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## Annual Report

SOUTHWESTERN MINNESOTA
FARM MANAGEMENT SERVICE

# University of Minnesota Institute of Agriculture <br> and <br> United States Department of Agriculture Agricultural Research Service and the <br> County Extension Services of 10 Southwestern Minnesota Counties <br> and the <br> Southwest Minnesota Farm Management Association Cooperating 

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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 Southwest 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 G. A. Pond and T. R. Nodland. Extension work in connection with the two services is handled by E. Hartmans and Harland Routhe. Donald Richter was the field agent for this project until August 1 and was followed by Paul Calvin. At the end of the year, R. B. Zoller, S.A. Engene and Kenneth Thomas of the Department of Agricultural Economics, aided in closing the records.

The following tabulation shows by counties the number of records submitted, the officers of the Associations, and the county agricultural extension agents who cooperated in 1956.

Southwestern Minnesota

| County | $\begin{aligned} & \text { No. oi } \\ & \text { records } \end{aligned}$ | Association Officers | County Agricultural Extension Agent |
| :---: | :---: | :---: | :---: |
| Cottonwood | 11 | Walter Schmotzer, Director | Herman Vossen |
| Faribault | 14 | Glenn Kaehler, Director | James Johnson |
| Jackson | 22 | Arnold Hussong, Director Steve Rubis, President | Ray Palmby |
| Martin | 8 | Wayne Strong, Vice President | Robert McDell |
| Murray | 16 | Arthur Foster, Secy-Treas. Robert Keller, Director | George E. Records |
| Nobles | 46 | Kenneth Hansberger, Director <br> Walter Strom, Director <br> Marian Lester, Director <br> Dale Hansberger, Director | Ross Huntsinger |
| Pipestone | 7 | Kenneth Butman, Director | Clem Chase |
| Redwood | 20 | Melvin Manguson, Director | J. I. Swedberg |
| Rock | 1 |  | Gregory Leuhr |
| Watonwan | 6 | Clayton Johnson, Director | John Ankeny |
| Total | 151 |  |  |

The data for 135 farms are shown in the tables on succeeding pages. Thirteen farms were omitted from all of the averages in the tables because the records were not sufficiently complete for a full analysis. Three 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, 1956*

| Items | Your farm |  | Average of 135 farms |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Jan. 1 | Dec. 31 | Janol | Dec. 31 |
| Size of farm (acres) |  |  | 284 |  |
| Size of business (work units)** |  |  | 433 |  |
| Dairy and dual purpose cows | \$ | \$ | \$776 | \$874 |
| Other dairy \& dual purpose cattle |  |  | 441 | 390 |
| Beef cattle (incl. feeders) |  |  | 6210 | 7044 |
| Hogs |  |  | 1701 | 2333 |
| Sheep (including feeders) |  |  | 508 | 583 |
| Poultry (including turkeys) |  |  | 295 | 255 |
| Productive livestock (total) |  |  | \$9931 | \$11479 |
| Horses |  |  | 19 | 15 |
| Crop, seed and feed |  |  | 8456 | 9751 |
| Auto (farm share) |  |  | 1596 | 1172 |
| Tractors |  |  | 2333 | 2310 |
| Crop and general machinery |  |  | 4792 | 4625 |
| Livestock equipment and supplies |  |  | 997 | 1006 |
| Machinery \& equipment (total) |  |  | \$9718 | \$9413 |
| Land |  |  | 28724 | 28724 |
| Buildings, fences, etc. |  |  | 12084 | 11973 |
| Total farm capital |  |  | \$68932 | \$71355 |
|  | 27 most pros | table farms | 27 Iea | profitable |
| Items | $\mathrm{Jan}_{0} \mathrm{I}$ | Dec. 31 | Jan. 1 | Dec. 31 |
| Size of farm (acres) | 401 |  | 291 |  |
| Size of business (work units) ${ }^{\text {\% }}$ | 600 |  | 382 |  |
| Dairy and dual purpose cows | \$580 | \$616 | \$597 | \$691 |
| Other dairy \& dual purpose cattle | 292 | 294 | 346 | 279 |
| Beef cattle (inclofeeders) | 10294 | 13986 | 7102 | 7534 |
| Hogs | 2451 | 3901 | 1448 | 1796 |
| Sheep (including feeders) | 464 | 368 | 882 | 1051 |
| Poultry (including tarkeys) | 338 | 228 | 182 | 202 |
| Productive livestock (total) | \$14419 | \$19393 | \$10557 | \$11553 |
| Horses | 20 | 16 | 17 | 9 |
| Crop, seed and feed | 13736 | 15480 | 9851 | 10040 |
| Auto (farm share) | 1855 | 1791 | 1594 | 1354 |
| Tractors | 3294 | 3416 | 2573 | 2336 |
| Crop and general machinery | 6586 | 6899 | 5044 | 4728 |
| Livestock equipment and supplies | 1387 | 1568 | 905 | 811 |
| Machinery and equipment (total) | \$13122 | \$13674 | \$1.0116 | \$9229 |
| Land | 39741 | 39741 | 30680 | 30680 |
| Buildingss fences, etc. | 17193 | 16377 | 14326 | 14213 |
| Total farm capital | \$98231 | \$104681 | \$75547 | \$75724 |

* For the purpose of comparison, all the data shown in this report, with the exe ception 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 21 for an explanation of "work units."

Table 2. Summary of Farm Earnings (Cash Statement), 1956

| Items | Your <br> farm | Average of 135 farms | $\begin{aligned} & 27 \text { most } \\ & \text { profitable } \\ & \text { farms } \end{aligned}$ | 27 least profitable farms |
| :---: | :---: | :---: | :---: | :---: |
| FARM RECEIPTS |  |  |  |  |
| 1. Dairy cattle |  | \$ 438 | \$ 363 | \$ 256 |
| 2. Dairy products |  | 1324 | 1204 | 1030 |
| 3. Beef cattle (including feeding cattle) |  | 10595 | 20316 | 9437 |
| 4 . Hogs |  | 5797 | 8932 | 4178 |
| 5. Sheep and wool |  | 1344 | 764 | 4471 |
| 6. Horses |  | 8 | 6 | 7 |
| 7. Poultry (including turkeys) |  | 608 | 781 | 131 |
| 8. Eggs |  | 1190 | 1221 | 918 |
| 9. Corn |  | 3385 | 6198 | 3426 |
| 10. Small grain |  | 809 | 1402 | 744 |
| 11. Other crops |  | 1867 | 3189 | 2133 |
| 12. Machinery \& equipment sold |  | 203 | 259 | 352 |
| 13. Income from work off the farm |  | 332 | 381 | 241 |
| 14. Miscellaneous |  | 391 | - 4.492 | \% 572 |
| 15. Total farm sales |  | \$28290 | \$45508 | \$27896 |
| 16. Increase in farm capital |  | 2423 | 6450 | 177 |
| 17. Family living from the farm |  | 250 | - 297 | 250 |
| 18. Total farm receipts |  | \$30963 | \$52255 | \$28323 |
| FARN EXPENSES |  |  |  |  |
| 19. Dairy and dual-purpose cattle bought |  | \$ 196 | \$ 135 | \$ 116 |
| 20. Beef cattle bought (inclo feeding cattle) |  | 5506 | 11382 | 5209 |
| 21. Hogs bought |  | 322 | 399 | 325 |
| 22. Sheep bought |  | 837 | 488 | 3223 |
| 23. Horses bought |  | 2 | $\sim$ | - |
| 24. Poultry bought (including turkeys) |  | 264 | 220 | 136 |
| 25. Misc. livestock expenses |  | 468 | 649 | 396 |
| 26. Feed bought |  | 5291 | 7647 | 6140 |
| 27. Fertilizers |  | 722 | 1354 | 570 |
| 28. Other crop expenses |  | 817 | 1161 | 815 |
| 29. Custom work hired |  | 646 | 908 | 755 |
| 30. Gas, oil and grease bought (farm share) |  | 947 | 1252 | 1053 |
| 31. Repairs for tractors, trucks \& autos <br> (farm share) |  | 485 | 560 | 521 |
| 32. Repair and upkeep of farm real estate |  | 254 | 269 | 253 |
| 33. Repair and upkeep of crop \& gen. mach. |  | 375 | 483 | 405 |
| 34. Repair and upkeep of livestock equip. |  | 170 | 228 | 195 |
| 35. Wages of hired Iabor |  | 863 | 1783 | 1056 |
| 36. Electricity expense |  | 204 | 237 | 219 |
| 37. Pers prop. and real est. taxes |  | 804 | 1154 | 799 |
| 38. Telephone and general farm expense |  | 358 | - 416 | - 4117 |
| 39. Total cash operating expense |  | \$19531 | \$30725 | \$22597 |
| 40. Mechanical power bought (farm share) |  | 634 | 1045 | 362 |
| 41. Crop and general machinery bought |  | 790 | 1582 | 736 |
| 42. Livestock equipment bought |  | 210 | 389 | 175 |
| 43. New real estate improvements |  | 618 | 288 | 783 |
| 44. Total farm purchases |  | \$21783 | \$34029 | \$24653 |
| 45. Decrease in farm capital |  | - | $\bigcirc$ | - |
| 46. Interest on farm capital |  | 3507 | 5073 | 3782 |
| 47. Unpaid family labor |  | 371 | 349 | 454 |
| 48. Board furnished hired labor |  | 87 | 146 | 79 |
| 49. Total farm expenses |  | \$25748 | \$39597 | \$28968 |
| 50. Labor earnings |  | \$5215 | \$12658 | \$ ${ }^{\text {- }}$ - 645 |

Table 3. Summary of Farm Earnings (Bnterprise Statement), 1956*

| Items | Your farm | Average of 135 farms | $\begin{aligned} & 27 \text { most } \\ & \text { profitable } \\ & \text { farms } \end{aligned}$ | 27 least profitable farms |
| :---: | :---: | :---: | :---: | :---: |
| RETURNS AND NET INCREASES |  |  |  |  |
| 1. Dairy and dual-purpose cows | \$ | \$1304 | \$1240 | \$ 984 |
| 2. Other dairy \& dual-purpose cattle |  | 445 | 362 | 250 |
| 3. Beef breeding herd |  | 404 | 292 | 713 |
| 4. Feeder cattle |  | 5558 | 12420 | 4076 |
| 5. Hogs |  | 61.53 | 10043 | 4242 |
| 6. Sheep--farm flock |  | 304 | 121 | 207 |
| 7. Sheep-feeders |  | 279 | 61 | 1210 |
| 8. Turkeys |  | 372 | 683 | 121 |
| 9. Chickens |  | 1184 | 1049 | 993 |
| 10. All productive livestock | \$ | \$1/16003 | \$26271 | \$12675 |
| 11. Value of feed fed to livestock |  | 11280 | 17878 | 10401 |
| 12. Return over feed from livestock | \$ | \$ 4723 | \$8393 | \$2274 |
| 13. Crops, seed and feed |  | 11776 | 20212 | 9354 |
| 14. Income from labor off the farm |  | 177 | 145 | 176 |
| 15. Agricultural conservation payments |  | 76 | 66 | 107 |
| 16. Miscellaneous |  | $\underline{312}$ | 426 | 4 |
| 17. Total returns and net increases |  | \$17064 | \$29242 | \$12376 |
| HXPENSES AND NET DECREASES |  |  |  |  |
| 18. Horses | \$ | \$ 4 | \$ 6 | \$ 3 |
| 19. Truck |  | 299 | 408 | 277 |
| 20. Auto (farm share) |  | 546 | 531 | 614 |
| 21. Tractor |  | 1139 | 1534 | 1281 |
| 22. Electricity (farm share) |  | 214 | 237 | 242 |
| 23. Hired power |  | 273 | 406 | 317 |
| 24. Total power | \$ | \$2475 | \$3122 | \$2734 |
| 25. Crop and general machinery |  | 1392 | 1805 | 1562 |
| 26. Livestock equipment |  | 341 | 397 | 419 |
| 27. Buildings, fencing, and tiling |  | 973 | 1392 | 1076 |
| 28. Misc, productive livestock expenses |  | 468 | 648 | 396 |
| 29. Labor |  | 1531 | 2577 | 1842 |
| 30. Real estate taxes |  | 633 | 924 | 627 |
| 31. Personal property tax |  | 171 | 230 | 172 |
| 32. Insurance |  | 153 | 197 | 173 |
| 33. General farm |  | 205 | 219 | 238 |
| 34. Interest on farm capital |  | 3507 | 5073 | 3782 |
| 35. Total expenses and net decreases | \$ | \$11849 | \$16584 | \$13021 |
| 36. Labor earnings | \$ | \$ 5215 | \$12658 | \$ -645 |

* Cash receipts and expenses are adjusted for changes in inventory for each enterprise and for each item of expense in order to show total receipts and net increases, and total expenses and net decreases. The operator's labor earnings are the same as those on page 4.

Table 4. Net Worth Statement for Those Farmers Who Kept a Complete Record of All Assets and Liabilities, 1956 (Operator's share)

| Items | Your farm |  | 24 Owners |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Jan. 1 | Dec. 31 | Jan. 1 | Dec. 31 |
| Total acres in farm |  |  | 233 |  |
| Owned |  |  | 233 |  |
| Rented |  |  | - |  |
| Total farm capital | \$ | \$ | \$54478 | \$57736 |
| Stocks and bonds |  |  | 2636 | 2415 |
| Life insurance |  |  | 2316 | 2410 |
| Notes and accounts receivable |  |  | 988 | 1055 |
| Shares in cooperative organizations |  |  | 758 | 832 |
| Outside real estate |  |  | 2849 | 3714 |
| Cash on hand in bank |  |  | 2358 | 2118 |
| Household furnishings and clothing |  |  | 2225 | 2279 |
| Personal share of auto |  |  | 682 | 616 |
| Farm dwelling |  |  | 4264 | 4057 |
| Total non-farm assets | \$ | \$ | \$19076 | \$19496 |
| Total assets |  |  | 73554 | 77232 |
| Federal Land Bank mortgage |  |  | 3417 | 3333 |
| Other mortgages on farm operated |  |  | 7328 | 7517 |
| Loans on other real estate |  |  | - | - |
| Production credit association loans |  |  | 1143 | 1332 |
| Sealed grain |  |  | 1050 | 780 |
| Other chattel mortgages |  |  | 2082 | 2291 |
| Notes payable |  |  | 1886 | 2099 |
| Accounts payable |  |  | 471 | 880 |
| Total liabilities | \$ | \$ | \$17377 | \$18232 |
| Farmer's net worth | \$ | \$ | \$56177 | \$59000 |
| Change in net worth |  |  |  | + 2823 |
|  | 14 par | Owners* | 25 r | ters** |
| Items | Jan. 1 | Dec. 31 | Jan. 1 | Dec. 31 |
| Total acres in farm | 264 |  | 264 |  |
| Owner | 139 |  | - |  |
| Rented | 125 |  | 254 |  |
| Total farm capital | \$50483 | \$53637 | \$18363 | \$19562 |
| Stocks and bonds | 1134 | 1495 | 1356 | 1203 |
| Life insurance | 1767 | 1959 | 1042 | 1091 |
| Notes and accounts receivable | 8 | 57 | 339 | 204 |
| Shares in cooperative organizations | 482 | 645 | 115 | 162 |
| Outside real estate | 118 | 2118 | - | 280 |
| Cash on hand and in bank | 1159 | 713 | 1849 | 2147 |
| Household furnighings and clothing | 2923 | 2944 | 2340 | 2464 |
| Personal share of auto | 515 | 399 | 532 | 505 |
| Farm dwelling | 4950 | 4898 | - - | - |
| Total non-farm assets | \$13056 | \$15228 | \$ 7573 | \$8056 |
| Total assets | 63539 | 68865 | 25936 | 27618 |
| Federal Land Bank mortgage | 2998 | 2938 | - | - |
| Other mortgages on farm operated | 10814 | 10121 | - | - |
| Loans on other real estate | 57 | 1914 | - | - |
| Production credit association loans | 1179 | 1077 | 607 | 165 |
| Sealed grain | 547 | 264 | 73 | 79 |
| Other chattle mortgages | 572 | 1245 | 2076 | 2494 |
| Notes payable | 2446 | 2906 | 1700 | 1789 |
| Accounts payable | 492 | 732 | 547 | 126 |
| Total liabilities | \$19105 | \$21197 | $\$ 5003$ | \$ 4653 |
| Farmer's net worth | \$44434 | \$47668 | \$20933 | \$22965 |
| Change in net worth |  | + 3234 |  | + 2032 |

2 rented for cash, 4 cash and crop share, and 8 crop share

* 4 rented for cash, 10 cash and crop share, 1 crop share and 10 livestock \& crop share.

Toble 5. Summary of Farm Earnings by Tenure,
Your $\quad 1956$ (Operator's share)
farm

| Items | Your farm | $\begin{gathered} 24 \\ \text { owners } \end{gathered}$ | 14 part owners | $\frac{25}{\text { renters }}$ |
| :---: | :---: | :---: | :---: | :---: |
| FARM RECEIPTS |  |  |  |  |
| Dairy and dual-purpose cattle |  | \$ 438 | \$ 959 | \$ 281 |
| Dairy products |  | 1675 | 1358 | 1013 |
| Beef cattle (including feeders) |  | 11634 | 5338 | 5879 |
| Hogs |  | 64.11 | 7533 | 5012 |
| Sheep and wool (including feeders) |  | 508 | 357 | 121 |
| Horses |  | 7 | 11 | - |
| poultry (including turkeys) |  | 2043 | 164 | 73 |
| Eggs |  | 836 | 1314 | 696 |
| Corn |  | 1272 | 2292 | 1720 |
| Small grain |  | 671 | 474 | 409 |
| Other crops |  | 712 | 1531 | 900 |
| Machinery and equipment sold |  | 170 | 143 | 240 |
| Income from work off the farm |  | 364 | 336 | 183 |
| Miscellaneous |  | 439 | 381 | 471 |
| (1) Total farm sales |  | \$27180 | \$22191 | \$16998 |
| (2) Increase in farm capital |  | 3258 | 3154 | 1199 |
| (3) Family living from the farm |  | 218 | 264 | 216 |
| (4) Total farm receipts (1)+(2)+(3) |  | \$ $\overline{30656}$ | \$25609 | \$18413 |
| FARM EXPENSES |  |  |  |  |
| Dairy and dual-purpose cattle bought | \$ | \$ 250 | \$ 260 | \$ 155 |
| Beef cattle bought (including feeders) |  | 6140 | 2733 | 2623 |
| Hogs bought |  | 427 | 263 | 301 |
| Sheep bought (including feeders) |  | 256 | 42 | 14 |
| Horses bought |  | - | - | 5 |
| Poultry (including turkeys) |  | 702 | 185 | 94 |
| Miscellaneous livestock expense |  | 612 | 509 | 350 |
| Feed |  | 6567 | 4266 | 3958 |
| Fertilizers |  | 516 | 725 | 415 |
| Other crop expense |  | 723 | 739 | 569 |
| Custom work hired |  | 632 | 680 | 458 |
| Gas, oil and grease |  | 911 | 814 | 672 |
| Rep. tractor, truck \& auto (farm share) |  | 480 | 1473 | 370 |
| Rep. and upkeep of real estate |  | 276 | 229 | 50 |
| Rep. and upkeep of crop \& gen. mach. |  | 340 | 298 | 273 |
| Rep. and upkeep of livestock equip. |  | 152 | 186 | 565 |
| Wages of hired labor |  | 1140 | 1030 | 566 |
| Electricity expense (farm share) |  | 181 | 228 | 154 |
| Heal estate and pers. pron. taxes |  | 678 | 505 | 133 |
| Cash rent |  | - | 412 | 522 |
| General farm and insurance |  | 415 | 413 | 277 |
| Interest paid |  | 816 | 682 | 235 |
| Total cash operating expense | \$ | \$22214 | \$ $\overline{15672}$ | \$12289 |
| Mechanical power bought (farm share) |  | 434 | 561 | 398 |
| Crop and general machinery bought |  | 630 | 863 | 500 |
| Livestock equipment bought |  | 234 | 245 | 237 |
| New real estate improvements |  | 736 | 728 | 55 |
| (5) Total farrn purchases | \$ | \$24248 | \$18069 | \$ $\overline{13479}$ |
| (6) Decrease in farm capital |  | - | - | - |
| (7) Interest on farm capital |  | 1989 | 1921 | 713 |
| (8) Unpaid fannily labor |  | 163 | 170 | 186 |
| (9) Board furnished hired labor |  | 100 | 63 | 42 |
| (10) Total farm expenses(5)+(6)+(7)+(8)+(9) |  | \$26500 | \$20223 | \$14420 |
| (11) Labor earnings (4)-(10) | \$ | 4156 | 5386 | 3993 |
| (12) Ret. to cap.\& fam. 1ab. (7)+(8)+(11) | \$ | 6308 | 7477 | 4892 |

Table 6. Household and Personal Expenses for Those Farms Which Kept Complete Accounts of These Expenses, 1956

| Itens | Your form | Average of 56 farms | ```1 1 ~ m o s t profit- able farms``` | $\begin{aligned} & \text { ll least } \\ & \text { profit- } \\ & \text { able } \\ & \text { farms } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Number of persons - family |  | 4.7 | 5.2 | 4.6 |
| Number of adult equivalent - family |  | 3.4 | 3.4 | 3.4 |
| other* |  | . 2 | 2 | . 7 |
| EXP ZNSES |  |  |  |  |
| Food and meals bought | \$ | \$ 914 | \$ 960 | \$ 996 |
| Operating and supplies |  | 269 | 277 | 300 |
| Furnishings and equipment |  | 267 | 295 | 217 |
| Clothing and clothing materials |  | 348 | 342 | 392 |
| Personal care and spending |  | 101 | 99 | 98 |
| Education and recreation |  | 188 | 243 | 163 |
| Gifts and special events |  | 138 | 142 | 182 |
| Medical and hospital insurance |  | 349 | 323 | 406 |
| Church and welfare |  | 280 | 195 | 145 |
| Perscnal share of auto expense |  | 167 | 189 | 182 |
| Upkeep on dwelling |  | 119 | 29 | 228 |
| Pers. share of tel, and elect. exp. |  | 105 | 105 | $\underline{112}$ |
| Total cash living expense | \$ | \$3245 | \$3199 | \$3421 |
| Personal share new autos |  | 115 | 111 | 32 |
| New dwelling |  | 562 | 1862 | - |
| Taxes |  | 231 | 141 | 274 |
| Life insurance |  | 360 | 424 | 351 |
| Other savings and investments |  | 165 | 531 | 111 |
| Total household \& pers. cash exp. | \$ | \$4678 | \$6268 | \$4189 |
| Family living from the farm Total cash expenses and perquisites |  | $\begin{array}{r} 261 \\ \$ 4939 \end{array}$ | $\begin{array}{r} 309 \\ \$ 6577 \end{array}$ | $\frac{265}{\$ 4454}$ |
| RECEIPTS |  |  |  |  |
| Return to capital and family labor | \$ | \$5858 | \$10074 | \$2322 |
| Income from cutside investments |  | 146 | 133 | - |
| Other personal income |  | 576 | 639 | 1541 |

* Hired help or others baarded.

Table 7. Family Living from the Farm, 1956

| Items | Average |  |  | Average of 135 |
| :---: | :---: | :---: | :---: | :---: |
|  | Your | of 135 | Your |  |
|  | farm | farms | farm | farms |
| No. of adult equivalents: |  |  |  |  |
| Family |  | 3.4 |  |  |
| Other |  | 2 |  |  |
| Whole milk |  | 596 ats: |  | \$43.85 |
| Skim milk |  | 49 ats . |  | 49 |
| Cream |  | 27 pts. |  | 5.65 |
| Butter |  | 1 lb . |  | . 63 |
| Cattle |  | 540 lbs 。 |  | 90.59 |
| Hogs |  | $34310 s$ |  | 46.83 |
| Sheep |  | 31 bs . |  | . 63 |
| Poultry |  | 112 1bs. |  | 19.56 |
| Hggs |  | 137 doz. |  | 41.30 |
| Total |  |  |  | \$249.53 |

* 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 accomplishments 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 Operator's Labor Earnings to the Number of Factors in which the Farmer Excels

| No. of factors in which farmer excels |  | Your farm | The length of the shaded lines is in proportion to the average cperator's labor earnings | Average labor earnings |
| :---: | :---: | :---: | :---: | :---: |
| None | 10 |  | XXXX | \$ 926 |
| 1 | 18 |  | XXXXXXXX | 1698 |
| 2 | 18 |  | XXXXXXXXXXXXXXXXXXXXXX | 4474 |
| 3 | 28 |  | XXXXXXXXXXXXXXXXXXXXX | 4806 |
| 4 | 27 |  | XXXXXXXXXXXXXXXXXXXXXXXXX | 5793 |
| 5 | 22 |  | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | 8244 |
| 6 or 7 | 12 |  | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | 9260 |

The array in table 8 indicates that it will be worth while 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, 1956

| Measures used in chart on page 11 | Your <br> farm | Average of 135 farms | $\begin{gathered} 27 \text { most } \\ \text { profit- } \\ \text { able } \\ \text { farms } \end{gathered}$ | 27 least profitable farms |
| :---: | :---: | :---: | :---: | :---: |
| 1. Labor earnings |  | \$5215 | \$12658 | \$-645 |
| 2. Crop yields* |  | 100 | 112 | 89 |
| 3. Percent tillable land in high ret. crops** |  | 63.0 | 65.0 | 61.0 |
| 4. Ret. for $\$ 100$ feed to prod. livestock*** |  | 100 | 105 | 94 |
| 5. Prod. livestock units per 100 acres**** |  | 37.8 | 45.7 | 30.0 |
| 6. Size of business--work units |  | 433 | 600 | 382 |
| 7. Work units per worker |  | 271 | 286 | 225 |
| 8. Pow., mach., equip., \& bldg. exp. per work unit |  | \$12. 72 | \$11.18 | \$16.00 |
| Items related to some of the above measures: |  |  |  |  |
| Index of return for $\$ 100$ feed from: <br> 9. Dairy cattle (see pages 16 and 17) |  | 100 | 120 | 86 |
| 10. Dual-purpose cattle |  | 100 | - | - |
| 11. Beef cattle--breeding herd (see page 18) |  | 100 | 89 | 87 |
| 12. Beef cattle--feeders (see page 18) |  | 100 | 109 | 100 |
| 13. Hogs (see page 15) |  | 100 | 102 | 93 |
| 14. Sheep--farm flock (see page 19) |  | 100 | - | 58 |
| 15. Sheep--feeders (see page 19) |  | 100 | 123 | - |
| 16. Turkeys |  | 100 | - | - |
| 17. Chickens (see page 20) |  | 100 | 92 | 108 |
| 18. Number of animal units |  | 92.2 | 150.0 | 81.4 |
| 19. Work units on crops |  | 140 | 209 | 135 |
| 20. Work units on productive livestock |  | 275 | 376 | 229 |
| 21. Other work units |  | 18 | 15 | 18 |
| 22. Number of family workers |  | 1.2 | 1.2 | 1.2 |
| 23. Number of hired workers |  | . 4 | . 9 | . 5 |
| 24. Total number of workers |  | 1.6 | 2.1 | 1.7 |
| 25. Power expense per work unit |  | \$6.15 | \$5. 25 | \$7.69 |
| 26. Crop machinery expense per work unit |  | 3.44 | 3.00 | 4.36 |
| 27. Livestock equip. expense per work unit |  | . 79 | . 64 | . 99 |
| 28. Bldg. \& fencing exp. per work unit |  | 2.34 | 2.29 | 2.96 |

* 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 varicus measures of farm organization and managenent efficiency. The averages for the 135 farms included in this sumary are located between the dotted lines across the center of this page.


Table 10. Distribution of Acres in Farm, 1956

|  | Crop <br> ratings* | Number <br> growing <br> this crop | Your <br> Farm | Average <br> of <br> farms |
| :--- | :---: | :---: | :---: | :---: |
| Crop |  |  |  |  |

[^0]Table 11. Crop Yields per Acre, 1956

| Crop | Your farm | Average of farms growing each crop |
| :---: | :---: | :---: |
| Canning peas, dollars |  | \$33.49 |
| Flax, bu. |  | 9.9 |
| Barley, bu. |  | 25.9 |
| Oats, bu. |  | 39.7 |
| Wheat, bu. |  | 13.8 |
| Corn grain, bu. |  | 65.0 |
| Sweet corn, tons |  | 5.3 |
| Soybeans, bu. |  | 22.3 |
| Corn silage, tons |  | 10.5 |
| Alfalfa hay, tons |  | 2.7 |
| Other legumes and mixtures, tons |  | 2.0 |
| Timothy or brome hay, tons |  | 1.4 |
| Annual hay |  | 7.0 |
| Oat silage, tons |  | 5.0 |
| Wild hay, tons |  | . 9 |

Table 12. Average Price of Feeds, 1956

| Item | Value | Item | Value |
| :--- | ---: | :--- | ---: |
| Ear corn, per bu。 | $\$ 1.25$ | Alfalfa hay, per ton | $\$ 18.50$ |
| Oats, per bu. | .63 | Red or alsike clov, hay, /ton | 15.60 |
| Barley, per bu. | .94 | Timothy, per ton | 10.95 |
| Wheat, per bu. | 2.08 | Wild hay, per ton | 9.25 |
| Bran, per cwt. | 2.55 | Corn silage, per ton | 6.00 |
| Linseed oil meal, per cwt .3 .70 | Pasture, per mo. per cow | 2.50 |  |
| Meat scraps, per cwt. | 4.60 | Skim milk per cwt. | .32 |

Table 13. Power and Machinery Expenses per Crop Acre, 1956

| $\begin{array}{ll}\text { Items } & \text { Your } \\ \text { farm }\end{array}$ | $\begin{gathered} \text { Average } \\ \text { of } 135 \\ \text { farms } \end{gathered}$ | 27 most profitable farms | $\begin{gathered} 27 \text { least } \\ \text { profitable } \\ \text { farms } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Crop acres per farm | 227 | 339 | 220 |
| Tractor and horse exp. per crop acre | \$5.30 | \$4.70 | \$5.76 |
| Crop \& gen. mach. exp. per crop acre | 6.41 | 5.51 | 7.33 |

## TOTAL FEED COSTS AND RETURNS FROM YOUR LIVESTOCK ENTERPRISES

The total "return over feed costs" for each class of livestock is shown in Table 14. This differs from the "return over feed" shown in the enterprise statement in that it is the total for each class of livestock instead of a return "per head," "per unit," or "per 100 pounds." These data indicate the relative importance of different classes of livestock as a source of income and as a market for feed. The total return is the same as the returns and net increases shown on page 5. The value of milk consumed by calves is included in the total returns from dairy or dual purpose cows and in the total feed cost for other dairy or other dual purpose cattle. The value of milk consumed by calves is not included in either the total returns or the feed cost of "all dairy" or "all dual purpose" cattle. The return over feed is not a net returm, but rather the amount availe able from the gross income, after paying the feed bill, to cover the outlay for hired labor, power, equipment, taxes, insurance, interest, and veterinary bills and to provide a return for the use of family labor and capital.

Table Il. Total Feed Costs and Returns from Your Livestock Enterprises, 1956

|  | Dairy or dual purpose cattle <br> Cows | Beef <br> breeding <br> herd |
| :--- | :--- | :--- |
| Total returns | - |  |


|  | Feeder Cattle | Hogs | Farm Flock of sheep | Chickens. |
| :---: | :---: | :---: | :---: | :---: |
| Total returns |  |  |  |  |
| Total feed cost |  |  |  |  |
| Total return over feed |  |  |  |  |

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

Table 15. Feed Costs and Returns from Hogs, 1956

| Items | Your <br> farm | Average of 112 farms | 22 farms <br> highest in returns above feed | 22 farms <br> lowest in returns above feed |
| :---: | :---: | :---: | :---: | :---: |
| Feed per cwt. hogs produced, lbso: |  |  | 200 |  |
| Corn |  | 274 90 | 64 | 129 |
| Small grain <br> Commercial feeds |  | $\begin{array}{r}90 \\ 59 \\ \hline\end{array}$ | 64 <br> 54 | $\begin{array}{r}129 \\ 67 \\ \hline\end{array}$ |
| Total concentrates |  | 423 | 318 | 563 |
| Skim milk, buttermilk and whey |  | 8 | 27 | 1 |
| Feed cost per cwt. hogs produced: Concentrates |  | \$10.66 | \$8.22 | \$12.05 |
| Skim milk, buttermilk and whey |  | . 02 | . 04 | .01 |
| Pasture |  | . 08 | . 09 | . 06 |
| TOTAL FEED COSTS |  | \$10.76 | \$8.35 |  |
| Net increase in value per cwt. hogs produced |  | \$15.74 | \$16.51 | \$15.31 |
| RETURNS ABOVE FEED COST PER CWT. HOGS PRODUCED |  | \$4.98 | \$8.16 | \$1. 19 |
| RETURNS FOR \$100 OF FEED |  | \$ 154 | \$ 204 | \$ 117 |
| Price received per cwt, hogs sold |  | \$14. 15 | ${ }^{\text {\# }} 14.31$ | \$13.92 |
| No. of spring litters raised |  | 16.2 | 15.7 | 13.5 |
| No. of fall litters raised |  | 9.8 | 8.8 | 8.1 |
| Total no. of litters raised |  | 26.0 | 24.5 | 21.6 |
| No. of pigs born per litter |  | 9.2 | 9.2 | 8.9 |
| No. of pigs weaned per litter |  | 7.3 | 7.6 | 6.6 |
| Pounds of hogs produced |  | 46730 | 42131 | 34503 |

Table 16. Factors of Cost and Returns from Dairy Cows, 1956

| Items | Your farm | Average of 31 farms | 10 farms highest in butterfat per cow | 10 farms lowest in butterfat per cow |
| :---: | :---: | :---: | :---: | :---: |
| Pounds of butterfat per cow |  | 298 | 376 | 222 |
| \% of butterfat in milk |  | 3.5 | 3.3 | 3.5 |
| Price rec. perllb. B.F. sold ( $¢$ ) |  | 85.4 | 93.1 | 74.4 |
| As manufacturing cream (cents) |  | 63.2 | 69.1 | 61.7 |
| Other (cents) |  | 92.4 | 93.2 | 93.6 |
| Feeds per cow, lbs.: |  |  |  |  |
| Corn |  | 1749 | 2256 | 1452 |
| Small grain |  | 650 | 955 | 520 |
| Commercial feeds |  | 246 | 352 | 94 |
| Legume hay |  | 4712 | 5415 | 5169 |
| Other hay |  | 202 | 243 | 174 |
| Total concentrates |  | 2645 | 3563 | 2066 |
| Total hay and fodder |  | 4914 | 5658 | 5343 |
| Silage |  | 7334 | 6516 | 7306 |
| Feed cost per cow: |  |  |  |  |
| Concentrates |  | \$60.73 | \$81. 65 | \$46.36 |
| Roughages |  | 66.08 | 69.77 | 69.10 |
| Pasture |  | 10.74 | 10.43 | 9.08 |
| TOTAL FEED COST |  | \$137.55 | \$161.85 | \$124.54 |
| Value of produce per cow: |  |  |  |  |
| Dairy product sales | \$ | \$248.59 | \$337. 32 | \$155.65 |
| Dairy produce used in home |  | 8.45 | 7.58 | 12.04 |
| Milk to livestock |  | 8.98 | 7.07 | 17.12 |
| Net increase in value of cows |  | $-15.28$ | $-20.57$ | -6.87 |
| TOTAL VALUE PRODUCED |  | \$250.74 | \$331.40 | \$177.94 |
| RETURNS ABOVE FEED COST PER COW |  | \$113.19 | \$169.55 | \$ 53.40 |
| RETURNS FOR \$100 OF FEED |  | \$182.00 | \$205.00 | \$144.00 |
| Feed cost per lb, B.F. (cents) |  | 46.2 | 43.0 | 56.1 |
| Number of cows* |  | 18.3 | 22.3 | 12.2 |

*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. 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 17. Feed Costs and Returns from Other Dairy Cattle, 1956

|  Your <br> Items farm | $\begin{aligned} & \text { Average } \\ & \text { of } 30 \\ & \text { farms } \end{aligned}$ | 10 farms highest in butterfat per cow | 10 farms lowest in butterfat per cow |
| :---: | :---: | :---: | :---: |
| Feed per head, Ibso: |  |  |  |
| Concentrates | 464 | 523 | 438 |
| Hay and fodder | 1515 | 1806 | 1613 |
| Silage | 2642 | 2810 | 2503 |
| Skim milk | 528 | - | 1584 |
| Whole milk | 216 | 221 | 277 |
| TOTAL FEED COSTS PER HEAD \$ | \$4.4.75 | \$46.38 | \$ 49.53 |
| Net inc. in value of other dairy cattle | 76.09 | 85.09 | 60.78 |
| RETURNS ABOVE FEED COST PER HEAD \$ | 31.34 | 38.71 | 11.25 |
| RETURNS FOR \$100 OF FEED ${ }^{\text {W }}$ | \$170.00 | \$183.00 | \$123.00 |
| Number of head of other dairy cattle | 21.8 | 25.2 | 18.4 |
| FOne farmer had both a milking herd and a beef herd, used a beef bull, and in all the young stock in the beef herd. |  |  |  |
| Table 18. Feed Costs and Returns from All Dairy Cattle, 1956 |  |  |  |
| Items Your <br> farm  | Average of 31 farms. | 10 farms highest in butterfat per cow | 10 farms lowest in butterfat per cow |
| Feeds per animal unit, Ibs.: |  |  |  |
| Concentrates | 2016 | 2658 | 1535 |
| Hay and fodder | 4174 | 4945 | 4424 |
| Silage | 6960 | 6152 | 7706 |
| TOTAL FEED COSTS PER ANIMAL UNITS \$ | \$115.19 | \$132.81 | \$106.21 |
| Value of produce per animal unit: |  |  |  |
| Dairy products \$ | \$163.79 | \$217.63 | \$101.24 |
| Net increase in val. of dairy cattle | 43.73 | 49.47 | 44.00 |
| TOTAL VALUE PRODUCED | \$207.52 | \$267.10 | \$145.24 |
| RETURNS ABOVE FEED PER ANIMAL UNIT | \$ 92.33 | \$134.29 | \$ 39.03 |
| RETURNS PER \$100 OF FEED \$ | \$186.00 | \$204.00 | \$ 145.00 |
| Animal units of dairy cattle | 29.2 | 35.1 | 21.6 |

Table 19. Feed Costs and Returns from Beef Cattle. 1956

|  |  | Your |
| :--- | :--- | :--- |
| Items | farm | Average <br> of all <br> farms |
| Beef breeding herd: | No. of farms: |  |

Feeds per animal unit, lbs.:

| Concentrates |  |  |
| :--- | ---: | ---: |
| Legume | - | 1040 |
| Other hay | 2958 |  |
| Silage | 421 |  |

Feed Cost per animal unit:
Concentrates
Roughages
Pasture
TOTAL FEED COST


Value of produce per animal unit:
Dairy products
Net increase in value of animal TOTAL VALUE PRODUCED

RETURNS ABOVE FEED COST PER ANIMAL UNITS
RETURNS FOR $\$ 100$ OF FEED
Lbs. beef produced
Number of cows and herd bulls
Number of other beef cattle
Number of animal units in the herd
${ }^{\$}$
$\$ 6.5^{\prime} 4$

Feeding Cattle: No of farms:
Feeds per cwt. beef produced, lbs.: Corn
Small grain

- $\quad 36$

Commercial feeds
$\square \quad 45$
Legume hay
Other hay
$\square \begin{array}{r}292 \\ \square\end{array}$
Total concentrate
538
Total hay
336
Silage
541
Feed cost per cwt, beef produced
Concentrates
Roughages
Pasture
TOTAL FEED COSTS
Net increase in value of feeders
RETURNS ABOVE FEED COST PER CWT. BEEF PROD.
RETURNS FOR $\$ 100$ OF FEED
Price paid per cwt. beef bought
Price received for feeder cattle sold
Number of animal units
Pounds of beef produced


Table 20．Feed Costs and Returns from a Farm Flock of Sheep． 1956

| Items | Your farm | Average <br> of 32 <br> farms | 11 farms highest in returns above feed |  |
| :---: | :---: | :---: | :---: | :---: |
| Feeds per head，＊Ibs．${ }^{\text {\％}}$（ 121 |  |  |  |  |
|  |  |  |  |  |
| Legume hay |  | 359 | 283 | 450 |
| Other hay |  | 30 | 37 | 7 |
| Silage |  | 122 | 98 | 196 |
| Feed cost per head： |  |  |  |  |
| Concentrates | \＄ | \＄2．65 | \＄1．48 | \＄3．74 |
| Roughages |  | 3.90 | 3.12 | 4.88 |
| Pasture |  | 2.21 | 2.20 | 1.90 |
| TOTAL FEED COSTS |  | \＄8．76 | \＄6．80 | \＄10．52 |
| Value of produce per head： |  |  |  |  |
| Wool prol |  | \＄ 4.45 | \＄ 5.36 | \＄ 3.59 |
| Net increase in value of sheep |  | 12.94 | 16.22 | 9.32 |
| TOTAL VALUE PRODUCED | \％ | \＄17．39 | \＄21．58 | 譶12．91 |
| RETURNS ABOVE FEED COST PER HEAD | $\$$ | \＄ 8.63 | \＄14．78 | \＄2．39 |
| RETURNS FOR \＄100 OF FEED | 潞 | \＄226．00 | \＄338．00 | \＄130．00 |
| Price per cwt．of lambs sold | \＄ | \＄19．13 | \＄19．49 | \＄ 18.80 |
| Price per lb．wool sold（cts．） |  | 65.1 | 79.5 | 50.1 |
| Pounds of wool per sheep sheared． |  | 9.1 | 9.0 | 9.5 |
| Number of ewes kept for lambing |  | 51 | 51 | 51 |
| Per cent lamb crop＊＊＊ |  | 116 | 125 | 101 |
| Per cent death loss＊＊＊＊＊＊＊ |  | 6.9 | 4.2 | 9.3 |
| Pounds of sheep produced |  | 4975 | 6284 | 3624 |
| Number of head of sheep＊ |  | 72.1 | 78.7 | 65.2 |

＊Two lambs under six months of age considered as one head． ＊ LLambs which die during month of birth are not included．

Table 25．Feed Costs and Returns from Feeder Lambs． 1956

|  | Your | Average of |
| :--- | :--- | :---: |
| Items | farm | 5 farms |

Feed per cwt．lambs produced，lbs。：
Concentrates $\quad 615$
Legume hay－ 490

Other hay
$\square \quad 17$
Silage
Feed cost per cwt．lambs produced Net increase in value per cwt．produced Return above feed cost per cwt．produced RETURN FOR $\$ 100$ OF FEED

Price paid per cwt．lambs bought
Price received per cwt．lambs sold
Per cent death loss
Pounds of lambs produced


Table 21. Feed Costs and Returns from Chickens, 1956*

| Items | Your <br> farm | Average of 89 farms | 18 farms highest in return above feed | 18 farms <br> lowest in return above feed |
| :---: | :---: | :---: | :---: | :---: |
| Feed per hen, lbso: |  |  |  |  |
| Grain |  | 87 | 86 | 108 |
| Commercial feeds |  | 53 | 43 | 46 |
| Total concentrates |  | 140 | 129 | 154 |
| TOTAL FEED COST PER HEN |  | \$4.18 | \$3.76 | \$4.50 |
| Value of produce per hen: |  |  |  |  |
| Eggs sold and used in house |  | \$5.16 | \$6.21 | \$3.83 |
| Net increase in value of chickens |  | $\underline{-.02}$ | \$6. ${ }^{.36}$ | $\frac{-.36}{\$ 3.47}$ |
| TOTAL VALUE PRODUCED |  | \$5.14 | $\$ 6.36$ $\$ 2.60$ | \$-1.03 |
| RETURNS ABOVE FEED COST PER HEN |  | \$.96 | $\$ 2.60$ $\$ 171.00$ | \$-1.03 |
| RETURNS FOR ${ }^{\text {P10 }}$ IOP OFEED |  | \$127.00 | \$171.00 |  |
| Price rectd. per doz.eggs sold (cts.) |  | 30.8 | 32.1 | 30.0 |
| Eggs laid per hen |  | 201 | 234 |  |
| Ave. No. of hens on farm during year |  | 325 | 407 | 261 |
| Per cent of hens that are pullets |  | 85 | 90 | 72 |
| Per cent death loss of hens |  | 10 | 7 | 17 |
| Number of chicks started: |  |  |  | 267 |
| Pullets |  | 394 | 528 | 267 |
| Straight run |  | 8 | 5 | 22 |
| Cockerels |  | 37 | 20 | 22 |
| Lbs. chickens produced |  | 1466 | 1978 | 794 |
| *Includes feeds and returns from laying flock and rearing flock. |  |  |  |  |
| Table 22. Feed Cost and Returns from Laying Hens. 1956 |  |  |  |  |
|  |  |  | Average |  |
|  |  | Your |  |  |
|  |  | farm | far |  |
| Feed per hen, lbsa: |  |  | 69 |  |
| Grain |  | - | . 35 |  |
| Commercial feeds |  | $\underline{\square}$ |  |  |
| Total concentrates |  |  | $\frac{304}{}$ |  |
| TOTAL FEED COST PER HEN |  |  | \$3.08 |  |
| Value of produce per hen: |  |  | \$5.28 |  |
| Eggs sold and used in home |  |  |  |  |
| Less depreciation and death loss |  |  | -. 84 |  |
| TOTAL VALUE PRODJCED |  |  | \$4.44 |  |
| RETURN ABOVE FEFD COST PER HEN |  |  | \$1.36 |  |
| RETURN FOR \$100 OF FRED |  |  | $\begin{aligned} & \$ \mathrm{I}_{4} 4_{4}, 00 \\ & 204 \end{aligned}$ |  |
| Eggs laid per hen |  |  |  |  |
| Price rec'd. per doz.eggs sold (cts.) |  |  | 31.0 |  |
| Ave. No. hens on farm during year |  |  | $\begin{aligned} & 356 \\ & 378 \end{aligned}$ |  |
| Nos of hens on hand begin. of year |  |  | 11 |  |
| Per cent death loss |  |  |  |  |
| Per cent of hens that are pullets |  |  | 67 |  |

Table 23．Feed Costs and Returns from Chicks． 1956

| Items | Your <br> farm | $\begin{aligned} & \text { Average } \\ & \text { of } 8 \\ & \text { farms } \end{aligned}$ |
| :---: | :---: | :---: |
| Feed per 100 chicks raised， lbs ： |  |  |
| Grain |  | 1372 |
| Commercial feeds |  | 774 |
| Total concentrates |  | 21146 |
| Total feed cost per 100 chicks raised | \＄ | \＄73．76 |
| Net increase in value per 100 chicks |  | 88.37 |
| RETURN OVER FEED COST PER 100 CHICKS |  | \＄15．01 |
| RETURN FOR \＄100 OF FEED |  | \＄120．00 |
| Number of chicks bought： |  |  |
| Pullets |  | 504 |
| Cockerels |  | 95 |
| Price paid per 100 chicks bought： |  |  |
| Pullets |  | \＄48．97 |
| Cockerels |  | 10.00 |
| Number of chicks raised |  | 518 |
| Per cent death loss |  | 13.1 |
| Price rec＇d．per pound sold（cents） |  | 19.3 |

## EXPLANATION OF＂WORK UNITS＂

The total＂work units＂for any one farm is a measure of the size of that farm business．A work unit as used in this report is the average accomplishment of a farm worker，in a ten hour day，working on crops and productive livestock at aver－ age 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 24.

Table 24．Number of Work Units for Each Class of Livestock and Each Acre of Crop

| Item | No of work units | Item | No．of work units |
| :---: | :---: | :---: | :---: |
| Dairy and dual pur．cows | 10.0 per cow | Small grain | .5 per acre |
| Other dairy \＆du．pur．cattle | 3.5 per an．unit＊ | Sugar beets | 1.5 per acre |
| Beef breeding herd | 3.5 per an．unit＊ | Sweet corn | ． 7 per acre |
| Feeder cattle | .25 per 100 lbs 。 | Corn husked | .7 per acre |
| Sheep－farm flock | 1.5 per an，unit＊ | Corn hogged | － 4 per acre |
| Sheep－feeder | ． 3 per 100 lbs 。 | Corn shredded | 1.5 per acre |
| Hogs | ． 2 per 100 lbs 。 | Corn silage | 1.0 per acre |
| Turkeys | .5 per 100 Ibs 。 | Corn fodder | 1.0 per acre |
| Hens | 20.0 per 100 hens | Alfalfa hay | ． 6 per acre |
| Canning peas | .5 per acre | Soybean hay | ． 8 per acre |
| Soybeans for grain | .5 per acre | Other hay crops | .4 per acre |

＊Animal unit represents one dairy cow or bull，two other dairy cattle， $1 \frac{1}{4}$ beef cows or bull， 1 feeder steer or heifer， $31 / 3$ other beef cattle， 7 sheep， I4 lambs， $2 \frac{1}{2}$ hogs， 5 pigs， 50 hens or 1,100 pounds of turkeys produced．

Table 24. Summary of Farm Earnings by Years

| Items | $\begin{aligned} & \text { Average } \\ & 1940-44 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Average } \\ & 1945-49 \\ & \hline \end{aligned}$ | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of farms | 165 | 140 | 139 | 122 | 118 | 153 | 156 | 146 | 135 |
| Total farm capital | \$36133 | \$40590 | \$50868 | \$54869 | \$58082 | \$62148 | \$62494 | \$64512 | \$70144 |
| Monthly charge for: |  |  |  |  |  |  |  |  |  |
| Unpaid family labor* | 63 | 118 | 130 | 130 | 130 | 130 | 130 | 130 | 135 |
| Board to hired labor* | 23 | 33 | 36 | 36 | 36 | 36 | 36 | 36 | 38 |
| FARM EXPENSES |  |  |  |  |  |  |  |  |  |
| Dairy and dual-pur. cattle bought | 120 | 175 | 321 | 252 | 264 | 158 | 82 | 98 | 196 |
| Beef cattle bought (incl. feeders) | 1405 | 2027 | 4120 | 5581 | 4461 | 2841 | 3482 | 3865 | 5506 |
| Hogs bought | 275 | 447 | 478 | 395 | 361 | 427 | 577 | 384 | 322 |
| Sheep bought (incl. feeders) | 596 | 365 | 543 | 881 | 569 | 766 | 235 | 483 | 837 |
| Poultry bought (incl. turkeys) | 140 | 165 | 164 | 246 | 122 | 187 | 233 | 181 | 264 |
| Horses bought | 39 | 11 | 6 | 5 | 4 | 9 | 7 | 2 | 2 |
| Miscellaneous livestock expense | 140 | 248 | 328 | 391 | 369 | 400 | 403 | 424 | 468 |
| Miscellaneous crop expenses | 402 | 869 | 966 | 995 | 1079 | 1496 | 1633 | 1690 | 1539 |
| Feed bought | 2041 | 3191 | 3807 | 4973 | 4318 | 4060 | 4456 | 4498 | 5291 |
| Custom work hired | 193 | 356 | 382 | 406 | 439 | 468 | 497 | 587 | 646 |
| Power machinery (new) | 320 | 757 | 1164 | 1063 | 610 | 705 | 780 | 802 | 634 |
| Power machinery (upkeep, gas, oil) | 551 | 1081 | 1308 | 1336 | 1438 | 1552 | 1474 | 1570 | 1636 |
| Crop and general machinery (new) | 335 | 912 | 1248 | 1121 | 871 | 779 | 979 | 719 | 790 |
| Crop and general machinery (upkeep) | ) 124 | 284 | 292 | 306 | 323 | 333 | 310 | 338 | 375 |
| Livestock equipment (new) | 112 | 99 | 124 | 157 | 124 | 191 | 225 | 241 | 210 |
| Livestock equipment (upkeep) | 55 | 117 | 125 | 142 | 121 | 125 | 161 | 7.44 | 170 |
| Buildings and fencing (new) | 341 | 676 | 741 | 1082 | 1023 | 738 | 821 | 786 | 618 |
| Buildings and fencing (upkeep) | 11.9 | 319 | 331 | 286 | 331 | 304 | 306 | 272 | 254 |
| Hired labor | 593 | 794 | 843 | 910 | 835 | 928 | 897 | 895 | 863 |
| Taxes | 330 | 403 | 534 | 565 | 627 | 685 | 701 | 724 | 804 |
| Insurance | 33 | 56 | 78 | 77 | 87 | 101 | 109 | 130 | 153 |
| General farm | 65 | 118 | 146 | 165 | 162 | 166 | 210 | 197 | 205 |
| Total farm purchases | \$8359 | \$13464 | \$18049 | \$21335 | \$ $\$ 18538$ | \$17419 | \$18578 | \$19030 | \$21783 |
| Decrease in farm capital | - - | - - | - | - - | - - | 925 | - - | 2132 | $\square$ |
| Interest on farm capital | 1806 | 2030 | 2543 | 2743 | 2904 | 3107 | 3125 | 3226 | 3507 |
| Unpaid family labor | 310 | 377 | 360 | 367 | 335 | 339 | 390 | 355 | 371 |
| Board furnished hired labor | 142 | 107 | 99 | 79 | 91 | 100 | 87 | 95 | 87 |
| Total farm expense | \$10617 | \$15978 | \$2105I | \$24524 | \$21868 | \$21890 | \$22180 | \$24838 | \$25748 |

[^1]Table 24．Summary of Farm Earnings by Years（continued）

| Items | $\begin{aligned} & \text { Average } \\ & 1940-44 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Average } \\ & 1945-49 \\ & \hline \end{aligned}$ | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FARM RECEIPTS |  |  |  |  |  |  |  |  |  |
| Dairy and dual－pur．cattle | \＄ 383 | \＄ 573 | \＄904 | \＄ 781 | 粦 765 | ＊ 572 | \＄ 453 | \＄ 524 | \＄ 438 |
| Dairy products | 783 | 988 | 885 | 1015 | 1124 | 1369 | 1033 | 1091 | 1324 |
| Beef cattle | 3140 | 4246 | 6438 | 9471 | 8115 | 7695 | 7933 | 7478 | 10595 |
| Hogs | 3622 | 6775 | 6801 | 7930 | 7322 | 7237 | 7983 | 6147 | 5797 |
| Sheep and wool | 928 | 651 | 810 | 753 | 1057 | 1633 | 637 | 798 | 1344 |
| Poultry（incl．turkeys） | 563 | 525 | 590 | 838 | 184 | 478 | 540 | 550 | 608 |
| Eggs | 597 | 1035 | 790 | 1055 | 875 | 1166 | 939 | 954 | 11.90 |
| Horses | 44 | 23 | $1{ }_{4}$ | 6 | 12 | 4 | 4 | 4 | 7 |
| Corn | 584 | 1138 | 1542 | 997 | 1245 | 2742 | 2749 | 3697 | 3385 |
| Small grain | 1031 | 2055 | 1694 | 1240 | 1217 | 1153 | 876 | 920 | 809 |
| Other crops | 400 | 879 | 677 | 901 | 981 | 1102 | 1454 | 1850 | 1867 |
| Machinery and equip．sold | 196 | 364 | 446 | 644 | 378 | 170 | 195 | 222 | 203 |
| Agric．adjustment payment | 370 | 65 | 57 | 72 | 70 | 65 | 54 | 26 | 76 |
| Income work off the farm | 174 | 313 | 290 | 398 | 341 | 346 | 371 | 377 | 332 |
| Miscellaneous | 224 | 78 | 112 | 130 | 154 | 88 | 204 | 252 | 315 |
| Total farm sales | \＄1 1 3039 | \＄${ }^{\text {P }}$ ¢ 9708 | \＄2 $2 \underline{2050}$ | \＄26171 | \＄23840 | \＄25820 | \＄25425 | \＄24890 | \＄28290 |
| Increase in farm capital | 1098 | 2395 | 5214 | 2561 | 1216 | ＋ | 1158 | ＋2480 | 2423 |
| Family living from farm | 553 | 666 | 669 | 708 | 748 | 34.4 | 296 | 271 | 250 |
| Total farm receipts | \＄114690 | \＄22769 | \＄27933 | \＄29440 | \＄25804 | \＄26164 | \＄26879 | \＄25161 | \＄30963 |
| Total farm expenses | 10617 | 15978 | 21051 | 24524 | 21868 | 21890 | 22180 | 24838 | 25748 |
| Labor earnings | 4073 | 6791 | 6882 | 4916 | 3936 | 4274 | 4699 | 323 | 5215 |
| MEAS．OF FARM ORG．AND MANAGEMENT |  |  |  |  |  |  |  |  |  |
| Percent high return crops＊＊ | 41.2 | 56.4 | 54.4 | 60.2 | 60.9 | 64.8 | 58.3 | 60.6 | 63.0 |
| Livestock units per 100 acres ${ }^{*}$ | 23.6 | 20.3 | 20.0 | 31.7 | 33.2 | 31.3 | 35.4 | 36.1 | 37.8 |
| Work units＊＊＊ | 588 | 501 | 502 | 529 | 515 | 397 | 408 | 412 | 433 |
| Work units per worker ${ }^{\text {\＃＊＊}}$ | 273 | 285 | 295 | 311 | 322 | 234 | 255 | 242 | 271 |
| Expenses per work unit ${ }^{* * *}$ | \＄3．02 | \＄6．23 | \＄8．01 | \＄7．75 | \＄8．29 | \＄11．66 | \＄11．76 | \＄ 12.34 | \＄12．72 |
| ACRES PER FARM | 282 | 254 | 257 | 256 | 260 | 283 | 270 | 272 | 284 |
| Crop acres per farm YIELDS PER ACRE | 212 | 197 | 203 | 198 | 201 | 222 | 21.6 | 219 | 227 |
| Flax．bu． | 10.5 | 13.7 | 15.1 | 9.8 | 13.8 | 9.2 | 9.7 | 15.9 | 9.9 |
| Barley，bu． | 25.1 | 34.1 | 38.0 | 23.2 | 28.9 | 22.2 | 32.7 | 34.5 | 25.9 |
| Oats，bu． | 40.4 | 46.3 | 47.0 | 47.7 | 44.0 | 27.7 | 40.8 | 55.1 | 39.7 |
| Corn，grain，bu． | 49.7 | 47.8 | 44．9 | 38.3 | 58.9 | 59.9 | 66.7 | 51.5 | 65.0 |
| Corn silage，ton． | 8.9 | 8.4 | 8.7 | 7.5 | 9.5 | 9.7 | 10.4 | 8.8 | 10.5 |
| Alfalfa hay，ton． | 2.2 | 2.1 | 2.0 | 2.5 | 2.6 | 2.9 | 2.6 | 2.2 | 2.7 |

\％The crop ratings used in calculating the percentage of the tillable land in high return crops was changed
considerably in 1944．
兴The basis for computing animal units was revised in 1951.
欮The basis for computing work units was revised in 1953.

Table 25. Summary of Miscellaneous Items by Years

| Items | Average $1940-44$ | Average 1945-49 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RETURN ABOVE FEED COST PER: | \$67.87 | \$171.96 | $\$ 130.70$ | \$139.79 | \$177.68 | \$93.63 | \$76.34 | \$94.83 | \$ 113.19 |
| Dairy cow | \$01.87 | \$114.96 | \$130.70 | \%139.19 | 117.60 41.22 | 49.63 34.32 | 176.94 17.94 | 53.23 | \$113.34 |
| Dual-purpose cow Animal unit in beef herd* | 21.90 | 46.46 | 85.59 | 130.06 | 30.37 | -34.29 | 17.81 .80 | -6.16 | -6.13 |
| 100 lbs. feeder cattle prod. | 3.11 | 8.87 | 17.09 | 13.00 | -2.45 | -6.50 | 5.18 | 1.93 | 4.55 |
| Head of sheep in farm flock | 4.24 | 8.20 | 14.29 | 13.33 | $-2.00$ | 2.06 | 5.22 | 4.40 | 8.63 |
| 100 lbs. feeder sheep prod. | 6.38 | 1.53 | 20.52 | - | -9.61 | . 38 | 11.17 | 5.98 | 3.88 |
| 100 lbs. hogs produced | 4.05 | 6.29 | 6.85 | 4.85 | 2.48 | 10.68 | 6.30 | .34 | 4.98 |
| Hen | 1.72 | 2.15 | . 83 | 2.09 | .62 | 2.20 | -. 27 | 1.48 | .96 |
| FEED COST PER: |  |  |  |  |  |  |  |  |  |
| Dairy cow | 67.74 | 121.21 | 136.67 | 150.85 | 148.11 | 142.90 | 135.97 | 136.98 | 137.55 |
| Dual-purpose cow | 53.40 | 101.44 | 123.55 | 108.86 | 114.56 | 114.62 | 103.08 | 94.80 | 111.68 |
| Animal unit in beef herd* | 38.90 | 63.30 | 82.24 | 114.85 | 112.04 | 96.31 | 81.98 | 95.93 | 83.88 |
| Cwt. of feeder cattle prod. | 11.56 | 21.66 | 20.13 | 23.44 | 25.01 | 23.44 | 21.40 | 19.06 | 18.09 |
| Head of sheep in farm flock | 3.26 | 5.62 | 7.06 | 7.59 | 7.77 | 7.95 | 8.81 | 8.94 | 8.76 |
| Cwt. feeder sheep produced | 11.32 | 26.88 | 25.51 | - | 25.28 | 31.86 | 18.44 | 14.17 | 21.52 |
| 100 lbs. hogs produced | 7.36 | 12.70 | 12.03 | 14.17 | 13.87 | 12.27 | 12.42 | 11.17 | 10.76 |
| Hen | 2.28 | 4.28 | 4.35 | 4.85 | 4.88 | 4.64 | 4.60 | 4.02 | 4.18 |
| MISC. LIVESTOCK INFORMATION |  |  |  |  |  |  |  |  |  |
| No. dairy or dual-pur. cows | 8.1 | 5.3 | 4.6 | 4.5 | 4.5 | 5.3 | 4.7 | 4.6 | 5.0 |
| Head in beef breeding herd | 10.5 | 9.4 | 8.0 | 8.9 | 11.6 | 13.4 | 13.4 | 11.7 | 10.0 |
| Lbs. feeder cattle produced | 9336 | 6676 | 8699 | 10852 | 12152 | 14674 | 14309 | 18423 | 23043 |
| Litters of pigs | 18.5 | 19.5 | 22.7 | 23.4 | 21.5 | 17.7 | 23.2 | 25.2 | 22.2 |
| Lbs. of hogs produced | 30411 | 34292 | 37633 | 39702 | 38436 | 31283 | 39269 | 42517 | 38898 |
| No. of hens | 197 | 202 | 186 | 180 | 179 | 187 | 204 | 182 | 222 |
| Ibs. of butterfat per: Dairy cow | 246 | 257 | 277 | 280 | 282 | 286 | 283 | 295 | 298 |
| Dual-purpose cow | 183 | 180 | 213 | 169 | 171 | 196 | 170 | 181 | 195 |
| No. of pigs weaned per litter | 6.1 | 6.3 | 6.5 | 6.6 | 6.7 | 6.7 | 6.9 | 7.0 | 7.3 |
| Percent lamb crop | 105 | 109 | 113 | 115 | 94 | 108 | 106 | 113 | 116 |
| Eggs per hen | 134 | 171 | 175 | 176 | 174 | 186 | 191 | 188 | 201 |

[^2]Table 25. Summary of Miscellaneous Items by Years (continued)

| Items | $\begin{aligned} & \text { Average } \\ & 1940-44 \end{aligned}$ | $\begin{aligned} & \text { Average } \\ & 1945-49 \\ & \hline \end{aligned}$ | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PRICE RECEIVED PER: |  |  |  |  |  |  |  |  |  |
| Ib. B.F. to creameries | \$. 044 | \$. 73 | \$ . 66 | \$ 0.75 | \$.80 | \$. 71 | \$ 21.54 | $\$ .61$ 20.73 | \$ 19.63 |
| 100 lbs . fat cattle | 11.73 | 21.71 | 27.24 | 33.73 | 30.16 25.13 | 20.36 20.71 | 21.54 20.60 | 19.55 | 20.38 |
| 100 lbs . feeder sheep | 12.22 .38 | 22.08 | 25.82 .55 | 1.00 | 25.13 .42 | 20.71 .53 | 20.60 | 19.42 | 20.38 |
| Pound of wool | 70.38 | ..$^{41}$ | 77.95 | ${ }_{19}^{19} 61$ | 17.34 | 21.19 | 21.07 | 14.33 | 14.15 |
| 100 lbs . of hogs | 10.86 | 19.54 | 17.93 | 19.61 | 17.34 | 21.10 |  | .33 | . 31 |
| Dozen eggs | . 26 | -37 | -30 | -40 | -34 | -40 | . 29 | . 33 | -31 |
|  |  |  |  |  |  |  |  |  |  |
| Corn, bu. | - 70 | 1.24 | 1.20 | 1.36 | 1.34 | 1.31 | 1.34 .70 | 1.23 | 1.25 |
| Oats, bu. | . 46 | . 74 | . 72 | . 81 | $\begin{array}{r}.76 \\ \hline 1.21\end{array}$ | . 171 | .70 1.02 | . 61 | .63 .94 |
| Barley, bu. | . 58 | 1.31 | 1.20 | 1.23 19.00 | 1.21 17.00 | 17.50 | 17.02 17.00 | 18.00 | 18.50 |
| Alfalfa hay, ton | 10.00 6.24 | 18.60 10.86 | 21.00 12.20 | 19.00 11.00 | 17.00 9.80 | 17.10 10.10 | 1.00 9.80 | 10.40 | 10.95 |
| Timothy hay, ton | 6.24 | 10.86 | 12.20 | 11.00 | 9.80 | 10.10 | 9.80 | 10.40 | 10.9 |
| Corn silage, ton | 3.20 | 6.07 | 6.70 | 6.00 | 5.75 | 5.85 | 5.75 | 6.00 | 6.00 |
| Bran, cwt. | 1.80 | 2.98 | 2.80 | 3.20 | 3.45 | 2.95 | 2.85 | 2.65 | 2.55 |
| Linseed oilmeal, cwt. | 2.33 | 3.80 | 3.95 | 4.00 | 4.85 | 4.05 | 4.20 | 4.10 | 3.70 |
| Soybean meal, cwt. | 2.51 | 4.15 | 3.95 | 4.00 | 5.60 | 4.40 | - | - | 3.70 |


[^0]:    * $A, B, C$ and $D$ refer to ranking used in calculating percent of tillable land in high return crops.

[^1]:    * These adjustments should be considered in comparing 1956 results with previous years.

[^2]:    * The basis for computing animal units was revised in 1951.

