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1962 ANNUAL REPORT

CENTRAL MINNESOTA FARM MANAGEMENT SERVICE
FOR T. V. A. TEST DEMONSTRATION COOPERATORS

Department of Agricultural Economics
and
Agricultural Extension Service
UNIVERSITY OF MINNESOTA

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1962 ANNUAL REPORT, T. V. A. TEST DEMONSTRATION FARMS
Prepared by T. R. Nodland, M. F. Miller and P. R. Hasbargen (1)

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Introduction

The Agricultural Extension Service and the Department of Agricultural Economics of the University of Minnesota, the Tennessee Valley Authority, and the County Extension Services of five counties in central Minnesota are cooperating in a fertilizer demonstration project and in a farm management service. The service was initiated in 1958. It is available to a selected group of farmers who are willing to demonstrate the value of commercial fertilizers and who have agreed to keep farm business records. The authors wish to express their appreciation to the farmers and the Agricultural Extension Agents for their fine cooperation in making this report possible.

The purpose of this report is (1) to show some of the factors affecting farm income, and (2) to obtain data in regard to farm income and expenses for central Minnesota farms.

The project is under the general supervision of Roland Abraham, Roger Harris, and Paul Hasbargen of the Agricultural Extension Service. Analysis of the farm records and preparation of this report are handled by T. R. Nodland, Department of Agricultural Economics, and Paul Hasbargen, Agricultural Extension Service. The following tabulation shows by counties, the county agricultural agents and the number of farm records submitted.

<u>County</u>	<u>County Agricultural Agents</u>	<u>No. of Records</u>
Crow Wing	Glenn Smith and James Rabehl	2
East Otter Tail	Gerald Ness and Sherman Mandt	5
Hubbard	Wm. Dorsey and John Eix	5
Todd	Richard Brand and Loyal Hyatt	3
Wadena	Miles Rowe	5

(1) The authors are indebted to Janet Otis for her assistance in the preparation of this report

Table 1. Summary of Farm Inventories, 1962 (1)

Items	Ave. of 20 farms	Farm Number									
		19	20	21	18	3	2	5			
Size of farms (acres)	344	440	279	160	600	270	365	547	280	240	400
Size of business (work units)*	409	793	357	427	674	487	202	423	401	358	434
Dairy cattle	\$6585	\$13936	\$6345	\$7690	\$15122	\$10325	---	\$8755	\$6085	\$2840	\$3300
Other livestock	1600	--	1513	1780	--	71	\$326	--	1173	645	324
Horses	86	--	--	--	--	--	--	--	--	--	--
Crop, seed and feed	2280	2668	3873	2000	3050	1977	1789	2247	3028	1516	990
Auto & truck (share)	820	1131	1976	--	1066	500	180	800	424	405	1345
Tractors	1341	2370	1092	123	1740	2379	345	1216	1057	2640	375
Crop & general mach.	3006	3531	10865	3579	4924	2720	2093	2587	984	1755	1272
Livestock equip.	1451	3543	2393	140	2438	2070	120	2673	365	--	1369
Land	9495	20000	12000	16000	74000	8812	6600	4400	15915	9840	4100
Buildings, fences, etc.	5372	8098	8453	4845	6889	2800	2233	2000	5598	4057	1272
Total farm capital	32036	55277	48510	36157	42629	31654	21686	24678	34629	23698	14347
Dairy cattle	\$6357	\$15145	\$5715	\$8565	\$14700	\$11000	\$--	\$9005	\$5910	\$2870	\$2700
Other livestock	1646	1361	1280	1320	--	--	9125	--	829	665	45
Horses	206	--	--	--	--	--	--	--	--	--	--
Crop, seed and feed	3025	4527	4255	2800	3450	2195	1544	2871	4756	2407	1808
Auto & truck (share)	967	957	1728	--	2120	250	1221	640	2080	202	1156
Tractors	1169	2267	920	105	1479	1908	230	958	838	2310	262
Crop & general mach.	3570	6046	13477	4012	4760	4300	2961	3012	748	1413	1249
Livestock equip.	1503	3535	2330	691	2010	1844	257	3114	1236	--	1226
Land	9447	20000	12000	16000	7400	8812	6600	4400	14715	9840	4100
Buildings, fences, etc.	5358	8414	8771	5372	6183	2650	2817	3545	5315	4197	1193
Total farm capital	33248	62252	50476	38865	42102	32959	24755	27545	36427	23904	13739

(1) Arranged in descending order by labor earnings
* See page 17 for an explanation of work units

Table 1. Summary of Farm Inventories, 1962 (continued)

Items	Farm Number									
	1	4	12	16	24	8	23	13	22	17
Size of farms (acres)	440	259	320	280	360	240	549	290	235	300
Size of business (work units)	455	425	386	340	461	233	410	315	312	317
Dairy cattle	\$8420	\$7420	\$5990	\$4515	\$10315	\$2850	\$5780	\$--	\$4092	\$7910
Other livestock	1962	--	770	805	--	4947	--	7593	2100	--
Horses	300	--	--	--	--	--	--	1425	--	--
Crop, seed and feed	3689	2986	4205	1005	2592	751	2258	2112	2190	677
Auto & truck (share)	2201	1405	1792	--	50	--	200	567	956	1398
Tractors	2120	116	3146	169	1109	343	1935	2166	900	1471
Crop & general mach.	3656	1570	4049	939	4141	1027	4137	3631	1477	1178
Livestock equip. & sup.	2514	2590	246	1439	357	101	503	2246	1660	2259
Land	5978	7084	16000	8000	5800	5450	9700	9500	7330	10000
Buildings, fences, etc.	10058	6457	7550	3186	3330	2666	10030	3534	4424	9961
Total farm capital	\$40898	\$29628	\$43748	\$20059	\$27694	\$18135	\$34543	\$32774	\$25129	\$34855
Dairy cattle	\$9365	\$6745	\$5300	\$4910	\$9140	\$1575	\$5575	\$--	\$3700	\$5225
Other livestock	75	168	4130	805	--	4353	--	7441	1325	--
Horses	1700	--	--	--	--	--	--	2425	--	--
Crop, seed and feed	3328	3346	5525	1750	3244	1693	3466	4103	2287	1140
Auto & truck (share)	1660	2489	1536	--	--	600	100	700	681	1207
Tractors	1625	927	2780	82	694	261	1610	1853	1083	1190
Crop & general mach.	3605	1298	5060	812	5573	758	5671	4322	1210	1117
Livestock equip. & sup.	2534	2493	194	1311	274	74	544	2746	1544	2102
Land	5978	7084	16000	8000	5800	5450	9940	9500	7330	10000
Buildings, fences, etc.	9455	6213	7509	3006	3039	2455	9360	3183	5142	9333
Total farm capital	\$39925	\$30763	\$48034	\$20676	\$27764	\$17219	\$36266	\$36273	\$24302	\$31314

Capital Investment

The average value of capital used per farm is shown in table 1. Capital investment per farm varied from \$58,765 to \$13,863. These data represent "book" values and not necessarily current market values. The common practice for both income tax accounting and farm business analysis is to depreciate capital items each year by an amount equal to their decrease in value as a result of use and obsolescence. Market prices, particularly real estate, have been increasing during the last several years. As a result, the value of farm real estate as shown in table 1 tends to be an understatement of its present market value. This is especially true in cases of farms purchased several years ago.

Farm Earnings

Farm income in this area of the state is relatively low. The 20 farmers included in this report have average farm sales of \$13,497 and farm purchases of \$10,285, or a net cash income of \$3,212 per farm (table 2). Farm purchases amounted to 76 percent of total farm sales leaving 24 percent to pay family living expenses, interest on indebtedness, and for savings.

Labor earnings, the measure of financial success used in this report, have been computed on a "full owner" basis. Sales and purchases for the whole farm are shown, whether it was operated by an owner or a renter. Labor earnings are the return to the operator for his labor and management after all expenses have been paid, including wages for members of the family other than the operator, and a 5 per cent charge on the average value of capital used in the farm business. This places all farms on a uniform basis for comparison.

Two methods of calculating labor earnings are used. Table 2 shows the earnings statement on a cash basis; table 3 shows the earnings on an enterprise or accrual basis. The main difference in the two statements is in the method of handling the net increase or decrease in farm capital. In the cash statement, the net increase or decrease in farm capital is entered as one item (item 14 or 43, table 2). In the enterprise statement, as shown in table 3, the net change in the inventory has been included in each item in order to compute "total returns and net increase" or "total expenses and net decreases" by enterprises. Thus the average returns and net decreases of \$7,087 from dairy cows includes the value of dairy products sold, fed, and used in the home -- with adjustments for changes in the value of the herd. The following is an illustration using the data for a dairy farm:

Value of dairy products sold	\$6180	
Used in the home	225	
Fed to livestock	28	
Total value of dairy products produced		\$6433
Value of cows on end of year inventory	\$4000	
Sales of cows	726	
Butchered for home use	0	
Total	\$4726	
Value of cows on beginning of year inventory	\$4800	
Purchases	--	
Value of heifers transferred to cow herd	200	
Total	\$5000	
Net change in value of cows		-274
Returns and net increases from milk cows		\$6159

Table 2. Summary of Farm Earnings (Cash Statement) 1962 (1)

Items	Ave. of 20 farms	Farm Number				
		25	19	27	26	20
Farm Receipts						
1. Dairy cattle	\$ 2,065	\$ 2,607	\$ 1,242	\$ 3,010	\$ 4,082	\$ 3,281
2. Dairy products	7,032	17,320	8,868	7,306	11,604	13,698
3. Beef cattle	57	-	-	-	-	-
4. Hogs	2,060	1,518	6,943	3,452	-	-
5. Sheep	444	-	-	-	-	-
6. Horses	-	-	-	-	-	-
7. Poultry	6	-	-	-	-	-
8. Eggs	8	-	-	-	-	-
9. Crops	761	1,733	1,246	347	2,325	-
10. Mach. & equipment sold	251	339	163	67	316	112
11. Income from work off farm	318	146	57	62	270	320
12. Miscellaneous	495	926	312	106	311	596
13. Total farm sales	\$13,497	\$24,589	\$18,831	\$14,350	\$18,908	\$18,007
14. Income in farm capital	1,212	6,974	1,967	2,707	-	1,304
15. Family living from farm	285	526	273	527	273	442
16. Total farm receipts	\$14,994	\$32,089	\$21,071	\$17,584	\$19,181	\$19,753
Farm Expenses						
17. Dairy cattle bought	\$ 113	\$ -	\$ 547	\$ -	\$ -	\$ -
18. Beef cattle bought	294	-	-	-	-	-
19. Hogs bought	153	885	50	1,386	-	-
20. Sheep bought	2	-	-	-	-	-
21. Horses bought	81	-	-	-	-	-
22. Poultry bought	2	-	-	-	-	-
23. Misc. livestock expense	386	663	286	283	384	611
24. Feed	2,418	6,081	1,380	3,177	3,168	4,734
25. Fertilizers	395	604	898	501	321	565
26. Other crop expenses	442	712	476	-	381	477
27. Custom work hired	598	1,088	608	-	972	916
28. Gas, oil, grease (farm share)	712	1,491	856	517	1,172	978
29. Rep. tract., trucks, autos (farm share)	530	711	205	201	737	586
30. Repair farm real estate	131	199	107	116	123	329
31. Rep. crop & gen. machinery	281	806	233	168	501	527
32. Rep. livestock equipment	80	274	6	10	123	121
33. Wages of hired labor	286	242	800	66	1,005	380
34. Electricity expense (farm share)	283	528	151	522	362	370
35. Real estate & personal property taxes	533	837	627	527	772	354
36. Tel. & gen. farm expense	199	295	101	216	242	337
37. Total cash oper. expense	\$ 7,920	\$15,416	\$ 7,331	\$ 7,690	\$10,263	\$11,285
38. Mech. power bot. (farm share)	482	315	-	-	1,650	-
39. Crop & gen. mach. bought	1,255	3,137	4,310	1,130	704	2,480
40. Livestock equip. bought	246	518	180	621	-	75
41. New real estate improvement	382	800	977	852	-	-
42. Total farm purchases	\$10,285	\$20,186	\$12,798	\$10,293	\$12,617	\$13,840
43. Decrease in farm capital	-	-	-	-	527	-
44. Interest on farm capital	1,632	2,938	2,475	1,875	2,118	1,615
45. Unpaid family labor	574	900	-	750	-	600
46. Board fur. hired labor	57	96	-	-	240	40
47. Total farm expenses	\$12,548	\$24,120	\$15,273	\$12,918	\$15,502	\$16,095
48. Labor earnings	\$ 2,446	\$ 7,969	\$ 5,798	\$ 4,666	\$ 3,679	\$ 3,658

(1) Arranged in descending order by labor earnings.

Table 2. Summary of Farm Earnings (Cash Statement) 1962 (Continued)

Items	Farm Number						
	21	18	3	2	5	1	4
<u>Farm Receipts</u>							
1. Dairy cattle	\$ -	\$ 3,376	\$ 1,420	\$ 1,530	\$ 1,510	\$ 2,437	\$ 2,567
2. Dairy products	-	8,985	6,944	6,275	3,205	9,276	8,451
3. Beef cattle	71	-	-	-	-	-	-
4. Hogs	6,182	-	3,206	2,248	330	3,072	262
5. Sheep	2,811	-	-	-	-	-	-
6. Horses	-	-	-	-	-	-	-
7. Poultry	-	-	20	-	-	-	-
8. Eggs	-	-	165	-	-	-	-
9. Crops	1,527	114	548	133	360	1,488	302
10. Mach. & equip. sold	157	70	1,330	248	172	226	193
11. Income from work off farm	-	693	-	228	2,202	450	119
12. Miscellaneous	2,347	941	37	72	233	69	15
13. Total farm sales	\$13,095	\$14,179	\$13,670	\$10,734	\$ 8,012	\$17,018	\$11,909
14. Increase in farm capital	3,068	2,866	1,798	205	-	-	1,134
15. Family living from farm	80	90	409	249	327	321	141
16. Total farm receipts	\$16,243	\$17,135	\$15,877	\$11,188	\$ 8,339	\$17,339	\$13,184
<u>Farm Expenses</u>							
17. Dairy cattle bought	\$ -	\$ 942	\$ -	\$ -	\$ -	\$ 340	\$ -
18. Beef cattle bought	20	-	-	-	-	-	-
19. Hogs bought	143	-	60	12	12	-	93
20. Sheep bought	-	-	-	-	-	35	-
21. Horses bought	-	-	-	-	-	1,055	-
22. Poultry bought	-	-	-	-	-	-	-
23. Misc. livestock expense	228	407	326	281	142	636	460
24. Feed	3,453	2,586	1,862	1,887	254	2,327	512
25. Fertilizers	644	405	429	310	141	670	356
26. Other crop expenses	289	498	900	458	293	632	439
27. Custom work hired	684	726	336	719	415	880	480
28. Gas, oil, grease(farm share)	704	568	610	569	556	591	787
29. Rep. tract., trucks, autos (farm share)	312	486	863	270	364	321	1,073
30. Repair farm real estate	100	55	261	51	60	82	21
31. Rep. crop & gen. machinery	153	289	123	164	263	232	153
32. Rep. livestock equipment	36	51	63	78	6	173	-
33. Wages of hired labor	-	192	30	38	-	195	909
34. Electricity expense(farm share)	142	315	277	209	117	290	309
35. Real estate & personal property taxes	389	513	445	744	390	492	678
36. Tel. & gen. farm expense	225	239	472	136	107	119	151
37. Total cash oper. expense	\$ 7,522	\$ 8,272	\$ 7,057	\$ 5,925	\$ 3,120	\$ 9,070	\$ 6,421
38. Mech. power bot.(farm share)	1,260	-	2,000	-	-	-	2,850
39. Crop & gen. mach. bought	1,345	897	-	-	367	1,026	530
40. Livestock equip. bought	200	957	1,200	-	-	286	-
41. New real estate improvement	860	1,690	-	427	-	95	-
42. Total farm purchases	\$11,187	\$11,816	\$10,257	\$ 6,352	\$ 3,487	\$10,477	\$ 9,801
43. Decrease in farm capital	-	-	-	-	608	1,573	-
44. Interest on farm capital	1,161	1,306	1,777	1,190	702	2,006	1,510
45. Unpaid family labor	300	450	350	405	900	1,200	-
46. Board fur. hired labor	-	40	-	-	-	-	-
47. Total farm expenses	\$12,648	\$13,612	\$12,384	\$ 7,947	\$ 5,697	\$15,256	\$11,311
48. Labor earnings	\$ 3,595	\$ 3,523	\$ 3,493	\$ 3,241	\$ 2,642	\$ 2,083	\$ 1,873

Table 2. Summary of Farm Earnings (Cash Statement) 1962 (Continued)

	Farm Number							
	12	16	24	8	23	13	22	17
Farm Receipts								
1.	\$ 1,803	\$ 887	\$ 3,422	\$ 1,696	\$ 1,379	\$ -	\$ 2,119	\$ 2,927
2.	5,205	4,519	8,709	1,673	6,108	-	4,021	8,467
3.	-	-	-	-	-	1,077	-	-
4.	3,610	-	-	-	-	6,743	3,642	-
5.	-	1,242	-	4,513	-	314	-	-
6.	-	-	-	-	-	-	-	-
7.	-	-	-	-	-	93	-	-
8.	-	-	-	-	-	-	-	-
9.	425	-	24	617	1,637	2,407	-	-
10.	-	127	337	65	171	842	68	16
11.	-	-	194	386	325	902	-	-
12.	134	253	218	366	195	2,028	120	619
13.	\$11,177	\$ 7,028	\$12,904	\$ 9,316	\$ 9,815	\$14,406	\$ 9,970	\$12,029
14.	4,287	618	70	-	1,723	3,499	-	-
15.	399	101	452	226	316	169	204	173
16.	\$15,863	\$ 7,747	\$13,426	\$ 9,542	\$11,854	\$18,074	\$10,174	\$12,202
Farm Expenses								
17.	\$ -	\$ -	\$ -	\$ -	\$ 20	\$ -	\$ 420	\$ -
18.	2,977	-	-	-	-	2,884	-	-
19.	222	-	-	-	-	130	65	-
20.	-	-	-	-	-	-	-	-
21.	-	-	-	-	-	557	-	-
22.	11	-	-	-	-	25	-	-
23.	274	256	597	267	167	424	548	475
24.	1,397	1,933	1,102	3,094	566	3,109	2,372	3,371
25.	439	-	333	112	427	209	344	192
26.	349	421	496	279	636	416	547	148
27.	276	583	201	591	610	45	852	989
28.	595	730	869	309	540	946	426	433
29.	695	224	1,269	219	638	743	350	341
30.	34	98	223	144	94	134	201	183
31.	391	57	376	151	586	173	267	-
32.	115	5	141	37	128	234	-	-
33.	350	58	238	36	-	-	8	1,180
34.	248	217	231	233	230	412	320	176
35.	772	383	550	383	666	485	393	267
36.	210	92	167	193	207	222	140	113
37.	\$ 9,355	\$ 5,057	\$ 6,793	\$ 6,048	\$ 5,515	\$11,148	\$ 7,253	\$ 7,868
38.	-	-	-	614	-	650	297	-
39.	1,735	-	2,649	-	2,385	2,000	-	395
40.	-	-	-	-	110	717	46	-
41.	314	-	-	34	240	-	1,355	-
42.	\$11,404	\$ 5,057	\$ 9,442	\$ 6,698	\$ 8,250	\$14,515	\$ 8,951	\$ 8,263
43.	-	-	-	916	-	-	827	3,540
44.	2,295	1,018	1,386	884	1,770	1,726	1,236	1,655
45.	300	-	1,800	375	1,200	1,650	-	300
46.	160	64	60	-	-	-	440	-
47.	\$14,159	\$ 6,139	\$12,688	\$ 8,873	\$11,220	\$17,892	\$11,454	\$13,758
48.	\$ 1,704	\$ 1,608	\$ 738	\$ 669	\$ 634	\$ 183	-\$ 1,280	-\$ 1,556

Table 3. Summary of Farm Earnings (Enterprise Statement) 1962 (1)

Items	Ave. of 20 farms										Farm Number										
	25	19	27	26	20	21	18	3	2	5	25	19	27	26	20	21	18	3	2	5	
RETURNS AND NET INCREASES																					
Dairy cows	\$ 7087	\$ 18018	\$ 8702	\$ 7555	\$ 12011	\$ 12856	\$ 8923	\$ 7017	\$ 6364	\$ 3492	\$ 7087	\$ 18018	\$ 8702	\$ 7555	\$ 12011	\$ 12856	\$ 8923	\$ 7017	\$ 6364	\$ 3492	
Other dairy cattle	2029	4165	639	4193	3623	5169	3014	1702	1671	978	2029	4165	639	4193	3623	5169	3014	1702	1671	978	
Beef cattle	82	-	-	-	-	-	-	-	-	-	82	-	-	-	-	-	-	-	-	-	-
Hogs	1745	2031	6790	1783	-	-	-	2932	2326	80	1745	2031	6790	1783	-	-	-	2932	2326	80	-
Sheep	387	-	-	-	-	-	-	-	-	-	387	-	-	-	-	-	-	-	-	-	-
Chickens	16	-	-	-	-	-	-	208	-	-	16	-	-	-	-	-	-	208	-	-	-
Total livestock	\$11347	24214	16130	13531	15633	18024	11937	11860	10361	4550	\$11347	24214	16130	13531	15633	18024	11937	11860	10361	4550	
Value of feed fed	6542	19241	6819	7094	5769	8389	4702	7116	4217	3190	6542	19241	6819	7094	5769	8389	4702	7116	4217	3190	
Livestk. return over feed	\$ 4805	14973	9311	6438	9864	9635	7235	4744	6144	1361	\$ 4805	14973	9311	6438	9864	9635	7235	4744	6144	1361	
Crops, seed & feed	4697	14973	5428	4355	4527	2831	1772	5927	2563	3612	4697	14973	5428	4355	4527	2831	1772	5927	2563	3612	
Income from labor off farm	216	58	-	62	113	80	156	-	207	2000	216	58	-	62	113	80	156	-	207	2000	
Miscellaneous	448	926	312	106	311	596	941	37	72	233	448	926	312	106	311	596	941	37	72	233	
Total returns & net increases	\$10167	20834	15052	10960	14816	13142	10104	10707	8986	7205	\$10167	20834	15052	10960	14816	13142	10104	10707	8986	7205	
EXPENSES AND NET DECREASES																					
Truck (farm share)	\$ 246	\$ 369	\$ 113	\$ 256	\$ 198	\$ 188	\$ 597	\$ 332	\$ -	\$ 83	\$ 246	\$ 369	\$ 113	\$ 256	\$ 198	\$ 188	\$ 597	\$ 332	\$ -	\$ 83	
Auto (farm share)	388	329	350	73	1014	316	-	563	503	335	388	329	350	73	1014	316	-	563	503	335	
Tractors & horses	872	1510	848	333	1139	1564	376	1007	729	532	872	1510	848	333	1139	1564	376	1007	729	532	
Elec. motors exp. (farm share)	289	610	158	522	362	395	315	277	209	117	289	610	158	522	362	395	315	277	209	117	
Hired power	325	661	350	-	507	570	441	102	336	249	325	661	350	-	507	570	441	102	336	249	
Total power	\$ 2121	\$ 3480	\$ 1818	\$ 1183	\$ 3220	\$ 3033	\$ 1729	\$ 2281	\$ 1776	\$ 1315	\$ 2121	\$ 3480	\$ 1818	\$ 1183	\$ 3220	\$ 3033	\$ 1729	\$ 2281	\$ 1776	\$ 1315	
Crop & gen. mach.	920	1506	1874	872	1316	1267	675	388	604	553	920	1506	1874	872	1316	1267	675	388	604	553	
Livestock equipment	274	799	249	80	551	422	568	393	78	149	274	799	249	80	551	422	568	393	78	149	
Buildings, fences, etc.	509	683	766	442	829	479	200	543	208	139	509	683	766	442	829	479	200	543	208	139	
Misc. livestock expense	386	663	286	283	384	611	407	326	281	142	386	663	286	283	384	611	407	326	281	142	
Labor	1147	1664	1058	816	1706	1366	946	591	728	1066	1147	1664	1058	816	1706	1366	946	591	728	1066	
Real estate taxes	368	609	387	322	532	158	328	347	588	269	368	609	387	322	532	158	328	347	588	269	
Personal property tax	165	228	240	206	239	196	184	98	156	121	165	228	240	206	239	196	184	98	156	121	
Insurance	101	162	35	163	158	130	116	249	87	30	101	162	35	163	158	130	116	249	87	30	
General farm expense	98	132	66	53	84	208	123	223	49	77	98	132	66	53	84	208	123	223	49	77	
Interest on farm capital	1632	2938	2475	1876	2118	1615	1306	1776	1190	702	1632	2938	2475	1876	2118	1615	1306	1776	1190	702	
Total exp. and net decreases	\$ 7721	12865	9254	6294	11137	9484	6581	7214	5745	4563	\$ 7721	12865	9254	6294	11137	9484	6581	7214	5745	4563	
Labor earnings	\$ 2446	7969	5798	4666	3679	3658	3523	3493	3241	2642	\$ 2446	7969	5798	4666	3679	3658	3523	3493	3241	2642	

(1) Arranged in descending order by labor earnings.

Table 3. Summary of Farm Earnings (Enterprise Statement) 1962 (continued)*

Item	Farm Number												
	1	4	12	16	24	8	23	13	22	17			
RETURNS AND NET INCREASES													
Dairy cows	\$9562	\$8978	\$5185	\$4805	\$8639	\$1795	\$6263	\$---	\$3568	\$8001			
Other dairy cattle	3085	1712	1375	1227	2833	505	1853	--	1960	880			
Beef cattle	--	--	383	--	--	--	--	618	--	--			
Hogs	1180	337	3520	--	--	--	--	4019	2838	--			
Sheep	40	--	--	1242	--	3939	--	465	--	--			
Chickens	--	--	14	--	--	--	--	103	--	--			
All productive livestock	13867	11027	10477	7274	11472	6239	8116	5205	8366	8881			
Value of feed fed	8316	5887	5788	5100	6955	4180	4150	5976	6720	4627			
Livestock ret. over feed	5551	5140	4689	2174	4517	2059	3966	- 771	1646	4254			
Crops, seed and feed	5734	5035	5347	3361	5636	2304	4827	7411	3522	1379			
Income from labor off farm	168	30	--	--	143	290	93	924	--	--			
Miscellaneous	69	15	134	253	218	366	195	1099	120	619			
Total returns & net increases	11522	10220	10170	5788	10514	5019	9081	8663	5288	6252			
EXPENSES AND NET DECREASES													
Truck (share)	242	--	654	262	781	51	--	23	336	478			
Auto (share)	589	1147	116	53	221	123	418	841	327	63			
Tractor & horses	430	1444	1108	600	1342	340	1045	1135	433	679			
Elec. exp. (share)	293	310	248	217	234	233	230	412	320	175			
Hired power	525	276	175	305	157	328	366	26	400	430			
Total power	2079	3177	2301	1437	2735	1075	2059	2437	1818	1825			
Crop & gen. mach.	1143	915	1149	236	1462	461	1196	583	725	700			
Lvstk. equip.	439	98	167	132	224	64	197	451	162	157			
Buildings, fences, etc.	780	265	388	278	514	389	764	484	837	811			
Misc. lvstk. ex.	636	460	274	257	597	268	167	424	548	475			
Labor	1747	1093	911	347	2140	634	1423	1667	709	1805			
Real estate taxes	354	498	606	251	334	267	481	324	259	178			
Per. property taxes	137	180	166	132	217	116	185	161	134	89			
Insurance	87	78	116	17	59	108	116	85	102	42			
Gen. farm expenses	31	73	94	75	107	84	90	138	38	72			
Interest on farm capital	2006	1510	2294	1018	1387	884	1770	1726	1236	1654			
Total expenses & net decreases	9439	8347	8466	4180	9776	4350	8448	8480	6568	7808			
Labor earnings	2083	1873	1704	1608	738	669	633	183	-1280	-1556			

* Cash receipts and expenses are adjusted for changes in inventory for each enterprise and for each item of expense.

Return to Capital and Family Labor

Return to capital and family labor, as shown in table 4, represents the income available to the family. These data represent the operator's share of the farm income. In cases of rented farms, landlord's expenses and receipts have not been included. Interest on indebtedness paid by the farm operator is included as a farm expense. Thus, return to capital and family labor represents the returns to family labor, management, and the operator's equity in the farm capital used in the business.

Net Worth

Net worth statements for those farmers who kept a complete record of all assets and liabilities are shown in table 5. This is simply a statement of all farm and nonfarm assets that a farmer has, balanced against all notes, accounts, mortgages, etc. that constitute his liabilities. It provides an excellent benchmark which can be used to give a true measure of progress through the year. Without this measure it is difficult for a farm family to judge their financial progress. Debt retirement is often considered to be a farm expense, when in reality it adds to the farmer's net worth by decreasing the amount of his liabilities.

The average net worth of the 17 farmers who kept complete records of assets and liabilities in 1962 was \$29,729. These farmers realized an average increase of \$2,215 in net worth during 1962.

Family Income and Expenses

Total cash family living expenses for 14 farm families that kept records of these expenditures amounted to an average of \$3,279 per family (table 6). In addition, these families used farm produce valued at \$280, or a total of \$3,559 for cash family expenses plus perquisites. Their average total income available for payment of family living amounted to \$5,014. Thus, the farmers who kept records of family living expenses had an average of about \$1,455 to use for debt retirement or business expansion after all living expenses were met.

Table 4. Returns to Capital and Family Labor (Operator's Share) 1962 ¹

Items	Ave. of										
	20 farms										
	19	20	21	22	23	24	25	26	27	28	
<u>Farm Income</u>											
1. Total farm sales	\$13418	\$24589	\$18831	\$14350	\$13669	\$18908	\$18007	\$13095	\$11734	\$17017	\$12904
2. Increase in capital	1676	6974	1966	2707	1799	--	1305	3068	205	2727	70
3. Family living from farm	285	526	272	527	402	272	442	80	242	321	452
4. Total farm receipts	15379	32089	21070	17584	15877	19181	19753	16243	11188	20065	13426
<u>Farm Expenses</u>											
5. Total farm purchases	\$11303	\$22199	\$12798	\$10904	\$10497	\$13160	\$14471	\$11618	\$6962	\$15931	\$9442
6. Decrease in capital	--	--	--	--	--	526	--	--	--	--	--
7. Board fur. hired labor	57	96	--	--	--	240	40	--	--	--	60
8. Total farm expenses	11360	22295	12798	10904	10497	13926	14511	11618	6962	15931	9502
9. Return to capital and family labor	4019	9794	8272	6680	5380	5255	5242	4625	4226	4134	3924
<u>Farm Income</u>											
1. Total farm sales	\$14179	\$11176	\$7651	\$9815	\$11909	\$7028	\$9316	\$13183	\$12028	\$9970	
2. Increase in capital	7866	4287	--	1772	1134	618	--	3499	--	--	
3. Family living from farm	90	392	327	316	141	101	226	162	172	204	
4. Total farm receipts	22135	15862	7978	11853	13184	7747	9542	16851	12201	10174	
<u>Farm Expenses</u>											
5. Total farm purchases	18183	11846	3731	8710	10489	5287	6864	15303	8328	9346	
6. Decrease in capital	--	--	608	--	--	--	917	--	3540	826	
7. Board fur. hired labor	40	160	--	--	--	64	--	--	--	440	
8. Total farm expenses	18223	12006	4339	8710	10489	5351	7781	15303	11868	10612	
9. Return to capital and family labor	3912	3856	3639	3143	2695	2396	1761	1548	333	-438	

¹ Arranged in descending order of return to capital and family labor

Table 5. Net Worth Statement for Those Farmers Who Kept a Record of All Assets and Liabilities (Operator's Share) 1962 ¹

Items	Farm Number									
	17 farms	25	19	27	26	20	21	18	3	
Total acres - owned	347	320	279	100	520	270	365	547	280	
rented	57	120	--	60	80	--	--	--	--	
January 1										
Farm Capital	\$28459	\$42277	\$48510	\$30157	\$40229	\$31654	\$21867	\$19678	\$34629	
Cash on Hand	1750	710	8650	200	550	500	--	100	1450	
Stocks, bonds & life insurance	1601	1100	11906	350	1045	--	--	400	1586	
Household goods & clothing	1644	2400	1960	2860	3200	2500	1250	1800	775	
Personal share of auto & truck	231	207	586	--	128	255	120	200	106	
Farm dwelling	2237	--	5000	6000	--	3000	3260	--	2200	
Other non-farm assets	592	1072	6208	--	80	1066	455	--	130	
Total non-farm assets	8055	5489	34310	9410	5003	7321	5085	2500	6247	
Total assets	36514	47766	82820	39567	45232	38975	26772	22178	40876	
Real estate mortgages	3862	13859	--	--	4500	10314	5539	--	10500	
Chattel mortgages	3429	--	--	4100	5450	--	--	5829	--	
Notes payable	967	--	--	--	2329	1000	--	1624	--	
Accounts payable	742	550	--	--	900	1680	12	--	--	
Total liabilities	9000	14409	--	4100	13179	12994	5551	7753	10500	
Net worth	27514	33357	82820	35467	32053	25981	21221	14725	30376	
December 31										
Farm Capital	\$30286	\$49252	\$50476	\$32865	\$39702	\$32959	\$24755	\$27545	\$36428	
Cash on hand	2179	450	10917	300	900	200	372	100	600	
Stocks, bonds & life insurance	1509	1100	12333	360	1060	1191	--	400	1651	
Household goods & clothing	1722	2400	1960	2800	3200	2500	1250	2100	775	
Personal share of auto	318	191	521	--	660	80	814	160	520	
Farm dwelling	2306	--	5000	6000	--	3000	3170	2000	2200	
Other non-farm assets	1223	1372	6700	--	1222	1191	455	--	130	
Total non-farm assets	9257	5513	37431	9460	7042	6971	6060	4760	5876	
Total assets	39543	54765	87907	42325	46744	39930	30815	32305	42304	
Real estate mortgages	4311	15637	--	--	4500	11971	8823	8000	10000	
Chattel mortgages	3887	--	--	4650	3650	--	--	6150	--	
Notes payable	1070	--	--	--	2229	320	--	1295	2200	
Accounts payable	546	720	--	--	1269	1200	--	300	--	
Total liabilities	9814	16357	--	4650	11648	13491	8823	15745	12200	
Net worth	29729	38407	87907	37675	35096	26439	21992	16560	30104	
Change in net worth	+2215	+5050	+5087	+2207	+3043	+458	+771	+1834	-272	

¹ Arranged in descending order of labor earnings

Table 5. Net worth Statement for Those Farmers Who Kept a Record of All Assets and Liabilities (Operator's Share) 1962
(continued)

Items	Farm Number									
	2	5	1	4	16	24	8	13	22	
Total acres - owned	120	320	280	240	280	360	240	235	160	
- rented	120	80	160	19	--	--	--	80	75	
Farm Capital	\$17698	\$13947	\$36598	\$29128	\$20058	\$27693	\$18135	\$29774	\$21979	
Cash on hand	--	349	30	812	10	15429	609	169	186	
Stocks, bonds & life insurance	20	566	2000	1521	--	--	2695	3197	826	
Household goods & clothing	1100	1150	1250	1250	400	1000	1600	1950	1500	
Personal share of auto & truck	101	795	600	351	10	50	--	63	356	
Farm dwelling	4490	1250	4603	2872	1600	2000	360	400	1002	
Other non-farm assets	60	1	200	--	--	--	--	541	250	
Total non-farm assets	5771	4111	8683	6806	2020	18479	5264	6320	4120	
Total assets	23469	18058	45281	35934	22078	46172	23399	36094	26099	
Real estate mortgages	5500	873	17300	7264	5500	--	--	4663	2032	
Chattel mortgages	2200	275	3950	--	1099	--	2100	3673	564	
Notes payable	--	5925	2500	3058	--	--	--	--	--	
Accounts payable	--	162	404	2673	--	--	695	5533	--	
Total liabilities	7700	7235	24154	19866	6599	--	2795	13869	2596	
Net worth	15769	10823	21127	16068	15479	46172	20604	22224	23503	
Farm Capital	17903	13739	39325	30263	20676	27764	17219	33273	21152	
Cash on Hand	--	354	100	992	10	17179	720	3542	314	
Stocks, bonds, & life insurance	20	566	2200	1661	--	--	2874	520	906	
Household goods & clothing	1100	1150	1250	1200	400	1000	1600	3100	1500	
Personal share of auto & truck	51	716	453	622	--	--	69	363	181	
Farm dwelling	4275	1250	4432	2831	1500	2000	360	260	929	
Other non-farm assets	60	16	320	--	--	--	--	9041	276	
Total non-farm assets	5506	4052	8756	7306	1910	20179	5623	16826	4106	
Total assets	23409	17391	48081	37569	22586	47943	22842	50099	25258	
Real estate mortgages	5000	823	16400	7200	4500	--	--	3500	5200	
Chattel mortgages	1800	--	3200	--	774	--	1672	7214	--	
Notes payable	--	4850	2150	4186	--	--	--	950	--	
Accounts payable	--	--	779	3017	--	--	600	1394	--	
Total liabilities	6800	5673	22529	23124	5274	--	2272	13058	5200	
Net worth	16610	11718	25551	14445	17312	47943	20570	37041	20058	
Change in net worth	+841	+895	+4424	-1623	+1833	+1771	-34	+14817	-3445	

Table 6. Household and Personal Expenses for Those Farmers Who Kept Accounts of These Expenses, 1962¹

Items	Farm Number						
	Ave. of 14 farms	13	27	20	3	26	21
Number of persons--family	5.6	7.0	7.0	7.0	9.0	7.0	7.0
Adult equivalents--family	7.7	6.2	4.8	5.7	6.2	6.4	5.9
other*	.1	--	--	--	--	.5	--
<u>Expenses</u>							
Food and meals bought	\$959	\$1172	\$582	\$1546	\$1195	\$795	\$1177
Operating and supplies	237	165	302	457	339	222	383
Furnishings and equipment	245	--	--	1261	637	310	89
Clothing & clothing materials	392	378	205	745	674	647	403
Personal care & spending	75	--	4	130	55	106	52
Education & recreation	189	--	15	276	413	96	94
Gifts & special events	104	3	24	417	93	137	106
Medical & hosp. insurance	259	--	277	46	547	519	274
Church & welfare	107	--	174	53	195	46	69
Personal share of auto expense	125	81	73	142	54	206	110
Upkeep on dwelling	28	--	--	106	30	--	--
Personal share of tel. & elec. expense	118	119	72	96	75	143	196
Total cash living expense	2838	1918	1728	5275	4307	3227	2953
Personal share of new autos	157	325	--	--	500	105	840
New dwelling	3	--	--	--	--	--	--
Taxes	106	143	209	18	187	--	208
Life insurance	145	62	690	163	290	281	103
Other savings & investments	30	--	--	--	77	--	219
Total household & personal cash expense	3279	2448	2627	5456	5361	3613	4323
Family living from the farm	280	169	527	441	408	273	80
Total cash expense and prerequisites	3559	2617	3154	5897	5769	3886	4403
<u>Receipts</u>							
Return to capital and family labor	\$3556	\$1549	\$6680	\$5242	\$5380	\$5255	\$4326
Other personal income	1458	15502	--	172	--	73	34
Total income	5014	17058	6680	5414	5380	5328	4428
							4360

¹ Arranged by descending order of return to capital and family labor plus personal income

* Hired help or others boarded

Table 6. Household and Personal Expenses for Those Farmers Who Kept Accounts of These Expenses, 1962 (continued)

Item	24	5	22	23	4	16	8
Number of persons -- family	3.0	4.0	4.0	5.0	6.0	4.0	2.0
Adult equivalents -- family	3.0	4.2	3.3	5.0	5.7	2.8	1.8
other	--	--	.9	--	--	--	--
Expenses							
Food and meals bought	\$1194	\$1055	\$665	\$940	\$1113	\$364	\$590
Operating and supplies	48	131	310	41	402	40	285
Furnishings and equipment	73	61	404	274	41	5	17
Clothing & clothing materials	256	245	489	301	616	33	193
Personal care & spending	244	73	78	30	111	32	97
Education & recreation	411	287	250	25	422	22	55
Gifts & special events	6	59	70	37	183	4	161
Medical & hosp. insurance	24	76	129	279	344	706	188
Church & welfare	21	257	80	21	337	--	29
Personal share of auto expense	181	145	152	318	108	82	23
Upkeep on dwelling	37	21	158	--	42	--	--
Personal share of tel. & elec. Expense	120	162	113	90	119	101	104
Total cash living expense	2615	2572	2898	2356	3838	1389	1742
Personal share of new autos	--	--	--	--	360	--	70
New dwelling	--	--	--	--	42	--	--
Taxes	400	56	12	130	--	82	25
Life insurance	--	--	41	--	147	--	168
Other savings & investments	--	--	--	--	120	--	6
Total household & personal cash exp.	3015	2628	2951	2486	4508	1471	2011
Family living from the farm	452	327	204	316	141	101	226
Total cash expense and perquisites	3467	2955	3155	2802	4649	1572	2237
Receipts							
Return to capital and family labor	\$3924	\$3639	\$ 438	\$3144	\$2695	\$2396	\$1761
Other personal income	358	--	3828	--	235	--	--
Total income	4282	3639	3390	3144	2930	3296	1761

Table 7. Family Living From the Farm, 1962 (1)

Item	Ave. of 20 farms	Farm Number													
		25	19	27	26	20	21	18	3	2	5				
No. of adult equivalents															
Family	4.6	7.1	6.8	4.9	6.4	5.7	5.9	3.6	6.2	4.4	4.2				
Other *	.1	.2	--	--	.5	--	--	--	--	--	--				
Whole milk qts.	1465	2400	2170	2493	2880	2200	--	1300	1630	1040	995				
Cream pts.	49	72	20	51	--	--	--	--	--	33	662				
Cattle lbs.	753	2400	--	1250	800	2000	--	--	900	700	1000				
Hogs lbs.	347	230	800	1050	--	500	550	--	450	500	450				
Lamb lbs.	6	--	--	--	--	--	--	--	--	--	--				
Poultry lbs.	36	--	--	--	--	--	--	--	260	--	--				
Eggs doz.	8	--	--	--	--	--	--	--	158	--	--				
Total value	\$285	\$526	\$273	\$527	\$273	\$442	\$80	\$90	\$409	\$249	\$327				

Item	No. of adult equivalents	Farm Number													
		1	4	12	16	24	8	23	13	22	17				
Family	4.4	5.7	2.8	2.8	3.0	1.8	5.0	6.2	3.3	1.8					
Other *	--	--	--	--	--	--	--	--	.9	--	--				
Whole milk qts.	2160	1410	1130	1440	2200	751	1560	--	830	720					
Cream pts.	--	--	--	--	--	16	120	--	--	--					
Cattle lbs.	600	--	900	--	1200	800	800	--	700	1000					
Hogs lbs.	400	--	940	--	--	--	--	855	220	--					
Lamb lbs.	--	--	--	--	--	130	--	--	--	--					
Poultry lbs.	--	--	200	--	--	--	--	265	--	--					
Eggs doz.	--	--	--	--	--	--	--	--	--	--					
Total value	\$321	\$141	\$399	\$101	\$452	\$226	\$316	\$169	\$204	\$173					

(1) Arranged in descending order of labor earnings

* Hired help or others boarded

Some Management Factors That Affect Earnings

Some of the variation in earnings from year to year and from farm to farm are due to variations in prices, weather, and other factors over which the farmer has little, if any, control. However, there are many management factors which are largely within the control of a farm operator. Some of these management factors are shown in table 9.

Volume or size of business in terms of work units is probably the most important of these factors. Size of business varied from 793 work units to 202 per farm. Farms with a large business tend to have an advantage in labor efficiency and in control over expenses. A well-balanced crop and livestock program spreads the work load throughout the year and provides for fuller employment of workers.

Control of farm expenses is another important factor. One measure of this is the power, mach., equipment, and bldg. expense per work unit shown in table 9. A second measure is that of power and machinery expenses per crop acre as shown in table 12. Another measure can be determined by calculating the proportion of farm sales needed to cover farm expenses. (Table 2: item 42 ÷ item 13). An average of 70 - 75 percent of the farm sales are usually needed to pay farm expenses. This, however, varies considerably among farmers. High costs relative to gross income holds earnings down on some farms. However, although a farmer should attempt to keep the proportion of farm expenses relatively low, he cannot do this by decreasing those expenses necessary for maintaining an adequate volume of production. Instead, it is usually necessary to increase total expenses in order to increase the volume of sales. The purchase of commercial fertilizers, for example, increases farm expenses. This, in turn, will increase the feed supply under normal weather conditions and make possible the maintenance of a greater number of livestock.

EXPLANATION OF "WORK UNITS"

The total "work units" for any one farm is a measure of the size of that farm business. A work unit as used in this report is the average accomplishment of a farm worker, in a ten-hour day, working on crops and productive livestock at average efficiency or ten hours of work off the farm for pay. The number of work units for each class of livestock and each acre of crop are presented in table 8.

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

Class of Livestock	No. of Work Units	Crop	No. of Work Units
Dairy & dual-purpose cows	10.0 per cow	Small grain	.7 per acre
Other dairy & dual-purpose cattle	3.5 per an. unit*	Truck crops	6.0 per acre
Beef breeding herd	3.5 per an. unit*	Potatoes	3.8 per acre
Feeder cattle	.25 per 100 lbs.	Corn-husked	1.1 per acre
Sheep - farm flock	1.2 per an. unit*	Corn-silage	1.7 per acre
Sheep - feeder	.3 per 100 lbs.	Oat silage	.9 per acre
Hogs	.2 per 100 lbs.	Alfalfa hay	.9 per acre
Turkeys	.5 per 100 lbs.	Other hay	.6 per acre
Hens	20.0 per 100 hens	Legume seed	1.0 per acre

* An animal unit is based on the amount of T.D.N. consumed. One animal unit thus represents 1 dairy cow or bull, 2 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.

Table 9, Measures of Farm Organization and Management Efficiency, 1962

Items	Ave. of Farm Number										
	20 farms	25	19	27	26	20	21	18	3	2	5
Labor earnings	\$2446	\$7969	\$5798	\$4556	\$3679	\$3658	\$3595	\$3523	\$3493	\$3341	\$2642
Crop yields	100	102	112	190	96	110	85	104	124	122	98
Index of return for \$100 feed to prod. livestock	100	67	140	101	132	103	109	131	94	147	74
Livestock units per 100 acres	22.0	22.3	23.7	53.2	22.5	28.5	27.5	14.1	22.1	24.4	10.6
Size of business -- work units	409	793	357	427	674	487	202	423	401	358	434
Work units per worker	273	466	210	267	421	348	168	325	334	298	289
Power, mach., equip., bldg. expense per work unit	\$9.62	\$8.16	\$13.19	\$6.03	\$8.78	\$10.68	\$14.34	\$7.50	\$8.99	\$7.45	\$4.96
Items related to above measures:											
Index of return for \$100 feed from:											
Dairy cattle	100	63	150	107	132	103	--	131	100	116	74
Hogs	100	93	127	82	--	--	106	--	76	214	--
Sheep	100	--	--	--	--	--	104	--	--	--	--
Beef breeding herd	100	--	--	--	--	--	144	--	--	--	--
Feeder Cattle	100	--	--	--	--	--	--	--	--	--	--
Number of Animal Units	54.0	86.2	56.3	65.0	115.0	55.7	68.5	45.1	44.0	47.5	21.8
Work units:											
Crops	98	200	102	38	147	76	77	93	105	75	91
Productive Livestock	290	587	255	383	516	403	125	314	296	262	143
Other	21	6	--	6	11	8	--	16	--	21	200
No. of workers:											
Family	1.3	1.5	1.0	1.6	1.0	1.3	1.2	1.2	1.2	1.2	1.5
Hired	.2	.2	.7	--	.6	.1	--	.1	--	--	--
Total	1.5	1.7	1.7	1.6	1.6	1.4	1.2	1.3	1.2	1.2	1.5
Expense per work unit:											
Power	\$5.35	\$4.39	\$5.09	\$2.77	\$4.78	\$6.23	\$8.12	\$4.09	\$5.69	\$4.96	\$3.03
Crop mach.	2.30	1.90	5.25	2.04	1.95	2.60	3.86	1.60	.97	1.69	1.27
Livestock equip.	.64	1.01	.70	.19	.82	.87	.49	1.34	.98	.22	.34
Bldgs. & fencing	1.33	.86	2.15	1.03	1.23	.98	1.87	.47	1.35	.58	.32

Table 9. Measures of Farm Organization and Management Efficiency, 1962 (continued)

Items	Farm Number									
	1	4	12	16	24	8	23	13	22	17
Labor earnings	\$2083	\$1873	\$1704	\$1608	\$738	\$669	\$664	\$183	\$1280	\$-1556
Crop yields*	93	134	128	57	99	59	77	81	82	51
Index of ret. for \$100 feed to prod. livestock**	74	94	104	89	84	105	106	63	68	97
Livestock units per 100 acres***	14.5	20.8	17.8	21.4	21.0	29.3	7.9	18.6	24.3	11.4
Size of business-- work units	455	425	386	340	461	233	410	290	312	317
Work units per worker	253	354	257	283	210	194	241	153	223	211
Power, mach., equip., bldg. expense per work unit	\$9.75	\$10.48	\$10.38	\$6.13	\$10.71	\$8.54	\$10.28	\$13.64	\$11.35	\$11.02
Items related to above measures:										
Index of return for \$100 feed from:										
Dairy cattle	92	94	92	71	84	101	106	--	73	97
Hogs	58	--	120	--	--	--	--	63	63	--
Sheep	--	--	--	129	--	106	--	62	--	--
Beef breeding herd	--	--	--	--	--	--	--	54	--	--
Feeder cattle	--	--	129	--	--	--	--	70	--	--
No. of animal units	53.1	46.2	48.1	47.3	50.0	54.8	40.5	55.6	50.5	28.6
Work units:										
Crops	116	82	113	84	106	46	102	135	99	64
Productive livestock	322	340	273	256	341	158	299	63	213	253
Other	17	3	--	--	14	29	9	92	--	--
No of workers:										
Family	1.7	1.0	1.2	1.0	2.0	1.2	1.7	1.9	1.0	1.2
Hired	.1	.2	.2	.2	.2	--	--	--	.4	.3
Total	1.8	1.2	1.5	1.2	2.2	1.2	1.7	1.9	1.4	1.5
Expense per work unit:										
Power	\$4.57	\$7.48	\$5.96	\$4.23	\$5.93	\$4.62	\$5.02	\$8.40	\$5.83	\$5.76
Crop mach.	2.51	2.15	2.98	.69	3.17	1.98	2.92	2.01	2.32	2.21
Livestock equip.	.96	.23	.43	.39	.49	.27	.48	1.56	.52	.50
Bldgs. & fencing	1.71	.62	1.01	.82	1.12	1.67	1.86	1.67	2.68	2.55

Table 10. Distribution of Acres in Farm, 1962 ¹

Crop	Ave. of 20 farms									
	25	19	27	26	20	21	18	3	2	
Oats for grain and silage	27.7	20	55	--	16	8	26	38	32	
Other small grains	1.2	--	3	--	--	7	--	--	--	
Total small grains	28.9	20	58	--	16	15	26	38	32	
Corn grain	24.7	35	67	--	--	53	--	41	18	
Corn silage	23.6	52	8	40	35	7	35	28	19	
Total cultivated crops	48.3	87	75	40	35	60	35	69	37	
Alfalfa & alfalfa mix hay	54.6	190	30	178	29	42	32	46	27	
Red clover hay	3.2	--	--	--	--	--	--	--	15	
Other hay & seed crops	5.8	--	--	--	10	--	5	--	--	
Total tillable land in hay	63.6	190	30	178	39	42	37	46	42	
Alfalfa & alfalfa mix pasture	38.9	10	44	156	20	60	60	11	5	
Other tillable pasture	1.9	18	--	--	--	--	--	--	--	
Total tillable land in pasture	40.8	28	44	156	20	60	60	11	5	
Soil bank & feed-grain acres	17.3	60	10	35	--	59	--	--	--	
Tillable land not cropped	5.7	--	--	18	20	--	--	20	--	
Total tillable land	204.6	385	217	427	130	236	158	184	116	
Wild hay	12.2	--	--	--	30	--	60	5	12	
Non-tillable pasture	58.0	--	20	82	35	13	100	10	66	
Timber not pastured, roads, waste, and farmstead	69.2	55	42	91	75	116	229	81	46	
Total acres in farm	344.0	440	279	600	270	365	547	280	240	
Percent land tillable	60	88	78	71	48	65	29	66	48	

¹ Arranged in descending order of labor earnings

Table 10. Distribution of Acres in Farm, 1962 (continued)

Crop	Farm Number																
	5	1	4	12	16	24	8	23	13	22	17						
Oats for grain and silage	40	70	20	47	--	47.5	14	50	60	10	--						
Other small grains	--	--	--	--	--	--	--	--	--	14	--						
Total small grains	40	70	20	47	--	47.5	14	50	60	24	--						
Corn grain	--	25	16	42	28	--	--	55	49	64	--						
Corn silage	3.5	35	33	17	27	44	10	16	20	26	18						
Total cultivated crops	3.5	60	49	59	55	44	10	71	69	90	18						
Alfalfa and alfalfa mix hay	44	14	41	52	40	64.5	39	35	84	28	13						
Red clover hay	--	48	--	--	--	--	--	--	--	--	--						
Other hay & seed crops	--	1	--	--	33	--	14	5	--	--	48						
Total tillable land in hay	44	63	41	52	73	64.5	53	40	84	28	61						
Alfalfa & alfalfa mix pasture	14	--	33	--	91	32	72.4	17.5	25	51	46						
Other tillable pasture	--	--	--	--	--	--	--	11	7	--	--						
Total tillable land in pasture	14	--	33	--	91	32	72.4	28.5	32	51	46						
Soil bank & feed-grain acres	--	44	--	--	--	--	37.6	50	50	--	--						
Tillable land not cropped	--	--	5	--	--	--	--	--	3	--	50						
Total tillable land	101.5	237	148	158	219	188	187	239.5	298	193	175						
Wild hay																	
Non-tillable pasture	102.5	--	8	29	--	--	--	--	--	--	--						
Timber not pastured, roads, waste and farmstead	120	128	66	83	2	50	--	267	--	14	75						
Total acres in farm	400	440	259	320	280	360	240	549	315	235	300						
Percent land tillable	25	54	57	49	78	52	78	44	95	82	58						

Table 11. Crop Yields per Acre, 1962 ¹

Crop	Ave. of farms raising each crop	Farm Number												
		25	19	27	26	20	21	18	3	2	5			
Oats, silage, tons	5.8	--	7.0	--	--	--	6.3	--	--	--	4.0	--	--	
Oats, grain, bu.	44.9	60	50.0	--	--	44.0	--	40.4	52.9	36.9	--	--	--	
Corn grain, bu.	45.1	34	52.0	--	--	37.3	--	60.5	61.1	--	--	--	--	
Corn silage, tons	6.7	6.9	5.6	--	7.5	5.0	--	8.9	7.3	7.1	--	--	--	
Alfalfa & alfalfa mix. hay, tons	2.2	2.1	2.0	4.1	1.9	2.4	1.8	2.6	2.7	2.3	--	--	--	
Annual hay, tons	3.1	--	--	--	3.5	--	--	--	--	--	--	--	--	
Wild hay, tons	.7	--	--	--	.5	--	--	1.3	.6	.7	--	--	--	
Feed-grain payment	\$25.57	\$28.88	\$41.76	--	\$22.25	--	\$21.33	--	--	--	--	--	--	

Crop	Ave. of farms raising each crop	Farm Number												
		1	4	12	16	24	8	23	13	22	17			
Oats silage, tons	--	--	--	--	--	--	--	--	--	--	--	--	--	
Oats grain, bu.	25.7	65.0	54.7	--	51.2	42.8	24.2	47.3	50.0	--	--	--	--	
Corn grain, bu.	75.2	48.7	43.0	30.0	--	--	26.4	49.3	24.4	--	--	--	--	
Corn silage, tons	8.3	4.1	9.1	5.0	6.7	4.0	9.4	6.9	6.2	5.8	--	--	--	
Alfalfa & alfalfa mix hay, tons	1.4	4.1	3.3	1.1	1.8	1.2	2.2	.8	2.4	.5	1.3	--	--	
Annual hay, tons	9.0	--	--	1.2	--	.5	--	--	--	--	--	--	--	
Wild hay, tons	--	--	.9	--	--	--	--	--	--	--	--	--	--	
Feed-grain payment	\$29.72	--	--	--	--	\$16.41	\$20.56	\$23.67	--	--	--	--	--	

¹ Arranged by descending order of labor earnings

Table 12. Power and Machinery Expenses per Crop Acre, 1962

Items	Farm Number									
	25	19	27	26	20	21	18	3	2	5
Ave. of 20 farms	153	163	64	218	120	117	158	158	123	190
Crop acres per farm	\$5.95	\$5.08	\$5.20	\$5.22	\$13.04	\$6.91	\$2.38	\$6.37	\$5.92	\$2.80
Tractor exp. per crop acre	\$6.46	\$5.07	\$11.50	\$6.04	\$10.56	\$6.66	\$4.27	\$2.45	\$4.91	\$2.91
Crop & gen. mach. exp. per crop acre										

Farm Number

Items	Farm Number									
	1	4	12	16	24	8	23	13	22	17
Ave. of 20 farms	193	118	187	128	156	77	161	213	142	79
Crop acres per farm	\$4.02	\$9.69	\$5.93	\$4.69	\$8.60	\$4.42	\$6.49	\$5.33	\$3.05	\$8.60
Tractor exp. per crop acre	\$5.92	\$7.76	\$6.15	\$1.84	\$9.37	\$5.98	\$7.43	\$2.74	\$5.10	\$8.87
Crop & Gen. Mach. Exp. per crop acre										

Table 13. Average Price of Feeds, 1962

Items	Value	Items	Value
Ear corn, per bu.	\$.96	Alfalfa hay, per ton	\$19.00
Oats, per bu.	.61	Red or alsike clover hay, per ton	16.10
Barley, per bu.	.99	Timothy, per ton	11.00
Wheat, per bu.	2.18	Wild hay, per ton	9.50
Soybean meal, per cwt.	4.40	Corn silage, per ton	6.50
Meat scraps, per cwt.	5.70	Pasture per mo. per cow	2.50

Table 14. Factors of Cost and Returns from Dally Cows, 1962 (1)

Items	Ave. of									
	18 farms	20	1	25	17	24	18	19	3	5
Pounds of butter fat per cow	356	448	412	404	404	399	398	396	393	363
Pounds of milk per cow	9426	12210	11585	11469	10535	11620	11339	10951	11199	10959
Ave. test of milk (percent)	3.6	3.7	3.6	3.9	3.8	3.5	3.5	3.6	3.5	3.3
Price per lb. BF sold (cents)	88.6	96.7	97.5	97.5	96.1	87.0	97.0	98.6	90.0	89.3
Price per cwt. milk sold	\$3.29	\$3.55	\$3.47	\$2.86	\$3.68	\$2.99	\$3.40	\$3.56	\$3.16	\$2.95
Feed per cow, lbs.:										
Corn	1643	2091	3899	4979	1275	984	1913	970	1447	--
Small grain	750	1160	1215	765	--	2875	673	401	252	1118
Commercial feeds	568	844	844	748	1495	284	375	193	435	15
Legume hay	5567	2500	3122	10870	5464	4688	2917	4184	6473	13010
Other hay	658	4250	2363	--	2732	--	2500	--	--	--
Total concentrates	2961	4095	5958	6492	2770	4143	2961	1564	2134	1133
Total hay	6225	6750	5485	10870	8196	4688	5417	4184	6473	13010
Sillage	9230	10188	14768	14783	6829	10781	11250	8117	8696	--
Feed cost per cow:										
Concentrates	\$66.07	\$99.79	\$125.88	\$138.13	\$74.26	\$104.20	\$58.72	\$31.39	\$53.20	\$22.01
Roughages	86.58	75.88	84.74	150.65	87.76	79.57	78.52	65.59	89.76	123.60
Pasture	9.37	5.62	7.59	8.42	8.20	8.59	6.87	13.49	6.88	12.37
Total feed cost	162.02	181.29	218.21	297.20	170.22	192.36	144.11	110.47	149.84	157.98
Value of produce per cow:										
Dairy product sales	319.86	428.05	391.38	376.51	385.50	340.20	374.36	371.06	335.47	311.16
Used in home	5.80	2.24	6.36	4.22	2.39	8.87	3.74	5.99	6.30	15.73
Fed	4.67	--	3.31	12.15	--	2.50	7.47	11.08	13.26	6.66
Net increase in value of cows	-9.17	-28.53	2.41	-1.17	-23.57	-14.09	-13.76	-24.05	-16.06	5.50
Total value produced	321.16	401.76	403.48	391.71	364.32	337.48	371.81	364.08	338.97	339.05
Return above feed cost per cow:	159.13	220.47	185.27	94.51	194.10	145.12	227.70	253.61	189.13	181.07
Returns for \$100 of feed	\$208	\$222	\$185	\$132	\$214	\$175	\$258	\$330	\$226	\$215
Feed cost per lb. BF (cents)	45.4	32.1	53.0	73.5	42.2	48.0	36.2	27.9	38.1	43.6
Number of cows	23.8	32.0	23.7	46.0	23.5	25.6	24.0	23.9	20.7	10.3

(1) Arranged in descending order of pounds of butterfat per cow

Table 14. Factors of Cost and Returns from Dairy Cows, 1962 (continued)

Items	Farm Number								
	2	4	26	27	23	12	22	16	8
Pounds of butterfat per cow	353	338	329	318	316	305	302	275	262
Pounds of milk per cow	1003	9493	9517	8863	6843	8136	8996	7708	7248
Ave. test of milk (percent)	3.5	3.6	3.5	3.5	4.9	3.7	3.6	3.4	3.6
Price per lb. BF sold (cents)	88.3	93.7	96.7	83.5	81.7	87.9	98.9	93.3	84.1
Price per cwt. milk sold	\$3.11	\$3.33	\$3.35	\$3.00	\$3.77	\$3.30	\$3.38	\$3.34	\$3.05
Feed per cow, lbs.:									
Corn	423	1981	361	255	1620	1550	1867	3959	--
Small grain	486	1490	--	550	727	682	688	--	401
Commercial feeds	--	220	2783	--	172	266	1273	205	771
Legume hay	5882	3935	--	10417	3306	5482	7246	5568	5128
Other hay	--	--	--	--	--	--	--	--	--
Total concentrates	909	3692	3144	805	2519	2498	3828	4164	487
Total hay	5882	3935	--	10417	3306	5482	7246	5568	5128
Silage	11863	10686	14385	--	6735	8934	12319	8108	7693
Feed cost per cow:									
Concentrates	\$16.36	\$77.75	\$72.90	\$18.75	\$48.95	\$59.13	\$98.10	\$78.18	\$11.49
Roughages	93.81	72.11	45.15	98.96	53.29	81.12	108.88	79.24	89.68
Pasture	11.53	10.92	8.02	12.62	11.16	7.61	10.14	5.84	12.82
Total feed cost	121.70	160.78	126.07	130.34	113.40	147.86	217.12	163.26	113.99
Value of produce per cow:									
Dairy product sales	307.60	305.09	310.28	253.69	252.40	264.19	291.38	244.27	214.44
Used in home	3.89	5.09	5.16	6.47	6.87	4.13	4.21	5.45	7.20
Fed	1.03	7.45	2.57	7.21	--	--	2.28	7.00	--
Net increase in value of cows	--.58	6.50	3.13	-5.06	-22.70	-5.15	-39.35	3.02	8.51
Total value produced	311.94	324.13	321.14	262.31	236.57	263.17	258.52	259.74	230.15
Return above feed cost per cow	190.24	163.35	95.07	131.97	123.17	115.31	41.40	96.48	116.16
Returns for \$100 of feed	\$256	\$201	\$255	\$201	\$209	\$178	\$119	\$159	\$202
Feed cost per lb. BF (cents)	34.5	49.4	38.3	41.0	35.9	48.5	71.9	59.4	43.4
Number of cows	20.4	27.7	37.4	28.8	24.2	19.7	13.8	18.5	7.8

Table 15. Feed Costs and Returns from Other Dairy Cattle, 1962 ¹

Items	Farm Number									
	18 farms	20	1	25	17	24	18	19	3	4
Feed per head, lbs.:										
Concentrates	251	650	126	323	336	155	180	165	294	84
Hay and fodder	2281	1062	1538	4811	6274	1663	1279	550	1818	2346
Silage	2746	7558	5528	344	4118	5667	2180	1978	7636	--
Whole milk	135	--	58	275	--	41	133	445	390	189
Total feed costs per head	\$46.12	\$54.94	\$43.29	\$71.11	\$87.11	\$41.69	\$29.46	\$37.61	\$65.76	\$40.06
Net increase in value	67.07	109.74	74.16	71.57	86.30	58.16	71.41	35.11	77.39	50.20
Return above feed cost	20.95	54.80	30.87	.46	-.81	16.47	41.95	-2.50	11.63	10.14
Return for \$100 of feed	\$163	\$200	\$171	\$101	\$99	\$139	\$242	\$93	\$117	\$125
Number of head of cattle	33.5	47.1	41.6	58.2	10.2	48.7	42.2	18.2	22.0	34.1

Items	Farm Number								
	5	2	26	27	23	12	22	16	8
Feed per head, lbs.:									
Concentrates	133	548	68	429	485	120	209	179	28
Hay and fodder	5752	3429	--	2404	431	2400	1270	2873	1151
Silage	--	1878	1379	--	1846	3200	2823	1091	2198
Whole milk	103	27	37	156	394	--	39	151	--
Total feed costs per head	\$66.60	\$41.88	\$12.98	\$46.09	\$43.24	\$39.78	\$32.62	\$47.23	\$28.64
Net increase in value	44.87	68.22	44.61	100.80	57.03	78.57	79.04	44.60	55.45
Return above feed cost	-21.73	26.34	31.63	54.71	13.79	38.79	46.42	-2.63	26.81
Return for \$100 of feed	\$67	\$162	\$344	\$219	\$132	\$198	\$242	\$94	\$194
Number of head of cattle	21.8	24.5	81.2	41.6	32.5	17.5	24.8	27.5	9.1

¹ Arranged by descending order of pounds of butterfat per cow

Table 16. Feed Costs and Returns from All Dairy Cattle, 1962

Items	Ave. of									
	18 farms	20	1	25	17	24	18	19	3	4
Feeds per cow, lb.:										
Concentrates	3286	5051	6178	6901	2734	4437	3279	1690	2447	3795
Hay and fodder	9201	8313	8185	16957	10382	7852	7667	4603	8406	6623
Silage	13537	32156	24473	15217	8171	21563	15083	9623	16812	10686
Total feed cost per cow	\$216.97	\$262.16	\$290.89	\$375.03	\$196.89	\$269.17	\$188.45	\$128.03	\$206.46	\$202.67
Value of prod. per cow										
Dairy products	324.25	430.29	397.75	380.73	362.52	349.07	378.09	377.06	341.77	310.18
Net increase in value of cattle	<u>83.45</u>	<u>132.99</u>	<u>132.57</u>	<u>89.38</u>	<u>15.42</u>	<u>96.56</u>	<u>111.82</u>	<u>2.68</u>	<u>66.19</u>	<u>68.30</u>
Total value produced	407.70	563.28	530.32	470.11	377.94	445.63	489.91	379.74	407.96	378.48
Return above feed per cow	190.73	301.12	239.43	95.08	181.05	176.46	301.46	251.71	201.50	175.81
Return per \$100 of feed	\$198	\$215	\$182	\$125	\$192	\$166	\$259	\$297	\$198	\$186
No. of cows	23.8	32.0	23.7	46.0	23.5	25.6	24.0	23.9	20.7	27.7

Items	Farm Number									
	5	2	26	27	23	12	22	16	8	8
Feeds per cow, lb.:										
Concentrates	1416	1567	3291	1424	3171	2605	4205	4421	579	579
Hay and fodder	25184	10000	--	13888	3884	7614	9529	9838	6472	6472
Silage	--	14118	17380	--	9215	11777	17391	9729	10256	10256
Total feed cost per cow	\$292.29	\$170.98	\$151.68	\$189.71	\$149.25	\$183.20	\$274.48	\$226.46	\$147.41	\$147.41
Value of prod. per cow										
Dairy products	326.90	311.49	315.44	260.16	259.26	268.32	295.59	249.72	221.65	221.65
Net increase in value of cattle	<u>100.47</u>	<u>81.35</u>	<u>99.99</u>	<u>140.54</u>	<u>53.89</u>	<u>64.64</u>	<u>102.70</u>	<u>69.32</u>	<u>73.20</u>	<u>73.20</u>
Total value produced	427.37	392.84	415.43	400.70	313.15	332.96	398.29	319.04	294.85	294.85
Return above feed per cow	135.08	221.86	263.75	210.99	163.90	149.76	123.81	92.58	147.44	147.44
Return per \$100 of feed	\$146	\$229	\$274	\$211	\$210	\$182	\$145	\$140	\$200	\$200
No of cows	10.3	20.4	37.4	28.8	24.2	19.7	13.8	18.5	7.8	7.8

Table 17. Feed Costs and Returns from Market Hogs, 1962 ¹

Items	Ave. of				
	5 farms	12	19	3	22
Feed per cwt. hogs produced. lbs.:					
Corn	465	227	333	374	506
Small grain	99	119	38	86	251
Commercial feeds	71	52	39	56	66
Total concentrates	635	405	410	516	823
Feed cost per cwt. hogs produced	\$14.42	\$10.38	\$ 8.31	\$13.99	\$18.18
Net increase in value per cwt. hogs produced	\$17.57	\$18.99	\$16.15	\$16.37	\$17.70
RETURNS ABOVE FEED COST PER CWT. HOGS PRODUCED	\$3.15	\$8.61	\$7.84	\$2.37	\$-.48
RETURNS FOR \$100 OF FEED	\$136	\$183	\$194	\$116	\$97
Price received per cwt. hogs sold	\$16.49	\$17.39	\$16.06	\$16.78	\$15.73
Average weight per hog sold	193	113	272	281	152
Total number of litters raised	15	17	19	12	24
Number of pigs born per litter	8.2	9.8	9.5	6.8	6.7
Number of pigs weaned per litter	7.0	8.9	8.5	5.9	5.8
Pounds of hogs produced	20172	18538	42050	17910	16035

¹ Arranged by descending order of return above feed cost per cwt. of hogs produced

Table 18. Feed Costs and Returns from Feeder Pigs, 1962¹

Items	Ave. of		Farm Number	
	5 Farms	2	21	27
Feed per litter, lbs.:				
Corn	1508	1075	2611	2714
Small grain	416	410	58	--
Commercial feeds	518	96	976	334
Total concentrates	2442	1581	3640	3048
Feed cost per litter	\$53	\$28	\$78	\$55
Net increase in value per litter	82	93	126	78
RETURN ABOVE FEED COST PER LITTER	29	65	48	23
Return for \$100 of feed	\$171	\$328	\$162	\$142
Total number of litters	42	25	56	26
Number of pigs born per litter	8.3	8.5	10.1	6.1
Number of pigs weaned per litter	6.6	7.4	7.8	5.0
Number of feeder pigs sold	245	194	300	86
Price received per feeder pig sold	\$12.16	\$11.59	\$12.29	\$11.42
Number of sows and other hogs sold and butchered	28	--	68	15
Price received per cwt. sows & other hogs sold	\$14.66	--	\$16.14	\$15.10
Pounds of hogs and pigs produced	16693	7650	33346	12385

¹ Arranged by descending order of return above feed cost per litter

Table 19. Feed Costs and Returns from a Farm Flock of Sheep, 1962

Items	Ave. of			
	16	8	21	13
	Farm Number			
	4 farms			
Feeds per ewe, lbs.:				
Concentrates	183	254	315	112
Legume hay	754	377	588	1465
Other hay	5	19	--	--
Silage	24	94	--	--
Feed cost per ewe:				
Concentrates	\$3.80	\$6.22	\$5.71	\$2.30
Roughages	7.20	5.00	5.59	12.61
Pasture	2.90	3.07	2.23	3.12
TOTAL FEED COSTS	13.90	14.29	13.53	18.03
Value of produce per ewe:				
Wool	\$5.31	\$6.43	\$5.28	\$4.85
Net increase in value of sheep	10.97	12.15	12.05	8.82
TOTAL VALUE PRODUCED	16.28	18.58	17.33	13.67
RETURNS ABOVE FEED COST PER EWE	2.38	4.29	3.80	-4.36
RETURNS FOR \$100 OF FEED	\$123	\$130	\$128	\$76
Price per cwt. of lambs sold	\$19.87	\$16.57	\$20.03	\$25.02
Price per lb. wool sold (cents)	67.8	60.7	60.7	69.8
Pounds of wool per sheep sheared	7.7	10.3	8.0	6.7
Percent lamb crop*	106	115	105	109
Percent death loss*	8.0	5.9	16.0	6.9
Number of ewes*	111	80	119	34

* Lambs which die during month of birth are not included

Table 20. Fertilizer Application, Crop Yields, & Return Over Cost of Fertilizer, 1962

Farm No.	1961 Crop	Pounds of Nutrients applied per acre			Yields per acre		Increase	Return per acre over fert. cost(1)	Returns per fert. dollar
		N	P ₂ O ₅	K ₂ O	Check	Fert.			
<u>Corn-Grain</u>									
4	Alf.	10	20	30	33	67	34	\$30.39	\$ 7.01
4	Corn	30	10	60	35	64	29	21.43	3.52
19	Alf.	80	50	42	40	97	57	40.65	3.13
19	Corn	80	50	42	35	78	43	26.26	2.38
25	Corn	33	28	30	19	35	16	8.26	1.95
21	Corn	48	36	36	26	48	22	9.45	1.75
3	Oats	10	20	30	68	75	8	2.88	1.58
2	Corn	40	30	90	40	60	20	7.50	1.56
2	Corn	40	30	90	40	54	14	1.52	1.11
4	Corn	30	10	60	37	46	9	.64	1.08
19	Alf.	34	20	15	34	41	7	-.13	.98
12	Corn	43	35	38	32	39	7	- 4.29	.64
19	Oats	5	10	15	34	34	0	- 2.87	.18
<u>Corn Silage (2)</u>									
20	Hay	10	20	30	13.3	19.5	6.2	\$38.40	\$ 7.68
24	Corn	15	30	45	2.0	8.8	6.8	40.10	5.34
24	Corn	45	40	45	2.0	9.6	7.6	40.20	3.41
20	Hay	10	20	30	11.1	13.5	2.4	11.80	3.36
24	Corn	45	40	45	2.5	10.4	7.9	42.30	3.25
24	Hay	45	40	45	3.0	8.8	5.8	27.60	3.13
18	Corn	51	42	45	15.1	22.6	7.5	38.30	2.72
24	Hay	15	30	45	3.0	5.6	2.6	10.70	2.44
24	Corn	15	30	45	2.5	4.9	2.4	9.30	2.24
26	Corn	43	35	38	11.4	14.3	2.9	8.55	1.75
26	Corn	43	35	38	9.4	9.7	.3	- 9.65	.19
<u>Year(3)</u>									
<u>Tame Hay (4)</u>									
2	1961	15	5	30	5.34	5.88	.54	3.85	1.90
4	1960	30	10	60	2.32	3.46	1.06	7.40	1.87
11	1960	23	8	45	3.60	4.80	1.20	11.62	1.66
24	1961	15	5	30	2.00	2.32	.32	.55	1.13
24	1961	20	40	60	3.00	4.84	.64	-.40	.96
12	1961	15	5	30	3.08	3.24	.16	- 1.85	.57

(1) Prices used in calculating return from increase in yield over fertilizer cost:

Corn grain - \$1.05 per bu.

Actual nitrogen - \$.15 per pound

Corn silage - \$7.00 per ton

Actual phosphate - \$.10 per pound

Tame hay - \$15.00 per ton

Actual potash - \$.05 per pound

(2) Green weight at harvest.

(3) The year in which fertilizer was applied on oats with seeding.

(4) Usual 2-cutting yield based on one measured cut.

(Note: The average small grain increase in year of seeding paid 60% of fertilizer cost.)

Table 21. Comparison of Results for Identical Farms for Years 1958-1962

Farm No.	Cash Sales Per Farm					Cash Income Per Farm				
	1958	1959	1960	1961	1962	1958	1959	1960	1961	1962
1	13,127	13,629	13,373	15,327	17,018	7,398	7,116	4,789	5,231	7,948
2	9,949	8,735	9,773	10,113	10,734	5,425	3,981	4,577	5,210	4,809
3	12,858	11,157	10,259	13,464	13,670	6,352	5,350	4,121	6,036	6,613
4	9,095	9,449	8,816	11,168	11,909	4,360	4,797	3,906	6,195	5,488
5	6,283	7,051	7,483	7,217	8,012	3,412	4,192	4,537	4,122	4,892
7	8,990	10,372	10,036	12,869	-	5,968	6,902	6,131	9,027	-
8	7,302	9,895	10,670	6,779	9,316	3,369	3,880	2,020	2,065	3,268
12	9,010	8,107	9,449	10,006	11,177	5,019	2,467	4,072	4,755	1,822
13	9,981	13,294	17,677	18,455	14,406	5,344	917	2,028	6,825	3,258
16	7,304	7,676	6,454	8,289	7,028	2,019	2,185	2,190	3,460	1,971
17	4,587	6,095	8,069	-	12,029	1,305	42	3,204	-	4,161
18	-	10,570	12,445	12,903	14,179	-	3,067	5,239	4,797	5,907
19	-	16,764	15,603	17,096	18,831	-	11,828	9,366	10,380	11,500
20	-	14,076	15,775	16,983	18,007	-	6,893	7,451	8,193	6,722
21	-	13,868	13,329	16,273	13,095	-	4,081	6,872	6,192	5,573
22	-	9,913	9,269	11,226	9,970	-	2,922	2,988	3,338	2,717
23	-	8,534	8,949	10,962	9,815	-	3,937	3,842	4,902	4,240
24	-	12,018	12,637	13,792	12,904	-	7,059	6,617	8,198	6,111
25	-	19,364	17,865	19,171	24,589	-	2,860	6,321	8,708	9,173
26	-	12,765	15,154	18,014	18,908	-	5,426	6,259	6,155	8,645
Ave.	8,953	11,167	11,654	13,164	13,452	4,543	4,495	4,827	5,989	5,517

Farm No.	Return to Capital and Family Labor					Operator's Net Worth (Dec. 31)		
	1958	1959	1960	1961	1962	1958	1962	4-Year Change
1	-	3,616	3,845	4,081	4,134	20,139	25,551	+ 5,412
2	3,527	2,825	3,553	3,350	4,226	11,928	16,610	+ 4,682
3	4,318	3,718	3,647	6,688	5,380	28,488	30,104	+ 1,616
4	3,294	3,260	4,583	6,182	2,695	14,940	14,445	- 495
5	2,925	3,733	3,432	2,956	3,639	9,266	11,718	+ 2,452
7	4,599	7,209	6,297	8,840	-	30,887	-	-
8	2,430	3,200	1,861	158	1,761	21,090	20,570	- 520
12	2,160	1,698	3,166	5,582	3,856	31,674	-	-
13	2,494	4,894	4,006	- 578	1,548	24,510	37,041	+ 12,531
16	518	2,291	2,175	2,086	2,396	13,352	17,312	+ 3,960
17	360	24	1,327	-	333	30,691	-	-
18	-	-	5,408	3,622	3,912	-	16,560	-
19	-	9,478	6,000	7,818	8,272	57,191	87,907	+ 30,716
20	-	4,543	5,658	6,082	5,240	23,779	26,439	+ 2,660
21	-	6,272	4,370	5,576	4,626	16,042	21,992	+ 5,950
22	-	1,865	1,396	4,610	- 438	17,001	20,058	+ 3,057
23	-	3,219	213	227	3,143	22,924	-	-
24	-	8,080	5,131	4,606	3,924	39,581	47,943	+ 8,362
25	-	625	1,164	6,438	9,794	37,493	38,407	+ 914
26	-	3,582	4,180	3,985	5,255	29,625	35,096	+ 5,471
Ave.	2,663	3,902	3,571	4,332	3,879	24,295*	30,080*	+ 5,785

* Average of 15 cases which show net worth for both years.

Table 21. Comparison of Results for Identical Farms for Years 1958-1962 (Continued)

Farm No.	Pounds of Butterfat Per Cow					Tons of Alfalfa Hay Per Acre				
	1958	1959	1960	1961	1962	1958	1959	1960	1961	1962
1	427	418	448	410	412	1.8	-	1.6	.7	1.4
2	298	325	367	341	353	1.8	1.3	1.8	.8	2.7
3	340	361	352	386	393	1.8	3.0	1.7	2.2	2.8
4	302	311	338	304	338	1.5	1.3	1.7	3.2	4.1
5	351	376	327	375	363	1.1	2.2	2.3	1.6	2.3
7	254	271	247	295	-	.7	-	.9	.3	-
8	317	341	279	258	262	2.4	1.9	.9	.1	1.2
12	224	267	305	328	305	2.0	.9	1.0	1.1	3.3
13	151	-	-	-	-	.7	1.2	1.5	.5	.8
16	243	309	296	279	275	-	.9	.6	-	1.1
17	282	394	372	-	404	1.8	-	1.7	-	.5
18	-	334	358	375	398	-	.6	2.2	2.5	2.6
19	-	346	334	360	396	-	3.0	1.5	1.1	2.0
20	-	356	392	408	448	-	1.5	1.8	.5	2.4
21	-	-	-	-	-	-	2.1	1.2	.8	1.8
22	-	305	348	357	302	-	1.4	1.5	.5	2.4
23	-	262	255	312	316	-	.7	.8	.9	2.2
24	-	392	369	384	399	-	1.5	1.2	.7	1.8
25	-	299	305	334	404	-	-	.6	1.3	2.1
26	-	337	359	347	329	-	.5	2.7	2.0	1.9
Ave.	290	334	336	344	359	1.6	1.5	1.5	1.2	1.7

Farm No.	Bushels of Oats Per Acre					Bushels of Corn Per Acre				
	1958	1959	1960	1961	1962	1958	1959	1960	1961	1962
1	44	33	41	-	26	38	44	35	54	75
2	69	34	37	53	53	-	24	40	40	61
3	45	44	38	16	40	36	48	31	60	61
4	36	27	61	40	65	30	57	-	65	49
5	48	67	32	30	37	-	-	-	-	-
7	24	14	40	-	-	-	-	-	-	-
8	41	45	27	-	43	20	33	45	-	-
12	46	50	60	38	55	20	29	58	56	43
13	30	45	13	13	47	17	52	26	21	49
16	-	43	-	-	-	15	25	39	20	30
17	25	91	25	-	-	-	27	67	-	-
18	-	49	65	-	29	-	30	-	-	-
19	-	38	34	29	50	-	65	61	51	52
20	-	47	-	-	-	-	50	20	-	-
21	-	44	24	10	44	-	42	18	25	37
22	-	50	32	-	50	-	50	50	40	24
23	-	18	17	10	24	-	36	18	29	26
24	-	60	38	24	51	-	46	-	-	-
25	-	32	50	25	60	-	31	20	25	34
26	-	19	37	-	-	-	45	25	-	-
Ave.	41	43	37	26	45	25	41	37	41	45