

10

W.E. Sullivan

1957 ANNUAL REPORT

VOCATIONAL AGRICULTURE FARM MANAGEMENT PROGRAM

NORTHWESTERN MINNESOTA

**UNIVERSITY OF MINNESOTA
INSTITUTE OF AGRICULTURE**

and

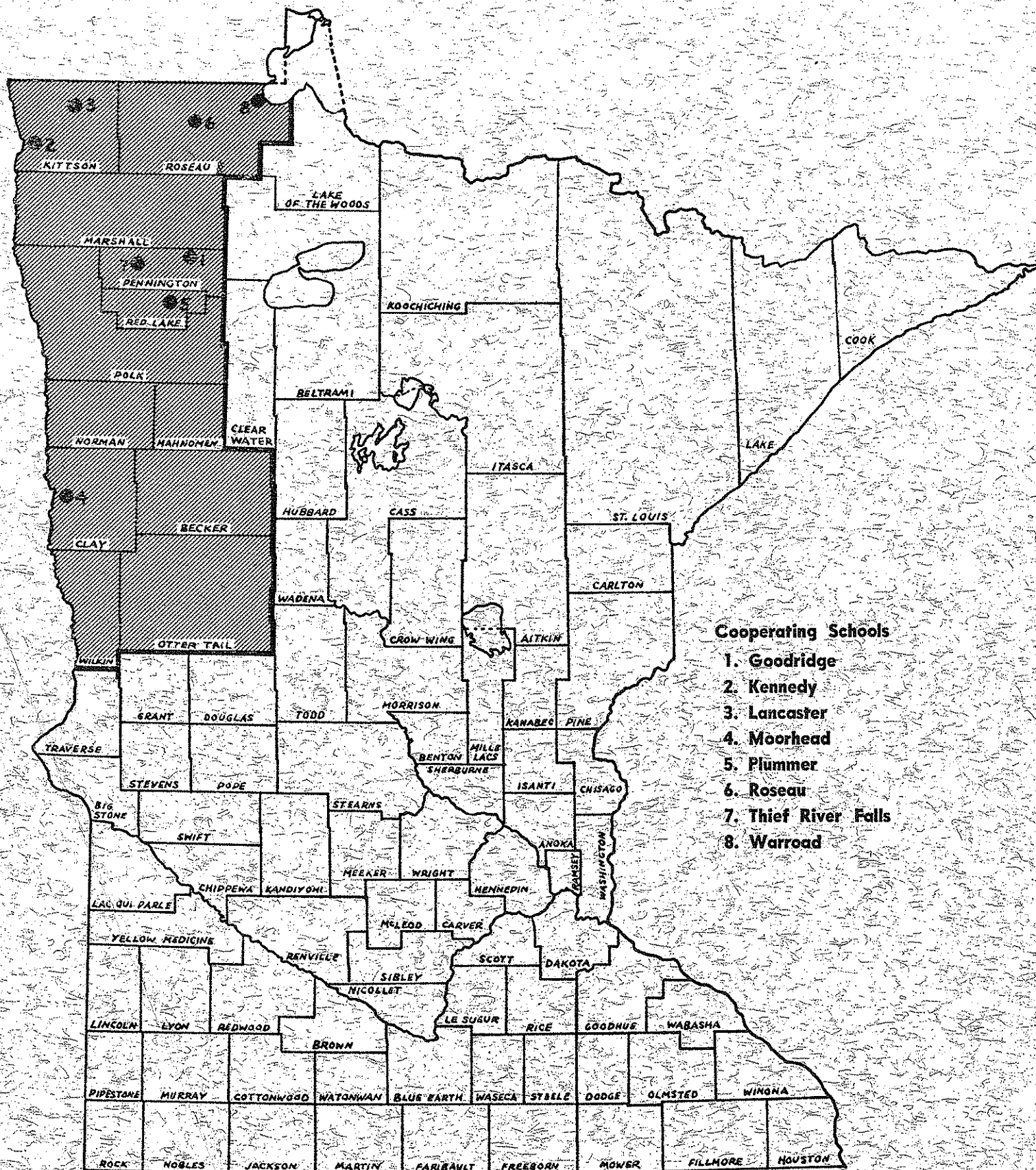
**MINNESOTA DEPARTMENT OF EDUCATION
VOCATIONAL DIVISION**

and

**AREA VOCATIONAL TECHNICAL SCHOOL
THIEF RIVER FALLS, MINNESOTA**

Cooperating

MARCH 1958



Cooperating Schools

1. Goodridge
2. Kennedy
3. Lancaster
4. Moorhead
5. Plummer
6. Roseau
7. Thief River Falls
8. Warroad

1957 REPORT OF THE FARM MANAGEMENT SERVICE FOR VOCATIONAL
AGRICULTURE IN NORTHWESTERN MINNESOTA

ARNT AUNE

INDEX

	Page
Introduction.....	1
Summary of Farm Inventories.....	3
Summary of Farm Earnings (Cash Statement).....	4
Summary of Farm Earnings (Enterprise Statement).....	5
Family Living from the Farm.....	6
Household and Personal Expenses and Receipts.....	6
Net Worth.....	7
Explanation of "Work Units".....	8
Range in Earnings.....	9
Measures of Farm Organization & Management Efficiency.....	10
Thermometer Chart.....	11
Distribution of Acres in Farm.....	12
Crop Yields.....	13
Power and Machinery Expenses.....	13
Amount of Livestock.....	13
Total Feed Costs & Returns from Livestock Enterprises.....	14
Dairy Cattle.....	15
Sheep.....	17
Chickens.....	17
Beef Cattle.....	18
Hogs.....	19
Average Prices Used.....	20

INTRODUCTION

The Department of Agricultural Education of the University of Minnesota, and the Thief River Falls Area Vocational-Technical School are cooperating with the Vocational Division, Minnesota Department of Education, in maintaining a farm management service. The service was initiated during 1955 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 Northwestern Minnesota are done under the direction of Arnt Aune of the Area Vocational School at Thief River Falls. Clerical assistants for this project were Mrs. Hazel Maves, Adeline Flatland, Mrs. Pearl Larson and Mrs. Gelene Peltier. Mrs. Viola Jaranson, office secretary, assisted with the program throughout the year.

The Farm Management Program is supervised locally by Irwin T. Mickelson, Superintendent of Schools and Stan Nelson, Director of the Area Vocational School. Special credit is due Mr. Nelson for his assistance in this analysis.

Lauren Granger, through a grant of funds from the Hill Family Foundation, is employed as co-ordinator for the program in the state. Other cooperating agencies are G. R. Cochran and S. K. Wick of the State Department of Education and Dr. Milo Peterson of the University of Minnesota, Department of Agricultural Education. Dr. T. R. Nodland and Dr. G. A. Pond of the Agricultural Economics Department and E. H. Hartmans and H. G. Routhe of the Agricultural Extension Service have been available as consultants.

Each farmer pays an annual fee which covers a portion of the cost. For the farmers in the Thief River Falls area, a portion of the cost of the analysis was contributed by the Thief River Falls Chamber of Commerce. The Farmers Home Administration and J. P. Rosengren, local County Supervisor, cooperated by encouraging clients to participate in the service.

This report deals with farmers enrolled in 8 schools in Northwestern Minnesota. The following tabulation shows the number of 1957 farm records submitted and the names of the instructor:

<u>School</u>	<u>No. of records</u>	<u>Instructor</u>
Goodridge	4	Oscar Breiland
Kennedy	1	Einar Palm
Lancaster	2	Leslie Taylor
Moorhead	2	K. N. Grimsrud
Plummer	1	Vern Mortenson
Roseau	6	Joe Freeman
Thief River Falls	29	Ted Kusmak
		Jon Metusalem
		Arnt Aune
Warroad	9	Glen Bergan
TOTAL	54	

...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...

...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...

...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...

...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...

...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...

...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...

...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...

...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...

...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...

...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...

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 operators liabilities and assets other than farm capital.

FARM INVENTORIES

The Capital investment per farm varied from \$4390 to \$61,730. The average investment for all farms included in this report and for the twelve high and the twelve 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.

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 the method of handling the net increase or decrease in the value of farm capital. In the cash statement the net increase or decrease in farm capital is entered as one item. In the enterprise statement the net change in the inventory has been included in each enterprise in order to compute "total returns and net increases", or "total expenses and net decreases" by enterprises.

RETURNS TO CAPITAL

The return to capital and family labor represents the amount available to the operator for living expense, payment on indebtedness and savings. These figures are found on Table 5.

1. The first part of the document is a letter from the President of the United States to the Congress, dated January 3, 1862. It is a very important document, as it contains the President's annual message to Congress. The letter is written in a very formal and dignified style, and it is one of the most important documents in the history of the United States.

2. The second part of the document is a letter from the Secretary of the Treasury to the President, dated January 3, 1862. It is a very important document, as it contains the Secretary's report to the President on the state of the Treasury. The letter is written in a very formal and dignified style, and it is one of the most important documents in the history of the United States.

3. The third part of the document is a letter from the Secretary of the Navy to the President, dated January 3, 1862. It is a very important document, as it contains the Secretary's report to the President on the state of the Navy. The letter is written in a very formal and dignified style, and it is one of the most important documents in the history of the United States.

4. The fourth part of the document is a letter from the Secretary of the War to the President, dated January 3, 1862. It is a very important document, as it contains the Secretary's report to the President on the state of the War. The letter is written in a very formal and dignified style, and it is one of the most important documents in the history of the United States.

5. The fifth part of the document is a letter from the Secretary of the Interior to the President, dated January 3, 1862. It is a very important document, as it contains the Secretary's report to the President on the state of the Interior. The letter is written in a very formal and dignified style, and it is one of the most important documents in the history of the United States.

Table 1. Summary of Farm Inventories, 1957

Items	Your farm		Average of 54 farms	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Size of farm (acres)			389	
Size of business (work units)*			379	
Dairy and dual purpose cows			\$ 1925	\$ 1846
Other dairy & dual purpose cattle			819	872
Beef cattle (incl. feeders)			530	600
Hogs			78	224
Sheep (including feeders)			286	289
Poultry (including turkeys)			66	92
Productive livestock			3706	3923
Horses			19	18
Crop, seed and feed			2534	1815
Auto & truck (farm share)			1053	1050
Tractor & motors			1870	1755
Crop and general machinery			3359	3197
Livestock equipment			326	504
Machinery and equipment (total)			6608	6506
Land			9260	9326
Buildings, fences, etc.			3300	3640
Total farm capital			\$ 25,427	\$ 25,228

Items	12 most profitable farms		12 least profitable	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Size of farm (acres)	360		486	
Size of business (work units)*	402		360	
Dairy and dual purpose cows	\$ 2286	\$ 2425	\$ 1760	\$ 1522
Other dairy and dual purpose cattle	988	1138	987	995
Beef cattle (incl. feeders)	1074	1256	170	330
Hogs	23	466	121	90
Sheep (including feeders)	352	439	113	98
Poultry (including turkeys)	71	70	88	110
Total Productive livestock	4794	5795	3239	3145
Horses	44	29	11	9
Crop, seed, and feed	2543	1926	2637	1759
Auto & truck, (farm share)	697	765	1643	1568
Tractors and motors	1209	1071	2827	2655
Crop & general machinery	2116	1970	4151	4079
Livestock equipment	306	693	328	537
Total Machinery & equipment	4328	4499	8949	8839
Land	7413	7413	11040	10574
Buildings, fences, etc.	2814	3838	3522	3780
Total farm capital	\$ 21,936	\$ 23,500	\$ 29,398	\$ 28,106

* See Page 8 for an explanation of "work units".

1. *Pharmaceuticals* (1997) 10, 101-102.
 2. *Pharmaceuticals* (1997) 10, 103-104.
 3. *Pharmaceuticals* (1997) 10, 105-106.
 4. *Pharmaceuticals* (1997) 10, 107-108.
 5. *Pharmaceuticals* (1997) 10, 109-110.
 6. *Pharmaceuticals* (1997) 10, 111-112.
 7. *Pharmaceuticals* (1997) 10, 113-114.
 8. *Pharmaceuticals* (1997) 10, 115-116.
 9. *Pharmaceuticals* (1997) 10, 117-118.
 10. *Pharmaceuticals* (1997) 10, 119-120.
 11. *Pharmaceuticals* (1997) 10, 121-122.
 12. *Pharmaceuticals* (1997) 10, 123-124.
 13. *Pharmaceuticals* (1997) 10, 125-126.
 14. *Pharmaceuticals* (1997) 10, 127-128.
 15. *Pharmaceuticals* (1997) 10, 129-130.
 16. *Pharmaceuticals* (1997) 10, 131-132.
 17. *Pharmaceuticals* (1997) 10, 133-134.
 18. *Pharmaceuticals* (1997) 10, 135-136.
 19. *Pharmaceuticals* (1997) 10, 137-138.
 20. *Pharmaceuticals* (1997) 10, 139-140.
 21. *Pharmaceuticals* (1997) 10, 141-142.
 22. *Pharmaceuticals* (1997) 10, 143-144.
 23. *Pharmaceuticals* (1997) 10, 145-146.
 24. *Pharmaceuticals* (1997) 10, 147-148.
 25. *Pharmaceuticals* (1997) 10, 149-150.
 26. *Pharmaceuticals* (1997) 10, 151-152.
 27. *Pharmaceuticals* (1997) 10, 153-154.
 28. *Pharmaceuticals* (1997) 10, 155-156.
 29. *Pharmaceuticals* (1997) 10, 157-158.
 30. *Pharmaceuticals* (1997) 10, 159-160.
 31. *Pharmaceuticals* (1997) 10, 161-162.
 32. *Pharmaceuticals* (1997) 10, 163-164.
 33. *Pharmaceuticals* (1997) 10, 165-166.
 34. *Pharmaceuticals* (1997) 10, 167-168.
 35. *Pharmaceuticals* (1997) 10, 169-170.
 36. *Pharmaceuticals* (1997) 10, 171-172.
 37. *Pharmaceuticals* (1997) 10, 173-174.
 38. *Pharmaceuticals* (1997) 10, 175-176.
 39. *Pharmaceuticals* (1997) 10, 177-178.
 40. *Pharmaceuticals* (1997) 10, 179-180.
 41. *Pharmaceuticals* (1997) 10, 181-182.
 42. *Pharmaceuticals* (1997) 10, 183-184.
 43. *Pharmaceuticals* (1997) 10, 185-186.
 44. *Pharmaceuticals* (1997) 10, 187-188.
 45. *Pharmaceuticals* (1997) 10, 189-190.
 46. *Pharmaceuticals* (1997) 10, 191-192.
 47. *Pharmaceuticals* (1997) 10, 193-194.
 48. *Pharmaceuticals* (1997) 10, 195-196.
 49. *Pharmaceuticals* (1997) 10, 197-198.
 50. *Pharmaceuticals* (1997) 10, 199-200.
 51. *Pharmaceuticals* (1997) 10, 201-202.
 52. *Pharmaceuticals* (1997) 10, 203-204.
 53. *Pharmaceuticals* (1997) 10, 205-206.
 54. *Pharmaceuticals* (1997) 10, 207-208.
 55. *Pharmaceuticals* (1997) 10, 209-210.
 56. *Pharmaceuticals* (1997) 10, 211-212.
 57. *Pharmaceuticals* (1997) 10, 213-214.
 58. *Pharmaceuticals* (1997) 10, 215-216.
 59. *Pharmaceuticals* (1997) 10, 217-218.
 60. *Pharmaceuticals* (1997) 10, 219-220.
 61. *Pharmaceuticals* (1997) 10, 221-222.
 62. *Pharmaceuticals* (1997) 10, 223-224.
 63. *Pharmaceuticals* (1997) 10, 225-226.
 64. *Pharmaceuticals* (1997) 10, 227-228.
 65. *Pharmaceuticals* (1997) 10, 229-230.
 66. *Pharmaceuticals* (1997) 10, 231-232.
 67. *Pharmaceuticals* (1997) 10, 233-234.
 68. *Pharmaceuticals* (1997) 10, 235-236.
 69. *Pharmaceuticals* (1997) 10, 237-238.
 70. *Pharmaceuticals* (1997) 10, 239-240.
 71. *Pharmaceuticals* (1997) 10, 241-242.
 72. *Pharmaceuticals* (1997) 10, 243-244.
 73. *Pharmaceuticals* (1997) 10, 245-246.
 74. *Pharmaceuticals* (1997) 10, 247-248.
 75. *Pharmaceuticals* (1997) 10, 249-250.
 76. *Pharmaceuticals* (1997) 10, 251-252.
 77. *Pharmaceuticals* (1997) 10, 253-254.
 78. *Pharmaceuticals* (1997) 10, 255-256.
 79. *Pharmaceuticals* (1997) 10, 257-258.
 80. *Pharmaceuticals* (1997) 10, 259-260.
 81. *Pharmaceuticals* (1997) 10, 261-262.
 82. *Pharmaceuticals* (1997) 10, 263-264.
 83. *Pharmaceuticals* (1997) 10, 265-266.
 84. *Pharmaceuticals* (1997) 10, 267-268.
 85. *Pharmaceuticals* (1997) 10, 269-270.
 86. *Pharmaceuticals* (1997) 10, 271-272.
 87. *Pharmaceuticals* (1997) 10, 273-274.
 88. *Pharmaceuticals* (1997) 10, 275-276.
 89. *Pharmaceuticals* (1997) 10, 277-278.
 90. *Pharmaceuticals* (1997) 10, 279-280.
 91. *Pharmaceuticals* (1997) 10, 281-282.
 92. *Pharmaceuticals* (1997) 10, 283-284.
 93. *Pharmaceuticals* (1997) 10, 285-286.
 94. *Pharmaceuticals* (1997) 10, 287-288.
 95. *Pharmaceuticals* (1997) 10, 289-290.
 96. *Pharmaceuticals* (1997) 10, 291-292.
 97. *Pharmaceuticals* (1997) 10, 293-294.
 98. *Pharmaceuticals* (1997) 10, 295-296.
 99. *Pharmaceuticals* (1997) 10, 297-298.
 100. *Pharmaceuticals* (1997) 10, 299-300.
 101. *Pharmaceuticals* (1997) 10, 301-302.
 102. *Pharmaceuticals* (1997) 10, 303-304.
 103. *Pharmaceuticals* (1997) 10, 305-306.
 104. *Pharmaceuticals* (1997) 10, 307-308.
 105. *Pharmaceuticals* (1997) 10, 309-310.
 106. *Pharmaceuticals* (1997) 10, 311-312.
 107. *Pharmaceuticals* (1997) 10, 313-314.
 108. *Pharmaceuticals* (1997) 10, 315-316.
 109. *Pharmaceuticals* (1997) 10, 317-318.
 110. *Pharmaceuticals* (1997) 10, 319-320.
 111. *Pharmaceuticals* (1997

[illegible]

Table 2. Summary of Farm Earnings (Cash Statement), 1957

Items	Your farm	Average of 54 farms	12 most profitable farms	12 least profitable farms
<u>FARM RECEIPTS</u>				
Dairy and dual-purpose cattle	\$	\$ 936	\$ 638	\$ 1408
Dairy products		2992	3667	2187
Beef cattle (including feeders)		350	739	91
Hogs		343	277	349
Sheep and wool (including feeders)		279	250	149
Horses		7	27	-
Poultry (including turkeys)		226	25	23
Eggs		252	319	281
Honey sold		74	-	-
Corn		770 62	641 237	1023 —
Small grain		1542 2405	1393 2054	1731 27
Other crops		249 94	335 78	49 32
Mach. & equip. sold & gas tax refund		386	135	979
Pulp sold		26	-	-
Income from work off the farm		238	141	328
Miscellaneous		264	207	188
(1) Total farm sales		8934	8794	8787
(2) Increase in farm capital		-	1562	-
(3) Family living from the farm		250	259	233
(4) Total farm receipts (1)+(2)+(3)		\$ 9,184	\$10,615	\$ 9,020
<u>FARM EXPENSES</u>				
Dairy and dual-purpose cattle bought		169	15	307
Beef cattle bought (incl. feeders)		27	29	42
Hogs bought		58	96	11
Sheep bought (including feeders)		16	21	30
Horses bought		2	-	-
Bees bought		52	-	-
Poultry bought (including turkeys)		76	25	43
Misc. livestock expense		202	203	185
Feed bought		800	658	680
Fertilizers		238	186	399
Other crop expense		550	429	614
Custom work hired		268	281	292
Gas, oil and grease bought (farm share)		826	719	901
Rep. of mechanical power (farm share)		315	341	242
Repair and upkeep of real estate		130	89	265
Repair & upkeep of crop & gen. mach.		208	160	246
Repair & upkeep of livestock equip.		52	55	69
Wages of hired labor		538	521	857
Electricity expense (farm share)		164	160	154
Real estate & pers. prop. taxes		382	344	384
General farm expense		123	100	148
(5) Total cash operating expense		5196	4432	5869
(6) Cap. purchases-mech. power (f. share)		596	426	662
(7) Cap. purchases-crop & gen. mach.		411	297	531
(8) Cap. purchases-livestock equipment		235	280	339
(9) Cap. purchases-bldgs. & fencing etc.		959	1466	1120
(10) Total farm purchases (5) to (9)		7397	6901	8521
(11) Decrease in farm capital		200	-	1293
(12) Interest on farm capital		1269	1136	1438
(13) Unpaid family labor		123	97	177
(14) Board furnished hired labor		121	71	280
(15) Total farm expenses (10) - (14)		\$ 9,110	\$8,205	\$11,709
(16) Labor earnings (4) - (15)		\$ 74	\$2,410	- \$ 2,689

Table 3. Summary of Farm Earnings (Enterprise Statement) 1957*

Items	Your farm	Average of 54 farms	12 most profitable farms	12 least profitable farms
<u>RETURNS AND NET INCREASES</u>				
Dairy and dual-purpose cows	_____	\$ 3169	\$ 3827	\$ 2491
Other dairy & dual-purpose cattle	_____	753	943	713
Beef breedingherd	_____	369	765	223
Feeder cattle	_____	41	155	-
Hogs	_____	455	638	326
Sheep - farm flock	_____	265	316	104
Sheep - feeders	_____	-	-	-
Turkeys	_____	173	-	-
Chickens	_____	305	354	311
All productive livestock	_____	5530	6998	4168
Value of feed fed to livestock	_____	2886	3172	2614
Return over feed from livestock	_____	2644	3826	1554
Crops, seed and feed	_____	3154	3666	2883
Income from labor off the farm	_____	153	91	149
Bees	_____	25	-	-
Agricultural conservation payments	_____	193	159	120
Miscellaneous	_____	60	49	69
(1) Total returns & net increases	_____	6229	7791	4775
<u>EXPENSES AND NET DECREASES</u>				
Horses	_____	\$ 13	\$ 15	\$ 13
Truck	_____	288	226	389
Auto (farm share)	_____	348	286	310
Tractor	_____	1005	903	1037
Elec. & gas engine exp.(farm share)	_____	159	137	159
Hired Power	_____	132	137	147
Total Power	_____	1945	1704	2055
Crop and general machinery	_____	785	626	837
Livestock equipment	_____	129	127	162
Buildings, fencing, and tiling	_____	439	350	837
Misc. productive livestock expense	_____	200	203	185
Labor	_____	883	791	1418
Real estate taxes	_____	255	242	258
Personal property tax	_____	127	102	126
Insurance	_____	54	43	47
General Farm	_____	69	57	101
Interest on farm capital	_____	1269	1136	1438
(2) Total expenses & net decreases	_____	\$ 6155	\$ 5381	\$ 7464
(3) Operator's earnings (1) - (2)	_____	\$ 74	\$ 2410	- \$ 2689

* 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.

Good : 100

FAMILY LIVING FROM THE FARM

The family living from the farm is the estimated value of the farm products used in the house and shelter furnished the farmer and his family by the farm. It is a part of the income of the farm and a part of the 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 expense.

The value of the family living as shown in Table 4 amounts to 2.4 per cent of the total farm receipts on these farms. The values used are shown in Table 21. If these products had been purchased, the amount paid out would have been considerably higher as the figures used were conservative.

Table 4. Family living from the Farm, 1957

Items	Your farm	Average of 41 farms	Your farm	Average of 41 farms
Adult equivalent - family	_____	3.0		
- other	_____	.3		
Whole milk	_____	1125 qts.	\$ _____	\$ 79
Skim milk	_____	81 qts.	_____	1
Cream	_____	95 pts.	_____	28
Beef	_____	422 lbs.	_____	75
Hogs	_____	135 lbs.	_____	29
Poultry	_____	71 lbs.	_____	12
Eggs.	_____	53 doz.	_____	15
Vegetables and fruits	_____		_____	29
Fuel	_____		_____	8
Total			\$ _____	\$276

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 \$175 per month for family living in addition to the food, fuel and housing furnished by the farm.

Table 5. Household and Personal Expenses for Those Farms which kept Complete Accounts of These Expenses, 1957

Items	Your farm	Average of 41 farms	12 most profitable farms	12 least profitable farms
Number of persons - family	_____	3.9	3.5	4.3
Number of adult equivalent - family	_____	3.0	2.8	3.1
other*	_____	.3	.1	.6
Food and meals bought	\$ _____	\$ 680	\$ 679	\$ 744
Operating and supplies	_____	185	196	166
Furnishings and equipment	_____	145	137	111
Clothing and clothing material	_____	206	248	204
Personal care, personal spending	_____	63	54	62
Education, recreation and development	_____	156	120	114
Gifts and special events	_____	94	90	141
Medical care and health insurance	_____	231	163	261
Church, welfare	_____	119	205	80
Personal share of auto & truck expense	_____	112	128	104
Operator's share of upkeep on dwelling	_____	13	23	8
Household share of elec. & tel. expense	_____	83	99	71
Total Cash living expense	\$ _____	\$ 2087	\$ 2142	\$ 2066
Social Security	_____	12	23	12
H. H. & Personal share of new auto	_____	129	69	376
New dwelling	_____	205	-	730
Taxes and other deductions	_____	8	10	-
Life insurance	_____	61	89	100
Other savings and investments	_____	494	14	405
Total H.H. and Personal Cash Expense	\$ _____	\$ 2996	\$ 2347	\$ 3689
Total family living from the farm	_____	263	258	261
Total Cash Expense and Perquisites	\$ _____	\$ 3259	\$ 2605	\$ 3950
Receipts:				
Return to capital and family labor	\$ _____	\$ 1846	\$ 3270	\$ 1395
Income from investments	_____	86	50	268
Sale of outside investments	_____	-	-	-
Other personal income	_____	1019	181	2410

* 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 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.

...the ... of ...

...the ... of ...

...the ... of ...

...the ... of ...

...the ... of ...

...the ... of ...

...the ... of ...

...the ... of ...

...the ... of ...

...the ... of ...

...the ... of ...

...the ... of ...

...the ... of ...

...the ... of ...

...the ... of ...

...the ... of ...

...the ... of ...

Table 6. Net Worth Statement for Those Farmers Who Kept a Complete Record of All Assets and Liabilities, 1957

Items	Your farm		54 farms	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Total acres in farm			389	
Total farm capital			\$25,427	\$25,228
Stocks and bonds			573	690
Life insurance			256	254
Accounts receivable			46	67
Shares in marketing organizations			433	498
Outside real estate			170	77
Cash on hand and in bank			1041	843
Household goods and clothing			1308	1366
Personal share of auto & truck			327	384
Dwelling			1753	1917
Total non-farm assets			5907	6096
TOTAL ASSETS			\$31,334	\$31,324
Federal Land Bank mortgage			663	633
FHA Real Estate mortgage			439	714
Other mortgage on land operated			1711	1757
Loans on other real estate			13	9
Production Credit Association			310	372
FHA Chattel mortgage			213	233
Crop loans			451	212
Other chattel mortgages			530	619
Notes payable			439	712
Accounts payable			1326	1360
TOTAL LIABILITIES			6,095	6,621
Farmer's Net Worth			\$25,239	\$24,703
Gain or decrease in net worth				\$ -536

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 live-stock at an average efficiency. The number of work units for each class of livestock and each acre of crop are presented in Table 7. Days of work off the farm for pay are not included in work unit computations in this report.

Table 7. Number of Work Units for each Class of Livestock & Each Acre of Crop

Item	No. of work units	Item	No. of Work units
Dairy & dual-purpose cows	10.0 per cow	Small grain	.7 per acre
Other dairy & du. purp.cattle	3.5 per an. unit*	Corn husked	1.1 per acre
Beef breeding herd	3.5 per an. unit*	Corn, silage	1.7 per acre
Feeder cattle	.25 per 100 lbs.	Corn, fodder	1.0 per acre
Sheep - farm flock	1.5 per an. unit*	Alfalfa hay	.9 per acre
Sheep - feeders	.3 per 100 lbs.	Other hay crops	.6 per acre
Hogs	.2 per 100 lbs.	Legume seed	1.0 per acre
Hens	20.0 per 100 hens	Grass silage	1.0 per acre
Potatoes	3.8 per acre		

* Animal unit represents one dairy cow or bull, two other dairy cattle, 1 1/4 beef cows or bull, 1 feeder steer or heifer, 3 1/3 other beef cattle, 7 sheep, 14 lambs, 2 1/2 hogs, 5 pigs, 50 hens or 1,100 pounds of turkeys produced.

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 per cent of the range according to earnings was \$2410 and of those in the lower 25 per cent was -\$2689. This is a range of \$5099 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
2. Choice of Crops
3. Return from Livestock
4. Amount of Livestock
5. Size of Business
6. Work Units per Worker
7. Control over Expenses

Operator's
Earnings

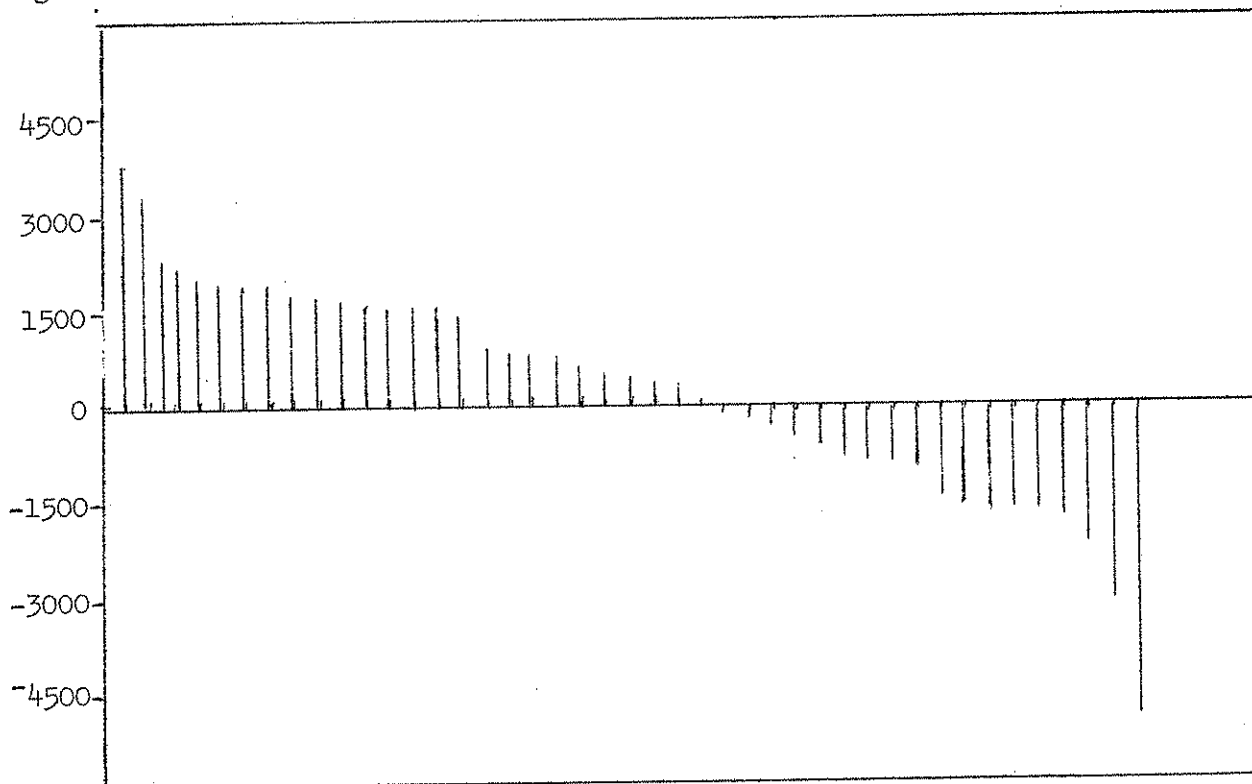


Fig. 1. Range in operator's earnings
Each line represents the earning of one farmer

1/ See Pond, G. A. "Why Farm Earnings Vary". Minn. Agri. Expt. Sta. Bul. 386, June, 1945.
Nodland, T. R. and Pond, G. A. "Some Factors Affecting the Earnings of Farmers in Southwestern Minnesota". Univ. of Minn., Dept. of Ag. Econ., Report No. 219, November, 1954.

[illegible]

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the situation.

1. 1990年12月15日，在“中国—东盟首脑非正式会议”上，中国领导人正式提出建立中国—东盟自由贸易区。

1. The first step in the process of the investigation is the identification of the problem. This is done by the investigator who is responsible for the investigation. The investigator must identify the problem and the scope of the investigation. The investigator must also identify the objectives of the investigation and the methods to be used. The investigator must also identify the resources available for the investigation.

Table 8. Measures of Farm Organization and Management Efficiency, 1957

Measures used in chart on page 11	Your farm	Average of 54 farms	12 most profitable farms	12 least profitable farms
Operator's earnings	\$ _____	\$ 74	\$ 2410	-\$ 2689
(1) Crop yields*	_____	100	101	76
(2) Per cent tillable land in high return crops**	_____	49	40	44
(3) Return for \$100 feed to Productive Livestock ***	_____	100	113	86
(4) Productive livestock units per 100 A.****	_____	8.6	11.8	5.8
(5) Size of business - work units	_____	379	402	360
(6) Work units per worker	_____	274	305	224
(7) Power, machinery, equipment and building expense per work unit	\$ _____	\$8.88	\$6.98	\$10.79

Items related to some of the above measures:

(3) Index of return for \$100 feed from:				
Dairy cattle (see pages 15 & 16)	_____	100	112	82
Beef cattle-breeding herd(p. 18)	_____	100	149	100
Hogs (see page 19)	_____	100	103	83
Chickens (see page 18)	_____	100	110	68
(4) Number of animal units	_____	28.1	36.4	23.5
(5) Work units on crops	_____	180	167	195
Work units on Productive Livestock	_____	191	234	165
(6) Number of family workers	_____	1.1	1.0	1.1
Number of hired workers	_____	.2	.3	.3
Total number of workers	_____	1.3	1.3	1.4
(7) Power expense per work unit	\$ _____	\$5.14	\$4.23	\$5.70
Crop mach. expense per work unit	\$ _____	2.10	1.56	2.32
Livestock equipment expense per work unit	\$ _____	.34	.31	.45
Buildings and fencing expense per work unit	\$ _____	1.17	.87	2.32

* Given as percentage of the average

** Crops are marked in table 9 as (A), (B), (C), and (D). All of the acres in (A) crops, one half of acres in (B) crops, and one fourth of the acres in (C) crops are used in calculating per cent of tillable land in high return crops.

*** An index weighted by the animal units of livestock.

****Acres in timber not pastured, roads, waste and farmstead were not included.

THERMOMETER CHART

Using your figures from page 10, locate your standing with respect to the various measures of farm organization and management efficiency. The averages for the 54 farms included in this summary are located between the dotted lines across the center of this page.

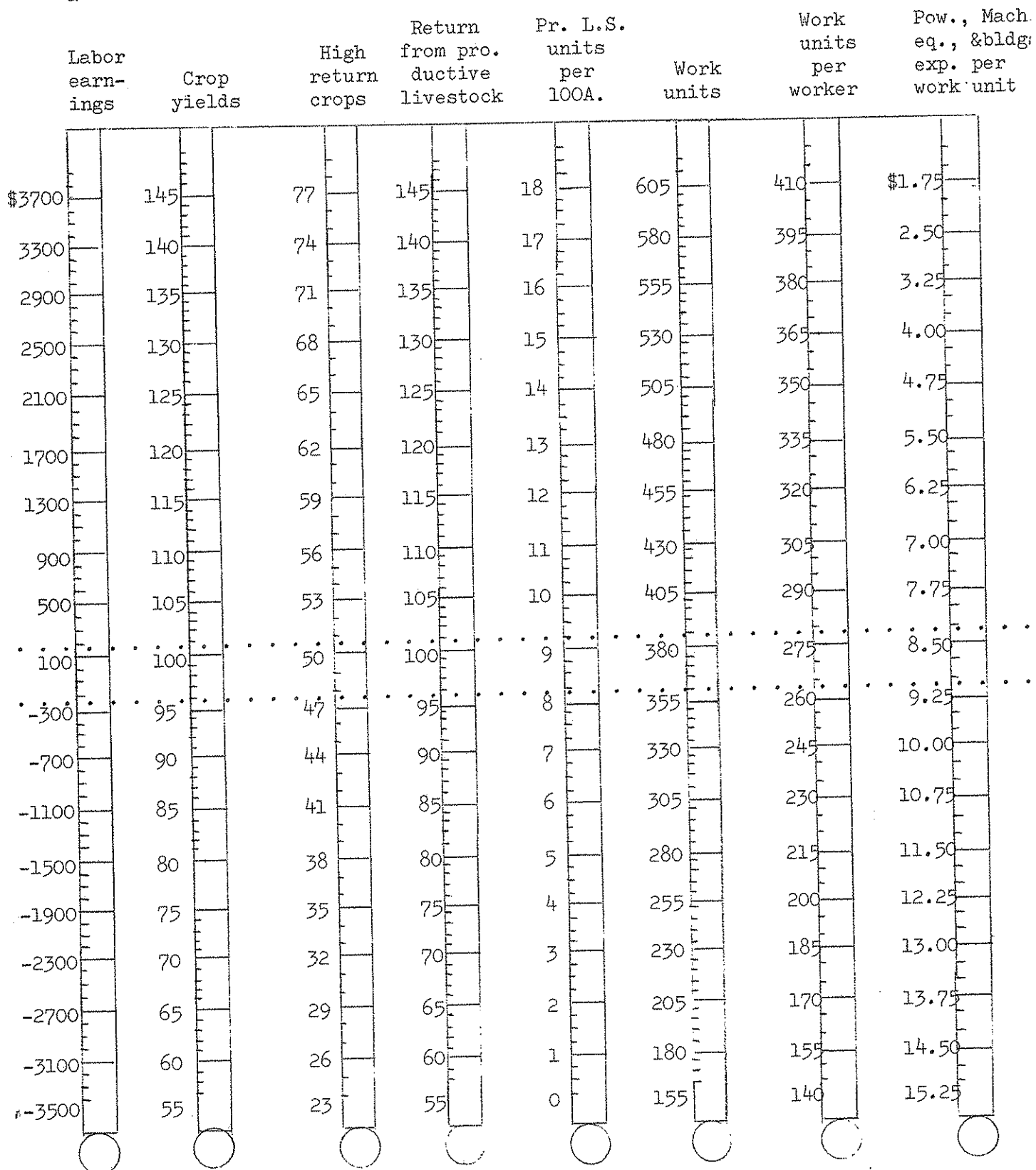


Table 9. Distribution of Acres in Farm, 1957

Crop	Crop ratings*	Your farm	Average of 54 farms
Flax	A	_____	46.3
Soybeans	A	_____	1.5
Barley	B	_____	17.6
Wheat	B	_____	23.1
Oats & oat mixtures	C	_____	67.0
Rye, millet	D	_____	1.3
Total small grain		_____	156.8
Potatoes	A	_____	.1
Corn grain	C	_____	2.0
Corn fodder	D	_____	3.3
Corn silage	C	_____	1.3
Total cultivated crops		_____	6.7
Grass silage	A	_____	.3
Alfalfa and Alfalfa mixture	A	_____	35.2
Alfalfa seed	B	_____	.1
Red or alsike clover hay	B	_____	4.6
Red or alsike clover seed	B	_____	3.4
Sweet clover seed	C	_____	.4
Other legumes and legume mixture hay	C	_____	5.7
Brome and timothy grass seed	C	_____	8.4
Brome or timothy hay	D	_____	18.4
Wild hay	D	_____	2.4
Annual hay	D	_____	.5
Total tillable land in hay		_____	79.4
Alfalfa pasture	A	_____	2.8
Other legumes and mixtures	C	_____	5.1
Other tillable pasture	D	_____	19.9
Total tillable land in pasture		_____	27.8
Tillable land not cropped	D	_____	40.0
Total Tillable land		_____	311.0
Wild hay		_____	6.8
Non-tillable pasture		_____	28.7
Timber (not pastured)		_____	12.4
Roads and waste		_____	13.9
Farmstead		_____	9.8
Brush		_____	6.5
Total acres in farm		_____	389.1
Percent land tillable		_____	79.0
Percent tillable land in high returncrops		_____	49.0

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

... ..
... ..
... ..

... ..
... ..
... ..
... ..
... ..

... ..
... ..
... ..
... ..
... ..

... ..
... ..
... ..
... ..
... ..

... ..
... ..
... ..
... ..
... ..

... ..
... ..
... ..
... ..
... ..

... ..
... ..
... ..
... ..
... ..

... ..
... ..
... ..
... ..
... ..
... ..
... ..
... ..
... ..

... ..
... ..
... ..
... ..
... ..
... ..
... ..
... ..
... ..

Table 10. Crop Yields Per Acre, 1957

Crop	Your farm	Average of Farms growing each crop
Flax, bu.	_____	1.9
Barley, bu.	_____	13.9
Wheat, bu.	_____	14.2
Oats, bu.	_____	30.8
Rye, bu.	_____	17.9
Soybeans, bu.	_____	-
Potatoes, bu.	_____	-
Corn grain, bu.	_____	46.722
Corn fodder, tons	_____	1.0
Corn silage, tons	_____	6.0
Alfalfa hay, tons	_____	1.8
Alfalfa seed, lbs.	_____	-
Red or alsike clover hay, tons	_____	.5
Red or alsike clover seed, lbs.	_____	196
Bluegrass seed, lbs.	_____	-
Sweet clover seed, lbs.	_____	300
Other legumes and legume mixture hay, tons	_____	1.3
Brome and timothy seed, lbs.	_____	77
Brome or timothy hay, tons	_____	1.1
Wild hay, tons	_____	.7
Annual hay, tons	_____	.4
Grass silage, tons	_____	6.6

POWER AND MACHINERY EXPENSE

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 40 to 570 with an average of 245 (Table 11). 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 11. Power and Machinery Expenses Per Crop Acre, 1957

Items	Your Farm	Average of 54 farms	12 most profitable farms	12 least profitable farms
Crop acres per farm	_____	245	223	290
Tractor expense per crop acre	_____	\$4.10	\$4.05	\$3.57
Crop & gen. mach. exp. per crop acre	_____	3.20	2.80	2.88

AMOUNT OF LIVESTOCK

The farmers cooperating in this study are predominantly livestock farmers. 86% of these farmers maintained dairy cattle, 45% poultry, 26% raised sheep, 15% kept beef cattle and 45% raised one or more hogs.

Table 12. Amount of Livestock, 1957

	Your farm	Average of 54 farms	12 most profitable farms	12 least profitable farms
Number of milk cows	_____	13.1	15.3	11.2
Number of other dairy cattle	_____	13.9	15.6	13.6
Number of beef cattle (incl. feeders)	_____	6.2	8.5	7.2
Number of ewes	_____	12.0	17.0	4.4
Number of hens	_____	60.4	70.0	60.0
Litters of pigs raised	_____	1.6	2.6	1.0
Pounds of hogs produced	_____	2179	3274	1044

TOTAL FEED COSTS AND RETURNS FROM YOUR LIVESTOCK ENTERPRISES

The total "return over feed costs" for each class of livestock is shown in Table 13. This differs from the "return over feed" shown in the enterprise statement in that it is the total for each class of livestock instead of a return "per head", "per unit" or "per 100 pounds". These data indicate the relative importance of different classes of livestock as a source of income and as a market for feed. The total return is the same as the returns and net increases shown on page 5. The value of milk consumed by calves is included in the total returns from dairy or dualpurpose 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 13. Total Feed Costs & Returns From Your Livestock Enterprises, 1957

	Dairy or Dual Purpose Cattle			Beef
	Cows	Other	All	breeding
Total returns	_____	_____	_____	_____
Total feed cost	_____	_____	_____	_____
Total return over feed	_____	_____	_____	_____
	Feeder cattle	Hogs	Farm flock of sheep	Chickens
Total returns	_____	_____	_____	_____
Total feed cost	_____	_____	_____	_____
Total return over feed	_____	_____	_____	_____

Feed is the largest single item of cost for all classes of livestock. However, the proportion of the total cost represented by feed varies considerably between classes of livestock. Feed makes up approximately 45 per cent of the total cost of maintaining dairy cattle and poultry, 50 per cent in the case of a farm flock of sheep, and 75 to 90 per cent for hogs, feeder cattle and feeder lambs. Consequently, it is necessary to secure a relatively higher return over feed from dairy cattle and poultry than from the other livestock enterprises in order to be able to cover all the costs other than feed.

DAIRY AND DUAL PURPOSE CATTLE

The quantity of feed consumed, value of feeds and returns from dairy cattle are presented in Tables 14, 15, & 16. The return over feed cost per cow varied from \$2.63 to \$241.48 among the 40 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 14. Factors of Cost and Returns from Dairy Cows, 1957

Items	Your farm	Average of 40 farms	12 farms highest in butterfat per cow	12 farms lowest in butterfat per cow
Pounds of butterfat per cow		284	339	207
Price rec. per lb. B.F. sold (cream)	\$.62	.63	.62
Price rec. per lb. B.F. sold (milk)	\$.90	.91	.82
Feed per cow, lbs.:				
Corn		19	47	-
Small grain		2039	2557	1593
Commercial feeds		467	456	299
Legume hay		5276	5402	4059
Other hay		3124	2569	4154
Fodder and stover		139	341	-
Total Concentrates		2526	3061	1892
Total dry roughages		8524	8313	8213
Silage		3144	4784	1484
Milk		35	85	-
Feed cost per cow:				
Concentrates	\$	48.27	60.71	31.73
Roughages		55.96	58.19	48.42
Pasture		7.00	7.00	7.00
Milk		.11	.28	-
TOTAL FEED COSTS		\$111.34	\$126.18	\$ 87.15
Value of produce per cow:				
Butterfat sales	\$	\$233.55	\$297.67	\$140.50
Dairy produce used in house		6.47	6.30	6.47
Milk to livestock		2.76	3.17	-
Net increase in value of cows		2.07	2.42	1.12
TOTAL VALUE PRODUCED	\$	\$244.85	\$304.72	\$148.09
RETURNS ABOVE FEED COST PER COW	\$	\$133.51	\$178.54	\$ 60.94
RETURNS FOR \$100 OF FEED	\$	\$ 220	\$ 241	\$ 170
Feed cost per lb. B.F. (cents)	\$.39	.37	.42
Number of cows		16.3	19.5	12.3

Table 15. Feed Costs & Returns from Other Dairy & Dual Purpose Cattle, 1957

Items	Your farm	Average of 40 farms	12 farms highest in butterfat per cow	12 farms lowest in butterfat per cow
Feeds per head, lbs.:				
Concentrates	_____	348	398	143
Hay and fodder	_____	3360	2868	3691
Silage	_____	1048	1606	131
Skim milk	_____	213	269	-
Whole milk	_____	51	50	-
Feed cost per head:				
Concentrates	\$ _____	\$ 9.03	\$ 9.56	\$ 3.29
Roughages	_____	21.86	20.15	20.87
Milk	_____	2.35	2.47	-
Pasture	_____	3.48	3.49	3.49
TOTAL FEED COSTS PER HEAD	\$ _____	\$36.72	\$35.67	\$27.65
Net inc. in value of other cattle	_____	53.50	57.68	50.49
RETURNS ABOVE FEED COST PER HEAD	_____	16.78	22.01	22.84
RETURNS FOR \$100 OF FEED	_____	\$ 145	\$ 161	\$ 182
Number of head of other cattle	_____	16.4	18.5	11.3

Table 16. Feed Costs and Returns from All Dairy & Dual Purpose Cattle, 1957

Items	Your farm	Average of 40 farms	12 farms highest in butterfat per cow	12 farms lowest in butterfat per cow
Feeds per animal unit, lbs.:				
Concentrates	_____	1929	2333	1384
Hay and fodder	_____	7941	7489	7875
Silage	_____	2806	4281	1142
TOTAL FEED COSTS PER ANIMAL UNIT	\$ _____	\$97.31	\$106.80	\$76.73
Value of produce per animal unit:				
Dairy products	\$ _____	\$162.04	\$206.20	\$100.99
Net inc. in val. of dairy cattle	_____	37.15	35.54	35.92
TOTAL VALUE PRODUCED	_____	\$199.19	\$241.74	\$136.91
RETURNS ABOVE FEED PER ANIMAL UNIT	\$ _____	\$101.88	\$134.94	\$ 60.18
RETURNS FOR \$100 OF FEED	_____	\$204	\$ 226	\$ 178
Animal units of cattle	_____	24.2	28.8	17.9

Table 17. Feed Costs and Returns from Farm Flock of Sheep, 1957

Items	Your farm	Average of 9 farms
Feeds per head,* lbs.		
Concentrates	_____	108
Legume hay	_____	522
Other hay	_____	76
Silage	_____	9
Feed cost per head:		
Concentrates	\$ _____	\$ 1.89
Roughages	_____	3.52
Pasture	_____	1.15
TOTAL FEED COSTS	\$ _____	\$ 6.56
Value of produce per head:		
Wool	\$ _____	\$ 3.61
Net increase in value of sheep	_____	11.21
TOTAL VALUE PRODUCED	\$ _____	\$14.82
RETURNS ABOVE FEED COST PER HEAD	\$ _____	\$ 8.26
RETURNS FOR \$100 OF FEED	\$ _____	\$ 226
Price per cwt. of lambs sold	\$ _____	\$20.27
Price per lb. of wool sold	_____	66.9
Pounds of wool per sheep sheared	_____	7.1
Number of ewes kept for lambing	_____	52.7
Per cent lamb crop**	_____	119
Per cent death loss**	_____	5.7
Pounds of sheep produced	_____	4896

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

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

CHICKENS

Forty per cent of the farmers cooperating in this analysis kept some chickens. In most cases poultry is a very minor enterprise, providing eggs and poultry meat for family consumption plus a small additional amount of cash income.

Some of the important factors that affected the return over feed were:

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

1. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Arar and Collins (1971) using a Shimadzu 1601 UV-Visible Spectrophotometer.

Table 18. Feed Costs and Returns from Chickens, 1957*

Items	Your farm	Average of 16 farms
Feed per hen, lbs.:		
Grain	_____	75
Commercial feeds	_____	40
Total Concentrates	_____	115
TOTAL FEED COST PER HEN	\$ _____	\$ 2.86
Value of Produce per hen:		
Eggs sold and used in house	\$ _____	\$ 3.63
Net inc. in value of chickens	\$ _____	.66
TOTAL VALUE PRODUCED	\$ _____	\$ 4.29
RETURNS ABOVE FEED COST PER HEN	\$ _____	\$ 1.43
RETURNS FOR \$100 OF FEED	\$ _____	\$ 149
Price rec'd. per doz. eggs sold (cents)	\$ _____	\$.28
Eggs laid per hen	_____	156
Ave. no. hens on farm during year	_____	226
Percent death loss of hens	_____	11%

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

Table 19. Feed Costs and Returns from Beef Cattle, 1957

Items	Your farm	Average of 7 farms
Feeds per animal unit, lbs.:		
Concentrates	_____	513
Legume	_____	4462
Other hay	_____	2505
Silage	_____	2176
Whole milk	_____	28
Feed Cost per animal unit:		
Concentrates	\$ _____	\$ 10.69
Roughages	_____	46.34
Milk	_____	.93
Pasture	_____	\$ 7.69
TOTAL FEED COSTS	\$ _____	\$ 65.65
Value of produce per animal unit:		
Dairy Products	\$ _____	\$ 4.65
Net increase in value of animals	_____	125.32
TOTAL VALUE PRODUCED	_____	\$129.97
RETURNS ABOVE FEED COST PER ANIMAL UNIT	\$ _____	\$ 64.32
RETURNS FOR \$100 OF FEED	\$ _____	\$ 198
Number of cows and herd bulls	_____	14.1
Number of animal units in the herd	_____	20.8

Copyright © 2006 John Wiley & Sons, Ltd.

(continued)

Raising hogs is a minor livestock enterprise on most farms in Northwestern Minnesota. The hog enterprise in this area varies in size from raising one or two for home butchering to the raising of a number of litters per year. In most cases the pigs were sold at time of weaning, keeping only two or three to be fed out to slaughter weights.

Table 20. Feed costs and returns from Hogs, 1957

Items	Your farm	Average of 14 farms
Feed per cwt. hogs produced, lbs.:		
Corn	_____	116
Small grain	_____	295
Commercial feeds	_____	120
Total concentrates	_____	531
Skim milk	_____	67
Feed cost per cwt. hogs produced:		
Concentrates	\$ _____	\$10.12
Skim milk	_____	.21
Pasture	_____	.51
TOTAL FEED COST	\$ _____	\$10.84
Net increase in val. per cwt. hogs prod.	\$ _____	\$17.32
RETURNS ABOVE FEED COST PER CWT.		
HOGS PRODUCED	\$ _____	\$ 6.40
RETURNS FOR \$100 FEED	\$ _____	\$ 158
Price received per cwt. hogs sold	\$ _____	\$ 17
No. of spring litters raised	_____	3.2
No. of fall litters raised	_____	1.8
Total No. of litters raised	_____	5.0
No. of pigs born per litter	_____	9.7
No. of pigs weaned per litter	_____	7.8
Pounds of hogs produced	_____	8181

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
84

[illegible]

From 1940 to 1941, the first year of the war, the number of people in the United States who were of Japanese ancestry was 120,000. By 1945, the number had increased to 150,000. This was due to the fact that many Japanese-Americans were interned in camps during the war.

[illegible]

the 1990s, the number of people in the world who are illiterate has increased from 1.2 billion to 1.5 billion. The number of illiterate people in the world is expected to reach 1.7 billion by the year 2015. The number of illiterate people in the world is expected to reach 1.7 billion by the year 2015.

1. The first step in the process is to identify the problem. This involves gathering information about the situation and understanding the needs of the stakeholders involved.

Journal of Management Inquiry, Vol. 17 No. 4, December 2008
DOI: 10.1177/1056492608325610
© The Author(s) 2008

Dr. J. G. Thompson, Jr., Director

Table 21. Average Prices of Feed, and Produce used in Home, 1957

<u>Feed Prices</u>			
<u>Farm Grown Grains</u>		<u>Hay</u>	
Corn	\$1.00 per bu.	Alfalfa	\$12.00 per Ton
Oats	.50 per bu.	Red Clover	8.00 per Ton
Barley	.91 per bu.	Timothy	6.00 per Ton
Wheat	2.09 per bu.		
<u>Other Roughages</u>		<u>Milk for Feed</u>	
Corn Silage	\$5.00 per Ton	Whole milk	\$ 3.25 per cwt.
Grass Silage	5.00 per Ton	Skim milk	.34 per cwt.

<u>Home Produce</u>	
Milk	7 ¢ per quart
Cream	28¢ per pint
Eggs	30¢ per dozen
Poultry	15¢ per pound
Beef	18¢ per pound
Hogs	16¢ per pound