merbgage	6323	•	19054	22626
Other mortgages on land oper	• 7478	6170		<b>****</b>
Mortgages on other real esta	• 1410 to	7172		
FHA chattel mortgage	. Le	- Circles		
Production Credit Associatio	n E000	4200	435	1280
Crop loans		6309	94	62
Other chattel mortgages	1361	2503	354	
Notes payable	4164	3581	5077	5332
Accounts payable	2549	2653	227	488
OTAL LIABILITIES	2034	2043	<u>670</u>	322
	2852 <b>7</b>	27928	6857	7484
	201122			
Farmer's net worth	27492	28886 1394	12197	15142

<sup>\*3</sup> rented for cash and 6 crop share.

\*# 5 cash and crop share, 5 crop share, 1 cash, and 2 livestock share.

Table 7. Summary of Far	Your	6	9 part	13
tems	Farm	owners	owners	renters
FARM RECEIPTS				
Dairy & dual purpose cows		<b>\$1239</b>	\$ 315	\$ 613
Dairy products	-	3031	1605	1921
Beef cattle (incl. feeders)		11561	10064	1038
Hogs		8 <i>5</i> 99	2412	3358
Sheep & wool (incl. feeders)	-	646	53	153
Poultry (incl. turkepp)		30	180	59
Eggs		425	2403	430
Horses		_		
Corn		6048	3373	834
Small grain		1070	1422	470
Other crops		1263	2123	1026
Mach. & equip. sold, gas tas		517	160	209
Invome from work off the farm		482	528	243
Miscellaneous		<u>230</u>	<u>_267</u>	75
(1) Total farm sales		35141	24905	10429
(2) Increase in farm capital		11380	67	3824
(3) Family living from the far	m	<u> 426</u>	<u> 172</u>	170
(4) Total farm receipts 1+2+3		46947	25144	14423
RM EXPENSES			• • •	
Dairy & dual purpose bought		665		296
Beef cattle bought(Inc.Feeder)		8368	4882	444
Hogs bought		3332	430	181
Sheep bought (incl. feeders)		1858	5	49
Horses bought		<del></del>	-	
Poultry bought(incl. turkeys)		32	234	43
Miscellaneous livestock exp.		828	394	228
Feed bought		7784	3204	2259
Fertilizers bought		1808	640	239
Other crop expense		1091	1049	331
Custom work hired		746	786	373
Gas, oil, grease bought (farm)		1835	1025	754
Rep. of mech. power(farm share	)	717	616	441
MeDalr & unkeen of real estate		255	245	24
Rep. & upkeep crop&gen. mach.		537	351	272
Rep. & upkeep of lvatck equip.		158	49	56
Wages of hired labor		389	441	484
Electric exp. (farm share)		27Ó	236	156
Real estate & pers. prop. tax		1037	802	100
Cash rent	<del></del>		475	317
General farm expense		304	323	102
Interest paid		1960	$1\widetilde{337}$	276
(5) Total cash operating exp.		33974	17524	7425
(b) Capital purchases-Mech-pow		1179	242	
(/) Cap. purchases-crop-g.mach		1856	990	533
(8) Cap. purchases-livesk-equir	)	598	44	1184
(9) Cap. purchases-bldgfenc		2010	_405	449 _132
(10) Total farm purchases 5-9		39617	19205	
(11) Decrease farm capital		J/011		9723
(12) Interest on farm capital	<del></del>	2548	808	560
(ユメ) Unpaid family labor		718		569
(14) Board for hired labor	<del></del>		31 <i>3</i>	54 50
/7 <i>E</i> \ M_4_7		42912	20 20376	<u>50</u>
(16) Labor earnings 4-15		4035	20346	10396
(17) Return to capital &	<del></del>		4798 #010	4027
family labor 16+12+13		<b>7</b> 301	5919	4650

# 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 6 owners, 9 part owners, and 13 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 20 percent of the range according to earnings was \$9012 and of those in the lower 20 percent was \$1178. This is a range of \$7834 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. 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

Operator's Earnings

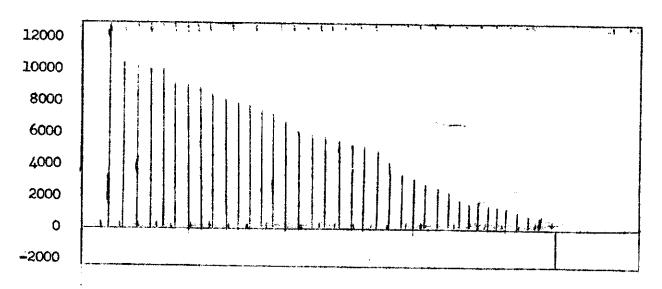


Fig. 1. Range in Operator's Earnings. Each line represents the earning of one farmer.

\* 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. Ag. Econ., Report No. 219, November, 1954

Studies of earning 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) return 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 Figure 2.

No. of Factors in Which Farmers Excelled	No. of farms	
0 - 1	6	\$3503
2 - 3	17	\$4815
4 - 5	11	\$5099
6 - 7	4	**

Figure 2, Relation of labor earnings to the number of factors in which the farmer excell, indicates that it will be well worth while for each cooperator 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.

# 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 of ten hours of work off the farm for pay. The number of work units for each class of livestock and each acre of erop 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. work	of units
Dairy & dual purpose cows	10.0 per cow	Small Grain		per acre
Other dairy & du. pur. Cattle	3.5 per an. unit*	Sugar Beets		per acre
Beef breeding herd	3.5 per an. unit*	Sweet Corn		per acre
Feeder Cattle	.25 per 100 lbs.	Corn husked	.7	per acre
Sheep farm flock	1.5 per an. unit*	Corn, hogged		per acre
Sheep feeders	.3 per 100 lbs.	Corn, (shredded)		
Hogs	.2 per 100 lbs.	Corn silage		per acre
Turkeys	.5 per 100 lbs.	Corn fodder		per acre
Hen <b>s</b>	20.0 per 100 hens	Alfalfa hay		per acre
Canning peas	.5 per acre	Soybean hay	_	per acre
Soybeans for grain	.5 per acre	Other hay crop		per acre

<sup>\*</sup>Animal-unit represents one dairy cow or bull, two other dairy cattle, 1\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}{4} hogs, 5 pigs, 50 hens or 1,100 pounds of turkeys produced.

Table 9. Measures of Farm Organization and Management Efficiency, 1960

Measures used in chart on page 13	Your farm	Average of 38 farms	8 most profitable farms	8 least profitable farms
Dperator's earnings	\$	\$5141	\$9012	\$1178
(1) Crop Yields*	-	100	111	88
(2) Percent tillable land in high ret. crops**	1	59.2	66.1	52.1
(3) Ret. for \$100 feed to prod. livestock ***		100	99	96
(4) Prod. livestock units per 100A.***		23.3	24.3	26.3
(5) Size of business - work unit		469	569	396
(6) Work units per worker		312	384	297
(7) Pow. Mach., Eguip., Bldg. exp. per work unit		10.60	12.03	11.44
tems related to some of the above	ve measur	es:		
(2) 20 2 2 3 4 2 2 2				
(3) Index of return for \$100 feed		300	rac.	97
Dairy cattle (see pgs. 186&	19	100 1 <b>0</b> 0	79 81	71
Beef brd, herd-Page 20 Beef cattle feeders-Page 20		100	111	78
peer carete reedera-rafe vo		100		10
Hogs-Page 17		200	99	114
Hogs-Page 17 Sheen-farm flock-Page 21		100	99 109	114
Hogs-Page 17 Sheep-farm flock-Page 21	·	100 100	99 109	-
	·		•	-
Sheep-farm flock-Page 21		100	•	der and
Sheep-farm flock-Page 21 Capons Chickens*(Page 22)		100	109	
Sheep-farm flock-Page 21 Capons Chickens*(Page 22) (4) Number of animal units		100 100 66.7	109  126 79.6	86 59•4
Sheep-farm flock-Page 21  Capons Chickens*(Page 22)  (4) Number of animal units  (5) Work units on crops		100 100 66.7 166	109  126 79.6 252	86 59.4
Sheep-farm flock-Page 21  Capons Chickens*(Page 22)  (4) Number of animal units  (5) Work units on crops Work units on prod. lvstk		100 100 66.7 166 299	109  126 79.6 252 299	86 59.4 110 271
Sheep-farm flock-Page 21  Capons Chickens*(Page 22)  (4) Number of animal units  (5) Work units on crops		100 100 66.7 166	109  126 79.6 252	86 59.4
Sheep-farm flock-Page 21  Capons Chickens*(Page 22)  (4) Number of animal units  (5) Work units on crops Work units on prod. lvstk Other work units		100 100 66.7 166 299 14	109  126 79.6 252 299	86 59.4 110 271
Sheep-farm flock-Page 21  Capons Chickens*(Page 22)  (4) Number of animal units  (5) Work units on crops Work units on prod. lvstk Other work units		100 100 66.7 166 299	109  126 79.6 252 299 18	271 15
Sheep-farm flock-Page 21  Capons Chickens*(Page 22)  (4) Number of animal units  (5) Work units on crops Work units on prod. lvstk Other work units  (6) Number of family workers		100  100 66.7 166 299 14	109 126 79.6 252 299 18	271 15
Capons Chickens*(Page 22)  (4) Number of animal units  (5) Work units on crops Work units on prod. lvstk Other work units  (6) Number of family workers Number of hired workers Total number of workers		100 100 66.7 166 299 14	109 	271 15 1.2 .1
Capons Chickens*(Page 22)  (4) Number of animal units  (5) Work units on crops Work units on prod. lvstk Other work units  (6) Number of family workers Number of hired workers Total number of workers  (7) Power expense per work unit		100 66.7 166 289 14 1.3 .2 1.5	109 	271 15 1.2 .1 1.3
Capons Chickens*(Page 22)  (4) Number of animal units  (5) Work units on crops Work units on prod. lvstk Other work units  (6) Number of family workers Number of hired workers Total number of workers  (7) Power expense per work unit Crop mach. exp. per work unit	t	100 	109	271 15 1.2 .1 1.3 6.00 3.67
Capons Chickens*(Page 22)  (4) Number of animal units  (5) Work units on crops Work units on prod. lvstk Other work units  (6) Number of family workers Number of hired workers Total number of workers  (7) Power expense per work unit	t	100 66.7 166 289 14 1.3 .2 1.5	109 	271 15 1.2 .1 1.3

<sup>\*\*</sup> 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. \*\*\*An index weighted by the animal units of livestock.

<sup>\*\*\*\*</sup>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.			<del></del>	استنداني و دوانوس		Return	P	r. L.	S.		Wo	rk	Pow-ma	ich
labor				High		om pro		units			Uni		eqb]	
earn-		Crop		return		luctiv		per		Wrk.		er		per
ings	у	ield	8	crops	liv	restoc	k	100 A		nits	WOI	ker	work	
티		<b>b</b> 1								F				
12000	7.0	=	~~		3.40	=	~~	_	105		200	=	_	=
13000	140	_	75		140	=	39		675		390	_	3	_
-	!	F				_		<b> </b>		_				
12000	135		73	=	135		37	-	650		380		4	
E	-55		,		-55	_							,	_
F1						_								
11000	130		71		130	=	35		625		370		5	1_
El						-				-				_
10000	125		69	=	125	-	33	=	600-	E_	360	<u> </u>	6	
=	,	-			2~)	_					,,,,,	=		
9000 -	120		67	<u>  </u>	120		31		575		350-		7	
<u> </u>		-		= 1				E				_		
8000	115	E	65		115		29		550	_	340-	-	8	-
5000 E	117		رن		117		~7	[ I			740	-		-
								-				=		
7000	110		63		110		27		525		330	=-	9	
<u> </u>		-						_				=		
6000	100	E	45		300		<i>#</i> .		500		200	=	10	-
6000 E	105	-	61		105	<u> </u>	<b>\$</b> 5		500	-	320	-	10	-
=						=				=				
5000	100		<b>-</b> 59		100		23		475		310		11	7-
										=		-		
-,-,-			=			1=1				-		= -		
\$000	95		<sup>-</sup> 57		95		21		450	-	300		12	
<u>-</u>		_												_
3000	90		55		90		19		425	-	290		13	
<u> </u>		E		FI				-				=		
2000	85		£2		0.5		20	_		=	ada		•	F
2000	(6)	-	53	-	85		17	-	400		280		14	
E I								=		F				F
1000	80		51		80		15	<u></u>	375		270		15	
<u>[</u> ]	Ì	-		=						=		_		=
<u> </u>	~~	=		=	F-0 FF	=				<del>-</del>	-/-	=		
0	75	-	49		75		13		350		260	_	16	
		=						=						
-1000	70		47		<b>7</b> 0		11		325		250		17	
	Į	=		E					ļ			Ξ		=
-2000	65		45		65		9		300		240		18	
-3000	60		43		60	dehen-	7		275	<b>E</b>	230	=	19	
	~~		47		•		,		213		پر∡		17	

Table 10. Distribution of Acres in Farm, 1960

	$\mathtt{Crop}$	Your	Average of
	ratings*	farm	38 farms
Flax	С		10.9
Barley	Č	***************************************	5.1
Theat	č	<del></del>	11.4
Dats & oat mixtures	· D		36.9
Rye	D		
Jo Dat silage	Č	<del></del>	
Buckwheat	Ď	<del></del>	.2
Potal small grain and peas	_		<u>.2</u> 64.5
-	_		22/ 6
Corn grain	A		114.7
Soybeans for grain	B	-	25.7
Sweet corn	A		.7
Corn or sorghum silage	В		12.6
Total cultivated crops		-	153.7
Alfalfa hay	В		29.8
Other legume & mixtures	C		1.1
limothy & brome hay & seed	D		1.5
Annual Hay	D		•3
Total tillable land in hay			32.7
Alfalfa pasture	В		5.9
Other legume & mixtures	Č	<del></del>	.2
Sudan and/or rape	č	<del></del>	1.3
Other tillable pasture	Ď	<del></del>	-2
Total tillable land in pasture	2		7.6
a. 17. b 1	•		
Soil Bank	A		
Fillable land not cropped	D		1.9
Total tillable land			260.4
Wild hay			2.8
Non-tillable pasture			3900
Timber (not pastured)			2.1
Roads and waste			13.8
Farmstead			9.6
Total acres in farm			318.7
Percent land tillable			81.5
Percent tillable land in high return	crons	<del></del>	59.2
or some attracte total taractic security	or obe	<del></del>	J/•~

<sup>\*</sup>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, 1960

		Average of
	Your	farms growing
brop	Farm	each crop
lax, bu.		13.1
arley, bu.		37.7
eat, bu.		26.1
ts, bu.		55.6
ickwheat bu.		25.0
t silage, tons		
llet, bu.	<del></del>	-
rn grain, bu.	<del>4 2 2 </del>	57.7
ybeans, bu.		20.8
rn silage, tons		10.3
falfa hay, tons		2.8
her legumes & mixtures, tons		1.9
mothy or brome hay, tons		•9
ild hay, tons		time expe

#### 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 70 to 577 with an average of 334 (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, 1960 8 least Average 8 most Your ●f 38 profitable profitable I tems farms Farm farma farms 176 Crop acres per farm 251 334 Tractor and horse exp. per crop A. 4.76 6.48 5.44 Crop & gen mach. exp. per crop A. 4.66 7.84 5.51

# AMOUNT OF LIVESTOCK

A large proportion of the farmers maintained some dairy cattle and hegs (Table 13). Thirty nine percent of the farmers kept poultry.

Table 13. A	mount of Live	stock, 1960	
	Average	8 most	8 least
Your	<b>3</b> £ 38	profitable	profitable
Farm	farms	farms	farms
Number of milk coss	10.4	2.1	13.1
Number of other dairy cattle	11.8	1.0	18.8
Number of beef cattle(INcl-Feeder	26.9	39.5	22.7
Number of sheep*	13.2	5.1	3.9
Number of hens	276	593	204
Litters of pigs raised	13.0	23.2	7.4
Pounds of hogs produced	27936	45732	8955
Pounds feeder cattle produced	12299	22949	16625
*Two lambs under six months of age co	nsidered as o		

# 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 1000pounds". 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.

Tat	ole 14.	Total	Feed	Costs	and	Returns	From Your	Livestock E	interprises.	1960
						Dairy o	r dual pur	poše <u>cattle</u>	Beef breed	ling
						Cows	Other	A11	herd	
Total	returns								4	
Total	feed co	st								
Total	return	over fe	ed						***	
						Feeder Cattle	Hogs	Farm fl		cens
Total	returns									
Total	feed co	st						<del></del>		
Total	return	over f	ed :							

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 \$9.07 for those farmers ranking in the upper one half in feeding efficiency to a return of \$4.39 for those in the lower one half. Some of the important factors that affected return over feed were:

- Quantity of feed required to produce 100 pounds of hogs.
   Price received.
- 3. Number of pigs born per litter.
- 4. Number of pigs weamed per litter.

Table 15. Feed C	osts and	Returns f	rom Hogs. 1960	
			14 farms	15 farms
		Average		lowest in
	Your	of 29	returns	returns
Items	Farm	farms	above feed_	above feed_
Feed per cwt. hogs produced, 1bs.				
Corn		277	200	350
Small grain		89	78	99
Commercial feeds	<del></del>	99	118	82
60% alfalfa	<del></del>	_4_	L	3
Total concentrates		469	400	534
Skim milk and buttermilk	***************************************	**	terate	ma yar
Feed cost per cwt. hogs produced				
Concentrates	<b>\$</b> t	\$10.01	\$ 8.66	\$11.26
Skim milk and buttermilk	¥	\$20.0I	* 0400	#
Pasture		.04	06	.03
TOTAL FEED COSTS	<del></del>	10.05	8.72	11.29
TOTAL FEED GOOTS		10.07	0.12	22.07
Net increase in val. per cwt. hog Produced	(s 	\$16.70	\$17.79	\$15.68
RETURNS ABOVE FEED COST PER CWT. HOGS PRODUCED	\$	6.65	9.07	4.39
RETURNS FOR \$100 OF FEED	\$	175	213	140
Price received per cwt. hogs sold	\$	15.92	16.22	15.63
No. of spring litters raised No. of fall litters raised Total no. of litters raised	************	13.3 <u>9.7</u> 23.0	18.4 14.2 32.6	8.5 5.5 14.0
No, of pigs born per litter No. of pigs weaned per litter Hogs purchased Pounds of hogs produced		8,4 6.5 4152 37304	8.6 6.8 665 36201	8.7 6.7 7406 38335

# 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 \$53.85 to \$246.20 among the 20 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 peceived for butterfat

- Feeding efficiency
   Quality of ration
   Economy of ration (feed cost per pound butterfat)

Table 16. Factors	s of Cost	and Return	s from Dairy (	lows, 1960
			10 farms	10 farms
		Average	highest in	lowest in
	Your	of 20	butterfat	butterfat
Items	Ferm	farms	per cow	per cow
David 3		221	262	202
Pounds of butterfat per cow	-+=7	324 86 <b>.</b> 7	362	287 86 <b>.</b> 6
Price ref. per 1b. B. F. sold(cer		•	86.7	= = = = = = = = = = = = = = = = = = = =
Price rec. per 1b. B. Fwhole m		87.3	88.0	86.6
Price rec. per 1b. B. F cream		67.4	67.4	
Feeds per cow. lbs.:				
Corn		2007	1822	2192
Small grain	<del></del>	693	793	593
Commercial Feeds	<del></del>	537	644	430
Common and Tookin		<i>))</i> (	<b></b>	450
Legume hay		45.33	5235	3831
Other hay	<del></del>	369	159	580
Fodder and stover	-	797		
	-			
Total concentrates		3237	32 <b>59</b>	3215
Total dry roughage		4902	5394	4411
Silage	<del></del>	6920	7728	6113
• 6	<del></del>			
Feed cost per cow:				
Concentrates		\$63.11	\$65.81	\$60.40
Roughages		72.27	76.43	68.12
Pasture		12.42	11.52	<u>13.32</u>
TOTAL FEED COSTS		147.80	153.76	141.84
	-	•	. •	
Value of produce per cow:				<b>3</b>
B. F. sales		\$270.05	\$299.79	\$240.30
Dairy produce used in house	<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>	4.87	4.85	4.88
Milk to livestock		5.14	5.77	4.53
Net increase in value of cows		- <u>12.82</u>	- <u>12.04</u>	- <u>13.60</u>
TOTAL VALUE PRODUCED		267.24	298.37	236.11
RETURNS ABOVE FEED COST PER COW		119.44	144.61	94.27
THE COM	<del>-/</del>	/ • <del></del> /	Tribut a Cry	/446/61
returns for \$100 of feed		185	201	169
Feed cost per 1b. B. F. (cents)	<del></del>	41.9	39•3	44.5
Number of cows*		19.3	23.6	15 7
MARINGE OF COMM.		1703	£3.0	15.1

<sup>\*</sup>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 Retur	ns from C	ther Dairy	and Dual Purpose	Cattle, 1960
			10 farms	10 farms
		Average	•	lowest in
	Your	of 20	butterfat	butterfat
Items	Farm	farms	per cow	per cow
Feeds per head, lbs.:				
Concentrates		<del>9</del> 80	542	1419
Hay and fodder		1995	259 <del>9</del>	1391
Silage		2208	2275	2141
Skim milk	<del></del>	***	-	·
Whole milk		176	197	155
Feed cost per head:				
Concentrates	\$	\$15.48	\$11.68	\$19.28
Roughages		20.24	22.03	18.45
Milk		4.87	5.17	4.57
Pasture		4.39	3.53	5.26
TOTAL FEED COSTS PER HEAD		44.98	42.41	47.56
Net. inc. in value of other cattl	le	91.05	85.60	96.51
RETURNS ABOVE FEED COST PER HEAD		46.07	43.19	48.95
	************	• •	••	*
RETURNS FOR \$100 OF FEED	***************************************	200	194	205
Number of head of other cattle		21.8	23.4	20.1
•				

Table 18. Feed Costs and Return	s from al	l Dairy and	Dual Purpose C	attle, 1960
			10 farms	10 farms
		Average	highest in	lowest in
	Your	of 20	butterfat	butterfat
Items	Farm	farms	per cow	per cow
Feeds per animal unit, lbs.:				
Concentrates	-	3145	25241	3748
Hay and fodder		4599	5200	3998
Silage		6277	6749	<b>5805</b>
TOTAL FEED COSTS PER ANIMAL UNIT	\$	\$126.44	\$131.32	\$121.55
Value of produce per animal unit:	<b>:</b>	•		
Dairy products		174.89	199.92	149.87
Net increase in val. dairg	7	58.79	54.69	62.89
TOTAL VALUE PRODUCED	<del></del>	233.68	254.61	212.76
RETURNS ABOVE FEED PER ANIMAL UNI	[ T\$	107.24	123.29	91.21
RETURNS PER \$100 OF FEED		187	198	176
Animal units of cattle		30.5	36.1	25.0

Table 19. Feed Costs and Returns from Beef Cattle, 1960 Average Your of all <u>Items</u> Farm farms Beef breeding herd: No. of farms: 6 Feeds per animal unit. 1bs.: Concentrates 330 Legumes 1280 Other hat 1480 Fodder and stover Silage 3906 Feed cost per animal unit: Concentrates \$ 8.10 Roughages 32.57 Pasture 11.17 TOTAL FEED COSTS 51.84 Value of produce per animal unit: Dairy products Net increase in value of animals 105.43 TOTAL VALUE PRODUCED 105.43 RETURNS ABOVE FEED COST PER ANIMAL UNIT 53.59 RETURNS FOR \$100 OF FEED 240 Number of cows and herd bulls 37.0 Number of animal units in the herd 35.9 Lbs. beef produced 13545 Feeding Cattle: No. of farms Corn 521 Small grain 9 Commercial feeds 48 Legume hay 260 Other hay 41 Total concentrates 578 Total hay and fodder 301 Silage 754 Feed cost per cwt. beef produced: Concentrates \$10.89 Roughages 5.16 Pasture TOTAL FEED COSTS 16.22 Net increase in value of feeders 20.14 RETURNS ABOVE FEED COST PER CWT. BEEF PROD. 3.92 RETURNS FOR \$100 OF FEED 126 Price paid per cwt. beef bot 21.47 Price recd. for feeder cattle sold 22.89 Number of animal units 46.5 Pounds of beef produced 35863

Table 20. Feed Costs and Returns from a Farm Flock of Sheep, 1960

	Average
77	
Your	of 6
Farm	farms
	195
	509
<del></del>	· <del>Antiques</del>
<del>~~~~</del>	720
<del>400 ***********************************</del>	
<b>\$</b>	<b>\$</b> 3.59
	5.81
	1.43
<u>*</u>	10.83
<del>***********</del>	
<b>₫</b>	\$ 3.30
<del>*</del>	8.20
2	11.50
¥	11.70
\$	.97
<u>\$</u>	\$118
\$	\$17.84
¥	44.3
<del></del>	8.9
	57
	97
	ź <u>i</u>
	~-
	5741
	00
<del></del>	80
	\$ \$ \$ \$ \$

<sup>\*</sup> Two lambs under six months of age considered as one head.
\*\* Lambs which Hie during month of birth are not included.

#### CHICKENS

Four out of the 15 farmers raising chickens failed to receive a return large enough to cover the cost of feed. The average return over feed from the 15 flocks included in this report was \$ .78 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. Per cent of hens that are pullets5. Percentage death loss of hens.

Table 21. Feed Costs and Returns from Chickens, 1960\*

1tems	Your Farm	Average of 15 farms	8 Highest	7 Lowest
Feed per hen, lbs.: Grain Commercial feeds Total concentrates Skim milk and buttermilk TOTAL FEED COST PER HEN Value of produce per hen: Eggs sold and used in house Net increase in value of chickens TOTAL VALUE PRODUCED	\$ \$	76 45 121 \$2.98 3.83 07 3.76	68 35 103  \$2.45 4.40 14 4.26	86 56 142  \$3.58 3.18 .02 3.20
RETURNS ABOVE FEED COST PER HEN	\$	\$ .78	\$1.81	\$38
RETURNS FOR \$100 OF FEED Price rec'd. per doz. eggs solld (cts.) Eggs laid per hen		\$134.00 .28.2 161	\$174.00 .29.4 177	\$ 88.00 .26.8 142
Ave. no. hens on farm during year Per cent of hens that are pullets Per cent death loss of hens Number of chicks started: Lbs. chickens produced		699 73 9 520 2033	1141 70 8 885 3552	193 77 9 104 297

<sup>\*</sup> Includes feeds and returns from laying flock and rearing flock.

- 23 - Table 21. Summary of Miscellaneous Items by Years

	1953-56	1957	1958	1959	1960	
Acres in Farm						
Small grains	79.2	62.2	53.6	34.3	64.5	
Cultivated crops	79.1	108.2	108.2	172.2	153.7	
Tillable land in hay	31.1	36.9	30.4	30.9	32.7	
Tillable land in pasture	11.4	15.8	10.9	5.2	7.6	
Soil Bank	-	3.8	5.1		-	
Tillable land not cropped	2.3	8	1.8		1.9	
Total tillable land	203.1	$2\overline{27.7}$	210.0	242.6	260.4	
Wild hay & non-tillable pastur	e 31.1	26.2	22.8	22.9	32.8	
Other non-tillable land	31.8	37.5	28.7	37.5	25.5	
Total acres in farm	266.0	291.4	261.5	303.0	318.7	
Yields per acre:						
Flax, bu.	11.0	5.3	13.8	8.9	13.1	
Barley, bu.	30.1	25.9	46.9	38.1	37.7	
Wheat, bu.	18.5	20.4	31.0	22.4	26.1	
Oats, bu.	38.2	38.6	55.8	43.1	55.6	
Oat silage, ton			5.1	<b>5.</b> 8	5.8	
Corn grain, bu.	49.3	47.5	50.0	48.8	57.7	
Soybeans, bu.	19.5	19.8	18.7	19.7	20.8	
Corn silage, tons	8.7	8.0	10.1	10.3	10.3	
Alfalfa hay, tons	2.6	2.6	2.5	2.6	2.8	
Measures of fm. Org. & management:						
Percent of land in high ret.						
crops .	51.0	52.7	53.2	67.2	59.2	
Prod. L. S. units per 100 A	17.9	21.6	22.6	38.0	23.3	
Size of business, work units	343	351	362	519	469	
Work units per worker	234	218	256	325	312	
Exp. per work unit	\$10.06	\$13.95	\$13.36	\$11.64	\$10.60	
Return above feed cost per:						
Dairy cow	68.00	113.57	132.24	145.92	119.44	
An. unit in beef breeding herd		98.68	87.02	76.52	53.59	
100 lbs. feeder wattle produce		10.91	9.95	2.30	3.92	
100 lbs. hogs produced	5.28	6.54	9.02	1.07	6.65	
Head native sheep	5 <b>.5</b> 8		-		-97	
Hen	1.31	.87	1.13	14	.78	
Feed cost per:						
Dairy cow	129.85	148.37	142.28	136.18	147.80	
An. unit in beef breeding herd	76.76	98.68	67.20	57.94	51.84	
100 lbs. feed cattle produced	21.18	16.90	14.19	17.92	16.22	
100 lbs. feed cattle produced 100 lbs. hogs produced	21.18 12.27	16.90 11.75	14.19 10.02	17.92 9.91	16.22 10.05	
100 lbs. feed cattle produced	21.18					

Table 21. Summary of Miscellaneous Items by Years (continued)

	1953-56	1957	1958	1959	1960
isc. livestock information:					
No. dairy & dual purpose cows	10.6	21.5	21.8	17	10.4
Lbs. beef produced	3088	22072	<b>3</b> 63 <b>7</b> 8	30424	12299
Litter of pigs	8.3	12.8	10.0		13.0
Lbs. hogs produced	15256	23182	24982	33173	27936
No. of hens	160	450	391	291	276
Lbs. butterfat per milk cow	270	296	305	311	324
No. of pigs weaned per litter	6.6	6.2	6.3		6.5
Percent lamb crop	101				97
Eggs per hen	184	179	164	199	161
rice received per:					
Lb. butterfat sold as cream	\$65.3		<b>\$</b> .622	\$	\$ .674
Lb. butterfat sold as milk	86.3	\$ .88	.862	.887	873
100 lbs. fat cattle	18.76	17.55	24.86	25.10	22.89
100 lbs. hogs	17.87	18.13	20.15	14.05	15.37
100 lbs. lambs	18.76	4040			17.84
Lbs. of wool	.403		-	4000	.443
Doz. eggs	.337	.279	30.3	.248	.282
rice pf feed:					
Corn, bu.	\$ 1.28	\$ 1.10	\$ .98	\$ .98	\$ .96
Oats	.66	.61	.535	•58	•58
Barley, bu.	1.00	.91	.90	.92	.87
Alfalfa hay, ton	17.75	17.00	17.75	22.00	19.50
Timothy hay, ton	10.31	9.80	10.25	14.15	11.10
Corn silage, ton	5.90	5.80	6.00	6.60	6.50
Soybean meal, cwt.	4.01	3.52	3.50	3.85	3.83

Table 22. Summary	1953-56		1958	1959	
No. of farms	1775-70		12,0		
NO. OI TAIMS	44	25	32	16	
Farm receipts:	44	2)	)	10	
	\$ 689	\$ 814	\$ 786	\$ 724	•
• •				2682	•
Dairy products	2154	2697	2737		
Beef cattle	1550	4661	7140	15373	
Hogs	2614	3253	2736	5906	
Sheep and wool	171	31	69	65	
Horses	4	19		**	
Poultry	114	46	120	90	
Eggs	792	941	841	1369	
Corn	1284	2604	1480	2290	
Small grain	1472	798	1206	753	
Other crops	714	1447	1666	1190	
Mach & equip. sold	173	297	230	265	
Income from work off farm	352	223	406	319	
Miscellaneous				217	
	176	201	<u>208</u>		
Total farm sales	12259	18032	19625	31243	
Increase in farm capital	1316	1071	3339	920	
Family living from the farm	<u> 262</u>	205	237	<u> 244</u>	
	13837	19308	23201	32407	
Farm Expenses:					
Dairy & dual-purpose cattle	167	400	<b>288</b> ୯	-	
Beef cattle bought	616	2839	4475	5250	
Hogs bought	227	346	589	4165	
Sheep bought	20	53	93	591	
Horses bought	2	18		****	
Poultry bought	101	103	101	253	
Misc. livestock expense	219	319	339	530	
Feed bought	1476	2440	2440	6489	
Fertilizers	259	630	382	901	
		600	552	874	
Other crop expenses: Custom work hired	505				
	428	584	<i>5</i> 7 <i>5</i>	674	
Gas, oil & grease bought	769	882	970	1127	
Repairs for mechanical power	316	473	441	555	
Repair & upkeep of real estate	151	168	224	141	
Rep. & upkeep of crop machinery		360	380	498	
Rep & upkeep of livestock	86	81	87	156	
Wages of hired labor	392	537	499	896	
Electricity expense	136	177	171	246	
Real estate & per. Prop. taxes	512	641	666	943	
General farm expense	<u> 160</u>	197	211	321	
Total cash operation expenses		11848	13483	24610	
Capital purchases-mech. power	656	606	770	804	
-crop & gen. mach.	822	1198	878	1400	
-livestock equipment	195	301	210	688	
-blgg. & fencing	446	944_	605	603	
Total farm purchases	8920	14897		28105	
	3720		15946	\$0.10°	
Decrease in farm capital	3066	2403	0.00	26.00	
Interest on farm capital	1956	2403	2486	3609	
Unpaid family labor	321	358	288	263	
	83	146	<u> 101</u>	<u> 135</u>	
Board furnished hired labor				27772	
Board furnished hired labor	11280	17804	18821	32112	
Board furnished hired labor	11280				
Board furnished hired labor Total farm expense		17804 1504	4380	295	