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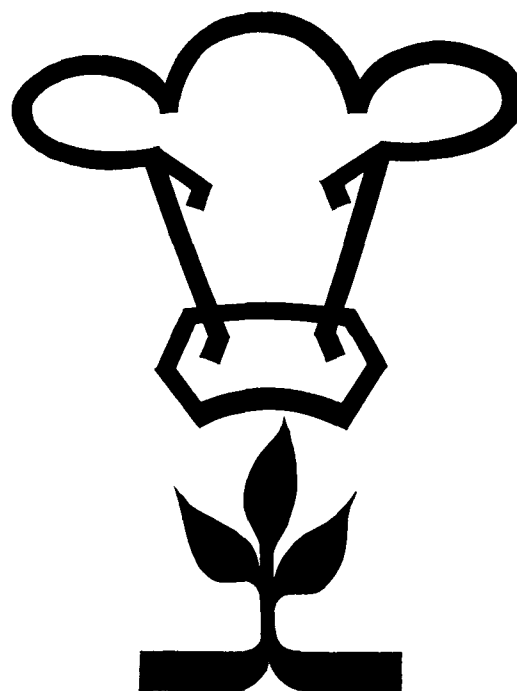
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1967 Minnesota Farm Business Summary

BY TYPE OF FARMING

TRUMAN NODLAND
EDGAR PERSONS



FOREWORD

Providing data based upon actual farm business records is certainly not a new idea. The Department of Agricultural Economics has been engaged in research based on farm records since the early part of the century. More recently, the Agricultural Education Department has encouraged farm business management education programs for adult farmers in local public schools. The information gained through farm business analysis has been used effectively in the study of individual businesses and as guides for farm planning.

The types of farming upon which this report is based are typical of Minnesota farms. Farmers and others who use the report should be able to identify a type of farming that is most like their own. Users should remember, however, that this report represents only one calendar year. As subsequent reports are made, incorporating more years of farm business activity, the reliability of the income, expense, and other management data will be improved.

Economic Information Report No. R 68-6 is the result of a cooperative effort of the Department of Agricultural Economics and the Department of Agricultural Education to publish record summaries of farms grouped by type. The rapid increase in the number of cooperators in the Vocational Agriculture Farm Management Education Program and the continued full subscription in the Southeastern and Southwestern Minnesota Farm Management Associations will provide data in subsequent years to expand the number and variety of special classifications.

The authors invite suggestions from the users of this publication for ways in which the type of farming report can be improved or suggestions for other special sorts of the data which may have value in education and service programs.

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1967 MINNESOTA FARM BUSINESS SUMMARIES
BY TYPES OF FARMING

Truman R. Nodland and Edgar A. Persons

Introduction

This report summarizes the 1967 farm business records by types of farming for 977 Minnesota farmers. Farm records were supplied by the area vocational-technical schools at Mankato, Austin, Winona, Willmar, Thief River Falls and Duluth, and the Southeastern and Southwestern Minnesota Farm Management Associations. A publication of this nature will be of use to farmers, teachers, research workers, and others who desire rather specific information concerning costs and returns from actual farming operations by types of farm.

Sufficient records were obtained from ten types of farms to be included in this report (table 1). Farms were classified according to the proportion of cash income received from various livestock enterprises and from the sale of crops. The following classifications were developed:

1. Specialized farms - 80 percent or more of the cash income was from one enterprise or source.
2. Two enterprise farms - 80 percent or more of the income was from two enterprises, with a minimum of 20 percent from the smallest of the two.
3. Three enterprise farms - 80 percent or more of the income came from three enterprises, with a minimum of 20 percent from the smallest.

Types of farm specified as "North" were from the Duluth and Thief River Falls area vocational-technical schools. Those identified as "South" included records from all of the other areas previously listed.

Table 1. Number of Farms by Type

Type	Number
Cash crops - Southern Minnesota	59
- Northern Minnesota	31
Dairy - Southern Minnesota	154
- Northern Minnesota	153
Hogs, complete program*	30
Dairy and hogs*	87
Dairy and cash crops	174
Hogs* and feeder cattle	31
Hogs* and cash crops	127
Feeder cattle and cash crops	68
Dairy, hogs* and cash crops	22
Hogs,* feeder cattle and cash crops	<u>41</u>
Total	977

* Most of the hogs are farrowed, fed out, and sold as butcher hogs. Farms with primary emphasis on purchased feeders or the production of feeder pigs have been omitted.

Capital Managed and Earnings

The average value of capital used per farm for the various types of farming is shown in table 2. These data represent values as reported by farmers in their farm business records and deviate somewhat from current market values for assets with a long useful life, such as real estate. Real estate improvements are valued at cost and depreciated on the basis of estimated life. These book values tend to be below present market values because of changes in the price level. Also, land is valued at cost and has not been corrected for the price inflation which occurred after many of the farms were purchased. Capital managed includes the value of any assets furnished by landlords.

Capital managed per farm varied widely between types of farming and between northern and southern Minnesota. Real estate values were higher in southern Minnesota than in the northern section of the state. Types of farming which can be classified as extensive require large amounts of capital. Cash crops and cattle feeding are examples of extensive agriculture.

Earnings are presented on a cash basis in table 3. In order to make all farms comparable, receipts and expenses of landlords are included. "Labor earnings" is the amount that would be left as a salary to the farm operator if he paid hired man's wages for the labor of other members of the family and five percent interest on all capital used. There is considerable variation in earnings between types of farming and areas in the state. It is important to bear in mind that the relative profitableness of various enterprises will vary from year to year. Thus, one cannot assume that hog, feeder cattle and cash crop farms will always show relatively high labor earnings as they did in 1967. These data should be studied in the light of current trends, production cycles, and similar information.

Table 2. Summary of Inventories by Type of Farming, 1967

Item	Cash crops, South. Minn.	Cash crops, North. Minn.	Dairy South. Minn.	Dairy North. Minn.	Hogs, complete program
1. Number of cases	59	31	154	153	30
2. Acres in farm	443	916	252	314	203
Average capital managed as of January 1, 1967					
3. Dairy cows	\$ 32	\$ -	\$ 8523	\$ 5854	\$ -
4. Other dairy cattle	55	-	4675	3157	38
5. Beef cattle	1895	4402	213	112	577
6. Hogs	590	215	194	102	14653
7. Sheep	41	332	58	74	18
8. Poultry	41	-	29	4	32
9. Other livestock	-	-	17	5	-
10. Total livestock	\$ 2654	\$ 4949	\$13709	\$ 9308	\$15318
11. Crops, seed, feed	\$15542	\$ 8675	\$ 6771	\$ 3431	\$12807
12. Auto & truck (fm.sh.)	\$ 1970	\$ 1613	\$ 997	\$ 953	\$ 1569
13. Tractors & crop mach.	12924	10962	7048	4590	7858
14. Livestock equipment	471	162	2430	1956	2975
15. Total equipment	\$15365	\$12737	\$10475	\$ 7499	\$12402
16. Land	\$90355	\$28972	\$23250	\$12236	\$25399
17. Buildings, fencing*	16717	6684	16169	6161	17240
18. Total capital	\$140633	\$62017	\$70374	\$38635	\$83166
Average capital managed as of December 31, 1967					
19. Total capital	\$147628	\$69700	\$75389	\$41853	\$85821

* Not including farm dwelling.

Table 2. Summary of Inventories by Type of Farming, 1967 (continued)

	Dairy and hogs	Dairy and cash crops	Hogs and feeder cattle	Hogs and cash crops	Feeder cattle & cash crops	Dairy, hogs & cash crops	Hogs, feeder cattle, cash crops
1.	87	174	31	127	68	22	41
2.	236	370	371	329	457	318	461
Average capital managed as of January 1, 1967							
3.	\$ 6100	\$ 6013	\$ 112	\$ 200	\$ 5	\$ 5426	\$ 14
4.	3567	3374	3	182	54	3276	80
5.	310	489	25694	1962	22644	522	17866
6.	4508	431	7719	7203	632	2547	5451
7.	36	92	170	150	172	68	175
8.	58	47	72	24	83	38	53
9.	5	-	13	7	5	15	20
10.	<u>\$14584</u>	<u>\$10446</u>	<u>\$33783</u>	<u>\$ 9728</u>	<u>\$23595</u>	<u>\$11892</u>	<u>\$23659</u>
11.	\$ 9052	\$ 8255	\$15358	\$14250	\$16855	\$11093	\$19539
12.	\$ 1352	\$ 1245	\$ 1812	\$ 1594	\$ 1627	\$ 1284	\$ 2079
13.	7264	8268	10964	9190	11194	8692	13702
14.	2353	1740	2615	1345	1378	2862	1778
15.	<u>\$10969</u>	<u>\$11253</u>	<u>\$15391</u>	<u>\$12129</u>	<u>\$14199</u>	<u>\$12838</u>	<u>\$17559</u>
16.	\$25768	\$35346	\$56584	\$58548	\$73973	\$47331	\$73639
17.	15938	14673	18014	13179	17434	17660	18628
18.	\$76311	\$79973	\$139130	\$107834	\$146056	\$100814	\$153024
Average capital managed as of December 31, 1967							
19.	\$79473	\$83746	\$148961	\$112476	\$149171	\$102286	\$154570

Table 3. Summary of Earnings - Cash Statement, by Type of Farming, 1967

Item	Cash crops, South. Minn.	Cash crops, North. Minn.	Dairy, South. Minn.	Dairy, North. Minn.	Hogs, complete program
RECEIPTS					
1. Dairy cattle	\$ 85	\$ -	\$ 4141	\$ 2735	\$ 45
2. Dairy products	44	-	18316	12051	-
3. Beef cattle	2016	3142	362	208	892
4. Hogs	1529	482	424	195	37806
5. Sheep	83	378	48	59	26
6. Other livestock	-	-	1	1	-
7. Poultry	19	42	36	2	10
8. Eggs	96	4	70	10	110
9. Crops - corn	13921	352	388	41	1350
10. - other crops	12916	22936	1233	646	1944
11. Other capital assets sold	2081	418	822	202	799
12. Work off the farm	1849	469	421	159	305
13. Miscellaneous farm income	912	1391	509	429	426
14. Total sales	<u>\$35551</u>	<u>\$29614</u>	<u>\$26771</u>	<u>\$16738</u>	<u>\$43713</u>
15. Increase in capital	6995	7683	5015	3218	2655
16. Family living from farm	82	136	394	374	165
17. Total received	<u>\$42628</u>	<u>\$37433</u>	<u>\$32180</u>	<u>\$20330</u>	<u>\$46533</u>
EXPENSES					
18. Dairy cattle bought	\$ 1	\$ -	\$ 936	\$ 834	\$ 20
19. Beef cattle bought	840	234	47	85	122
20. Hogs bought	375	40	70	11	1688
21. Sheep bought	15	76	1	3	-
22. Other livestock bought	-	-	17	-	-
23. Poultry bought	18	13	104	1	19
24. Misc. livestock expense	76	46	1031	614	1335
25. Feed bought	1118	298	2692	2319	12581
26. Fertilizer bought	4046	2949	1252	581	2818
27. Other crop expense	3558	3362	906	566	1923
28. Custom work hired	786	1162	1217	841	1021
29. Gas, oil, grease bought	1624	1709	964	809	967
30. Rep. auto, truck, tractor, and crop machinery	1854	1712	1064	810	1059
31. Repair real estate	273	301	373	186	340
32. Repair livestock equipment	31	32	232	157	249
33. Wages of hired labor	936	1151	816	471	621
34. Electric expense	223	204	388	312	429
35. Taxes (real est. & pers. prop.)	2084	1131	1179	588	1208
36. General farm expense	523	543	437	301	535
37. Total cash expense	<u>\$18381</u>	<u>\$14963</u>	<u>\$13726</u>	<u>\$ 9489</u>	<u>\$26935</u>
38. New power and machinery	5741	6039	3247	2083	4355
39. New livestock equipment	270	42	934	565	605
40. New buildings & real estate	5577	2970	3064	1923	2211
41. Total purchases	<u>\$29969</u>	<u>\$24014</u>	<u>\$20971</u>	<u>\$14060</u>	<u>\$34106</u>
42. Decrease in farm capital	-	-	-	-	-
43. Interest at 5 percent	7207	3292	3644	2012	4224
44. Unpaid family labor	520	643	974	615	571
45. Board for hired labor	30	60	103	65	66
46. Total expenses	<u>\$37726</u>	<u>\$28009</u>	<u>\$25692</u>	<u>\$16752</u>	<u>\$38967</u>
47. Labor earnings	\$ 4902	\$ 9424	\$ 6488	\$ 3578	\$ 7566
48. Net cash income (line 14 - line 41)	\$ 5582	\$ 5600	\$ 5800	\$ 2678	\$ 9607

Table 3. Summary of Earnings - Cash Statement, by Type of Farming, 1967 (cont'd)

	Dairy and hogs	Dairy and cash crops	Hogs and feeder cattle	Hogs and cash crops	Feeder cattle & cash crops	Dairy, hogs & cash crops	Hogs, feeder cattle, cash crops
1.	\$ 3826	\$ 3560	\$ 121	\$ 283	\$ 58	\$ 3227	\$ 156
2.	13379	11908	71	221	1	12780	-
3.	600	544	45199	2055	37757	557	33234
4.	10962	974	20373	17483	1414	7059	14919
5.	47	104	216	136	174	49	136
6.	1	1	-	3	-	-	-
7.	26	13	12	8	26	31	12
8.	211	114	200	56	214	115	134
9.	342	3275	775	6343	6253	3633	6033
10.	1788	5650	3095	8641	9729	5988	11276
11.	323	1700	386	852	894	417	517
12.	276	570	686	720	736	429	751
13.	396	603	577	687	662	665	774
14.	<u>\$32177</u>	<u>\$29016</u>	<u>\$71711</u>	<u>\$37488</u>	<u>\$57918</u>	<u>\$34950</u>	<u>\$67942</u>
15.	3162	3773	9831	4642	3115	1472	1546
16.	420	365	429	157	252	344	321
17.	<u>\$35759</u>	<u>\$33154</u>	<u>\$81971</u>	<u>\$42287</u>	<u>\$61285</u>	<u>\$36766</u>	<u>\$69809</u>
18.	\$ 645	\$ 914	\$ 8	\$ 70	\$ -	\$ 170	\$ -
19.	207	47	24267	1098	20559	9	17712
20.	421	230	479	978	310	412	402
21.	1	13	82	84	100	-	17
22.	1	1	1	-	-	2	1
23.	18	17	18	10	36	9	19
24.	1090	730	947	591	389	1010	710
25.	5563	2058	15348	6371	4009	4165	9275
26.	1660	1815	3035	2893	3623	1989	3492
27.	1182	1590	2040	2378	2593	1534	3496
28.	1305	1174	1558	836	1185	1514	1175
29.	1105	1169	1520	1315	1441	1433	1628
30.	1123	1279	1699	1397	1642	1309	2026
31.	414	265	623	334	349	439	427
32.	223	188	313	190	164	240	261
33.	614	764	1521	815	938	544	1752
34.	417	347	369	302	256	398	327
35.	1294	1395	1693	1583	2002	1875	2272
36.	464	407	617	524	562	510	620
37.	<u>\$17747</u>	<u>\$14403</u>	<u>\$56138</u>	<u>\$21769</u>	<u>\$40158</u>	<u>\$17562</u>	<u>\$45622</u>
38.	2966	3947	4139	4495	4059	2776	4556
39.	902	459	943	470	360	1312	314
40.	2860	4022	6150	4636	4842	1657	2190
41.	<u>\$24475</u>	<u>\$22831</u>	<u>\$67370</u>	<u>\$31370</u>	<u>\$49419</u>	<u>\$23307</u>	<u>\$52682</u>
42.	-	-	-	-	-	-	-
43.	3895	4093	7202	5508	7381	5078	7690
44.	1064	868	1019	448	335	1040	1034
45.	45	89	101	43	75	41	97
46.	<u>\$29479</u>	<u>\$27881</u>	<u>\$75692</u>	<u>\$37359</u>	<u>\$57210</u>	<u>\$29465</u>	<u>\$51503</u>
47.	\$ 6280	\$ 5273	\$ 6279	\$ 4918	\$ 4075	\$ 7300	\$ 8306
48.	\$ 7702	\$ 6185	\$ 4341	\$ 6118	\$ 8409	\$11643	\$15260

Approximately 50 to 75 percent of each dollar of sales is required to pay cash operating costs (table 4). Another 15 to 25 percent of each dollar of sales is required for capital expenditures. The latter includes the purchase of power, machinery, equipment, and real estate improvements. Thus, 67 to 94 percent of each dollar of receipts is required to pay for farm purchases, leaving the balance for family living expenses, interest on money borrowed, debt retirement, and other savings.

Table 4. Purchases per \$100 of Total Sales, by Type of Farming, 1967*

Item	Cash crops, South. Minn.	Cash crops, North. Minn.	Dairy, South. Minn.	Dairy, North. Minn.	Hogs, complete program
1. Dairy cattle bought	\$ -	\$ -	\$ 3.50	\$ 4.99	\$.04
2. Beef cattle bought	2.36	.79	.17	.51	.28
3. Hogs bought	1.05	.13	.26	.06	3.87
4. Sheep bought	.04	.26	-	.02	-
5. Poultry bought	.05	.04	.39	-	.04
6. Misc. livestock expense	.21	.15	3.94	3.67	3.05
7. Feed bought	3.14	1.01	10.05	13.86	28.79
8. Fertilizer bought	11.39	9.96	4.68	3.47	6.46
9. Other crop expenses	10.02	11.36	3.38	3.38	4.40
10. Custom work hired	2.21	3.92	4.54	5.03	2.33
11. Gas, oil, grease bought	4.57	5.77	3.60	4.83	2.21
12. Rep. auto, truck, tractor, and crop machinery	5.21	5.78	3.97	4.84	2.42
13. Repair real estate	.76	1.02	1.39	1.11	.78
14. Repair livestock equipment	.09	.11	.87	.94	.57
15. Wages of hired labor	2.63	3.89	3.05	2.81	1.42
16. Electric expense	.63	.69	1.45	1.86	.98
17. Taxes (R.E. & P.P.)	5.87	3.82	4.40	3.51	2.76
18. General farm expense	1.47	1.83	1.63	1.80	1.22
19. Total operating purchases	\$51.70	\$50.53	\$51.27	\$56.69	\$61.62
20. New power and machinery	16.15	20.39	12.13	12.44	9.96
21. New livestock equipment	.76	.14	3.49	3.37	1.38
22. New buildings & real estate	15.69	10.03	11.44	11.50	5.06
23. Total purchases	\$84.30	\$81.09	\$78.33	\$84.00	\$78.02

* Total purchases and sales are shown in table 3.

The data in table 5 report earnings on an enterprise or accrual basis, in contrast with the cash basis as shown in table 3. Earnings statements on the cash basis stress purchases and sales. All inventory adjustments are entered as one item--either an increase or a decrease in farm capital. Likewise, family living from the farm is entered as a single item of income. On the enterprise or accrual basis, the value of livestock and livestock products produced includes sales, value used in the home, changes in inventories, and

Table 4. Purchases per \$100 of Total Sales, by Type of Farming, 1967 (cont'd)

	Dairy and hogs	Dairy and cash crops	Hogs and feeder cattle	Hogs and cash crops	Feeder cattle & cash crops	Dairy hogs & cash crops	Hogs, feeder cattle, cash crops
1.	\$ 2.00	\$ 3.15	\$.01	\$.19	\$ -	\$.49	\$ -
2.	.64	.16	33.85	2.93	35.51	.02	26.10
3.	1.31	.79	.67	2.61	.53	1.18	.59
4.	-	.04	.11	.22	.17	-	.02
5.	.05	.06	.02	.03	.06	.02	.02
6.	3.39	2.51	1.32	1.58	.67	2.89	1.04
7.	17.30	7.10	21.41	16.99	6.93	11.93	13.66
8.	5.17	6.26	4.23	7.72	6.25	5.69	5.14
9.	3.67	5.48	2.84	6.34	4.48	4.39	5.14
10.	4.06	4.05	2.17	2.23	2.04	4.33	1.73
11.	3.43	4.03	2.12	3.51	2.49	4.10	2.40
12.	3.49	4.42	2.37	3.73	2.83	3.74	2.98
13.	1.29	.91	.87	.89	.60	1.26	.63
14.	.69	.65	.44	.51	.28	.69	.38
15.	1.91	2.63	2.12	2.17	1.62	1.56	2.59
16.	1.29	1.19	.51	.80	.44	1.14	.48
17.	4.02	4.81	2.36	4.22	3.46	5.36	3.34
18.	1.44	1.40	.86	1.40	.97	1.46	.91
19.	<u>\$55.15</u>	<u>\$49.64</u>	<u>\$78.28</u>	<u>\$58.07</u>	<u>\$69.33</u>	<u>\$50.25</u>	<u>\$67.15</u>
20.	9.22	13.60	5.77	11.99	7.01	7.95	6.71
21.	2.80	1.58	1.31	1.25	.62	3.75	.46
22.	8.89	13.86	8.59	12.37	8.36	4.74	3.22
23.	<u>\$76.06</u>	<u>\$78.68</u>	<u>\$93.95</u>	<u>\$83.68</u>	<u>\$85.32</u>	<u>\$66.69</u>	<u>\$77.54</u>

accounts for transfers between enterprises. Purchases of livestock are subtracted so the data represents value of livestock and livestock products added by the enterprise. Costs of operating each service enterprise (autos and trucks, tractors and crop machinery, etc.) are calculated in a similar manner. Credit is given to crops for feed raised on the farm and consumed by livestock. Thus, while earnings statements on an accrual basis do not show purchases and

Table 5. Summary of Earnings - Enterprise Statement, by Type of Farming, 1967

Item	Cash crops, South. Minn.	Cash crops, North. Minn.	Dairy, South. Minn.	Dairy, North. Minn.	Hogs, complete program
RECEIPTS AND NET INCREASES					
1. Milk cows	\$ 46	\$ -	\$18262	\$12344	\$ -
2. Other dairy cattle	26	-	4517	3031	18
3. Beef breeding herd	307	796	12	23	41
4. Feeder cattle	605	335	194	80	442
5. Hogs	900	289	398	179	36217
6. Sheep - farm flock	62	129	34	44	22
7. Chickens	75	29	81	16	101
8. Other livestock	12	56	4	-	-
9. Total prod. livestock	\$ 2033	\$ 1634	\$23502	\$15717	\$36841
10. Feed fed	1568	1273	11615	7725	22584
11. Return over feed	\$ 465	\$ 361	\$11887	\$ 7992	\$14257
12. Crops, seed, feed	21626	22290	9159	4643	8685
13. Income from labor off farm	964	140	210	94	160
14. Miscellaneous farm income	912	1391	507	429	426
15. Total receipts	\$23967	\$24182	\$21763	\$13158	\$23528
EXPENSES AND NET DECREASES					
16. Truck and auto	\$ 1423	\$ 1174	\$ 1063	\$ 1027	\$ 1258
17. Electric expense	223	204	388	312	429
18. Tractors and crop mach.	4636	5305	3018	2123	3221
19. Livestock equipment	133	59	684	422	806
20. Buildings, fencing	1038	803	1506	750	1346
21. Miscel. livestock expense	76	46	1030	614	1335
22. Labor	1729	2191	2326	1452	1602
23. Taxes (R.E. & P.P.)	2084	1131	1179	588	1208
24. General farm expense	516	553	437	280	533
25. Interest at 5 percent	7207	3292	3644	2012	4224
26. Total expense	\$19065	\$14758	\$15275	\$ 9580	\$15962
27. Labor earnings	\$ 4902	\$ 9424	\$ 6488	\$ 3578	\$ 7566

sales, such a statement does more truly show the value produced for the productive enterprises and net expenses for each of the service enterprises.

Crops are a major source of income on all farms when credit is given to crops for feed raised on the farm and consumed by livestock (table 6). The proportion of farm income from livestock, crops, and miscellaneous sources is

Table 5. Summary of Earnings - Enterprise Statement, by Type of Farming, 1967
(continued)

	Dairy and hogs	Dairy and cash crops	Hogs and feeder cattle	Hogs and cash crops	Feeder cattle & cash crops	Dairy, hogs & cash crops	Hogs, feeder cattle, cash crops
1.	\$13569	\$12156	\$ 108	\$ 219	\$ 5	\$12901	\$ 12
2.	3812	3240	17	143	14	3191	97
3.	15	62	356	334	377	-	192
4.	243	165	22670	800	16143	67	16698
5.	10669	717	19992	16703	843	6836	13826
6.	34	36	146	56	102	66	122
7.	202	115	193	50	193	108	116
8.	-	2	9	17	29	2	5
9.	<u>\$28544</u>	<u>\$16493</u>	<u>\$43491</u>	<u>\$18322</u>	<u>\$17706</u>	<u>\$23171</u>	<u>\$31068</u>
10.	15976	8694	30247	12287	14206	12842	21003
11.	<u>\$12568</u>	<u>\$ 7799</u>	<u>\$13244</u>	<u>\$ 6035</u>	<u>\$ 3500</u>	<u>\$10329</u>	<u>\$10065</u>
12.	9216	12418	14930	14889	20248	14391	21335
13.	139	278	315	305	397	182	360
14.	<u>396</u>	<u>603</u>	<u>577</u>	<u>687</u>	<u>662</u>	<u>664</u>	<u>774</u>
15.	<u>\$22319</u>	<u>\$21098</u>	<u>\$29066</u>	<u>\$21916</u>	<u>\$24807</u>	<u>\$25566</u>	<u>\$32534</u>
16.	\$ 1176	\$ 1183	\$ 1316	\$ 1070	\$ 1275	\$ 896	\$ 1370
17.	417	348	369	302	256	398	327
18.	3340	3654	4706	3971	4656	4125	5294
19.	689	509	878	475	503	637	580
20.	1508	1393	1926	1393	1983	1626	2106
21.	1090	730	947	589	389	1010	710
22.	2165	2116	3134	1573	1727	2111	3260
23.	1294	1395	1693	1583	2002	1876	2271
24.	465	404	616	534	560	509	620
25.	<u>3895</u>	<u>4093</u>	<u>7202</u>	<u>5508</u>	<u>7381</u>	<u>5078</u>	<u>7690</u>
26.	<u>\$16039</u>	<u>\$15825</u>	<u>\$22787</u>	<u>\$16998</u>	<u>\$20732</u>	<u>\$18266</u>	<u>\$24228</u>
27.	\$ 6280	\$ 5273	\$ 6279	\$ 4918	\$ 4075	\$ 7300	\$ 8306

Table 6. Proportion of Farm Income from Livestock, Crops, and Miscellaneous Sources, by Type of Farming, 1967

Source of Income	Cash	Cash	Dairy,	Dairy,	Hogs,
	crops, South. Minn.	crops, North. Minn.	South. Minn.	North. Minn.	complete program
	(percent)				
1. Livestock	1.9	1.5	54.6	60.7	60.6
2. Crops	90.3	92.2	42.1	35.3	36.9
3. Miscellaneous	7.8	6.3	3.3	4.0	2.5
4. Total	100.0	100.0	100.0	100.0	100.0

based on receipts and net increases, as shown in table 5. Return over feed is the amount of income added by livestock and the return to crops represents the value of crops produced during the year.

The amount of income added by livestock tends to be high on farms maintaining dairy cattle and low on farms where beef cattle feeding is a major enterprise. In the case of feeder cattle and cash crops farms, only 14.1 percent of the income came from livestock. Cash sales were relatively high but the amount remaining after the deduction of cost of feed was low. As an average, dairy cattle give a higher return for each \$100 of feed consumed than is true for beef cattle. Since labor, building and equipment costs are less for beef cattle than for dairy, a lower return for each \$100 of feed consumed is needed. For many of the types of farms, the value of feed consumed exceeded the value of crops produced, indicating that the value of feed purchased exceeded crop sales.

Table 6. Proportion of Farm Income from Livestock, Crops, and Miscellaneous Sources, by Type of Farming, 1967 (continued)

	Dairy and hogs	Dairy and cash crops	Hogs and feeder cattle	Hogs and cash crops	Feeder cattle & cash crops	Dairy, hogs & cash crops	Hogs, feeder cattle, cash crops
	(percent)						
1.	56.3	37.0	45.6	27.6	14.1	40.4	30.9
2.	41.3	58.9	51.4	67.9	81.6	56.3	65.6
3.	2.4	4.1	3.0	4.5	4.3	3.3	3.5
4.	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Land Use and Crop Yields

Farms on which dairy cattle are the only major livestock enterprise have a relatively large proportion of their land in pasture and hay and less in grain crops than other types of farming (table 7). Specialized dairy farms have about 65 percent tillable land; all other types of farms have over 80 percent tillable land. Types of farms which include cash crops and beef cattle feeding as major enterprises tend to be large in terms of acres and include a large amount of grain crops.

Average crop yields are shown in table 8. Except for generally lower crop yields in northern Minnesota than in the southern portions of the state, there are no marked differences in yields by types of farming.

Table 7. Distribution of Acres in Farm, by Type of Farming, 1967

Item	Cash crops, South. Minn.	Cash crops, North. Minn.	Dairy, South. Minn.	Dairy, North. Minn.	Hogs, complete program
1. Canning peas	3.5	-	1.8	-	-
2. Wheat	5.7	112.8	1.5	7.5	.5
3. Oats for silage	.2	-	2.6	.9	-
4. Oats for grain	11.1	170.9	19.9	38.1	11.7
5. Barley	1.8	105.0	.8	2.7	1.0
6. Flax	2.4	28.8	.1	2.9	-
7. Other small grain	<u>3.4</u>	<u>34.7</u>	<u>.1</u>	<u>1.3</u>	<u>-</u>
8. Total small grain	28.1	452.2	26.8	53.4	13.2
9. Sugar beets	3.3	13.6	-	-	-
10. Corn grain	183.5	8.6	43.3	4.9	127.8
11. Soybeans	123.7	28.5	9.9	1.3	20.6
12. Sweet corn	8.5	-	.9	-	-
13. Corn silage	.4	3.7	21.2	29.4	-
14. Other cultivated crops	<u>.4</u>	<u>40.3</u>	<u>.1</u>	<u>.6</u>	<u>-</u>
15. Total cult. crops	319.8	94.7	75.4	36.2	148.4
16. Alfalfa hay	8.2	21.4	51.8	47.8	6.1
17. Other legume hay	.5	8.7	.7	24.7	.8
18. Other tame hay	-	2.5	.3	4.4	1.1
19. Annual hay	-	-	1.1	2.6	-
20. Legume seed	-	17.1	-	.8	-
21. Grass seed	-	<u>24.6</u>	-	<u>.2</u>	-
22. Total till. land in hay	8.7	74.3	53.9	80.5	8.0
23. Alfalfa pasture	1.1	4.5	6.5	4.9	.5
24. Other tillable pasture	-	<u>5.6</u>	<u>2.3</u>	<u>12.3</u>	<u>2.9</u>
25. Total till. land in past.	1.1	10.1	8.8	17.2	3.4
26. Feed grain program	33.7	12.3	5.9	3.5	4.0
27. Tillable land not cropped	<u>3.6</u>	<u>111.1</u>	<u>1.0</u>	<u>10.4</u>	<u>1.1</u>
28. Total tillable land	395.0	754.7	171.8	201.2	178.1
29. Wild hay	1.4	3.6	1.6	4.2	2.8
30. Non-tillable pasture	15.4	65.8	30.9	57.2	5.0
31. Timber not pastured	1.1	22.9	30.9	19.7	3.6
32. Waste and roads	20.4	43.3	10.4	24.5	7.1
33. Farmstead	<u>10.1</u>	<u>25.7</u>	<u>6.8</u>	<u>6.8</u>	<u>6.4</u>
34. Total acres in farm	443.4	916.0	252.4	313.6	203.0
35. Percent land tillable	89.1	82.4	68.1	64.2	87.7

Table 7. Distribution of Acres in Farm by Type of Farming, 1967 (continued)

	Dairy and hogs	Dairy and cash crops	Hogs and feeder cattle	Hogs and cash crops	Feeder cattle & cash crops	Dairy, hogs & cash crops	Hogs, feeder cattle, cash crops
1.	.3	3.2	-	1.0	1.0	1.4	1.0
2.	.6	12.6	2.6	2.7	7.2	.4	.2
3.	2.6	.6	4.9	-	2.9	1.6	1.8
4.	23.7	38.3	24.3	13.7	26.6	22.4	22.9
5.	.7	9.1	.9	2.1	8.0	1.8	-
6.	.1	4.9	2.9	.8	4.9	.4	-
7.	.4	3.6	-	.3	.8	-	-
8.	<u>28.4</u>	<u>72.3</u>	<u>35.6</u>	<u>20.6</u>	<u>51.4</u>	<u>28.0</u>	<u>25.9</u>
9.	-	.2	-	.6	.9	-	-
10.	70.4	73.4	151.6	139.6	156.9	104.8	184.7
11.	17.6	42.7	36.6	87.9	94.1	67.3	110.4
12.	.3	2.9	-	5.2	3.2	1.1	1.9
13.	14.3	14.3	29.0	1.6	20.4	10.9	16.4
14.	.3	4.2	1.5	.1	1.0	-	-
15.	<u>102.9</u>	<u>137.7</u>	<u>218.7</u>	<u>235.0</u>	<u>276.5</u>	<u>184.1</u>	<u>313.4</u>
16.	38.8	42.4	34.3	9.4	26.5	36.6	28.4
17.	1.3	5.1	1.0	.2	1.9	-	-
18.	.8	.3	.3	-	.1	1.7	-
19.	.2	.9	-	-	1.7	.6	-
20.	-	.9	-	1.3	-	-	-
21.	-	1.1	-	.2	1.8	-	-
22.	<u>41.1</u>	<u>50.7</u>	<u>35.6</u>	<u>11.1</u>	<u>32.0</u>	<u>38.9</u>	<u>28.4</u>
23.	10.5	8.1	3.9	2.2	2.8	10.7	2.7
24.	1.2	6.5	3.3	1.2	7.5	.8	.7
25.	<u>11.7</u>	<u>14.6</u>	<u>7.2</u>	<u>3.4</u>	<u>10.3</u>	<u>11.5</u>	<u>3.4</u>
26.	7.4	16.2	9.4	20.7	26.4	16.9	32.4
27.	.3	9.2	1.1	3.4	4.3	.4	4.1
28.	<u>191.8</u>	<u>300.7</u>	<u>307.6</u>	<u>294.2</u>	<u>400.9</u>	<u>279.8</u>	<u>407.6</u>
29.	.8	1.9	4.1	1.0	.6	2.5	2.0
30.	15.7	23.7	24.5	9.3	18.9	15.1	13.9
31.	8.1	18.3	7.2	1.4	4.8	1.9	2.3
32.	11.4	16.1	16.2	13.6	19.2	9.2	22.3
33.	8.2	9.3	11.3	9.8	12.5	9.6	12.5
34.	<u>236.0</u>	<u>370.0</u>	<u>370.9</u>	<u>329.3</u>	<u>456.9</u>	<u>318.1</u>	<u>460.6</u>
35.	81.3	81.3	82.9	89.3	87.7	88.0	88.5

Table 8. Crops Yields per Acre, by Type of Farming, 1967

Crop	Cash crops, South. Minn.	Cash crops, North. Minn.	Dairy, South. Minn.	Dairy, North. Minn.	Hogs, complete program
1. Canning peas, dollars	\$71.00	-	\$79.68	-	-
2. Wheat, bu.	35.0	33.4	28.8	28.4	-
3. Oats for silage, tons	-	-	7.1	3.3	-
4. Oats for grain, bu.	65.6	57.4	58.8	50.0	67.9
5. Barley, bu.	-	53.4	50.0	38.5	-
6. Flax, bu.	-	*	-	17.2	-
7. Corn grain, bu.	89.9	37.4	81.9	47.6	85.0
8. Sugar beets, tons	-	9.0	-	-	-
9. Soybeans, bu.	25.0	17.4	19.0	-	24.4
10. Sweet corn, tons	*	-	*	*	-
11. Corn silage, tons	14.0	5.9	13.1	5.7	-
12. Alfalfa hay, tons	2.8	*	3.2	3.1	2.8
13. Other legume hay, tons	-	2.1	3.8	1.5	-
14. Annual hay, tons	-	-	1.7	1.2	-
15. Feed grain program, dol.	\$59.67	*	\$47.98	\$25.14	\$50.50
16. Wild hay, tons	-	-	1.5	-	-

* Information not available.

Table 8. Crop Yields per Acre, by Type of Farming, 1967 (continued)

	Dairy and hogs	Dairy and cash crops	Hogs and feeder cattle	Hogs and cash crops	Feeder cattle & cash crops	Dairy, hogs & cash crops	Hogs, feeder cattle, cash crops
1.	-	\$42.99	-	\$76.23	\$45.00	-	-
2.	33.0	30.1	-	34.4	38.0	-	-
3.	7.8	5.5	7.3	-	7.1	6.0	6.2
4.	61.4	56.1	65.4	61.8	59.7	57.2	63.0
5.	-	40.4	-	50.0	38.2	-	-
6.	-	14.3	21.2	14.0	14.9	-	-
7.	78.2	81.2	76.4	86.8	85.5	79.0	80.2
8.	-	-	-	-	-	-	-
9.	21.6	21.2	22.5	24.6	24.2	20.6	23.7
10.	-	*	-	*	*	-	4.1
11.	12.1	11.3	11.9	11.1	12.8	15.2	11.7
12.	3.4	3.0	3.0	3.0	4.8	3.6	2.8
13.	2.4	1.8	-	3.3	3.7	-	-
14.	1.2	2.0	-	-	3.0	-	-
15.	\$55.50	\$50.18	\$46.54	\$55.75	\$49.67	\$55.89	\$56.38
16.	-	-	1.4	-	-	-	-

Livestock Enterprises

The amount of livestock per farm by type of farming is shown in table 9. The data in regard to number of head of livestock represent the average number on hand during the year. The differences in livestock efficiency are relatively small. The dairy cow statements for the five types of farming that include dairying as a major enterprise show returns for \$100 of feed of \$196 to \$205 (table 12). Variations in returns from hogs and from feeder cattle by type of farming also are relatively small. Home

Table 9. Amount of Livestock, by Type of Farming, 1967

Item	Cash crops, South. Minn.	Cash crops North. Minn.	Dairy, South. Minn.	Dairy, North. Minn.	Hogs, complete program
1. Number of dairy cows	-	-	38	29	-
2. Number of other dairy cattle	-	-	45	34	*
3. Number in beef breeding herd	3	9	*	*	*
4. Number of feeder cattle	6	7	1	*	2
5. Pounds of feeder cattle produced	2920	2593	754	358	1728
6. Number of ewes kept for lambing	2	6	2	4	*
7. Number of hens	75	4	26	3	27
8. Number of litters of pigs farrowed	1	-	2	1	101
9. Pounds of hogs produced	5878	365	2150	367	189961

* Less than one.

grown feeds have been charged to livestock at current market prices during the year. Purchased feeds were charged at cost.

There is little evidence to support the idea that enterprises on highly specialized farms are more efficient than "several enterprise" farms. It is possible that the variations in size among the types of farming are not sufficiently great to show possible economies of size.

Table 9. Amount of Livestock, by Type of Farming, 1967 (continued)

	Dairy and hogs	Dairy and cash crops	Hogs and feeder cattle	Hogs and cash crops	Feeder cattle & cash crops	Dairy, hogs & cash crops	Hogs, feeder cattle, cash crops
1.	28	27	-	*	-	27	-
2.	36	35	-	1	-	34	-
3.	*	*	44	3	6	-	2
4.	2	2	143	6	108	*	115
5.	1124	1230	94497	3646	68859	297	74201
6.	1	2	5	3	3	-	5
7.	48	29	72	19	56	33	35
8.	35	2	60	47	2	22	44
9.	58174	4098	107266	92984	5473	37237	75575

Table 10. Factors of Costs and Returns from Dairy Cows, by Type of Farming, 1967

Item	Dairy, South. Minn.	Dairy, North. Minn.	Dairy and hogs	Dairy and cash crops	Dairy, hogs & cash crops
Pounds of milk per cow	10964	10221	11292	10613	10918
Percent butterfat in milk	3.7	3.6	3.6	3.5	3.8
Pounds butterfat per cow	404	371	417	380	408
Price rec'd per pound BF	\$1.20	\$1.18	\$1.16	\$1.17	\$1.18
Price rec'd per cwt. milk	4.45	4.27	4.26	4.19	4.46
Value of produce per cow:					
Dairy product sales	\$478.48	\$421.36	\$470.30	\$432.78	\$473.27
Dairy produce used in home	3.48	4.58	4.37	4.50	4.50
Milk fed to livestock	4.18	9.48	5.18	6.29	2.41
Net increase in value of cows	-9.71	-3.85	-1.80	-1.13	3.19
Total value produced	<u>\$476.43</u>	<u>\$431.57</u>	<u>\$478.05</u>	<u>\$442.44</u>	<u>\$483.37</u>
Feed cost per cow:					
Concentrates	\$112.97	\$ 97.31	\$117.09	\$105.77	\$135.78
Roughages	95.54	92.27	89.77	91.04	94.12
Pasture	9.24	6.01	10.22	9.66	7.12
Total feed cost	<u>\$217.75</u>	<u>\$195.59</u>	<u>\$217.08</u>	<u>\$206.47</u>	<u>\$237.02</u>
Return above feed cost per cow	\$258.68	\$235.98	\$260.97	\$235.97	\$246.35
Return for \$100 of feed	\$219	\$221	\$220	\$214	\$204
Feeds per cow, lbs.:					
Corn	3342	1260	3654	3017	4322
Small grain	754	2598	669	1203	735
Commercial feeds	615	277	558	475	577
Total concentrates	4711	4135	4881	4695	5634
Total hay	5774	7390	5789	6077	6249
Silage	11866	11357	9331	9217	9234
Feed cost per pound of BF	\$.54	\$.53	\$.52	\$.55	\$.59
Feed cost per cwt. milk produced	\$1.99	\$1.91	\$1.93	\$1.95	\$2.21
Number of cows	38	29	28	27	27

Table 11. Feed Costs and Returns from Other Dairy Cattle, by Type of Farming, 1967

Item	Dairy, South. Minn.	Dairy, North. Minn.	Dairy and hogs	Dairy and cash crops	Dairy, hogs & cash crops
Net incr. in value per head	\$99.27	\$88.02	\$111.53	\$94.44	\$96.97
Total feed cost per head	\$63.95	\$57.06	\$ 69.94	\$65.68	\$59.24
Return above feed cost/head	\$35.32	\$30.96	\$ 41.59	\$28.76	\$37.73
Returns for \$100 of feed	\$155	\$154	\$159	\$144	\$164
Feed per head, lbs.:					
Concentrates	891	603	1113	1071	844
Hay	1948	2708	2204	2337	2350
Silage	3752	3080	3334	3499	2818
Whole milk	99	234	126	178	55
Number of head	45	34	36	35	34

Table 12. Feed Costs and Returns from All Dairy Cattle, by Type of Farming, 1967

Item	Dairy, South. Minn.	Dairy, North. Minn.	Dairy and hogs	Dairy and cash crops	Dairy, hogs & cash crops
Value of produce per cow:					
Dairy products	\$485.71	\$435.42	\$478.51	\$442.55	\$477.78
Net increase in value	<u>108.21</u>	<u>102.13</u>	<u>131.30</u>	<u>118.56</u>	<u>141.94</u>
Total value produced	\$593.92	\$537.55	\$609.81	\$561.11	\$619.72
Total feed cost per cow	\$290.86	\$261.90	\$297.98	\$286.43	\$316.02
Returns above feed cost/cow	\$303.06	\$275.65	\$311.83	\$274.68	\$303.70
Returns for \$100 of feed	\$204	\$205	\$205	\$196	\$196
Feed per cow, lbs.:					
Concentrates	5786	4817	6227	6052	6823
Hay	8074	10528	8403	9465	9409
Silage	16068	14346	13351	13267	13325
Misc. expenses per cow	\$19.98	\$27.90	\$18.58	\$20.78	\$30.26

Table 13. Feed Costs and Returns from Hogs, Complete Program,* by Type of Farming 1967

Item	Hogs, complete program	Dairy and hogs	Hogs and feeder cattle	Hogs and cash crops	Dairy, hogs & cash crops	Hogs, feeder cattle, cash crops
Pounds produced	189961	58174	107266	92984	37237	75575
Per cwt. produced:						
Net increase in value	\$19.11	\$18.29	\$18.60	\$17.97	\$18.90	\$18.28
Feed cost	<u>11.70</u>	<u>11.91</u>	<u>12.13</u>	<u>11.91</u>	<u>12.24</u>	<u>12.11</u>
Return above feed cost	\$ 7.41	\$ 6.38	\$ 6.47	\$ 6.06	\$ 6.66	\$ 6.17
Returns for \$100 of feed	\$163	\$154	\$153	\$151	\$154	\$151
Price received per cwt. sold	\$19.84	\$19.34	\$19.34	\$18.93	\$19.53	\$18.77
Weight per hog sold	226	225	243	234	235	242
Misc. costs per cwt. prod.	\$.39	\$.22	\$.29	\$.34	\$.79	\$.47
Feed per cwt. hogs prod., lbs.:						
Corn	309	302	**	312	317	312
Small grain	14	42	**	26	41	32
Commercial feeds	<u>93</u>	<u>114</u>	**	<u>82</u>	<u>74</u>	<u>98</u>
Total concentrates	<u>416</u>	<u>458</u>	**	<u>420</u>	<u>432</u>	<u>442</u>
Total number of litters raised	101	35	60	47	22	44
Number of pigs born per litter	10.3	9.4	9.1	9.9	9.4	8.8
Number of pigs weaned per litter	8.3	7.5	7.5	8.1	7.3	7.4

* Includes only those farms that farrow and fatten hogs.

** Information not available.

Table 14. Feed Costs and Returns from Feeder Cattle, by Type of Farming, 1967

Item	Hogs and feeder cattle	Feeder cattle & cash crops	Hogs, feeder cattle, cash crops
Pounds of beef produced	94497	68859	74201
Net increase in value of feeders	\$23.76	\$23.60	\$23.31
Feed cost per cwt. beef produced:			
Concentrates	\$13.42	\$13.90	\$12.83
Roughages	4.59	4.96	4.49
Pasture	.71	.56	.17
Total feed cost	\$18.72	\$19.42	\$17.49
Returns above feed cost per cwt. beef produced	\$ 5.04	\$ 4.18	\$ 5.82
Returns for \$100 of feed	\$127	\$122	\$133
Miscellaneous costs per cwt. beef produced	\$.16	*	\$.39
Feeds per cwt. beef produced, lbs.:			
Corn and small grain	545	581	527
Commercial feeds	45	43	42
Total concentrates	590	624	569
Total hay	211	235	239
Silage	716	871	591
Price paid per cwt. for beef bought	\$27.00	\$25.04	\$26.64
Price received for feeder cattle sold	24.70	24.32	24.94
Number of animal units	143	108	115

* Information not available.

Factors Affecting Choice of Type of Farming

It is important to bear in mind that the records included in this report are for only one calendar year. Similar data for a different year would show variations in the figures presented. Variations between years, in the main, are caused by differences in climatic conditions and general price levels-- factors which the farmer cannot control. Furthermore, price levels do not rise or fall in unison. Some prices may rise while others are falling, or some may change faster than others. For these reasons, the relative earning levels of the various types of farms may change from year to year. While cash crops farms in northern Minnesota reported the highest labor earnings in 1967,

Table 15. Earnings, Resources Utilized, Size of Business, and Expenses, by Type of Farming, 1967

Item	Cash crops, South. Minn.	Cash crops, North. Minn.	Dairv, South. Minn.	Dairy, North. Minn.	Hogs, complete program
Earnings					
1. Labor earnings	\$4902	\$9424	\$6488	\$3578	\$7566
2. Net cash income	5582	5600	5800	2678	9607
Resources used					
3. Acres per farm	443	916	252	314	203
4. Acres tillable	395	755	172	201	178
5. Capital managed	\$144130	\$65858	\$72882	\$40244	\$84494
6. Number of workers	1.4	1.5	1.6	1.5	1.3
Size of business					
7. Total farm sales	\$35551	\$29614	\$26771	\$16738	\$43713
8. Total work units	260	309	424	338	331
Expenses					
9. Total operating exp.	\$18381	\$14963	\$13726	\$ 9489	\$26935
10. Purchase of cap. items	11588	9051	7245	4571	7171
11. Power, mach., equip., & bldg. exp. per W.U.	28.78	24.45	15.71	13.57	21.33
12. Power and mach. expense per crop acre	17.79	10.70	28.34	19.86	28.47

the factors just described may elevate some other farm type to the top earning position in another year.

A summary of some of the resources available, size of business, and other factors by type of farming is presented in table 15. Farms which have cash crops or feeder cattle as major enterprises use large amounts of capital and involve large acreages. These are extensive enterprises and are best suited where labor is scarce as compared to land and capital. Dairying tends to be located on relatively small farms, where there is non-tillable land and where it is desirable, because of erosion and other factors, to include a considerable amount of hay and pasture in the rotation. Dairying is an intensive

Table 15. Earnings, Resources Utilized, Size of Business, and Expenses, by Type of Farming, 1967 (continued)

	Dairy and hogs	Dairy and cash crops	Hogs and feeder cattle	Hogs and cash crops	Feeder cattle & cash crops	Dairy, hogs & cash crops	Hogs, feeder cattle, cash crops
1.	\$6280	\$5273	\$6279	\$4918	\$4075	\$7300	\$8306
2.	7702	6185	4341	6118	8499	11643	15260
3.	236	370	371	329	457	318	461
4.	192	301	308	294	401	280	408
5.	\$77892	\$81860	\$144046	\$110155	\$147614	\$101550	\$153797
6.	1.5	1.7	1.8	1.4	1.4	1.6	1.8
7.	\$32177	\$29016	\$71711	\$37488	\$57918	\$34950	\$67942
8.	415	384	492	283	313	409	405
9.	\$17747	\$14403	\$56138	\$21769	\$40158	\$17562	\$45622
10.	6728	8428	11232	9601	9261	5745	7060
11.	17.18	18.11	19.14	23.36	26.49	18.78	23.89
12.	28.49	19.74	21.74	23.11	17.16	21.38	18.91

enterprise and is adapted to situations where labor is plentiful in comparison to land. Hogs seem to be adapted to a variety of situations.

The type of farming which a farmer selects is the result of factors such as the number of acres of tillable land and non-tillable land, topography, soils, climate, markets, availability of labor and capital, and personal preference. Most farmers face some limitations in adopting a particular farming type since each farm needs to be organized so as to make the best possible use of the particular bundle of resources available on that farm. In general, in order to maximize income, farmers should attempt to maximize the returns from their most scarce resources. If the supply of labor is short, enterprises should be selected that best fit that amount of labor. Others may have limitations in respect to land or capital, which in turn affect the selection of enterprises. What to produce and how much to produce depends on many physical, economic, and personal factors. Some of these personal factors take precedence over the maximizing of income.

There are many possible combinations of crops and livestock from which a farmer can make a choice. The specific combination that he chooses should be dependent on the resources available and be consistent with the personal goals of the farm operator and his family.