

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

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

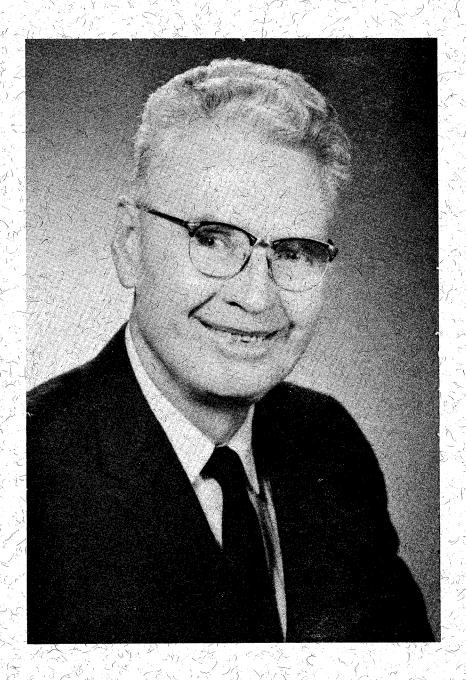
Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

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

1975 annual report Southeastern Minnesota Farm Management Association COOPERATING AGENCIES: University of Minnesota, Institute of Agriculture County Extension Services of the 14 Southeastern Counties Southeastern Minnesota Farm Management Association Economic Report ER 76-2 Department of Agricultural and Applied Economics Institute of Agriculture St. Paul, Minnesota 55108 May 1976



This edition of the Southeastern annual summary is dedicated to Truman R. Nodland for his untiring and selfless promotion of accurate farm records for the past 37 years.

This report is also dedicated to Janet Otis and Barbara Miller who have given many years of outstanding service to the Southeast and Southwest Associations.

1975 ANNUAL REPORT OF THE SOUTHEASTERN MINNESOTA FARM MANAGEMENT ASSOCIATION Prepared by Janet B. Otis, Barbara B. Miller, and Truman R. Nodland*

TABLE OF CONTENTS

	Page
Introduction	1
Summary of Farm Inventories	3
Summary of Farm Earnings (Cash Statement)	4
Summary of Farm Earnings (Enterprise Statement)	5
Net Worth Statement	6
Summary of Farm Earnings by Tenure	7
Household and Personal Expenses	8
Family Living from the Farm	9
Cumulative Effect of Excelling in a Number of Management Factors	. 9
Measures of Farm Organization and Management Efficiency	10
Thermometer Chart	11
Distribution of Acres in Farm	12
Crop Yields per Acre	13
Average Price of Feeds	13
Return Above Listed Costs per Acre of Crops	14
Explanation of "Work Units" and "Animal Units"	15
Feed Costs and Returns from Dairy Cattle	16
Feed Costs and Returns from Hogs	18
Feed Costs and Returns from Beef Breeding Herd	19
Feed Costs and Returns from Feeder Cattle	20
Feed Costs and Returns from a Farm Flock of Sheep	21
Summary by Years, 1950-1975	22

INTRODUCTION

The Department of Agricultural and Applied Economics and the Agricultural Extension Service of the University of Minnesota, and the county extension services of several southeastern Minnesota counties are cooperating with the Southeastern Minnesota Farm Management Association in maintaining a farm management service. The Southeast Minnesota Farm Management Service was organized in 1927 and began operations on January 1, 1928. The Southeastern Minnesota Farm Management Association was organized in 1939 by the farmers and now represents the farmers in determining policies and maintaining the field organization and membership. Each farmer pays an annual fee which covers part of the cost. The balance of the cost is defrayed by the University of Minnesota.

^{*} The authors are indebted to Eileen Miley and Diane Huggins for their assistance in the preparation of this report.

The analysis of the records and the preparation of the report are handled by the Department of Agricultural and Applied Economics under the direction of T. R. Nodland. Extension work in connection with the supervision of the project is handled by Ed Becker. Harvey Bjerke was the field agent for this project. At the end of the year, several county agricultural extension agents and Mervin Freeman, Area Farm Management Agent at Rochester, Minnesota, and Ken Thomas, Agricultural Extension Service, aided in closing the records.

The following tabulation shows by counties the number of Association members, the officers of the Association, and the county agricultural extension agents who cooperated in 1975.

County	Number of members	Number submit. records	Association officers	County agricultural extension agent
		* .		
Dakota	10	8	Walter Klaus, Director	Warren N. Sifferath
Dodge	17	12	Glen Johnson, Director	David H. Hanson
Freeborn	19	14	Jacob Kuiters, Director	Eldon H. Senske
Goodhue	28	24	Merle Schwartau, President	Richard C. Walter
Le Sueur	10	8	Kenneth Krenik, Director	Robert Leary
Mower	4	3	Donald Zimmerman, Director	Harlan L. Johnsrud
Nicollet	4	4	Tom Hanson, Director	Gregory D. Luehr
Olmsted	16	10	Luverne Hammel, Director	Donald Untiedt
Rice	9	7	Arthur Jindra, Director	Warren Liebenstein
Scott	12	10	Arnie Schoenbauer, SecTreas. John Woestehoff, Director	David Hart
Steele	12	10	Kenneth Anderson, Director	Larry Tande
Wabasha	10	8	Lewellyn Sprenger, Vice-Pres.	Matthias Metz
Waseca	2	2		Roger Wilkowske
Winona	8	7	Ellsworth Simon, Director	Harry B. Burcalow
Total	161	127		

Of the 161 farms in the Southeastern Association, 127 submitted records. The data for 101 farms are shown in the tables on succeeding pages. Twenty-six farms were omitted from all averages in the tables because the reports were not sufficiently complete for a full summarization or the records were not returned for summarization following completion of income tax schedules.

Because the farmers included in this study are, in general, above the average in managerial ability and operate larger and more productive farms, they have returns materially higher than the average for this section of the state. There were, however, wide variations in the methods and practices followed by these men. It is reasonable to assume that similar variations occur among all farmers in the area. To the extent that this is true, this report would be of value to all farmers and to others interested in agriculture in that it illustrates how farm records may be used as a basis for making an analysis of a farm business and for improving the management of a farm.

Dec. 31

Average of 101 farms

Jan.

Table 1. Summary of Farm Inventories, 1975*

Item

		<u> </u>			
Size of farm (acres) Size of business (work units)	* *			386 522	
Dairy cows Other dairy cattle Beef cattle (incl. feeders) Hogs Sheep (incl. feeders) Poultry (incl. turkeys) Productive livestock total				\$ 8033 5864 4694 10255 73 25 \$ 28934	\$ 7985 6184 5190 13942 53 27 \$ 33381
Horses Crop, seed and feed				\$ 9 \$ 51232	\$ 10 \$ 50104
Auto and truck (farm share) Tractors and crop machinery Livestock equipment Machinery and equipment total Land*** Buildings, fences, etc.			en e	\$ 4264 24198 6282 \$ 34744 \$ 86542 38888	\$ 4438 27315 6457 \$ 38210 \$ 86542 43479
Total farm capital managed				\$240349	\$251726
Item		20 most pi Jan. 1	cofitable Dec. 31	20 least j Jan. 1	profitable Dec. 31
Size of farm (acres) Size of business (work units)	**	428 618		419 472	
Dairy cows Other dairy cattle Beef cattle (incl. feeders) Hogs Sheep (incl. feeders) Poultry (incl. turkeys) Productive livestock total		\$ 2931 1758 6298 33922 123 - \$ 45032	\$ 2893 1626 8016 51362 103 - \$ 64000	\$ 8959 6651 9189 97 87 60 \$ 25043	\$ 9224 6635 7911 923 46 63 \$ 24802
Horses Crop, seed and feed		\$ - \$ 61782	\$ - \$ 65487	\$ 1 \$ 58500	\$ 2 \$ 46614
Auto and truck (farm share) Tractors and crop machinery Livestock equipment Machinery and equipment total		\$ 4067 23492 10705 \$ 38264	\$ 4431 27815 10171 \$ 42417	\$ 4323 23647 4041 \$ 32011	\$ 4182 28448 4238 \$ 36868
Land*** Buildings, fences, etc.		\$106153 <u>44951</u>	\$106153 	\$103357 <u>42964</u>	\$103357 <u>44055</u>
Total farm capital managed		\$296182	\$329427	\$261876	\$255698 ————
* For the purpose of com	narison	. all of ti	he data shown i	n this ren	ort with

^{*} For the purpose of comparison, all of the data shown in this report, with the exception of tables 4 and 5, are presented on a full-owner basis. The assets, expenses, and receipts of the landlord are included in the records from rented farms.

^{**} See page 15 for an explanation of "work units."

*** Real estate values are based on cost and thus do not reflect current market prices.

Table 2. Summary of Farm Earnings (Cash Statement), 1975

	Average	20 most	20 least profitable
Item	of 101	profitable	farms
	farms	farms	Taims
FARM RECEIPTS		s 1438	\$ 4782
Dairy cattle sold	\$ 4825	1	
Dairy products sold	24998	8084	25590
Beef cattle sold (incl. feeders)	6206	7903	12566
Hogs sold	33495	109097	781
Sheep and wool sold	92	42	133
Horses sold	-	•	-
Poultry sold (incl. turkeys)	4	-	14
Eggs sold	107		211
Corn sold	13527	10949	19914
Soybeans sold	7897	10336	9130
Small grain sold	1375	825	2157
Other crops sold	1825	1272	690
Machinery & equipment sold & gas tax refund		608	677
Machinery & equipment sold & gas tax retund	1417	1923	1447
Income from work off the farm	2562	2636	1999
Miscellaneous farm income	\$ 98862	\$155113	\$ 80091
Total farm sales	*	33245	φ 0007±
Increase in farm capital	11377	488	507
Family living from the farm	558		\$ 80598
Total farm receipts	\$110797	\$188846	\$ 00390
FARM EXPENSES		4 10	A 1200
Dairy cattle bought	\$ 522	\$ 10	\$ 1380
Beef cattle bought (incl. feeders)	2770	3406	5582
Hogs bought	1573	2730	798
Sheep bought	7	•	
Horses bought	-		-
Poultry bought (incl. turkeys)	39	- · · · · · · · · · · · · · · · · · · ·	86
Miscellaneous livestock expense	2552	3259	2248
Feed bought	12059	32087	4588
Fertilizers bought	7996	9405	7295
Other crop expenses	7266	9739	7824
Custom work hired	2285	2470	2160
	2775	3169	2627
Gas, oil and grease bought (farm share)	789	867	776
Repair of truck and auto (farm share)	1272	2006	950
Repair & upkeep of farm real estate		3294	2410
Repair & upkeep of tractors & crop machines	cy 2592		577
Repair & upkeep of livestock equipment	794	1214	
Wages of hired labor	2869	4465	2863
Electricity expense (farm share)	1022	1322	998
Real estate taxes	2795	3369	3094
Telephone and general farm expense	<u> 1586</u>	<u>2264</u>	<u>1418</u>
Total cash operating expense	\$ 53563	\$ 85076	\$ 47674
Trucks and autos bought (farm share)	1247	1558	722
Crop and power machinery bought	10252	11909	11288
Livestock equipment bought	1673	1650	1092
New real estate and improvements	8584	10400	4148
Total farm purchases	\$ 75319	\$110593	\$ 64924
	Ţ , 55	1 T T T T T T	6179
Decrease in farm capital	17223	21896	18115
Interest on farm capital at 7%	4578	11468	965
Family labor above one operator*			56
Board furnished hired labor	83	145	
Total farm expenses	\$ 97203	\$144102	\$ 90239
Labor & management earnings for one operate	or\$ 13594	\$ 44744	\$ - 9641
Net cash income	\$ 23543	\$ 44520	\$ 15167

Table 3. Summary of Farm Earnings (Enterprise Statement), 1975*

Tem		Average	20 most	20 least
RETURNS AND NET INCREASES Section 24768 Total returns and net increases Section 25682 Return over feed from livestock Section 25682 Return over feed from livestock Section 26682 Return over feed from livestock	Item	of 101	•	•
Dairy cows \$ 24768 \$ 7987 \$ 24960 Other dairy cattle 5682 2263 4989 Beef breeding herd 150 117 492 Feeder cattle 3575 5609 5142 Hogs 35697 123999 822 Sheep - feeders - - - Chickens and turkeys 77 - 153 All productive livestock \$ 70014 \$139997 \$ 36650 Value of feed fed to livestock 45423 73025 33633 Return over feed from livestock 45423 73025 33633 Return over feed from livestock \$ 24591 \$ 66972 \$ 3017 Value added by crops 41404 48758 33778 Income from labor off the farm 690 977 569 Miscellaneous farm income 2562 2636 1999 Total returns and net increases \$ - - - EXPENSES AND NET DECREASES Horses - - - Horses		farms	farms	farms
Other dairy cattle 5682 2263 4989 Beef breeding herd 150 117 492 Feeder cattle 3575 5609 5142 Hogs 35697 123999 822 Sheep - farm flock 65 22 92 Sheep - feeders - - - - Chickens and turkeys 77 - 153 A11 productive livestock \$ 70014 \$139997 \$ 36650 Value of feed fed to livestock 45423 73025 33633 Return over feed from livestock \$ 24591 \$ 66972 \$ 3017 Value added by crops 41404 48758 33778 Income from labor off the farm 690 977 569 Miscellaneous farm income 2562 2636 1999 Total returns and net increases \$ 69247 \$119343 \$ 39363 EXPENSES AND NET DECREASES ** ** - ** - \$ -2 Truck 1447 1676 1449 <td>RETURNS AND NET INCREASES</td> <td></td> <td>And the second s</td> <td></td>	RETURNS AND NET INCREASES		And the second s	
Beef breeding herd 150 117 492 Feeder cattle 3575 5609 5142 Hogs 35697 123999 822 Sheep - farm flock 65 22 92 Sheep - feeders - - - Chickens and turkeys 77 - 153 All productive livestock \$ 70014 \$139997 \$ 36550 Value of feed fed to livestock 45423 73025 33633 Return over feed from livestock \$ 24591 \$ 66972 \$ 3017 Value added by crops 41404 48758 33778 Income from labor off the farm 690 977 569 Miscellaneous farm income 2562 2636 1999 Total returns and net increases \$ 69247 \$119343 \$ 39363 EXPENSES AND NET DECREASES ** - - - Horses \$ - ** - - - Truck 1447 1676 1449 Auto (farm share)		\$ 2476 8	•	•
Feeder cattle Hogs Sheep - farm flock Sheep - farm flock Sheep - feeders Chickens and turkeys All productive livestock Value of feed fed to livestock Value of feed fed to livestock Value added by crops Income from labor off the farm Siscellaneous farm income Total returns and net increases EXPENSES AND NET DECREASES Horses Truck Auto (farm share) Electricity (farm share) Hired power Tractors and crop machinery Livestock equipment Buildings, fencing and tiling Miscellaneous livestock expense Labor** Real estate taxes General farm expense and telephone Interest on farm capital at 7%*** 17223 21896 1819 123999 15069 1	Other dairy cattle	5682	2263	4989
Hogs	Beef breeding herd	150		
Sheep - farm flock 65 22 92 Sheep - feeders - - - Chickens and turkeys 77 - 153 All productive livestock \$ 70014 \$139997 \$ 36650 Value of feed fed to livestock 45423 73025 33633 Return over feed from livestock \$ 24591 \$ 66972 \$ 3017 Value added by crops 41404 48758 33778 Income from labor off the farm 690 977 569 Miscellaneous farm income 2562 2636 1999 Total returns and net increases \$ 69247 \$119343 \$ 39363 EXPENSES AND NET DECREASES *** *** *** - Horses \$ - ** ** - ** Truck 1447 1676 1449 440 447	Feeder cattle	3575	5609	
Sheep - farm flock 65 22 92 Sheep - feeders - - - Chickens and turkeys 77 - 153 All productive livestock \$ 70014 \$139997 \$ 36650 Value of feed fed to livestock 45423 73025 33633 Return over feed from livestock \$ 24591 \$ 66972 \$ 3017 Value added by crops 41404 48758 33778 Income from labor off the farm 690 977 569 Miscellaneous farm income 2562 2636 1999 Total returns and net increases \$ 69247 \$119343 \$ 39363 EXPENSES AND NET DECREASES Horses \$ - \$ - \$ - \$ -2 Truck 1447 1676 1449 Auto (farm share) 966 1064 792 Electricity (farm share) 1022 1322 998 Hired power 1508 1677 1435 Tractors and crop machinery 10785 12004 9370	Hogs	35697	123999	822
Sheep - feeders - - - - - - - - 153 All productive livestock \$ 70014 \$139997 \$ 36650 \$ 3633 \$ 824523 73025 33633 3 3633 \$ 824591 \$ 66972 \$ 3017 <t< td=""><td></td><td>65</td><td>22</td><td>92</td></t<>		65	22	92
Chickens and turkeys 77 - 153 All productive livestock \$70014 \$139997 \$36650 Value of feed fed to livestock 45423 73025 33633 Return over feed from livestock \$24591 \$66972 \$3017 Value added by crops 41404 48758 33778 Income from labor off the farm 690 977 569 Miscellaneous farm income 2562 2636 1999 Total returns and net increases \$69247 \$119343 \$39363 EXPENSES AND NET DECREASES ** ** ** ** Horses ** ** ** ** ** Horses ** ** ** ** ** Horses ** ** ** ** ** EXPENSES AND NET DECREASES ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **	•	-		
Value of feed fed to livestock 45423 73025 33633 Return over feed from livestock \$ 24591 \$ 66972 \$ 3017 Value added by crops 41404 48758 33778 Income from labor off the farm 690 977 569 Miscelianeous farm income 2562 2636 1999 Total returns and net increases \$ 69247 \$119343 \$ 39363 EXPENSES AND NET DECREASES **	Chickens and turkeys	77	<u> </u>	
Value of feed fed to livestock 45423 73025 33633 Return over feed from livestock \$ 24591 \$ 66972 \$ 3017 Value added by crops 41404 48758 33778 Income from labor off the farm 690 977 569 Miscellaneous farm income 2562 2636 1999 Miscellaneous farm increases \$ 69247 \$119343 \$ 39363 EXPENSES AND NET DECREASES \$ 69247 \$119343 \$ 39363 EXPENSES AND NET DECREASES \$ - \$ - \$ -2 Horses \$ - \$ - \$ -2 Truck 1447 1676 1449 Auto (farm share) 966 1064 792 Electricity (farm share) 1022 1322 998 Hired power 1508 1677 1435 Tractors and crop machinery 10785 12004 9370 Livestock equipment 2228 3210 1472 Buildings, fencing and tiling 5234 5988 4006 <	All productive livestock	\$ 70014	\$139997	\$ 36650
Value added by crops 41404 48758 33778 Income from labor off the farm 690 977 569 Miscellaneous farm income 2562 2636 1999 Total returns and net increases \$ 69247 \$119343 \$ 39363 EXPENSES AND NET DECREASES *** *** *** *** Horses \$ - *** *** *** *** Truck 1447 1676 1449 *** *** *** *** *** *** *** 2 ***	•	45423		33633
Income from labor off the farm 690 977 569 Miscellaneous farm income 2562 2636 1999 Total returns and net increases \$ 69247 \$119343 \$ 39363 EXPENSES AND NET DECREASES *** *** *** *** Horses \$ - \$ - \$ - *** - Truck 1447 1676 1449 *** 1447 1676 1449 *** 449 *** 192 1322 998 *** *** 192 1322 998 *** *** 192 1322 998 *** *** 1435 *** 1435 *** 1435 *** 1435 *** 1435 *** 1435 *** 1472 *** 1472 *** 1472 *** 1472 *** 1472 *** 1472 *** 1472 *** 1472 *** 1472 *** 1472 *** 148 *** 1472 *** 148 *** 148 148 148 148 148 148 1418	Return over feed from livestock	\$ 24591	\$ 66972	
Miscellaneous farm income 2562 2636 1999 Total returns and net increases \$ 69247 \$119343 \$ 39363 EXPENSES AND NET DECREASES *** \$ - \$ -2 Horses \$ - \$ - \$ -2 Truck 1447 1676 1449 Auto (farm share) 966 1064 792 Electricity (farm share) 1022 1322 998 Hired power 1508 1677 1435 Tractors and crop machinery 10785 12004 9370 Livestock equipment 2228 3210 1472 Buildings, fencing and tiling 5234 5988 4006 Miscellaneous livestock expense 2552 3259 2248 Labor** 8307 16870 4609 Real estate taxes 2795 3369 3094 General farm expense and telephone 1586 2264 1418 Interest on farm capital at 7%*** 17223 21896 18115 Total expenses and net de	Value added by crops	41404	48758	33778
Total returns and net increases \$ 69247 \$ 119343 \$ 39363 EXPENSES AND NET DECREASES Horses \$ - \$ - \$ -2 Truck	Income from labor off the farm	690	977	
EXPENSES AND NET DECREASES Horses \$ - \$ - \$ -2 Truck 1447 1676 1449 Auto (farm share) 966 1064 792 Electricity (farm share) 1022 1322 998 Hired power 1508 1677 1435 Tractors and crop machinery 10785 12004 9370 Livestock equipment 2228 3210 1472 Buildings, fencing and tiling 5234 5988 4006 Miscellaneous livestock expense 2552 3259 2248 Labor** 8307 16870 4609 Real estate taxes 2795 3369 3094 General farm expense and telephone 1586 2264 1418 Interest on farm capital at 7%*** 17223 21896 18115 Total expenses and net decreases \$ 55653 \$ 74599 \$ 49004	Miscellaneous farm income	2562	2636	
Horses	Total returns and net increases	\$ 69247	\$119343	\$ 39363
Truck 1447 1676 1449 Auto (farm share) 966 1064 792 Electricity (farm share) 1022 1322 998 Hired power 1508 1677 1435 Tractors and crop machinery 10785 12004 9370 Livestock equipment 2228 3210 1472 Buildings, fencing and tiling 5234 5988 4006 Miscellaneous livestock expense 2552 3259 2248 Labor** 8307 16870 4609 Real estate taxes 2795 3369 3094 General farm expense and telephone 1586 2264 1418 Interest on farm capital at 7%*** 17223 21896 18115 Total expenses and net decreases \$ 55653 \$ 74599 \$ 49004	EXPENSES AND NET DECREASES		en e	
Auto (farm share) 966 1064 792 Electricity (farm share) 1022 1322 998 Hired power 1508 1677 1435 Tractors and crop machinery 10785 12004 9370 Livestock equipment 2228 3210 1472 Buildings, fencing and tiling 5234 5988 4006 Miscellaneous livestock expense 2552 3259 2248 Labor** 8307 16870 4609 Real estate taxes 2795 3369 3094 General farm expense and telephone 1586 2264 1418 Interest on farm capital at 7%*** 17223 21896 18115 Total expenses and net decreases \$ 55653 \$ 74599 \$ 49004	Horses	\$ -	\$ -	
Electricity (farm share) 1022 1322 998 Hired power 1508 1677 1435 Tractors and crop machinery 10785 12004 9370 Livestock equipment 2228 3210 1472 Buildings, fencing and tiling 5234 5988 4006 Miscellaneous livestock expense 2552 3259 2248 Labor** 8307 16870 4609 Real estate taxes 2795 3369 3094 General farm expense and telephone 1586 2264 1418 Interest on farm capital at 7%*** 17223 21896 18115 Total expenses and net decreases \$ 55653 \$ 74599 \$ 49004	Truck	1447	1676	
Hired power 1508 1677 1435 Tractors and crop machinery 10785 12004 9370 Livestock equipment 2228 3210 1472 Buildings, fencing and tiling 5234 5988 4006 Miscellaneous livestock expense 2552 3259 2248 Labor** 8307 16870 4609 Real estate taxes 2795 3369 3094 General farm expense and telephone 1586 2264 1418 Interest on farm capital at 7%*** 17223 21896 18115 Total expenses and net decreases \$ 55653 \$ 74599 \$ 49004	Auto (farm share)	966	1064	
Tractors and crop machinery 10785 12004 9370 Livestock equipment 2228 3210 1472 Buildings, fencing and tiling 5234 5988 4006 Miscellaneous livestock expense 2552 3259 2248 Labor** 8307 16870 4609 Real estate taxes 2795 3369 3094 General farm expense and telephone 1586 2264 1418 Interest on farm capital at 7%*** 17223 21896 18115 Total expenses and net decreases \$ 55653 \$ 74599 \$ 49004	Electricity (farm share)	1022	1322	
Livestock equipment 2228 3210 1472 Buildings, fencing and tiling 5234 5988 4006 Miscellaneous livestock expense 2552 3259 2248 Labor** 8307 16870 4609 Real estate taxes 2795 3369 3094 General farm expense and telephone 1586 2264 1418 Interest on farm capital at 7%*** 17223 21896 18115 Total expenses and net decreases \$ 55653 \$ 74599 \$ 49004	Hired power	1508	1677	
Buildings, fencing and tiling 5234 5988 4006 Miscellaneous livestock expense 2552 3259 2248 Labor** 8307 16870 4609 Real estate taxes 2795 3369 3094 General farm expense and telephone 1586 2264 1418 Interest on farm capital at 7%*** 17223 21896 18115 Total expenses and net decreases \$ 55653 \$ 74599 \$ 49004	Tractors and crop machinery	10785	12004	9370
Miscellaneous livestock expense 2552 3259 2248 Labor** 8307 16870 4609 Real estate taxes 2795 3369 3094 General farm expense and telephone 1586 2264 1418 Interest on farm capital at 7%*** 17223 21896 18115 Total expenses and net decreases \$ 55653 \$ 74599 \$ 49004	Livestock equipment	2228	3210	1472
Labor** 8307 16870 4609 Real estate taxes 2795 3369 3094 General farm expense and telephone 1586 2264 1418 Interest on farm capital at 7%*** 17223 21896 18115 Total expenses and net decreases \$ 55653 \$ 74599 \$ 49004	Buildings, fencing and tiling	5234	5988	4006
Real estate taxes 2795 3369 3094 General farm expense and telephone 1586 2264 1418 Interest on farm capital at 7%*** 17223 21896 18115 Total expenses and net decreases \$ 55653 \$ 74599 \$ 49004	Miscellaneous livestock expense	2552	3259	
General farm expense and telephone 1586 2264 1418 Interest on farm capital at $7\%***$ 17223 21896 18115 Total expenses and net decreases \$ 55653 \$ 74599 \$ 49004	Labor**	8307	16870	4609
Interest on farm capital at $7\%***$ $\frac{17223}{$55653}$ $\frac{21896}{$74599}$ $\frac{18115}{$49004}$	Real estate taxes	2795	3369	3094
Interest on farm capital at $7\%***$ 17223 21896 18115 Total expenses and net decreases \$ 55653 \$ 74599 \$ 49004	General farm expense and telephone	1586	2264	1418
Total expenses and net decreases \$ 55653 \$ 74599 \$ 49004		17223	21896	18115
-		\$ 55653	\$ 74599	\$ 49004
	-	tor\$ 13594	\$ 44744	\$ - 9641

^{*} Earnings statements, as shown in table 2, stress purchases and sales; inventory adjustments are entered as one item--either as an increase or as a decrease in farm capital. Likewise, family living from the farm is entered as a single item of income. On the enterprise basis, the value of livestock and livestock products produced includes sales, value used in the home, changes in inventories, and 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 (auto 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 the enterprise basis do not show purchases and sales, such a statement more truly shows the value produced for the productive enterprises and net expenses for each of the service enterprises.

^{**} Includes labor earnings for partners above one full-time individual.

^{***} Interest calculated on the "book" value of capital managed. If current market prices were applied to real estate, interest on average capital managed would be greater.

Table 4. Net Worth Statement for Those Farmers Who Kept a Complete Record of All Assets and Liabilities, 1975 (Operator's Share)

	15 Ow	ners
Item	Jan. 1	Dec. 31
Total acres in farm	322	
Acres owned	322	
Acres rented	-	
Acres Tenced		01/0111
Total farm capital - operator's	\$157661	\$169111
Stocks and bonds	\$ 24339	\$ 33060
Life insurance cash value	3528	4267 4425
Notes and accounts receivable	4849 2526	3055
Shares in cooperative organizations		4951
Outside real estate	2086	
Cash on hand and in bank	9451	11723 5637
Household furnishings and clothing	5134	
Personal share of auto and truck	1505	1304
Farm dwelling	9209	9065
Total non-farm assets - operator's	\$ 62627	\$ 77487
Total assets	\$220288	\$246598
Mortgages on farm operated	\$ 27118	\$ 30489
Mortgages on other real estate		17070
Chattel mortgages	15174	17079
Notes payable	3620	4513
Accounts payable	2595	2545
Total liabilities - operator's	\$ 48507	\$ 54626
Farmer's net worth	\$171781	\$191972
Change in net worth		\$ 20191
	21 Par	t-owners
Item	Jan. 1	Dec. 31
Total acres in farm	389	
Acres owned	255	
	134	
Acres rented	and the second	
	\$173597	\$187622
Total farm capital - operator's	\$173597 \$ 4504	•
Total farm capital - operator's Stocks and bonds		\$ 4574
Total farm capital - operator's Stocks and bonds Life insurance cash value	\$ 4504	\$ 4574 5842
Total farm capital - operator's Stocks and bonds Life insurance cash value Notes and accounts receivable	\$ 4504 5108 1192	\$ 4574 5842 1767
Total farm capital - operator's Stocks and bonds Life insurance cash value Notes and accounts receivable Shares in cooperative organizations	\$ 4504 5108 1192 2508	\$ 4574 5842 1767 3894
Total farm capital - operator's Stocks and bonds Life insurance cash value Notes and accounts receivable Shares in cooperative organizations Outside real estate	\$ 4504 5108 1192 2508 3562	\$ 4574 5842 1767 3894 3540
Total farm capital - operator's Stocks and bonds Life insurance cash value Notes and accounts receivable Shares in cooperative organizations Outside real estate Cash on hand and in bank	\$ 4504 5108 1192 2508 3562 11912	\$ 4574 5842 1767 3894 3540 14589
Total farm capital - operator's Stocks and bonds Life insurance cash value Notes and accounts receivable Shares in cooperative organizations Outside real estate Cash on hand and in bank Household furnishings and clothing	\$ 4504 5108 1192 2508 3562 11912 3602	\$ 4574 5842 1767 3894 3540 14589 4050
Total farm capital - operator's Stocks and bonds Life insurance cash value Notes and accounts receivable Shares in cooperative organizations Outside real estate Cash on hand and in bank Household furnishings and clothing Personal share of auto and truck	\$ 4504 5108 1192 2508 3562 11912 3602 824	\$ 4574 5842 1767 3894 3540 14589 4050 815
Total farm capital - operator's Stocks and bonds Life insurance cash value Notes and accounts receivable Shares in cooperative organizations Outside real estate Cash on hand and in bank Household furnishings and clothing Personal share of auto and truck Farm dwelling	\$ 4504 5108 1192 2508 3562 11912 3602 824 6822	\$ 4574 5842 1767 3894 3540 14589 4050 815 10252
Total farm capital - operator's Stocks and bonds Life insurance cash value Notes and accounts receivable Shares in cooperative organizations Outside real estate Cash on hand and in bank Household furnishings and clothing Personal share of auto and truck Farm dwelling Total non-farm assets - operator's	\$ 4504 5108 1192 2508 3562 11912 3602 824 6822 \$ 40034	\$ 4574 5842 1767 3894 3540 14589 4050 815 10252 \$ 49323
Total farm capital - operator's Stocks and bonds Life insurance cash value Notes and accounts receivable Shares in cooperative organizations Outside real estate Cash on hand and in bank Household furnishings and clothing Personal share of auto and truck Farm dwelling Total non-farm assets - operator's Total assets	\$ 4504 5108 1192 2508 3562 11912 3602 824 6822 \$ 40034 \$213631	\$ 4574 5842 1767 3894 3540 14589 4050 815 10252 \$ 49323 \$236945
Total farm capital - operator's Stocks and bonds Life insurance cash value Notes and accounts receivable Shares in cooperative organizations Outside real estate Cash on hand and in bank Household furnishings and clothing Personal share of auto and truck Farm dwelling Total non-farm assets - operator's Total assets Mortgages on farm operated	\$ 4504 5108 1192 2508 3562 11912 3602 824 6822 \$ 40034 \$213631 \$ 30514	\$ 4574 5842 1767 3894 3540 14589 4050 815 10252 \$ 49323 \$236945 \$ 34340
Total farm capital - operator's Stocks and bonds Life insurance cash value Notes and accounts receivable Shares in cooperative organizations Outside real estate Cash on hand and in bank Household furnishings and clothing Personal share of auto and truck Farm dwelling Total non-farm assets - operator's Total assets Mortgages on farm operated Mortgages on other real estate	\$ 4504 5108 1192 2508 3562 11912 3602 824 6822 \$ 40034 \$213631 \$ 30514 1500	\$ 4574 5842 1767 3894 3540 14589 4050 815 10252 \$ 49323 \$236945 \$ 34340 3176
Total farm capital - operator's Stocks and bonds Life insurance cash value Notes and accounts receivable Shares in cooperative organizations Outside real estate Cash on hand and in bank Household furnishings and clothing Personal share of auto and truck Farm dwelling Total non-farm assets - operator's Total assets Mortgages on farm operated Mortgages on other real estate Chattel mortgages	\$ 4504 5108 1192 2508 3562 11912 3602 824 6822 \$ 40034 \$213631 \$ 30514 1500 27070	\$ 4574 5842 1767 3894 3540 14589 4050 815 10252 \$ 49323 \$236945 \$ 34340 3176 28409
Total farm capital - operator's Stocks and bonds Life insurance cash value Notes and accounts receivable Shares in cooperative organizations Outside real estate Cash on hand and in bank Household furnishings and clothing Personal share of auto and truck Farm dwelling Total non-farm assets - operator's Total assets Mortgages on farm operated Mortgages on other real estate Chattel mortgages Notes payable	\$ 4504 5108 1192 2508 3562 11912 3602 824 6822 \$ 40034 \$213631 \$ 30514 1500 27070 2677	\$ 4574 5842 1767 3894 3540 14589 4050 815 10252 \$ 49323 \$ 236945 \$ 34340 28409
Total farm capital - operator's Stocks and bonds Life insurance cash value Notes and accounts receivable Shares in cooperative organizations Outside real estate Cash on hand and in bank Household furnishings and clothing Personal share of auto and truck Farm dwelling Total non-farm assets - operator's Total assets Mortgages on farm operated Mortgages on other real estate Chattel mortgages Notes payable Accounts payable	\$ 4504 5108 1192 2508 3562 11912 3602 824 6822 \$ 40034 \$213631 \$ 30514 1500 27070 2677 1277	\$ 4574 5842 1767 3894 3540 14589 4050 815 10252 \$ 49323 \$ 236945 \$ 34340 3176 28409 2877 2709
Total farm capital - operator's Stocks and bonds Life insurance cash value Notes and accounts receivable Shares in cooperative organizations Outside real estate Cash on hand and in bank Household furnishings and clothing Personal share of auto and truck Farm dwelling Total non-farm assets - operator's Total assets Mortgages on farm operated Mortgages on other real estate Chattel mortgages Notes payable Accounts payable Total liabilities - operator's	\$ 4504 5108 1192 2508 3562 11912 3602 824 6822 \$ 40034 \$213631 \$ 30514 1500 27070 2677 1277 \$ 63038	\$ 4574 5842 1767 3894 3540 14589 4050 815 10252 \$ 49323 \$ 236945 \$ 34340 3176 28409 2877 2709 \$ 71511
Total farm capital - operator's Stocks and bonds Life insurance cash value Notes and accounts receivable Shares in cooperative organizations Outside real estate Cash on hand and in bank Household furnishings and clothing Personal share of auto and truck Farm dwelling Total non-farm assets - operator's Total assets Mortgages on farm operated Mortgages on other real estate Chattel mortgages Notes payable Accounts payable	\$ 4504 5108 1192 2508 3562 11912 3602 824 6822 \$ 40034 \$213631 \$ 30514 1500 27070 2677 1277	\$187622 \$ 4574 5842 1767 3894 3540 14589 4050 815 10252 \$ 49323 \$236945 \$ 34340 28409 2877 2709 \$ 71511 \$165434 \$ 14841

Table 5. Summary of Farm Earnings by Tenure (Operator's Share), 1975

	20		
Item	38	37 Part-	6
	Owners	owners	Renters
FARM RECEIPTS	A /262	à /F/O	à //ar
Dairy cattle sold	\$ 4363	\$ 4540	\$ 4435
Dairy products sold	22365	23224	17377
Beef cattle sold (incl. feeders)	7414	5022	314
Hogs sold	16893	33579	806
Sheep and wool sold	106	142	- · ·
Horses sold	-	-	-
Poultry sold (incl. turkeys)	9	-	- ,
Eggs sold	193	1	
Corn sold	7696	15318	13770
Soybeans sold	4406	7099	4255
Small grain sold	1660	809	769
Other crops sold	1904	1775	1167
Machinery and equipment sold & gas tax refund	488	409	952
Income from work off the farm	1296	1442	3019
Miscellaneous farm income	<u>2455</u>	1993	<u>655</u>
(1) Total farm sales	\$ 71248	\$ 95353	\$ 47519
(2) Increase in farm capital	15645	12077	an an an an Africa 🚾 a said
(3) Family living from the farm	<u>478</u>	<u>544</u>	386
(4) Total farm receipts $(1)+(2)+(3)$	\$ 87371	\$107974	\$ 47905
FARM EXPENSES			for the second
Dairy cattle bought	\$ 344	\$ 376	\$ 244
Beef cattle bought (incl. feeders)	3133	2942	433
Hogs bought	708	2909	296
Sheep bought	19		in the second
Horses bought	-	-	-
Poultry bought (incl. turkeys)	75	2	
Miscellaneous livestock expense	2019	2389	1589
Feed bought	6958	14599	3265
Fertilizers bought	5781	7427	6099
Other crop expenses	5740	7293	4132
Custom work hired	2390	1964	1584
Gas, oil and grease bought (farm share)	2338	2687	1907
Repair and upkeep of power & crop machinery	3276	3224	2224
Repair and upkeep of real estate	923	1213	433
Repair and upkeep of livestock equipment	667	863	212
Wages of hired labor	3052	3518	915
Electricity expense (farm share)	797	922	629
Real estate taxes	2090	1894	52
Cash rent		2995	5534
General farm expense & telephone	1543	1460	861
Interest paid	5912	6502	2685
Total cash operating expense	\$ 47765	\$ 65179	\$ 33094
Trucks and autos bought (farm share)	1195	594	883
Crop and power machinery bought	6536	9166	5356
Livestock equipment bought	1255	1395	
			124
Farm purchase and real estate improvements	10030	9031	1248
(5) Total farm purchases	\$ 66781	\$ 85365	\$ 40705
(6) Decrease in farm capital	 	7000	1454
(7) Interest on operator's farm capital	6285	7982	1459
(8) Unpaid family labor	909	1050	750
(9) Board furnished hired labor	166	45	
(10) Total farm expenses $(5)+(6)+(7)+(8)+(9)$	\$ 74141	\$ 94442	\$ 44368
(11) Labor earnings (4)-(10)	\$ 13230	\$ 13532	\$ 3537
(12) Return to capital & family labor $(7)+(8)+(11)$	\$ 20424	\$ 22564	\$ 5746

Table 6. Household and Personal Expenses for Those Farms Which Kept Complete Accounts of These Expenses, 1975

Item	Average of 36 farms	18 high in return to cap. and fam. labor	18 low in return to cap. and fam. labor
Number of persons - family	4.0	3.8	4.2
Number of adult equivalent - family - others*	3.5 .1	3.3 .1	3.7
EXPENSES			
Food and meals bought	\$ 2251	s 2225	\$ 2279
Operating and supplies	792	721	862
Furnishings and equipment	794	1030	557
Clothing and clothing materials	841	929	753
Personal care and spending	443	606	280
Education	626	711	542
Recreation	535	778	292
Gifts and special events	474	630	317
Medical and hospital expenses	1205	1204	1206
Church and welfare	801	1046	555
Personal share of auto expense	610	717	502
Upkeep of dwelling	153	211	96
Personal share of tel. & elec. expense	256	<u>275</u>	238
Total cash living expense	\$ 9781	\$11083	\$ 8479
Personal share of new auto	293	257	329
New dwelling	1521	742	2299
Taxes**	4507	6478	2535
Life insurance	1301	1699	903
Other savings and investments	3066	3726	2407
other savings and investments			
Total household & personal cash expense	\$20469	\$23985	\$16952
Family living from the farm	481	526	437
Total cash expenses & perquisites**	\$20950	\$24511	\$17389
RECEIPTS			
Return to capital and family labor	\$23462	\$40008	\$ 6916
Income from outside investments	1552	2019	1084
Other personal income	1060	1769	350

^{*} Hired help or others boarded.
*** All farmers did not report amount of state and federal income taxes.

Table 7. Family Living from the Farm, 1975

Item		 Average of 101 farms	Average of 101 farms
Number of adult equi	valents - fam: - othe	4.0 .1	
Whole milk Cream Cattle Hogs Sheep Poultry Eggs		853 qts. 2 pts. 1025 1bs. 200 1bs. - 7 1bs. 7 doz.	\$ 143 1 322 89 - 1 2
Tota1			\$ 558

^{*} Hired help or others boarded

CUMULATIVE EFFECT OF EXCELLING IN A NUMBER OF MANAGEMENT FACTORS

Studies of earnings of farmers in this area show that there are seven major management factors causing variations in earnings among farmers within a given year. These seven factors are (1) crop yields, (2) choice of crops, (3) returns from livestock, (4) amount of livestock, (5) size of business, (6) work accomplished per worker, and (7) control over expenses. The combined or cumulative influence of these seven management factors on earnings is shown in table 8. The farmer's earnings are determined to a considerable extent by his accomplishments in these seven factors.

Table 8. Relation of Labor Earnings to the Number of Factors in Which the Farmer Excels

Number of factors in which farmer excels	Number of farms	Your farm	The length of the shaded lines is in proportion to the average operator's labor earnings	Average labor earnings
0 or 1	12		XXXX	\$ 7403
2	25	······	XXX	6864
3	27		XXXX	8975
4	18		XXXXXXXX	17957
5	15		XXXXXXXXXXX	25962
6 or 7	4		xxxxxxxxxxxxxxxx	39388

The array in table 8 indicates that it will be worthwhile for each cooperator to study carefully his ranking on pages 10 and 11, and learn his standing in respect to each of the above factors and the elements of strength and weakness in his farm business.

Table 9. Measures of Farm Organization and Management Efficiency, 1975

	Average	20 most	20 least
Measures used in chart on page 11	of 101	profitable	profitable
	farms	farms	farms
Labor and management earnings	\$13594	\$44744	\$ - 9641
Crop yields*	100	101	91
Percent tillable land in high return crops**	67.8	75.0	64.9
Return for \$100 of feed to prod. livestock***	100	104	89
Productive livestock units per 100 acres****	36.4	66.0	24.3
Size of business - work units	522	618	472
Work units per worker	275	309	248
All power, machinery, equipment, building	213	309	240
expense per work unit	\$44.92	\$44.92	\$42.57
Items related to some of the above measures:			
Index of return for \$100 of feed from:			
	100	100	01
Dairy cattle (see pages 16 and 17)	100	109	91
Beef cattle - breeding herd (see page 19)	100	<u>-</u>	- 01
Beef cattle - feeders (see page 20)	100	85	94
Hogs (see page 18)	100	104	88
Sheep - farm flock (see page 21)	100	104	-
bhoop farm frock (See page 21)	100		
Number of animal units	107.8	204.5	72.6
Work units on crops	183	210	191
Work units on productive livestock	319	380	265
Other work units	20	28	16
	-20		10
Number of family workers	1.4	1.4	1.4
Number of hired workers			
Total number of workers	$\frac{.5}{1.9}$	$\frac{.6}{2.0}$.5 1.9
Power & crop machinery expense per work unit	\$32.05	\$31.70	\$31.59
Livestock equipment expense per work unit	3.77	3.69	2.58
Building & fencing expense per work unit	9.10	9.53	8.40
Number of crop acres per farm	326	374	342
Tractor & crop machinery expense per crop acre	\$34.56	\$35.43	\$29.41
Rate earned on capital managed (\$10,000 is			
deducted for operator's labor)	8.5%	18.1%	0%
	3.578	~ U + 1/0	V /0

^{*} Given as a percentage of the average.

^{**} Crops are marked in table 10 as A, B, C, and D. All of acres in A crops, one-half of acres in B crops, and one-fourth of acres in C crops are used in calculating percent of tillable land in high return crops.

^{***} An index weighted by the animal units of livestock.

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

Using your figures from page 10, locate your standing with respect to the various measures of farm organization and management efficiency. The average for the 101 farms included in this summary are located between the dotted lines across the center of this page.

7.74				Return	Pr.lvstk.		Work	Pow., mach.
	Labo	iron	High	from	units	Work	units	eq.& bldg.
	earn	yields	return	prod.	per	units	per	exp. per
	ings	,	crops	lvstk.	100 A.	<u> </u>	worker	work unit
. ,								
:								
\$54,	000	140	92.0	140	69.0	925	435	\$13
	000	135	89.0	135	65.0	875	415	17
47,		133	03.0		03.0	ŭ.5		- 1
						005	205	0.1
44,	,000	130	86.0	130	61.0	825	395	21
				1 1				
39	000	125	83.0	125	57.0	725	375	25
٠,								
		100		100	50.0	705	255	20
34,	,000	120	80.0	120	53.0	725	355	29
				1 1		- 11	1 1	
29.	,000	115	77.0	115	49.0	675	335	33
		. []	1 1	1.1		1 1	[+]	
24.	000	110	74.0	110	45.0	625	315	37
24,	,000	110	/4.0	110	43.0	023	212	3'
						1 1	11	
19.	,000	105	71.0	105	41.0	575	295	41
	, <u></u>							
1.6	,000	100	68.0	100	37.0	525	275	45
14,	,000 [100	00.0	100	3/.0	323	2/3	
• •	•••••		• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	•••••	• • • • • • • • • • • • • • • • • • • •
9,	,000	95	65.0	95	33.0	475	255	49
						11	11	
/.	,000	90	62.0	90	29.0	425	235	53
4:	,000	347	02.0	7	27.	727	233	- 73 M
		11		. !!	y	11		
-1,	,000	85	59.0	85	25.0	375 	215	57
-6	,000	80	56.0	80	21.0	325	195	61
	,000		30.0	١		323	1,33	* -[
		1 1	1 1		1 1			
-11	,000	75	53.0	75	17.0	275	175	65
								11
-16	,000	70	50.0	70	13.0	225	155	69
10	, , , ,			'	-3.0			
		_		_				
-21	,000	65	47.0	65	9.0	175	135	73
							1 1	
-26	,000 📙	60	44.0	60	5.0	125	115	77
_0				- 1				
		11						
	· · · · · ·	ļl	ļJ	اسسما	<u></u>	السنسا	لسسا	

Table 10. Distribution of Acres in Farm, 1975

Item	Crop ratings*	Number growing this crop	Average of 101 farms	Ave. per farm raising each crop
Canning peas	В	5	1.0	19.8
Wheat	Č	28	7.0	25.3
Oats for silage	Č	12	2.1	17.9
Oats for grain	D	64	18.7	29.5
Barley	D	3	.6	19.4
Other small grain	D or C			
Total small grains and peas		90	29.4	33.0
Corn grain	A	100	167.0	168.7
Soybeans for grain	В	58	63.6	110.8
Sweet corn	В	8	3.6	45.1
Corn silage	В	60	<u>15.7</u>	26.4
Total cultivated crops		100	249.9	252.4
Alfalfa hay	В	82	45.4	56.0
Other legume hay	C		•	
Annual hay	D	2	$\frac{.2}{45.6}$	6.5
Total tillable land in hay		82	45.6	56.2
Alfalfa pasture	В	34	7.1	21.0
Other tillable pasture	D	3	-4 7.5	14.3
Total tillable land in pasture		35	7.5	21.6
Tillable land not cropped	D	7	.8 333,2	11,8
Total tillable land		101	333.2	333.2
Wild hay		14	1.4	9,9
Non-tillable pasture		51	16.4	32.5
Timber not pastured		38	9.4	24.8
Roads and waste			16.7	
Farmstead			8.9	
Total acres in farm			386.0	
Percent land tillable			85.4	
Percent tillable land in high return	crops		67.8	

Table 11. Crop Yields per Acre, 1975

Item			,			of farms each crop
Canning peas, \$ Wheat, bu. Oats for silage, t	ons				\$	85.77 30.4 4.1
Oats for grain, bu Barley, bu. Corn grain, bu.						62.4 31.3 90.1
Soybeans, bu. Sweet corn, tons Corn silage, tons						28.1 5.4 15.2
Alfalfa hay, tons Annual hay, tons	8		A **		e e e e e e e e e e e e e e e e e e e	3.5 1.9

Table 12. Average Price of Feeds, 1975

Item	Value	Item	Value
Corn, per bu. Oats, per bu.	\$2.65 1.45	Alfalfa hay, per ton Corn silage, per ton Pasture, per month per cow	\$60.00 20.00 6.50

Table 13. Return Above Listed Costs per Acre of Crops, 1975

Item	Corn grain	Corn silage	Soy- beans
Number of farmers reporting	89	54	47
Yield per acre	90.1	bu. 15.2	28.1 bu.
Price per unit*	\$2.30	\$18.00	\$4.50
Total return	\$207.23	\$273.60	\$126.45
Fertilizer	\$ 37.20	\$ 34.18	\$ 3.00
Seeds, herbicides, etc.	27.03	25.62	
Total listed costs	\$ 64.23	\$ 59.80	\$ 20.63
Return above listed costs	\$143.00	\$213.80	\$105.82
Item	Alfalfa hay	Oats	Wheat
Number of farmers reporting	67	45	18
Yield per acre	3.5	tons 62.4	bu. 30.4 bu.
Price per unit*	\$55.00	\$1.45	
Total return	\$192.50	\$90.48	\$114.00
Fertilizer	\$ 7.81	\$ 5.37	\$ 15.08
Seeds, herbicides, etc.	13.22	8.28	13.02
Total listed costs	\$ 21.03	\$13.65	\$ 28.10
Return above listed costs	\$171.47	\$76.83	\$ 85.90

 $[\]ensuremath{^{\star}}$ Market prices reported at the end of December 1975.

EXPLANATION OF "WORK UNITS" AND "ANIMAL 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 14.

Table 14. Number of Work Units for Each Class of Livestock and Each Acre of Crop

Item	Number of work units	Item	Number of work units
Dairy cows	7.0 per cow	Small grain	.3 per acre
Other dairy cattle	1.2 per head	Sugar beets	1.8 per acre
Beef breeding herd	1.5 per cow	Sweet corn	.7 per acre
Feeder cattle	.12 per 100 lbs.	Corn husked	.6 per acre
Sheep, farm flock	.6 per ewe	Corn silage	.8 per acre
Sheep, feeders	.3 per 100 1bs.	Potatoes	4.0 per acre
Hogs	.12 per 100 lbs.	Alfalfa hay	.6 per acre
Turkeys	.1 per 100 1bs.	Soybean hay	.6 per acre
Hens	5.0 per 100 hens	Other hay crops	.4 per acre
Canning peas	.3 per acre	Labor off the farm	1.0 per \$35
Soybeans for grain	.5 per acre		F 100

An animal unit represents one dairy cow or bull, two other dairy cattle, $1\frac{1}{4}$ beef cows or bulls, 1 feeder steer or heifer, 3 1/3 other beef cattle, 7 sheep, 14 lambs, $2\frac{1}{2}$ hogs, 5 pigs, 50 hens, or 1100 pounds of turkeys produced.

Table 15. Factors of Costs and Returns from Dairy Cows, 1975

Item	Average of 61 farms	15 farms highest in butterfat per cow	15 farms lowest in butterfat per cow
Pounds of milk per cow	12386	14755	9253
Percent butterfat in milk	3.9	4.0	3.9
Pounds of butterfat per cow	474	581	360
Price received per pound of BF sold	\$2.07	\$2.06	\$2.03
Price received per cwt. of milk sold	\$7.93	\$8.12	\$7.95
Value of produce per cow:	+0.CH =1		
Dairy product sales	\$965.54	\$1177.84	\$714.57
Dairy produce used in home	6.17	6.42	6.99
Milk fed to livestock	8.94	10.30	10.36
Net increase in value of cows TOTAL VALUE PRODUCED	$\frac{-18.12}{\$962.53}$	$\frac{-22.94}{\$1171.62}$	12 \$731.80
TOTAL VALUE PRODUCED	3902.53	311/1.02	\$731.00
Feed cost per cow:	4015 / 6	4250 00	00// 00
Concentrates	\$315.46	\$352.00	\$244.83
Roughages	297.10	322.05	252.84
Pasture TOTAL FEED COST	$\frac{9.96}{$622.52}$	$\frac{8.10}{$682.15}$	$\frac{18.74}{\$516.41}$
	• ,		
RETURN ABOVE FEED COST PER COW	\$340.01	\$489.47	\$215.39
RETURN FOR \$100 OF FEED	\$158	\$176	\$144
Feeds per cow, 1bs.:			* 4
Corn	4699	5578	3934
Small grain	617	558	470
Commercial feeds	616	497	286
Total concentrates	5932	6633	4690
Total hay	7109	7911	6859
Silage	8407	8397	4740
Feed cost per pound of butterfat	\$1.34	\$1.19	\$1.45
Feed cost per cwt. of milk	\$5.14	\$4.66	\$5.70
Number of cows*	41.9	46.7	34.2

^{*} All dairy cows which have at some time in the past freshened are included in the dairy herd and affect the average number of cows used in computing this table.

Table 16. Feed Costs and Returns from Other Dairy Cattle, 1975

Item	Average of 61 farms	15 farms highest in butterfat per cow	15 farms lowest in butterfat per cow
NET INCREASE IN VALUE OF OTHER DAIRY CATTLE	\$132.27	\$176.54	\$ 82.37
TOTAL FEED COST PER HEAD	\$180.10	\$188.86	\$162.38
RETURN ABOVE FEED COST PER HEAD	\$-47.83	\$-12.32	\$ - 80.01
RETURN FOR \$100 OF FEED	\$ 76	\$ 96	\$ 53
Feed per head, 1bs.: Concentrates Hay Silage Whole milk	1332 2446 2540 83	1293 2644 2751 88	990 2796 1767 115
Number of head of other dairy cattle	62.6	76.2	45.6

Table 17. Feed Costs and Returns from All Dairy Cattle, 1975

Item	Average of 61 farms	15 farms highest in butterfat per cow	15 farms lowest in butterfat per cow
Value of produce per cow: Dairy products Net increase in value of dairy cattle TOTAL VALUE PRODUCED	\$ 971.70 185.20 \$1156.90	\$1184.26 253.52 \$1437.78	\$721.56 118.25 \$839.81
TOTAL FEED COSTS PER COW	\$ 884.97	\$ 963.08	\$742.49
RETURN ABOVE FEED COST PER COW	\$ 271.93	\$ 474.70	\$ 97.32
RETURN FOR \$100 OF FEED	\$134	\$154	\$119
Feed per cow, lbs.: Concentrates Hay Silage	8008 10851 12203	8713 12002 12678	6198 11057 7359
Miscellaneous costs per cow	\$65.28	\$80.74	\$48.70

Tables 18a and 18b. Feed Costs and Returns from Hogs, 1975

		Farms	ng stock	ng stock 6 farms	
	Average	Average	11 farms	11 farms	with
Item	of 39	of 33	highest in		purchased
	farms	farms	returns	returns	feeder pigs
			above feed	above feed	
Pounds of hogs produced	176026	199579	288535	85106	46484
NET INCREASE IN VALUE PER CWT. PRODUCED	\$48.70	\$50.38	\$51 . 59	\$48.05	\$39.46
FEED COST PER CWT. PRODUCED	\$27.35	\$26.13	\$22.12	\$30.38	\$34.05
RETURN ABOVE FEED COST PER CWT. PRODUCED	\$21.35	\$24.25	\$29.47	\$17.67	\$ 5.41
RETURN FOR \$100 OF FEED	\$192	\$202	\$238	\$164	\$137
Price received per cwt. sold	\$47.91	\$47.51	\$48.15	\$46.21	\$50.52
Weight per hog sold	240	241	243	256	234
Miscellaneous costs per cwt. produced	\$.73	\$.74	\$.91	\$.30	\$.57
Feed per cwt. hogs produced, lbs.:					
Corn	359	350	309	409	407
Small grain	20	21	16	21	19
Commercial feeds*	82	_86	<u>72</u>	94	<u>57</u>
Total concentrates	461	457	397	524	483
Total number of litters raised	97	115	168	51	
Number of pigs born per litter	8.9	8.9	9.1	8.4	
Number of pigs weaned per litter	7.4	7.4	7.8	6.5	
Number of feeder pigs purchased	71	25	8	46	321
Total weight of feeders purchased	3148	1032	386	1803	14790
Price paid per feeder pig	\$42.71	\$43.92	\$55.67	\$37.61	\$41.91

^{*} This includes purchased complete feeds which have not been divided between corn, small grain and protein feeds.

Table 19. Feed Costs and Returns from Beef Breeding Herd, 1975

Item	Average of 7 farms
TOTAL VALUE PRODUCED PER COW	\$ 89.90
Feed cost per cow: Concentrates Roughages Pasture TOTAL FEED COST	\$ 21.89 126.68 44.85 \$193.42
RETURN ABOVE FEED COST PER COW	\$ - 103 . 52
RETURN FOR \$100 OF FEED	\$ 59
Miscellaneous costs per cow	\$.38
Feed per cow, 1bs.: Concentrates Hay Silage	445 3167 3166
Pounds of beef produced	7069
Number of cows Number of other beer cattle	25.0 22.2

Table 20. Feed Costs and Returns from Feeder Cattle, 1975

Item	Average of 17
1 Cent	farms
Pounds of beef produced	39625
NET INCREASE IN VALUE OF FEEDERS PER CWT. OF BEEF PRODUCED	\$52.42
Feed cost per cwt. beef produced: Concentrates Roughages Pasture TOTAL FEED COST	\$28.88 16.00 .45 \$45.33
RETURN ABOVE FEED COST PER CWT. BEEF PRODUCED	\$ 7.09
RETURN FOR \$100 OF FEED	\$133
Miscellaneous costs per cwt. of beef produced	\$1.40
Feed per cwt. beef produced, lbs.: Corn Small grain Commercial feeds	527 9 37
Total concentrates Total hay Silage	573 301 699
Price paid per cwt. of beef bought Price received per cwt. of feeder cattle sold	\$28.03 37.80
Number of animal units	69.4

Table 21. Feed Costs and Returns from a Farm Flock of Sheep, 1975

Item	
	of 4
	 farms
Value of produce per ewe:	
Wool	\$ 5.28
Net increase in value of sheep	42.15
TOTAL VALUE PRODUCED	\$47.43
Feed cost per ewe:	
Concentrates	\$30.02
Roughages	28.94
Pasture	7.64
TOTAL FEED COST PER EWE	\$66.60
RETURN ABOVE FEED COST PER EWE	\$ - 19 . 17
RETURN FOR \$100 OF FEED	\$ 51
Migoollonoous sonts son	
Miscellaneous costs per ewe	\$1.73
Feeds per ewe, 1bs.:	
Concentrates	566
Нау	965
Silage	-
Price received per cwt. of lambs sold	\$44.71
Price received per pound of wool sold	**
Pounds of wool per sheep sheared	**
Percent lamb crop*	84
Percent death loss*	1.7
	1.7
Pounds of sheep produced	2698
Number of ewes	22

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

^{**} Information not available.

I tom	Average 1950 - 54	Average 1955 - 59	Average 1960-64	Average 1965-69	1970	1971	1972	1973	1974	1975
Number of farms	162	165	158	134	113	113	114	118	112	101
Total farm capital managed	\$42663	\$49342	\$60988	\$84088	\$107724	\$120511	\$137338	\$174068	\$204978	\$246038
Monthly charge for:	,		•							
Unpaid family labor*	125	133	147	160	250	300	300	350	400	450
Second operator*	125	133	187	295	500	600	600	**	**	**
Board for hired labor*	36	38	40	45	60	60	60	75	90	120
FARM EXPENSES										1
Dairy cattle bought	\$ 314	\$ 235	\$ 265	\$ 398	\$ 521	\$ 544	\$ 363	\$ 527	\$ 966	\$ 522
Beef cattle bought	· 588	913	1185	791	908	2228	2536	3768	2080	2770
Hogs bought	202	258	386	504	616	534	751	1523	557	1573
Sheep bought (incl. feeders)	35	143	88	7	7	10	11	4	8	. , 7
Poultry bought (incl. turkeys)	154	124	154	110	··· 73	50	9 -	24	14	39
Horses bought	6	6	2	1	-	1	-	7	· · · · · · · · · · · · · · · · · · ·	-
Miscellaneous livestock expense	e 359	530	731	947	1347	1468	1662	1978	2161	2552
Fertilizers bought	_	877	1085	1978	2250	2686	2940	4286	7362	7996
Miscellaneous crop expense	1010*	*** 651	926	1878	2593	2966	3341	4869	6029	7266
Feed bought	2241	2747	3735	4279	5001	4539	5975	10372	10030	12059
Custom work hired	552	745	857	1295	1744	1868	1908	2023	2222	2285
Power & crop machinery (new)	1744	1825	1803	3538	4565	4902	6434	9096	9919	11499
Power & crop machinery (upkeep		1937	2378	2712	3737	3970	4254	5444	6384	7178
Livestock equipment (new)	202	347	412	658	986	1154	954	1544	3099	1673
Livestock equipment (upkeep)	113	152	171	225	345	380	440	649	710	794
Buildings and fencing (new)	983	982	1229	1930	2948	2801	3909	3648	5479	8584
Buildings and fencing (upkeep)	368	320	344	436	573	621	684	994	1188	1272
Hired labor	857	878	922	1123	1730	1838	1895	2335	2642	2869
Taxes	633	861	1301	1589	1921	2384	2129	2287	2232	2795
General farm expense	239	316	409	555	769	<u>786</u>	901	1069	1270	1586
Total farm purchases	\$12150	\$14847	\$18383	\$24954	\$32634	\$35730	\$41096	\$56447	\$64352	\$75319
Decrease in farm capital	· <u>-</u>	· -	_	_		-	-	-	-	-
Interest on farm capital****	2133	2467	3049	4482	6463	7231	8240	10444	14349	17223
Unpaid family labor	496	540	629	815	1171	1405	1532	8186	5132	4578
Board furnished hired labor	166	134	101	64	<u>55</u>	64	<u>45</u>	55	140	83
Total farm expense	\$14945	\$17988	\$22162	\$30315	\$40323	\$44430	\$50913	\$75132	\$83973	\$97203

^{*} These adjustments should be considered in comparing 1975 with previous years.

^{**} Labor earnings was divided between the various partners.

^{***} Includes fertilizer.

^{****} Interest was calculated at the rate of 5% on capital managed from 1950 to 1966, at 5.5% from 1967 to 1969, at 6% from 1970-1973, and at 7% in 1974 and 1975.

Table 22. Summary by Years (continued)

Item	Average 1950-54	Average 1955 - 59	Average 1960-64	Average 1965-69	1970	1971	1972	1973	1974	1975
FARM RECEIPTS								 		
Dairy cattle sold	\$ 1680	\$ 1641	\$ 2061	\$ 3246	\$ 3676	\$ 3952	\$ 4694	\$ 5855	\$ 5552	\$ 4825
Dairy products sold	4702	6032	8105	11631	16686	17478	17262	20694	26432	24998
Beef cattle sold	1301	1891	2688	2148	3030	4555	5319	6310	5983	6206
Hogs sold	4253	4653	5961	7973	9069	6932	12516	22993	20670	33495
Sheep and wool sold	171	272	222	95	82	96	111	118	111	92
Poultry (incl. turkeys) sold	354	212	. 88	82	19	14	8	13	8	4
Eggs sold	1297	1075	1015	732	225	130	90	85	96	107
Horses sold	14	8	4	1	-	-	1	1	-	-
Corn sold	766	1926	1594	2467	4844	4822	5255	11136	18267	13527
Soybeans sold		-	-	1689	2762	2936	4464	7991	12156	7897
Small grain sold	495	481	624	492	421	356	259	494	1407	1375
Other crops sold*	853	1334	2181	2582	2208	2600	4023	2568	1364	1825
Mach., & equip. sold & gas tax		271	323	379	458	430	348	397	664	532
Income from work off the farm		269	239	432	399	346	484	889	923	1417
Miscellaneous farm income	<u>356</u>	<u>458</u>	<u>559</u>	1022	<u>1435</u>	1100	<u> 1508</u>	1768	1805	<u>2562</u>
Total farm sales	\$16752	\$20523	\$25664	\$34971	\$45314	\$45747	\$56342	\$81312	\$95438	\$98862
Increase in farm capital	1905	941	601	3516	3814	5698	10109	33825	12241	11377
Family living from the farm	<u>620</u>	<u>304</u>	307	321	<u>373</u>	<u>341</u>	380	526	<u>564</u>	558
Total farm receipts	\$19277	\$21768	\$26572	\$38808	\$49501	\$51786	\$66831	\$115663	\$108243	\$110797
Total farm expenses	<u> 14945</u>	<u> 17988</u>	22162	30515	<u>40323</u>	<u>44430</u>	<u>50913</u>	<u> 75132</u>	<u>83973</u>	97203
Labor and management earnings	\$ 4332	\$ 3780	\$ 4410	\$ 8293	\$ 9178	\$ 7356	\$15918	\$ 40531	\$ 24270	\$ 13594
MEASURES OF FARM ORGANIZATION	AND MANA	GEMENT EF	FICIENCY	,						
Percent land in high ret crops	s** 62.8	62.7	60.1	60.5	63.6	66.1	64.8	65.3	66.3	67.8
Livestock units per 100 acres	*** 28.9	33.7	36.4	34.3	34.3	32.9	33.1	36.9	36.9	36.4
Work units****	535	486	548	505	431	443	446	482	509	522
Work units per worker***	284	274	318	305	254	261	262	284	283	272
Expenses per work unit****	\$8.18	\$10.81	\$11.61	\$17.99	\$27.86	\$29.72	\$31.75	\$38.89	\$41.48	\$44.92

^{*} Includes soybeans 1950-1965.

^{**} The crop ratings used in calculating the percentage of the tillable land in high return crops were considerably changed in 1957.

^{***} The basis for computing animal units was revised in 1951.

^{****} The basis for computing work units was revised in 1953, 1967, and 1970.

Table 23. Summary of Miscellaneous Items by Years

Item	Average 1950-54	Average 1955 - 59	Average 1960-64	Average 1965-69	1970	1971	1972	1973	1974	1975
	eur feit in						en e	5.4.2		
RETURN ABOVE FEED COST PER				*****	4070 (5	4000 61	A/17 (0	A//E OF	6494 00	
Dairy cow	\$156.86	\$162.86	\$183.05	\$266.74	\$373.65	\$383.61	\$417.68	\$445.85	\$424.99	\$340.01
100 lbs. feeder cattle prod.	7.37	4.76	1.78	5.08	3.78	9.62	17.82	14.06	-28.90	7.09
Ewe	9.47	6.18	5.40	7.52	11.29	10.82	16.75	15.99	-3.04	-19.17
100 lbs. hogs produced	6.47	4.62	4.57	8.86	5.17	6.05	14.17	21.49	6.42	21.35
Hen	1.60	1.39	1.27	.84	.59	54	.14	1.67	2.22	01
Beef cow	*	*	*	*	74.48	48.29	30.69	61.27	-63.88	-103.52
FEED COST PER										
Dairy cow	\$142.59	\$147.05	\$169.62	\$215.79	\$246 53	\$253.73	\$257.59	\$381.72	\$521.92	\$622.52
100 lbs. feeder cattle prod.	19.46	18.83	19.10	21.60	22.08	22.08	22.10	36.23	51.39	45.33
Ewe	10.73	11.17	13.46	19.51	23.69	23.16	24.58	32.46	56.97	66.60
100 lbs. hogs produced	12.95	10.65	10.65	11.90	12.06	12.60	12.88	20.77	26.00	27.35
Hen	4.76	3.78	3.28	3.31	2.97	3.00	2.78	4.27	3.88	5.44
Beef cow	*	*	*	*	104.54	99.11	121.69	147.62	189.10	193.42
MISCELLANEOUS LIVESTOCK INFOR	MATION		.*							
Number of dairy cows	17.7	19.8	22.2	24.2	26.7	27.2	25.7	25.8	27.6	25.3
Pounds of feeder cattle prod.		3529	5573	4308	5784	7013	7211	8593	7882	6770
Litters of pigs	13.5	17.3	19.4	19.7	22.0	18.4	24.3	34.3	34.1	39.1
Pounds of hogs produced	17579	28272	36619	36519	36039	35542	47090	56762	59433	68265
Number of hens	219	209	197	138	47	32	23	14	15	17
Pounds of butterfat per dairy	cow 308	342	375	417	457	453	461	457	462	474
Pigs weaned per litter	6.7	6.9	7.1	7.3	7.3	7.2	7.2	7.2	7.2	7.4
Number of head of ewes	7	5	4	3	2	2	2	2	2	1
Eggs per hen	194	203	205	201	187	197	198	168	181	200

^{*} Information not available.

Table 23. Summary of Miscellaneous Items by Years (continued)

Item	Average 1950 - 54	Average 1955 - 59	Average 1960-64	Average 1965 - 69	1970	1971	1972	1973	1974	1975
PRICE RECEIVED PER										
Pound of butterfat in milk	\$.90	\$.90	\$.94	\$ 1.15	\$ 1.36	\$ 1.40	\$ 1.43	\$ 1.73	\$ 2.06	\$ 2.07
Cwt. of milk	*	*	3.48	4.31	5.09	5 . 27	5.47	6.50	7.75	7.93
Cwt. of hogs	19.54	15.99	15.55	20.89	21.93	18.02	26.13	41.28	34.67	47.91
Cwt. of feeder cattle sold	26.22	21.19	22.61	24.02	27.44	28.57	33.48	43.58	38.02	37.80
Pound of wool sold	.58	.50	.62	.56	.45	.62	.86	1.08	.36	.24
Dozen of eggs sold	.37	.31	.28	.28	.29	.25	.25	.46	.47	.45
PRICE OF FEED										
Corn (per bu.)	\$ 1.31	\$ 1.11	\$.99	\$ 1.10	\$ 1.15	\$ 1.17	\$ 1.08	\$ 1.70	\$ 2.75	\$ 2.65
Barley (per bu.)	1.16	.92	.91	.97	.85	.90	.92	1.55	*	*
Oats (per bu.)	.74	.59	.61	.62	.60	.62	.65	.90	1.70	1.45
Oilmeal (per cwt.)	4.19	3.73	4.36	4.99	5.00	5.00	6.35	13.50	*	*
Alfalfa (per ton)	18.30	18.20	19.40	20.80	20.00	20.00	21.00	30.00	40.00	60.00
Timothy hay (per ton)	10.58	10.58	11.22	12.00	11.60	11.60	11.60	18.70	18.70	*
Corn silage (per ton)	6.01	6.08	6.60	7.36	7.25	7.25	7.25	10.00	14.00	20.00
ACRES PER FARM										
Small grains	48.5	36.1	34.5	30.4	28.0	25.8	23.4	24.3	29.2	29.4
Cultivated crops	65.2	90.9	103.6	132.4	152.3	170.3	175.7	215.3	223.8	249.9
Tillable land in hay	38.5	37.6	39.4	40.0	43.7	46.5	41.3	41.4	43.5	45.6
Tillable land in pasture	22.3	20.0	16.6	12.8	11.4	10.5	8.6	8.6	7.0	7.5
Tillable land not cropped**		1.9	14.4	22.0	22.8	22.4	37.7	8.2	.8	.8
Total tillable land	175.4	186.5	208.5	237.6	258.2	275.5	286.7	297.8	304.3	333.2
Non-tillable land	50.0	48.2	47.3	46.3	48.7	48.4	51.5	47.1	52.9	52.8
Total acres per farm	225.4	234.7	255.8	283.9	306.9	323.9	338.2	344.9	357.2	386.0
YIELD PER ACRE										
Corn (bu.)	59.8	73.1	72.4	86.8	96.7	96.2	101.1	109.3	77.6	90.1
Barley (bu.)	29.1	41.4	44.9	51.4	48.4	38.6	53.4	54.8	42.8	31.3
Oats (bu.)	32.8	58.3	58.3	62.4	55.6	61.4	66.6	61.0	63.5	62.4
Alfalfa (tons)	2.7	2.9	3.0	3.2	3.6	3.6	3.6	3.6	3.7	3.5
Soybeans (bu.)	19.6	24.8	23.6	24.4	29.5	25.7	30.9	33.0	23.1	28.1

^{*} Information not available.** Including feed grain program.