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Economic Information Report R 68-2
Department of Agricultural Economics Institute of Agriculture St. Paul, Minnesota 55101 June

Prepared by T. R. Nodland and Janet B. Otis*

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## INTRODUCTION

The Department of Agricultural Economics and the Agricultural Extension Service of the University of Minnesota, the Agricultural Research Service of the United States Department of Agriculture, and the county extension services of several southwestern Minnesota counties are cooperating with the Southwestern Minnesota Farm Management Association in maintaining a farm management service. The Association was organized in the fall of 1939 by farmers in that part of the state for the purpose of studying the farm business through farm records. Each farmer pays an annual fee which covers a part of the cost. The balance of the cost is defrayed by the University of Minnesota and the United States Department of Agriculture.

The analysis of the records and the preparation of the report are handled by the Department of Agricultural Economics under the direction of T. R. Nodland. Extension work in connection with this service is handled by Paul Hasbargen. Michael Lynch was the field agent for this project. At the end of the year, Carl

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Pherson, Herbert Walch and Walter Fishel of the Departiment of Agricultural Economics; Duane Wilson, District County Agent Supervisor; Paul Hasbargen, Charles Cuykendall, Richard Hawkins and Jerome Bambenik, Extension Specialists in Farm Management; Lawrence Christenson, Area Farm Management Agent, Waseca, Minnesota; David Johnson, County Agricultural Agent in Yellow Medicine County; and Ernest Johnson, County Agricultural Agent in Redwood County aided in closing the records.

The following tabulation shows by counties the number of records submitted, the officers of the Association, and the county agricultural extension agents who cooperated in 1967.

| County | No. of records | Association officers | County Agricultural Extension Agent |
| :---: | :---: | :---: | :---: |
| Cottonwood | 20 | John Regier, Director | Paul Sandager |
| Faribault | 22 | Leon Chirpich, Director <br> Bernard Stevermer, Director | Gene Williams |
| Jackson | 18 | Curtis Pietz, Vice-President Vernon Voss, Director | Ray Palmby |
| Martin | 9 | Willard Peters, Director | Floyd Bellin, Jr. |
| Murray | 21 | Malcolm McLean, Director <br> Arthur Foster, Secretary-Treasurer <br> Loren Richardson, Director | Reuben Boxrud |
| Nobles | 32 | Burton Larson, President Donald Gingerich, Director Henry J. Peterson, Director | Robert Koehler |
| Pipestone | 11 | Fred Schuld, Director | Kenneth Rose |
| Redwood | 24 | Harold Deal, Director Reinhardt Jenniges, Director | Ernest Johnson |
| Rock | 1 |  | Laverne B. Forest |
| Watonwan | 11 | Eldon Torkelson, Director | John Ankeny |
| Total | 169 |  |  |

The data for 144 farms are shown in the tables on succeeding pages. Twentyfive farms were omitted from all of the averages in the tables because the records were not sufficiently complete for a full analysis or the records were not returned for analysis 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, nevertheless, wide variations in the methods and practices followed by these men. It is reasonable to assume that similar variation occurs 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.

Table 1. Summary of Farm Inventories, 1967*

|  |  |  | Average of | 44 farms |
| :---: | :---: | :---: | :---: | :---: |
| Items |  |  | Jan. 1 | Dec. 31 |
| Size of farm (acres) |  |  | 400 |  |
| Size of business (work units)** |  |  | 449 |  |
| Dairy cows |  |  | \$ 1431 | \$ 1425 |
| Other dairy cattle |  |  | 888 | 872 |
| Beef cattle (incl. feeders) |  |  | 13688 | 14215 |
| Hogs |  |  | 3867 | 3525 |
| Sheep (incl. feeders) |  |  | 160 | 168 |
| Poultry (incl. turkeys) |  |  | 284 | 220 |
| Productive livestock total |  |  | \$20318 | \$20425 |
| Horses |  |  | 11 | 11 |
| Crop, seed and feed |  |  | 16478 | 16288 |
| Autos and trucks (farm share) |  |  | 1883 | 1979 |
| Tractors and crop machinery |  |  | 11684 | 13077 |
| Livestock equipment |  |  | $\underline{2169}$ | $\underline{2226}$ |
| Machinery and equipment total |  |  | \$15736 | \$17282 |
| Land |  |  | 66512 | 66512 |
| Buildings, fences, etc. |  |  | 17653 | 18178 |
| Total farm capital managed |  |  | \$136708 | \$138696 |
|  | 29 most | ofitable | 29 least | ofitable |
| Items | Jan. 1 | Dec. 31 | Jan. 1 | Dec. 31 |
| Size of farm (acres) | 511 |  | 346 |  |
| Size of business (work units)** | 571 |  | 334 |  |
| Dairy cows | \$ 1847 | \$ 1912 | \$ 618 | \$ 584 |
| Other dairy cattle | 962 | 989 | 467 | 386 |
| Beef cattle (incl. feeders) | 19907 | 23126 | 11375 | 8608 |
| Hogs | 4371 | 3491 | 2791 | 3025 |
| Sheep (incl. feeders) | 25 | 0 | 299 | 369 |
| Poultry (incl. turkeys) | 118 | 65 | 338 | 229 |
| Productive livestock total | \$27230 | \$29583 | \$15888 | \$13201 |
| Horses | 3 | 5 | 17 | 17 |
| Crop, seed and feed | 20545 | 22062 | 15337 | 13638 |
| Autos and trucks (farm share) | 1881 | 2118 | 1974 | 2122 |
| Tractors and crop machinery | 14178 | 15881 | 10009 | 11162 |
| Livestock equipment | 2447 | 2687 | 1178 | $\underline{1302}$ |
| Machinery and equipment total | \$18506 | \$20686 | \$13161 | \$14586 |
| Land | 93010 | 93010 | 57505 | 57505 |
| Buildings, fences, etc. | 19591 | 20577 | 15498 | 15659 |
| Total farm capital managed | \$178885 | \$185923 | \$1177406 | \$114606 |

* For the purpose of comparison, all 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 were included in the records from rented farms.
** See page 15 for an explanation of "work units."

Table 2. Summary of Farm Earnings (Cash Statement), 1967

| Items | Average of 144 farms | $\begin{gathered} 29 \text { most } \\ \text { profitable } \\ \text { farms } \\ \hline \end{gathered}$ | $\begin{gathered} 29 \text { least } \\ \text { profitable } \\ \text { farms } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| FARM RECEIPTS |  |  |  |
| Dairy cattle sold | \$ 774 | \$ 953 | \$ 558 |
| Dairy products sold | 3398 | 5317 | 857 |
| Beef cattle (incl. feeders) sold | 23989 | 40397 | 14820 |
| Hogs sold | 10724 | 13627 | 8114 |
| Sheep and wool (incl. feeders) sold | 158 | 23 | 298 |
| Horses sold |  | - |  |
| Poultry (incl. turkeys) sold | 366 | 1226 | 114 |
| Eggs sold | 863 | 324 | 905 |
| Corn sold | 6078 | 6683 | 82.42 |
| Soybeans sold | 5566 | 8639 | 4015 |
| Small grain sold | 504 | 491 | 326 |
| Other orops sold | 2026 | 3122 | 1403 |
| Machinery and equipment sold | 434 | 555 | 447 |
| Income from work off the farm | 784 | 837 | 495 |
| Miscellaneous farm income | 844 | 1424 | 564 |
| Total farm sales | \$56508 | \$83618 | \$41158 |
| Increase in farm capital | 1988 | 7038 | - |
| Family living from the farm | 289 | 323 | 277 |
| Total farm receipts | \$58785 | \$90979 | \$41435 |
| FARM EXPENSES |  |  |  |
| Dairy cattle bought | \$ 99 | \$ 109 | \$ 202 |
| Beef cattle bought (incl. feeders) | 12940 | 23649 | 5987 |
| Hogs bought | 801 | 670 | 1533 |
| Sheep bought (incl. feeders) | 50 | I | 104 |
| Horses bought | 2 | 2 | - |
| Poultry bought (incl. turkeys) | 234 | 256 | 168 |
| Miscellaneous livestock expense | 738 | 1015 | 457 |
| Feed bought | 7867 | 11444 | 5191 |
| Fertilizers bought | 3058 | 3943 | 2819 |
| Other crop expenses | 2720 | 4058 | 2435 |
| Custom work hired | 1284 | 1533 | 1205 |
| Gas, oil, and grease (farm share) | 1474 | 1751 | 1321 |
| Repair truck and auto (farm share) | 443 | 535 | 429 |
| Repair and upkeep of farm real estate | 420 | 379 | 406 |
| Repair \& upkeep of tractors \& crop machinery | 1311 | 1697 | 1188 |
| Repair \& upkeep of livestock equipment | 230 | 346 | 201 |
| Wages of hired labor | 1399 | 2174 | 782 |
| Electricity expense (farm share) | 333 | 363 | 302 |
| Personal property and real estate taxes | 2000 | 2577 | 1789 |
| Telephone and general farm expense | 581 | 673 | 519 |
| Total cash operating expense | \$37984 | \$57175 | \$27038 |
| Trucks and autos bought (farm share) | 549 | 748 | 550 |
| Crop and power machinery bought | 3628 | 4487 | 3313 |
| Livestock equipment bought | 480 | 654 | 440 |
| New real estate and improvements | 1949 | 2737 | 1469 |
| Total farm purchases | \$44590 | \$65801 | \$32810 |
| Decrease in farm capital | - | - | 2800 |
| Interest on farm capital @ 5.5 percent | 7574 | 10032 | 6380 |
| Unpaid family labor | 699 | 1094 | 400 |
| Board furnished hired labor | 69 | 93 | 47 |
| Total farm expenses | \$52932 | \$77020 | \$42437 |
| Labor earnings | 5853 | 13959 | -1002 |

Table 3. Sumary of Farm Earnings (Enterprise Statement), 1967*

| Items | Average of 144 farms | $\begin{gathered} 29 \text { most } \\ \text { profitable } \\ \text { farms } \end{gathered}$ | $\begin{gathered} 29 \text { least } \\ \text { profitable } \\ \text { farms } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| RETURNS AND NET INCREASES |  |  |  |
| Dairy cows | \$3457 | \$5417 | \$ 884 |
| Other dairy cattle | 828 | 1243 | 397 |
| Beef breeding herd | 477 | 197 | 667 |
| Feeder cattle | 11118 | 19670 | 5428 |
| Hogs | 9626 | 12133 | 6853 |
| Sheep - farm flock | 115 | -3 | 265 |
| Sheep - feeders | - | - | - |
| Chickens | 730 | 263 | 702 |
| Turkeys | 217 | 987 | 80 |
| All productive livestock | \$26568 | \$39907 | \$15276 |
| Value of feed fed to livestock | 18021 | 25342 | 12482 |
| Return over feed from livestock | \$8547 | \$14565 | \$2794 |
| Crops, seed and feed | 18335 | 26300 | 14314 |
| Income from labor off the farm | 398 | 385 | 222 |
| Miscellaneous farm income | 844 | 1424 | 564 |
| Total returns and net increases | \$28124 | \$42674 | \$17894 |
| EXPENSES AND NET DECREASES |  |  |  |
| Horses | \$ 3 | \$ - | \$ 4 |
| Truck | 438 | 528 | 395 |
| Auto (farm share) | 703 | 818 | 677 |
| Electricity (farm share) | 333 | 363 | 302 |
| Hired power | 887 | 1021 | 858 |
| Tractors and crop machinery | 3989 | 4975 | 3746 |
| Livestock equipment | 631 | 752 | 483 |
| Building, fencing and tiling | 1830 | 2088 | 1710 |
| Miscellaneous productive livestock expense | 737 | 1015 | 458 |
| Labor | 2565 | 3873 | 1575 |
| Real estate taxes | 1687 | 2166 | 1544 |
| Personal property tax | 313 | 411 | 245 |
| General farm expense and telephone | 581 | 673 | 519 |
| Interest on farm capital @ 5.5 percent | 7574 | 10032 | $\underline{6380}$ |
| Total expenses and net decreases | \$22271 | \$28715 | 䨖8896 |
| Labor earnings | \$ 5853 | \$13959 | \$-1002 |

[^1]Table 4. Net Worth Statement for Those Farmers Who Kept a Complete Record of All Assets and Liabilities (Operator's Share), 1967

| Items | 21 Owners |  |
| :---: | :---: | :---: |
|  | Jan. 1 | Dec. 31 |
| Total acres in farm | 300 |  |
| Owned | 300 |  |
| Rented | - |  |
| Total farm capital - operator's | \$99056 | \$101183 |
| Stocks and bonds | 1251 | 1642 |
| Life insurance cash value | 3535 | 3838 |
| Notes and accounts receivable | 2004 | 2046 |
| Shares in cooperative organizations | 2396 | 2529 |
| Outside real estate | 2657 | 3390 |
| Cash on hand and in bank | 4775 | 3688 |
| Household furnishings and clothing | 4184 | 4409 |
| Personal share of auto and truck | 737 | 845 |
| Farm dwelling | 7251 | 7166 |
| Total non-farm assets - operator's | \$28790 | \$29553 |
| Total assets - operator's | \$127846 | \$130736 |
| Mortgages on farm operated | 26482 | 25383 |
| Mortgages on other real estate | 786 | - |
| Chattel mortgages | 13059 | 16522 |
| Notes payable | 4246 | 3583 |
| Accounts payable | 211 | 241 |
| Total liabilities - operator's | \$44784 | \$45729 |
| Farmer's net worth | \$83062 | \$85007 |
| Change in net worth |  | \$+1945 |


| Items | 47 part-owners |  | 16 renters |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Jan. 1 | Dec. 31 | Jan. 1 | Dec. 31 |
| Total acres in farm | 432 |  | 408 |  |
| Owned | 226 |  | - |  |
| Rented | 206 |  | 408 |  |
| Total farm capital - operator's | \$105068 | \$114838 | \$ 42009 | \$ 41884 |
| Stocks and bonds | 2318 | 2516 | 484 | 560 |
| Life insurance cash value | 3723 | 3887 | 2225 | 2396 |
| Notes and accounts receivable | 2009 | 1941 | 3197 | 3628 |
| Shares in cooperative organizations | 1789 | 2182 | 500 | 550 |
| Outside real estate | 1974 | 4977 | 5312 | 5312 |
| Cash on hand and in bank | 2492 | 2937 | 2146 | 3011 |
| Household furnishings and clothing | 3226 | 3417 | 2916 | 3010 |
| Personal share of auto | 859 | 887 | 582 | 876 |
| Farm dwelling | 8171 | 8197 | - | - |
| Total non-farm assets - operator's | \$26561 | \$30941 | \$ 17362 | \$19343 |
| Total assets - operator's | \$131629 | \$145779 | \$ 59371 | \$ 61227 |
| Mortgages on farm operated | 23896 | 28845 | - | - |
| Mortgages on other real estate | 65 | 1961 | 875 | 856 |
| Chattel mortgages | 17522 | 20720 | 13343 | 13605 |
| Notes payable | 7284 | 8524 | 7299 | 6972 |
| Accounts payable | 708 | 803 | 2559 | 2561 |
| Total liabilities - operator's | \$49475 | \$60853 | \$24076 | \$23994 |
| Farmer's net worth | \$82154 | \$ 84926 | \$ 35295 | \$ 37233 |
| Change in net worth |  | \$ +2772 |  | \$ +1938 |

Table 5. Summary of Farm Earnings by Tenure (Operator's Share), 1967

| Items | $\begin{gathered} 38 \\ \text { Owners } \end{gathered}$ | 73 Part owners | $\begin{aligned} & 25 \\ & \text { Renters } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| FARM RECEIPTS |  |  |  |
| Dairy cattle sold | \$ 572 | \$ 819 | \$922 |
| Dairy products sold | 2815 | 3451 | 4089 |
| Beef cattle sold (incl. feeders) | 20029 | 24881 | 13826 |
| Hogs sold | 9192 | 10907 | 8078 |
| Sheep and wool sold (incl. feeders) | 207 | 79 | 246 |
| Horses sold | - | - |  |
| Poultry sold (incl. turkeys) | 1255 | 49 | 51 |
| Eges sold | 1398 | 822 | 396 |
| Corn sold | 4376 | 5093 | 2550 |
| Soybeans sold | 4135 | 5272 | 3035 |
| Small grain sold | 431 | 396 | 305 |
| Other crops sold | 1694 | 1979 | 1359 |
| Machinery and equipment sold | 444 | 455 | 334 |
| Income from work off the farm | 694 | 830 | 502 |
| Miscellaneous | 831 | 953 | 410 |
| (1.) Total farm sales | \$48123 | \$55986 | \$36103 |
| (2) Increase in farm capital | 4466 | 10584 | 2076 |
| (3) Family living from the farm | 246 | 304 | 299 |
| (4) Total farm receipts (1)+(2)+(3) | \$52835 | \$66874 | \$38478 |
| FARM EXPENSES |  |  |  |
| Dairy cattle bought | \$ 5 | \$ 120 | \$ 179 |
| Beef cattle bought (incl. feeders) | 10335 | 13778 | 7380 |
| Hogs bought | 435 | 979 | 972 |
| Sheep bought (incl. feeders) | 19 | 32 | 100 |
| Horses bought | - | 3 | 68 |
| Poultry bought (incl. turkeys) | 391 | 230 | 68 |
| Miscellaneous livestock expense | 645 | 738 | 693 |
| Feed bought | 8098 | 7768 | 5264 |
| Fertilizers bought | 2383 | 3104 | 1660 |
| Other crop expenses | 2039 | 2865 | 1921 |
| Custom work hired | 1252 | 1318 | 970 |
| Gas, oil and grease bought (farm share) | 1308 | 1512 | 1318 |
| Repair and upkeep of power and crop machinery | 1432 | 1870 | 1487 |
| Repair and upkeep of real estate | 446 | 448 | 165 |
| Repair and upkeep of livestock equipment | 154 | 250 | 160 |
| Wages of hired labor | 1234 | 1435 | 1144 |
| Electricity expense (farm share) | 326 | 330 | 262 |
| Real estate and personal property taxes | 1681 | 1293 | 238 |
| Cash rent | 1. | 1275 | 1662 |
| General farm expense | 589 | 617 | 395 |
| Interest paid. | 2748 | 2634 | 1270 |
| Total cash operating expense | \$35521 | \$42579 | \$27308 |
| Trucks and autos bought (farm share) | 455 | 519 | 625 |
| Tractors and crop machinery bought | 2370 | 4731 | 3281 |
| Livestock equipment bought | 295 | 636 | 354 |
| Farm purchase and real estate improvements | 6511 | 9561 | $\underline{96}$ |
| (5) Total farm purchases | \$45152 | \$57426 | \$31664 |
| (6) Decrease in farm capital | - | 5156 | 1708 |
| (7) Interest on operator's farm capital | 3039 | 3156 | 1108 |
| (8) Unpaid family labor | 198 | 305 | 237 |
| (9) Board furnished hired labor | 51 | 54 | 92 |
| (10) Total farm expense (5)+(6)+(7)+(8)+(9) | \$48440 | \$60947 | \$33101 |
| (11) Labor earnings (4)-(10) | \$ 4395 | \$ 5933 | \$ 5377 |
| (12) Ret. to capital \& family labor (7)+(8)+(11) | \$ 7632 | \$ 9394 | \$ 6722 |

Table 6. Household and Personal Expenses for Those Farms Which Kept Complete Accounts of These Expenses, 1967

| Items | $\begin{gathered} \text { Average } \\ \text { of } 76 \\ \text { farms } \\ \hline \end{gathered}$ | 15 high in return to cap. and fam. labor | 15 low in return to cap. and fam. labor |
| :---: | :---: | :---: | :---: |
| Number of persons - family | 4.8 | 5.6 | 4.0 |
| $\begin{aligned} & \text { Number of adult equivalents } \text { - family } \\ & \text { - other* }\end{aligned}$ | $4.0$ | $\begin{array}{r} 4.8 \\ .2 \end{array}$ | $\begin{array}{r} 3.2 \\ .1 \end{array}$ |

EXPENSES

| Food and meals bought | \$1291 | \$1308 | \$1162 |
| :---: | :---: | :---: | :---: |
| Operating and supplies | 435 | 492 | 419 |
| Furnishings and equipment | 464 | 443 | 385 |
| Clothing and clothing materials | 550 | 598 | 498 |
| Personal care and spending | 174 | 138 | 127 |
| Education | 209 | 290 | 198 |
| Recreation | 211 | 192 | 148 |
| Gifts and special events | 174 | 175 | 164 |
| Medical and hospital insurance | 565 | 700 | 619 |
| Church and welfare | 388 | 501 | 392 |
| Personal share of auto expense | 290 | 314 | 256 |
| Upkeep on dwelling | 53 | 46 | 62 |
| Pers. share of tel. \& elec. expense | 139 | 155 | 138 |
| Total cash living expense | \$4943 | \$5352 | \$4568 |
| Personal share of new autos | 241 | 365 | 131 |
| New dwelling | 286 | 631 | 92 |
| Taxes | 875 | 1493 | 519 |
| Life insurance | 729 | 869 | 515 |
| Other savings and investments | 405 | 1053 | 21 |
| Total household \& pers. cash exp. | \$7479 | \$9763 | \$5846 |
| Family living from the farm | 318 | 358 | 319 |
| Total cash expense \& perquisites | \$7797 | \$10121 | \$6165 |
| RECEIPTS |  |  |  |
| Return to capital and family labor | \$8445 | \$17135 | \$1432 |
| Income from outside investments | 291 | 743 | 415 |
| Other personal income | 1176 | 918 | 1380 |

* Hired help or others boarded.

Table 7. Family Living from the Farm, 1967

| Items | $\begin{aligned} & \text { Average } \\ & \text { of } 144 \\ & \text { farms } \end{aligned}$ | Average of 144 farms |
| :---: | :---: | :---: |
| Number of adult equivalents - family $\begin{aligned} & \text { other* }\end{aligned}$ | $4.0$ |  |
| Whole milk | 434 qts. | \$ 33 |
| Cream | 3 pts. | 1 |
| Cattle | 347 Ibs. | 192 |
| Hogs | 254 lbs. | 46 |
| Sheep | 3 Ibs. | - |
| Poultry | 50 lbs . | 9 |
| Eggs | 34 doz. | 8 |
|  |  | \$289 |

* Hired help or others boarded.

CUMULATIVE EFFECT OF EXCELIING 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 accomplishments per worker, and (7) control of expenses. The combined or cumulative influence of these seven managenent factors on earnings is shown in Table 8. The farmer's earnings are detemined 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 | Number |  | The length of the shaded lines | Average |
| which farmer | of | Your | is in proportion to the average | labor |
| excels | farms | farm | operator's labor earnings | earnings |
| None or 1 | 22 |  | XXXXXXX | \$2118 |
| 2 | 27 |  | X $\mathrm{Xx} \times \mathrm{XXXXXXXXXXX}$ | 3913 |
| 3 | 33 |  | XXXXXXXXXXXXXXXXXXXX | 5743 |
| 4 | 26 |  | XXXXXXXXXXXXXXXXXXXXXXX | 6705 |
| 5 | 23 |  | XxXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | 9077 |
| 6 or 7 | 13 |  | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | 9073 |

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.

1. Nodland, T. R., and G. A. Pond, "Some Factors Affecting the Earnings of Farmers in Southwestern Minnesota." University of Minnesota Department of Agricultural Economics, Report No. 219, November 1954.

Table 9. Measures of Farm Organization and Management Efficiency, 1967
$\left.\begin{array}{lrcc}\hline \text { Measures used in chart on page 11 } & & \begin{array}{c}\text { Average } \\ \text { of } \\ \text { farms }\end{array} & \begin{array}{c}\text { 29 most } \\ \text { profit- } \\ \text { able } \\ \text { farms }\end{array}\end{array} \begin{array}{c}\text { 29 least } \\ \text { profit- } \\ \text { able } \\ \text { farms }\end{array}\right]$

* Given as a percentage of the average.
** Crops are marked in Table 10 as A, B, C, and D. All of the acres in A crops, one-half of the acres in B crops, and one-fourth of the 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 averages for the 144 farms included in this sumary are located between the dotted lines across the center of this page.


Table 10. Distribution of Acres in Farm, 1967

| Items | $\begin{aligned} & \text { Crop } \\ & \text { ratings* } \\ & \hline \end{aligned}$ | Number growing this orop | Average of 144 farms | ```Ave per farm raising each crop``` |
| :---: | :---: | :---: | :---: | :---: |
| Canning peas | B | 3 | . 6 | 26.0 |
| Wheat | C | 5 | . 4 | 12.0 |
| Oats for silage | C | 18 | 1.9 | 15.0 |
| Oats for grain | D | 96 | 18.0 | 27.0 |
| Flax | C | 7 | 2.2 | 46.1 |
| Other small grain | D | 3 | 1.1 | 56.7 |
| Total small grain and peas |  | 106 | 24.2 | 33.0 |
| Corn grain | A | 144 | 165.1 | 165.1 |
| Soybeans for grain | B | 129 | 83.4 | 93.2 |
| Sweet corn | B | 6 | 1.3 | 30.7 |
| Corn silage | B | 88 | 17.8 | 29.0 |
| Other cultivated crops Total cultivated crops | D | 144 | $\overline{267 . \overline{6}}$ | $267 . \overline{6}$ |
| Alfalfa hay | B | 129 | 26.0 | 29.1 |
| Other legume hay | C | 2 | . 3 | 18.5 |
| Other tame hay | D | 2 | . 4 | 26.5 |
| Annual hay | D | 6 | . 7 | 16.3 |
| Total tillable land in hay |  | 129 | $\overline{27.4}$ | 30.5 |
| Alfalfa pasture | B | 35 | 2.9 | 11.8 |
|  | D | 21 | 1.1 | 7.6 |
| Total tillable land in pasture |  | 50 | 4.0 | 11.4 |
| Feed grain program (diverted acres) | B | 92 | 25.1 | 39.3 |
| Tillable land not cropped | D | 11 | 1.6 | 21.3 |
| Total tillable land |  | 144 | $\overline{349.9}$ | 349.9 |
| Wild hay |  | 38 | 2.2 |  |
| Non-tillable pasture |  | 71 | 19.4 |  |
| Timber not pastured. |  | 11 | . 6 |  |
| Roads and waste |  |  | 16.8 |  |
| Farmstead |  |  | 10.6 |  |
| Total acres in farm |  |  | 399.5 |  |
| Percent land tillable |  |  | 88.0 |  |
| Percent tillable land in high return crops |  |  | 70.0 |  |

* A, B, C and D refer to ranking used in calculating percent of tillable land in high return crops.

Table 11. Crop Yields per Acre, 1967

| Items | Average of farms <br> growing each crop |
| :--- | ---: |
| Canning peas, dollars | $\$ 56.89$ |
| Wheat, bu. | 42.9 |
| Oats for silage, tons | 5.7 |
| Oats for grain, bu。 | 61.3 |
| Flax, bu, | 19.3 |
| Corn grain, bu. | 81.2 |
| Soybeans, bu, | 23.7 |
| Sweet corn, tons | 5.1 |
| Corn silage, tons | 12.3 |
| Alfalfa hay, tons | 3.0 |
| Other legume hay, tons | 2.1 |
| Annual hay, tons | 2.7 |
| Feed grain program, dollars | $\$ 55.55$ |
| Wild hay, tons | 1.04 |

Table 12. Average Price of Feeds, 1967

| Items | Value | Items | Value |
| :--- | ---: | :--- | ---: |
| Ear corn, per bu. | $\$ 1.12$ | Alfalfa hay, per ton | $\$ 20.00$ |
| Oats, per bu. | .64 | Timothy hay, per ton | 11.60 |
| Barley, per bu. | 1.04 | Wild hay, per ton | 10.00 |
| Wheat, per bu. | 1.62 | Corn silage, per ton | 7.25 |
| Soybean meal, per cwt. | 5.00 | Pasture, per mo. per cow | 4.00 |

Table 13. Return Above Listed Costs per Acre of Crops

| Items | $\begin{aligned} & \hline \text { Corn } \\ & \text { grain } \end{aligned}$ | $\begin{gathered} \text { Corn } \\ \text { silage } \\ \hline \end{gathered}$ | $\begin{array}{r} \text { Soy- } \\ \text { beans } \end{array}$ |
| :---: | :---: | :---: | :---: |
| Number of farms reporting | 59 | 24 | 51 |
| Yield per acre | 81.2 bu. | 11.8 tons | 23.7 bu. |
| Price per unit | \$1.00 | \$7.50 | \$2.50 |
| Total return | \$81.17 | \$88.72 | \$59.41 |
| Fertilizer | 14.36 | 12.34 | 1.07 |
| Seeds, herbicides, etc. | 9.66 | 8.60 | 6.45 |
| Total listed costs | \$24.02 | \$20.94 | \$7.52 |
| Return above listed costs | \$57.15 | \$67.78 | \$51.89 |
| Items | Alfalfa hay | Oats |  |
| Number of farms reporting | 46 | 35 |  |
| Yield per acre | 3.0 tons | 59.2 bu. |  |
| Price per unit | \$21.00 | \$. 63 |  |
| Total return | \$60.87 | \$37.28 |  |
| Fertilizer | \$4.71 | \$ 1.62 |  |
| Seeds, herbicides, etc. | 4.87 | - 3.45 |  |
| Total listed costs | 冓9.58 | \$5.07 |  |
| Return above listed costs | \$51.29 | \$32.21 |  |

## EXPIANATION OF "NORK UNITS" AND "ANIMAL UNITS"

The total "work unitsp 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 | 1.5 per head | Sugar beets | 1.5 per acre |
| Beef breeding herd | 1.5 per cow | Sweet corn | - ? per acre |
| Feeder cattle | .12 per 100 lbs . | Corn husked | . 6 per acre |
| Sheep - farm flock | . 6 per ewe | Corn silage | 1.0 per a.cre |
| Sheep - feeder | .3 per 100 lbs . | Corn fodder | 1.0 per acre |
| Hogs | . 12 per 100 lbs . | Alfalfa hay | . 6 per acre |
| Turkeys | . 1 per 100 lbs . | Soybean hay | .6 per acre |
| Hens : | 10.0 per 100 hens | Other hay crops | .4 per acre |
| Canning peas | . 5 per acre | Labor off the farm | 1.0 per \$15 |
| Soybeans for grain | .5 per acre |  |  |

An animal unit represents one dairy cow or bull, two other dairy cattle, $11 / 4$ beef cows or bulls, 1 feeder steer or heifer, $31 / 3$ other beef cattle, 7 sheep, 14 lembs, $21 / 2$ hogs, 5 pigs, 50 hens, or 1100 pounds of turkeys produced.

Table 15. Factors of Costs and Returns from Dairy Cows, 1967

| Items | Average of 30 farms | 15 farms highest in butterfat per cow | 15 farms lowest in butterfat per cow |
| :---: | :---: | :---: | :---: |
| Pounds of milk per cow | 11116 | 12201 | 10032 |
| Percent of butterfat in milk | 3.6 | 3.6 | 3.6 |
| Pounds of butterfat per cow | 397 | 433 | 361 |
| Price received per pound of butterfat sold | \$1.21 | \$1. 24 | \$1.18 |
| Price received per cowt. of milk sold | 4.34 | 4.42 | 4.27 |
| Value of produce per cow: |  |  |  |
| Dairy product sales | \$ 470.66 | \$528.23 | \$413.11 |
| Dairy produce used in home | 5.97 | 4.03 | 7.90 |
| Milk fed to livestock | 4.12 | 4.79 | 3.44 |
| Net increase in talue of cows | -. 38 | -. 20 | -. 57 |
| TOTAL VALUE PRODJCED | \$ 7480.37 | \$536.85 | \$423.88 |
| Feed cost per cow: |  |  |  |
| Concentrates | \$128.97 | \$129.99 | \$127.95 |
| Roughages | 99.56 | 104.77 | 94.35 |
| Pasture | 6.31 | 6.67 | 5.94 |
| TOTAL FEED COST | \$234.84 | \$241.43 | \$228.24 |
| RETURNS ABOVE FEED COST PER COW | \$245.53 | \$295.42 | \$195.64 |
| RETURNS FOR \$100 OF FEED | \$212 | \$231 | \$193 |
| Feeds per cow, lbs.: |  |  |  |
| Corn | 4051 | 4267 | 3835 |
| Small grain | 449 | 389 | 509 |
| Comnercial feeds | 676 | 556 | 795 |
| Total concentrates | 5176 | 5212 | 5139 |
| Total hay | 5983 | 6642 | 5323 |
| Silage | 11332 | 11076 | 11587 |
| Feed cost per pound of butterfat | \$ 0.59 | \$. 56 | \$ . 63 |
| Feed cost per cwt. of milk produced | 2.11 | 1.98 | 2.28 |
| Number of cows* | 32.3 | 36.5 | 28.1 |

* 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. There is some variation in the number of months of dry period per cow; however, this variation is small for the majority of farms.

Table 16. Feed Costs and Returns from Other Dairy Cattle, 1967

| Items | Average <br> of 30 <br> farms | 15 farms highest in butterfat per cow | 15 farms lowest in butterfat per cow |
| :---: | :---: | :---: | :---: |
| NET INCREASE IN VALUE OF OTHER DAIRY CATTLE | \$99.99 | \$ 210.65 | \$89.32 |
| TOTAL FEED COST PER HEAD | \$58.94 | \$65.04 | \$52.83 |
| RETURNS ABOVE FEED COST PER HEAD | \$41.05 | \$45.61 | 36.49 |
| RETURNS FOR \$100 OF FEED | \$170 | \$170 | \$170 |
| Feed per head, Ibs.: |  |  |  |
| Concentrates | 912 | 882 | 941 |
| Hay | 1886 | 2184 | 1588 |
| Silage | 3362 | 4000 | 2725 |
| Thole milk | 90 | 118 | 62 |
| Number of head of other dairy | 39.8 | 46.4 | 33.3 |

Table 17. Feed Costs and Returns from All Dairy Cattle, 1967

| Items | Average <br> of 30 <br> farms | 15 farms highest in butterfat per cow | 15 farms lowest in butterfat per cow |
| :---: | :---: | :---: | :---: |
| Value of produce per cow: |  |  |  |
| Dairy products | \$476.63 | \$532.25 | \$421.01 |
| Net increase in value of dairy cattle | 128.27 | 146.22 | 110.33 |
| TOTAL VALUE PRODUCED | \$604.90 | \$678.47 | \$531.34 |
| TOTAL FEED COST PER CON | \$308.74 | \$324.53 | \$292.95 |
| RETURNS ABOVE FEED COST PER COW | \$296.16 | \$353.94 | \$233.39 |
| RETURNS PER \$ 100 OF FEED | \$203 | \$216 | \$191 |
| Feed per cow, lbs.: |  |  |  |
| Concentrates | 6352 | 6376 | 6327 |
| Hay | 8512 | 9622 | 7401 |
| Silage | 15958 | 16841 | 15075 |
| Miscellaneous expenses per cow | \$28.71 | \$30.27 | \$26.19 |

Table 18. Feed Costs and Returns from Hogs, 1967

| Items | 92 farms with breeding stock |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average of 106 farms | Average of 92 <br> farms | 18 farms highest in returns above feed | 18 farms <br> lowest in returns above feed | ```14 farms with purchased feeder pigs``` |
| Pounds of hogs produced | 73324 | 75888 | 65171 | 53186 | 56477 |
| NET INCREASE IN VALUE PER CWT. PRODUCED | \$17.90 | \$18.40 | \$21.04 | \$16.47 | \$14.61 |
| FEED COST PER CWT. PRODUCED | 12.49 | 12.29 | 11.06 | 14.46 | 13.76 |
| RETURN ABOVE FEED COST PER CTVT. PRODUCED | \$ 5.41 | \$6.11 | \$ 9.98 | \$2.01 | \$ . 85 |
| RETURNS FOR \$ 100 OF FEED | \$149 | \$154 | \$194 | \$115 | \$117 |
| Price received per cwt. sold | \$19.27 | \$19.04 | \$20.04 | \$18.26 | \$19.07 |
| Weight per hog sold | 239 | 241 | 232 | 242 | 225 |
| Miscellaneous costs per cwt. produced | \$. 57 | \$. 59 | \$ .76 | \$ $\cdot 37$ | \$. 30 |
| Feed per cwt. hogs produced, lbs.: Corn | 306 | 298 | 288 | 378 | 357 |
| Small grain | 31 | 34 | 28 | 49 | 15 |
| Commercial feeds | 104 | 103 | 69 | 112 | 109 |
| Total concentrates | 441 | 435 | 385 | 539 | 481 |
| Total number of litters raised | 37 | 42 | 39 | 29 | 0 |
| Number of pigs born per litter | 9.0 | 9.0 | 9.3 | 9.1 | - |
| Number of pigs weaned per litter | 7.5 | 7.5 | 7.8 | 7.5 | - |
| Number of feeder pigs bought | 48 | 6 | 7 | - | 323 |
| Total weight of feeders purchased | 2094 | 237 | 259 | - | 14416 |
| Price paid per feeder pig | \$15.97 | \$14.93 | \$15.66 | - | \$16.74 |

Table 19. Feed Costs and Returns from Beef Breeding Herd, 1967

|  | Average <br> of 17 <br> farms |
| :--- | ---: |
| Items | $\$ 109.97$ |
| TOTAL VALUE PRODUCED PER COW |  |
| Feed cost per cow: <br> Concentrates <br> Roughages <br> Pasture <br> TOTAL FEED COST | $\$ 9.48$ |
| RETURNS ABOVE FEED COST PER COW | 39.28 |
| RETURNS FOR \$100 OF FEED | $\mathbf{2 7 . 9 3}$ |
| Miscellaneous costs per cow | $\$ 76.69$ |
| Feed per cow, lbs.: | $\$ 33.28$ |
| Concentrates |  |
| Hay |  |
| Silage | $\$ 154$ |
| Pounds of beef produced | $\$ 6.46$ |
| Number of cows | 334 |
| Number of other beef cattle | 2244 |

Table 20. Feed Costs and Returns from Feeder Cattle, 1967

| Items | Average of 96 farms |
| :---: | :---: |
| Pounds of beef produced | 70757 |
| NET INCREASE IN VALJE OF FEEDERS | \$23.49 |
| Feed cost per cwt. of beef produced: |  |
| Concentrates | \$13.75 |
| Roughages | 4.62 |
| Pasture | . 25 |
| TOTAL FEED COSTS | \$18.62 |
| RETURNS ABOVE FEED COST PER CWT. BEEF PRODUCED | \$4.87 |
| RETURNS FOR \$100 OF FEED | \$134 |
| Miscellaneous costs per cwt. of beef produced | \$. 50 |
| Feeds per cut. beef produced, lbs.: |  |
| Corn | 557 |
| Small grain | 7 |
| Commercial feeds | 42 |
| Total concentrates | 606 |
| Total hay | 253 |
| Silage | 595 |
| Price paid per cwt. for beef bought | \$26.46 |
| Price received for feeder cattle sold | 24.67 |
| Number of animal units | 108.6 |

Table 21. Feed Costs and Returns from a Farm Flock of Sheep, 1967

| Items | Average of 15 <br> farms |
| :---: | :---: |
| Value of produce per ewe: |  |
| Wool | \$ 5.20 |
| Net increase in value of sheep | $\underline{17.58}$ |
| TOTAL VALUE PRODUCED | \$22.78 |
| Feed cost per ewe: |  |
| Concentrates | \$ 5.77 |
| Roughages | 7.35 |
| Pasture | 3.17 |
| TOTAL FEED COSTS | \$16.29 |
| RETURNS ABOVE FEED COST PER EWE | \$ 6.49 |
| RETURNS FOR \$100 OF FEED | \$ 151 |
| Miscellaneous expenses per ewe | \$ . 82 |
| Feeds per ewe, lbs.: |  |
| Concentrates | 202 |
| Hay | 673 |
| Silage | 172 |
| Price per cwt. of lambs sold | \$22.53 |
| Price per pound of wool sold | \$. 44 |
| Pounds of wool per sheep sheared | 9.5 |
| Percent lamb crop* | 103 |
| Percent death loss* | 5.9 |
| Pounds of sheep produced | 4658 |
| Number of head of ewes | 46 |

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

Table 22. Feed Costs and Returns from Chickens, 1967*

|  | Average <br> of 24 <br> farms |
| :--- | ---: |
| Items |  |
| Value of produce per hen: <br> Eggs sold and used in home <br> Net increase in value of chickens <br> TOTAL VALUE PRODUCED | $\$ 4.04$ |
| TOTAL FEED COST PER HEN | $\mathbf{- . 7 1}$ |
| RETURNS ABOVE FEED COST PER HEN | $\$ 3.33$ |
| RETURNS FOR \$l00 OF FEED | $\$ 3.38$ |
| Miscellaneous expenses per hen | $\$-.05$ |
| Feed per hen, lbs.: | $\$ 103$ |
| Grain | $\$ .11$ |
| Commercial feed |  |
| Total concentrates | 67 |
| Price received per dozen eggs sold | 36 |
| Eggs laid per hen | 103 |
| Feed costs per dozen eggs produced | $\$ .22$ |
| Average number of hens on farm during the year | 217 |
| Percent death loss of hens | $\$ .19$ |
| Number of chicks bought | 1156 |
| Number of hens bought | 6.7 |

Table 23. Summary by Years

| Items | Average 1940-44 | Average 1945-49 | Average 1950-54 | Average $1955-59$ | $\begin{aligned} & \text { Average } \\ & 1960.64 \end{aligned}$ | 1965 | 1966 | 1967 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of farms | 165 | 140 | 138 | 135 | 135 | 156 | 153 | 144 |
| Total farm capital managed | \$36133 | \$40590 | \$57692 | \$75246 | \$99907 | \$118992 | \$122684 | \$137702 |
| Monthly charge for: |  |  |  |  |  |  |  |  |
| Unpaid family labor* | 63 | 118 | 130 | 134 | 147 | 160 | 160 | 160 |
| Second operator | 63 | 118 | 130 | 134 | 167 | 275 | 300 | 300 |
| Board for hired labor | 23 | 33 | 36 | 38 | 40 | 45 | 45 | 45 |
| FARM EXPENSES |  |  |  |  |  |  |  |  |
| Dairy cattle bought | \$ 120 | \$ 175 | \$ 215 | \$ 151 | \$ 146 | \$ 145 | \$ 135 | \$ 99 |
| Beef cattle bought | 1405 | 2027 | 4097 | 7619 | 11153 | 10975 | 12295 | 12940 |
| Hogs bought | 275 | 447 | 448 | 473 | 723 | 738 | 827 | 801 |
| Sheep bought (incl. feeders) | 596 | 365 | 599 | 517 | 69 | 27 | 16 | 50 |
| Poultry bought (incl. turkeys) | 140 | 165 | 190 | 225 | 244 | 238 | 186 | 234 |
| Horses bought | 39 | 11 | 6 | 5 | 3 | 6 | 2 | 2 |
| Miscellaneous livestock expense | 140 | 248 | 378 | 525 | 592 | 644 | 660 | 738 |
| Fertilizer |  |  |  | 906 | 1223 | 1945 | 2311 | 3058 |
| Miscellaneous crop expenses | 402** | 869** | 1234** | 908 | 1184 | 1782 | 1988 | 2720 |
| Feed bought | 2041 | 3191 | 4323 | 5503 | 7225 | 8191 | 9588 | 7867 |
| Custorn work hired | 193 | 356 | 438 | 694 | 874 | 1041 | 1050 | 1284 |
| Power and crop machinery (new) | 655 | 1669 | 1864 | 1891 | 2057 | 3881 | 4151 | 4177 |
| Power and crop machinery (upkeep) | 675 | 1365 | 1735 | 2200 | 2718 | 3164 | 3279 | 3561 |
| Livestock equipment (new) | 112 | 99 | 164 | 327 | 415 | 505 | 565 | 480 |
| Livestock equipment (upkeep) | 55 | 111 | 135 | 194 | 207 | 235 | 252 | 230 |
| Buildings and fencing (new) | 341 | 676 | 881 | 832 | 1018 | 1172 | 1353 | 1949 |
| Buildings and fencing (upkeep) | 149 | 319 | 312 | 320 | 338 | 377 | 425 | 420 |
| Hired labor | 593 | 794 | 883 | 993 | 1092 | 1175 | 1223 | 1399 |
| Taxes | 330 | 403 | 622 | 910 | 1449 | 1843 | 1841 | 2000 |
| General farm expense | 98 | 174 | 260 | 364 | 430 | 517 | 518 | 581 |
| Total farm purchases | \$8359 | \$13464 | \$18784 | \$25557 | \$33160 | \$38601 | \$42665 | \$44590 |
| Decrease in farm capital | 6 | - | 5 | 62 | 4097 | 5 | 673 | 757 |
| Interest on farm capital | 1806 | 2030 | 2885 | 3762 | 4991 | 5950 | 6134 | 7574 |
| Unpaid family labor | 310 | 377 | 358 | 379 | 500 | 702 | 657 | 699 |
| Board furnished hired labor | 142 | 107 | 91 | 92 | 82 | 89 | 72 | 69 |
| Total farm expense | \$10617 | \$15978 | \$22118 | \$29790 | \$38733 | \$45342 | \$49528 | \$52932 |

[^2]** Includes fertilizer.

Table 23. Summary by Years (continued)

| Items | $\begin{aligned} & \text { Average } \\ & 1940-44 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Average } \\ & 1945-49 \end{aligned}$ | $\begin{aligned} & \text { Average } \\ & 1950-54 \end{aligned}$ | $\begin{aligned} & \text { Average } \\ & 1955-59 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Average } \\ & 1960-64 \\ & \hline \end{aligned}$ | 1965 | 1966 | 1967 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FARM RECEIPTS |  |  |  |  |  |  |  |  |
| Dairy cattle | \$ 383 | \$ 573 | \$ 695 | \$ 585 | \$ 563 | \$ 626 | \$ 628 | \$ 774 |
| Dairy products | 783 | 988 | 1085 | 1450 | 1888 | 2199 | 2633 | 3398 |
| Beef cattle | 3140 | 4246 | 7918 | 13025 | 20180 | 21094 | 21099 | 23989 |
| Hogs | 3622 | 6775 | 7455 | 7158 | 8431 | 11321 | 13877 | 10724 |
| Sheep and wool | 928 | 651 | 978 | 981 | 263 | 174 | 137 | 158 |
| Poultry (incl. turkeys) | 563 | 525 | 526 | 530 | 505 | 440 | 432 | 366 |
| Eggs | 597 | 1035 | 965 | 1013 | 1074 | 863 | 1103 | 863 |
| Horses | 44 | 23 | 8 | 5 | 4 | 1 | 1 | - |
| Corn | 584 | 1138 | 1855 | 3749 | 3401 | 3961 | 4707 | 6078 |
| Soybeans | - | - | - | - | - | - | 4567 | 5566 |
| Small grain | 1031 | 2055 | 1236 | 807 | 882 | 598 | 594 | 504 |
| Other crops* | 400 | 879 | 1023 | 1759 | 3855 | 6452 | 2482 | 2026 |
| Machinery and equipment sold | 196 | 364 | 367 | 266 | 373 | 457 | 267 | 434 |
| Agricultural adjustment payment | 370 | 65 | 64 | 44 | 43 | 33 | 5 |  |
| Income from work off the farm | 174 | 313 | 349 | 398 | 396 | 593 | 665 | 784 |
| Miscellaneous farm income | 224 | 78 | 137 | 306 | 386 | 503 | 678 | 844 |
| Total farm sales | \$13039 | \$19708 | \$24661 | \$31476 | \$42244 | \$49315 | \$53870 | \$56508 |
| Increase in farm capital | 1098 | 2395 | 1845 | 1157 | 1205 | 6359 | 7896 | 1988 |
| Family living from the farm | 553 | 666 | 553 | 278 | 288 | 274 | 279 | 289 |
| Total farm receipts | \$74690 | \$22769 | \$27059 | \$32911 | \$43737 | \$55948 | \$62045 | \$58785 |
| Total farm expenses | 10617 | 15978 | 22118 | 29790 | 38733 | 45342 | 49528 | $\frac{52932}{5853}$ |
| Labor earnings | \$4073 | \$6791 | \$4941 | \$3121 | \$5004 | \$10606 | \$12517 | \$5853 |
| MEASURES OF FARM ORGANIZATION AND MANAGEMENT |  |  |  |  |  |  |  |  |
| Percent high return crops** | 41.2 | 56.4 | 59.7 | 63.4 | 68.1 | 65.4 | 67.5 | 70.0 |
| Livestock units per 100 acres*** | 23.6 | 20.3 | 30.3 | 39.4 | 43.0 | 37.4 | 38.7 | 35.6 |
| Work units**** | 588 | 501 | 470 | 469 | 533 | 556 | 576 | 449 |
| Work units per worker**** | 273 | 285 | 283 | 279 | 318 | ${ }^{321}$ | $\begin{array}{r}360 \\ \hline 15\end{array}$ | 281 $\$ 21.32$ |
| Expenses per work unit**** | \$3.02 | \$6.23 | \$9.49 | \$12.81 | \$13.42 | \$14.95 | \$15.74 | \$21.32 |

* Includes soybeans 1940-1965.
** The crop ratings used in calculating the percentage of the tillable land in high return crops were changed considerably in 1944 and 1957.
*** The basis for computing animal units was revised in 1951.
**** The basis for computing work units was revised in 1953 and 1967.

Table 24. Summary of Miscellaneous Items by Years

| Items | Average 1940-44 | Average 1945-49 | Average 1950-54 | Average 1955-59 | $\begin{aligned} & \text { Average } \\ & 1960-64 \end{aligned}$ | 1965 | 1966 | 1967 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RETURN ABOVE FEED COST PER |  |  |  |  |  |  |  |  |
| Dairy cow | \$61.87 | \$114.96 | \$111. 51 | \$125.34 | \$140.97 | \$141.25 | \$197.29 | \$245.53 |
| Animal unit in beef herd | 21.90 | 46.46 | 42.51 | 30.08 | 30.77 | 10.75 | 52.76 | * |
| 100 lbs. feeder cattle produced | 3.11 | 8.87 | 5.26 | 5.88 | 1.94 | 7.12 | . 68 | 4.87 |
| Ewe | - | -- | - | - | 6.80 | 11.06 | 12.20 | 6.49 |
| 100 lbs. hogs produced | 4.05 | 6.29 | 6.23 | 4.52 | 4.28 | 11.22 | 8.03 | 5.41 |
| Hen | 1.72 | 2.15 | 1.09 | 1.05 | . 91 | .28 | 1.32 | -. 05 |
| FEED COST PER |  |  |  |  |  |  |  |  |
| Dairy cow | 67.74 | 121.21 | 142.90 | 147.40 | 181.72 | 213.32 | 222.41 | 234.84 |
| Animal unit in beef herd | 38.90 | 68.30 | 97.48 | 83.69 | 72.97 | 72.46 | 69.60 | * |
| 100 Ibs. feeder cattle produced | 14.56 | 21.66 | 22.68 | 17.70 | 18.32 | 21.12 | 22.09 | 18.62 |
| Ewe | - | - | - | - | 13.42 | 15.10 | 17.01 | 16.29 |
| 100 lbs. hogs produced | 7.36 | 12.70 | 12.95 | 10.48 | 10.65 | 12.22 | 12.75 | 12.49 |
| Hen | 2.28 | 4.28 | 4.66 | 3.89 | 3.45 | 3.48 | 4.01 | 3.38 |
| NISCELIANEOUS LIVESTOCK INFORMATION |  |  |  |  |  |  |  |  |
| Number of dairy cows | 8.1 | $5 \cdot 3$ | 4.7 | 5.2 | 5.7 | 6.1 | 6.2 | 6.7 |
| Head in beef breeding herd | 10.5 | 9.4 | 11.1 | 10.6 | 4.9 | 4.3 | 6.2 | 7.7 |
| Pounds feeder cattle produced | 9336 | 6676 | 12137 | 27685 | 41929 | 43527 | 46887 | 47171 |
| Litters of pigs | 18.5 | 19.5 | 21.7 | 24.6 | 28.0 | 27.8 | 29.1 | 27.2 |
| Pounds of hogs produced | 30411 | 34292 | 37265 | 44369 | 52828 | 52981 | 57697 | 52975 |
| Number of hens | 197 | 202 | 187 | 204 | 219 | 193 | 179 | 196 |
| Pounds of butterfat per dairy cow | 246 | 257 | 282 | 311 | 349 | 365 | 372 | 397 |
| Pigs weaned per litter | 6.1 | 6.3 | 6.7 | 7.2 | 7.0 | 7.2 | 7.4 | 7.5 |
| Percent lamb crop | 105 | 109 | 107 | 111 | 103 | 101 | 119 | 103 |
| Eggs per hen | 134 | 171 | 180 | 200 | 208 | 205 | 224 | 217 |

* Information not available。

Table 24. Summary of Miscellaneous Items by Years (Continued)

| Items | Average 1940-44 | $\begin{aligned} & \text { Average } \\ & 1945-49 \end{aligned}$ | $\begin{aligned} & \text { Average } \\ & 1950-54 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Average } \\ & 1955-59 \end{aligned}$ | Average 1960-64 | 1965 | 1966 | 1967 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PRICE RECEIVED PER |  |  |  |  |  |  |  |  |
| Pound of butterfat in milk | \$ . 64 | \$ . 98 | \$. 94 | \$ . 91 | \$ . 94 | \$ . 98 | \$1.14 | \$ 1.21 |
| 100 pounds fat cattle | 11.73 | 21.71 | 26.61 | 22.51 | 22.86 | 23.72 | 24.39 | 24.67 |
| Pound of wool | .38 | .41 | .60 | . 51 | . 58 | . 53 | . 66 | . 44 |
| Dozen of eggs | . 26 | .37 | . 35 | . 29 | . 27 | . 25 | . 31 | . 22 |
| 100 pounds of hogs sold | 10.86 | 19.54 | 19.43 | 15.96 | 15.45 | 20.34 | 23.07 | 19.27 |
| PRICE OF FEED |  |  |  |  |  |  |  |  |
| Corn, bu. | .70 | 1.24 | 1.31 | 1.11 | - 99 | 1.13 | 1.19 | 1.12 |
| Oats, bu. | . 46 | . 74 | .74 | . 59 | .61 | . 63 | . 66 | . 64 |
| Barley, bu. | .58 | 1.31 | 1.15 | . 92 | .91 | . 98 | 1.02 | 1.04 |
| Alfalfa hay, ton | 10.00 | 18.60 | 18.30 | 18.20 | 19.40 | 23.00 | 21.00 | 20.00 |
| Timothy hay, ton | 6.24 | 10.86 | 10.60 | 10.58 | 11.22 | 13.00 | 12.20 | 11.60 |
| Corn silage, ton | 3.20 | 6.07 | 6.00 | 6.08 | 6.60 | 7.75 | 7.30 | 7.25 |
| Soybean meal, cwt. | 2.51. | 4.15 | 4.50 | - | 4.36 | 4.60 | 5.25 | 5.00 |
| ACRES PER FARM |  |  |  |  |  |  |  |  |
| Small grains | 89.9 | 73.9 | 70.5 | 48.8 | 39.5 | 26.3 | 27.4 | 24.2 |
| Cultivated crops | 89.5 | 100.3 | 107.0 | 153.7 | 187.0 | 228.9 | 233.8 | 267.6 |
| Tillable land in hay | 27.4 | 19.1 | 28.1 | 34.9 | 37.0 | 29.1 | 27.4 | 27.4 |
| Tillable land in pasture | 24.5 | 15.2 | 14.8 | 13.2 | 6.8 | 6.1 | 4.5 | 4.0 |
| Tillable land not cropped | 5.7 | 2.4 | $\underline{1.4}$ | $\frac{2.2}{250.8}$ | $\frac{25.9}{}{ }^{\text {( }}$ | $\frac{46.4}{336.8}$ | $\frac{35.0}{328.7}$ | $\frac{26.7 *}{349.9}$ |
| Total tillable land | 236.4 | 210.9 | 221.8 | 252.8 | 290.2 | 336.8 | 328.1 | 349.9 |
| Non-tillable land | 45.6 | 43.1 | 43.4 | 40.5 | 44.6 | $\underline{49.2}$ | 44.0 | 49.6 |
| Total acres per farm | $\underline{282.0}$ | 254.0 | 265.2 | 293.3 | 334.8 | 385.0 | 372.1 | 399.5 |
| YIELDS PER ACRE |  |  |  |  |  |  |  |  |
| Flax, bu. | 10.5 | 13.7 | 11.5 | 13.0 | 13.6 | 18.2 | 10.9 | 19.3 |
| Oats, bu. | 40.4 | 46.3 | 41.4 | 51.7 | 54.8 | 61.2 | 53.9 | 61.3 |
| Corn grain, bu. | 49.7 | 47.8 | 53.7 | 57.1 | 71.3 | 62.7 | 84.0 | 81.2 |
| Corn silage, tons | 8.9 | 8.4 | 9.2 | 9.7 | 11.8 | 10.7 | 13.2 | 12.3 |
| Soybeans, bu. | 17.8 | 14.4 | 19.8 | 22.5 | 25.5 | 20.2 | 26.9 | 23.7 |
| Alfalfa hay, tons | 2.2 | 2.1 | 2.5 | 2.5 | 3.0 | 2.8 | 2.9 | 3.0 |

* Including feed grain program.


[^0]:    * The authors are indebted to Barbara Miller, Dorothy Spreck and Eileen Miley for their assistance in the preparation of this report.

[^1]:    * Cash receipts and expenses are adjusted for changes in inventory for each enterprise and for each item of expense in order to show total receipts and net increases and total expenses and net decreases. The labor earnings are the same as those on page 4.

[^2]:    * These adjustments should be considered in comparing 1967 results with previous years.

