

COOPERATIVE FARM MANAGEMENT IN N.W. MINNESOTA PUBLIC SCHOOLS - 1954

by
Lauren Granger

November 1955
Department of Agricultural Education, University of Minnesota

CONTENTS

	<u>Page</u>
Introduction	1
Purposes of Report	2
Farm Inventories and Farm Earnings	3
Summary Farm Inventories	4
Summary Farm Earnings	5
Household and Personal Expenses and Receipts	6
Summary and Conclusions	7

INTRODUCTION

In 1953 the vocational agriculture departments of Minnesota public schools, the State Department of Education and the University of Minnesota joined forces in organizing the Cooperative Project in Adult Education in Agriculture.

A unique feature of this new educational program is the use made of farm records in training farmers to observe and improve the business phase of their farming. All farm operators enrolled keep a record of their business affairs in the Minnesota Farm Account Book. These accounts are analyzed annually by a central headquarters in order to study the facts of the farm businesses involved. The resulting farm management data is exceedingly valuable in helping vocational agriculture teachers and farmers to cooperate in accomplishing the goal of adult vocational agriculture education, which is better farming and farm living.

This report deals with farmers enrolled in seven schools in northwestern Minnesota. The following tabulation shows by schools the number of 1954 farm records submitted:

Fosston	2	Roseau	4
Greenbush	5	Stephen	1
Lancaster	1	Warren	4
Mahnomen	1	Total	<u>18</u>

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.

PURPOSES OF REPORT

The chief reason for publishing this farm management summary has been to build a feeling among teachers and farmers of the vital need for farm records and farm business studies as they plan and carry out programs of farming improvements. Also, this report has been developed with the following additional objectives in mind:

1. To provide cooperating farmers with an individual analysis of their farm businesses.
2. To permit cooperating farmers to compare their farming resources of land, labor, capital and management with other farmers in northwestern Minnesota.
3. To present a picture of the patterns of farming followed in northwestern Minnesota.
4. To encourage vocational agriculture instructors to participate in the Cooperative Farm Management Program.
5. To point out the need for more farmers and schools to take part in this kind of adult education in the future so that the management summaries will be more meaningful.
6. To highlight the evaluation potentials of farm records and management summaries in noting the strength, weaknesses and trends of improvements in managing a farm.

FARM INVENTORIES

The capital investment per farm varied from approximately \$10,000 to more than \$150,000. The average investment for all farms included in this report and for the one-third high and the one-third low in operator's labor earnings is shown in Table 1.

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 an enterprise or accrual basis. The principal difference in the two statements is in the method of handling the net increase or decrease in 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 expenses and net decreases" by enterprises.

Table 1. Summary of Farm Inventories, 1954

Items	Your farm		Average of 18 farms	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Size of farm (acres)	_____	_____	548	
Size of business (work units)	_____	_____	426	
Dairy and dual purpose cows	_____	_____	\$ 1337	\$ 1622
Other dairy & dual-purpose cattle	_____	_____	716	677
Beef cattle (incl. feeders)	_____	_____	1905	1492
Hogs	_____	_____	151	145
Sheep (including feeders)	_____	_____	334	330
Poultry (including turkeys)	_____	_____	64	42
Productive livestock (total)	_____	_____	4507	4308
Horses	_____	_____	76	71
Crops, seed and feed	_____	_____	7060	4694
Power mach. (farm share)	_____	_____	2355	2538
Crop and general machinery	_____	_____	6680	7710
Livestock equipment	_____	_____	457	412
Machinery and equipment (total)	_____	_____	9492	10660
Miscellaneous	_____	_____	--	--
Land	_____	_____	16434	16434
Buildings, fences, etc.	_____	_____	8346	8656
Total farm capital	_____	_____	45915	44823

Items	<i>Ave. 1/3 High</i>		<i>Ave. 1/3 Low</i>	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Size of farm (acres)	716		409	
Size of business (work units)	596		367	
Dairy and dual purpose cows	\$ 1707	\$ 1930	\$ 1366	\$ 1788
Other dairy and dual purpose cattle	672	786	818	707
Beef cattle (incl. feeders)	4516	3160	447	458
Hogs	250	291	81	56
Sheep (including feeders)	551	528	243	271
Poultry (including turkeys)	72	7	34	58
Productive livestock (total)	7768	6702	2989	3338
Horses	18	13	171	175
Crop, seed, and feed	16238	9865	2055	1681
Power mach. (farm share)	3294	4045	2040	2526
Crop and general machinery	10335	10200	4615	4329
Livestock equipment	769	653	309	335
Machinery and equipment (total)	14398	14898	6964	7190
Miscellaneous	—	—	—	—
Land	16823	16823	15028	15028
Buildings, fences, etc.	7694	8695	10815	10664
Total farm capital	62939	56996	38022	38076

Table 2. Summary of Farm Earnings (Enterprise Statement) 1954*

Items	Your farm	Average of 18 farms	6 most profitable farms	6 least profitable farms
RETURNS AND NET INCREASES				
Dairy and dual-purpose cows	_____	\$ 1950	\$ 2333	\$ 2098
Other dairy & dual-purpose cattle	_____	662	822	581
Beef breeding herd	_____	771	1432	304
Feeder cattle	_____	868	2604	—
Hogs	_____	315	674	61
Sheep - farm flock	_____	242	139	325
Capons	_____	—	—	—
Chickens	_____	264	204	277
All productive livestock	_____	5072	8208	3646
Value of feed fed to livestock	_____	3699	5653	2869
Return over feed from livestock	_____	1373	2555	777
Crops, seed, and feed	_____	11126	21381	4460
Income from labor off the farm	_____	297	250	572
Agricultural conservation payments	_____	138	199	79
Miscellaneous	_____	240	608	14
(1) Total returns & net increases	_____	13175	24993	5902
EXPENSES AND NET DECREASES				
Horses	_____	\$ 35	\$ 25	\$ 64
Truck	_____	453	680	414
Auto (farm share)	_____	381	341	386
Tractor	_____	1539	2631	924
Elec. & gas engine exp. (farm share)	_____	197	274	170
Hired power	_____	194	300	116
Total power	_____	2799	4251	2074
Crop and general machinery	_____	1572	2381	1148
Livestock equipment	_____	150	290	93
Buildings, fencing, and tiling	_____	957	1780	443
Misc. productive livestock exp.	_____	232	422	154
Labor	_____	2035	4099	916
Real estate taxes	_____	609	933	390
Personal property tax	_____	198	283	139
Insurance	_____	102	249	22
General farm	_____	140	254	101
Interest on farm capital	_____	2269	2998	1903
(2) Total expenses & net decreases	_____	11063	17940	7383
(3) Operator's earnings (1)-(2)	_____	2112	7053	-1481

*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.

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 3. These farmers spent an average of \$149 per month for family living in addition to the food, fuel and housing furnished by the farm.

Table 3. Household and Personal Expenses for
Those Farms Which Kept Complete Accounts of These Expenses, 1954

Items	Your farm	Average of 13 farms	4 most profitable farms	4 least profitable farms
Number of persons - family	_____	4.2	3.8	2.4
Number of adult equiv. - family	_____	3.1	2.8	2.0
other*	_____	.2	.2	.2
Food and meals bought	_____	\$ 610	\$ 575	\$ 468
Operating and supplies	_____	126	91	150
Furnishings and equipment	_____	202	328	105
Clothing and clothing materials	_____	258	256	194
Personal care, personal spending	_____	93	88	63
Education, recreation and development	_____	105	147	55
Gifts and special events	_____	84	56	105
Medical care and health insurance	_____	111	99	80
Church, welfare	_____	48	38	48
Personal share of auto expense	_____	61	71	54
Operator's share of upkeep on dwelling	_____	36	1	35
Household share of electric expense	_____	57	63	30
Total cash living expense	_____	1791	1813	1387
Household & pers. share of new auto	_____	13	--	33
New dwelling	_____	--	--	--
Taxes and other deductions	_____	93	220	39
Life insurance	_____	142	132	32
Other savings and investments	_____	5	14	--
Total household and personal cash exp.	_____	2044	2179	1491
Total family living from the farm	_____	300	305	187
Total cash expenses and perquisites	_____	2344	2484	1678
Receipts:				
Return to capital and family labor	_____	1899	2878	454

*Hired help and others boarded.

SUMMARY

It is well to note that conclusions drawn from a small number of first year farm records as found in this report are necessarily of less value than studies made among large groups of experienced record keepers. However, there are several items of general interest in this farm management summary as listed below that have implications for future farm management study and action:

1. The number of acres farmed per farmer is well above the state average.
2. Cash cropping was the predominate source of farm income.
3. Dairying was the major livestock enterprise found on most of the farms. Beef and sheep were next in importance while hogs and poultry were minor livestock enterprises.
4. The farm earnings of the top group of farmers were very satisfactory for providing an above average level of living.
5. Farms in this report with the lowest earnings showed a tendency to have smaller amounts of land, labor and working capital than did the high income farms; also, they realized lower rates of returns from these farming resources.
6. An increased number of farmers enrolled in the northwestern Minnesota Farm Management Program will make future studies more valid and useful in determining which types of farming and what kinds of management are most profitable in this part of the state.