UNIVERSITY OF MINNESOTA
Department of Agriculture
and
UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics
and the
Farm Bureaus of
Dodge, Freeborn, Goodhue, Le Sueur, Mower, Rice,
Steele, and Waseca Counties
Cooperating

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# Annual Report of the Farm Management Service for Farmers in Southeast Minnesota for the year 1933

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Cooperator: _____

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# Sixth Annual Report of the Farm Management Service of Dodge, Freeborn, Goodhue, Le Sueur, Mower, Rice, Steele, and Waseca Counties for the Year 1933

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## INTRODUCTION

The Division of Agricultural Economics and the Division of Agricultural Extension of the University of Minnesota, the Bureau of Agricultural Economics of the United States Department of Agriculture, and the farm bureaus of Dodge, Freeborn, Goodhue, Le Sueur, Mower, Rice, Steele, and Waseca Counties organized late in 1927 the Farm Management Service Project, to operate in the above named counties, beginning January 1, 1928. This farm management service is offered to farmers who desire to keep farm records, and to have these records summarized and analyzed in connection with those of other farmers. Each farmer who cooperates in this service pays an annual fee which covers a part of the cost.

The project is under the direction of G. A. Pond and W. P. Ranney of the Division of Agricultural Economics, University of Minnesota. Hearty support

and assistance have been rendered by the county agricultural agents of the above named counties, respectively: M. L. Armour, W. M. Lawson, M. A. Thorfinnson, R. D. Evans, F. L. Liebenstein, H. Hass, and R. A. Fischer; by W. L. Cavert and S. B. Cleland of the Division of Agricultural Extension and by G. A. Sallee, T. R. Nodland and S. A. Engene of the Division of Agricultural Economics, who aided in closing the records at the end of the year.

## TYPE OF FARMING

The service is restricted to livestock farms on which dairy cattle are the principal source of income. Although some milk and cream are retailed in cities, and some milk is sold for shipment to the Twin Cities, cream for manufacture into butter is the principal dairy product sold. This is marketed through farmer owned cooperative creameries specializing in the manufacture of high quality butter. The skimmilk is retained on the farm and fed to hogs and poultry. These two classes of livestock are also an important source of income.

The principal crops grown are corn, oats, barley, and hay. These crops are raised primarily as livestock feed although a seasonal surplus may be sold. Wheat, sweet corn, canning peas, sugar beets, flax, and potatoes are grown to a limited extent as cash crops. Weather conditions were somewhat more favorable for corn production in 1933 than in previous years, but less favorable for other crops.

This report shows that the receipts from the sales of dairy products constituted one-third, and the receipts from hog sales a little more than one-sixth of the average cash income of 108 cooperators included in this report. These farms are fairly typical of the system of dairy farming prevailing in southeastern Minnesota.

## CLIMATE, SOIL, AND TOPOGRAPHY

The weather conditions normally are fairly uniform in these eight counties, but there is some variation in soil conditions and topography. The soil varies from sandy loam to a rich black clay loam; the latter type predominates in this area. Some of the farms are level, all tillable, and well drained, but most of them are gently rolling with some land too rough or too wet to cultivate. Goodhue County has more rolling land than the other counties. Much of the level land is tiled to make possible its cultivation in wet years. However, on a number of farms, there is considerable land which is poorly drained. In Goodhue, Dodge, and Mower Counties, and the eastern part of Rice and Steele Counties, the soil is generally lime deficient, and applications of lime are necessary in order to grow alfalfa and sweet clover. In the remainder of the area, it is not necessary, as a rule, to apply lime in order to grow these two crops.

## RECORDS KEPT

The records kept by the cooperators included inventories at the beginning and end of the year, cash receipts and expenses, a report of feed fed to the various classes of livestock, and a record of farm produce used by the farm family. Supplementary information was also secured during the year regarding crop and livestock production and practices.

The cooperators were assisted and supervised in keeping their records by the field agent, R. C. Bevan, who visited each farm in the eight counties several times during the year. In addition to securing the supplementary information, the field agent's duties included numerous services, viz., securing a

monthly list of prices of farm products prevailing in the areas, helping the farmer place uniform values on real estate and equipment, checking the cash and feed records, and answering any questions that might arise as to how the entries should be made in the account book. The supervision resulted in uniformity in the type of records secured, in the inventory valuations and in the prices at which feed and farm produce were charged.

At the end of the year, each farm was visited by a representative of the University who checked the records for completeness and accuracy. The books were then taken to the central office at University Farm, where every entry was again checked and omissions were noted. Any discrepancies found were referred back to the farmers for correction. This double checking insured a high degree of accuracy and completeness in each individual record.

## PURPOSE OF PROJECT

The Farm Management Service renders assistance to the cooperators in keeping such records as will enable each operator to know the returns for his labor and management, the returns to capital and family labor, and the actual earnings from the farm that the family had to spend for living and personal use. The main purpose of the service is to secure such data and information, which when compared with that secured on other farms, will enable the cooperator to increase his efficiency in various enterprises and to organize his farm on a more profitable basis. For the latter purpose, it was necessary for all the cooperators, tenants as well as owner operators to include the whole farm business in order that the results would be on a comparative basis. For the purpose of comparison, the earnings as shown in this report are computed as if each farm was owned by its operator; however, each tenant is supplied a statement of his earnings on the basis of the rental system under which he was operating.

## ANALYSIS OF THE FARM BUSINESS

On pages 6 and 7 are presented financial summaries of the year's business, showing the average results for the 108 farms on which the work was completed for the twelve months' period, January 1, 1933 to December 31, 1933, and the average results for the highest one-fifth of the farms in respect to Operator's Labor Earnings, and likewise for the lowest one-fifth. In the "your farm" column, in the copy sent to the farmer, the results of his individual farm business are inserted in order that he may compare his figures with the averages of the various groups.

The data on page 9 and the remaining pages, which set up the ranking in the various measures of efficiency, should suggest to each cooperator some possibilities for improvement in his organization of the various enterprises and of the business as a whole. Although each farm is an individual problem and has its particular advantages and limitations, the type of farming is fairly uniform in the area. This study should bring out trends toward more profitable combinations of enterprises, and also toward more efficient methods of management within the enterprises. In spite of the differences in physical and economic conditions explained on page 2, it is significant that the same general factors account for financial success in all of the eight counties.

## CAPITAL INVESTMENT IN FARM BUSINESS

The average size of the farms in this report was 202 acres. The average farm inventory was $16,522. This does not include the value of the house in which the operator lived. In 1933, 46.9 per cent of the average farm inventory

consisted of land; 21.5 per cent of permanent improvement; 8.4 per cent of feeds and supplies; 11.2 per cent of machinery and equipment; and 12.0 per cent of livestock, of which two-fifths or an average of $787 was the average inventory value of milk cows.

## RETURNS TO OPERATORS FOR THEIR LABOR AND MANAGEMENT

The average cash receipts per farm were $2936. In addition, farm produce to the value of $193 was consumed by the farm family and there was an average inventory increase of $505 per farm. The total average receipts per farm is the sum of these three items, $3634. The average total expense per farm, $1581, includes $1510 cash expense and an estimated allowance of $71 for board of hired labor. The difference between the total income and total expense figure is $2053. This is the return which the farmer received for his own labor and management, the services of members of his family and the use of his capital. After deducting a charge of 5 per cent on the average inventory valuation, $826, for the services of capital, there remains $1227 for the services of the farmer and his family. The average value of family labor used, if computed at hired man's wages, was $241. The average operator's labor earnings is the family earnings less their allowance of $241, or $986. This is the return to the farmer for his labor and management over and above a 5 per cent return for his capital and going wages for other members of the family.

On page 21, financial summaries for 1933 are shown for six groups of farms, classified on basis of size (total acres in farm). A comparison of the financial returns and other miscellaneous information for 1928 to 1933 inclusive is given on pages 29 and 30.

The table on page 18 shows the average amounts and values for each item included in the total of farm produce used in the house. On many farms, a saving could be made if more produce were raised on the farm rather than purchased.

Sixty-eight farmers included in this report kept a detailed record of personal and household expenses, and asked for a distribution of these expenses. This distribution is shown on page 18, with averages for the sixty-eight farms and for the fourteen most profitable and fourteen least profitable in this group. Taking into consideration the number of members (adult equivalents) in his family and the number in the average family, each farmer can compare his items of expense with those of the average.

Summary of Farm Inventories 1933

| Items | Your farm | Average of 108 farms | 22 most profitable farms | 22 least profitable farms |
|---|---|---|---|---|
| Size of farm (acres) | _____ | 202 | 255 | 172 |
| Size of business (days of prod.work) (1) | _____ | 768 | 1,120 | 572 |
| Average farm inventory (without house) | _____ | $16,522 | $22,407 | $13,284 |
| Land | _____ | 7,745 | 10,616 | 5,899 |
| Farm improvements | _____ | 3,548 | 4,363 | 3,295 |
| Machinery & equipment (total) | _____ | 1,858 | 2,709 | 1,524 |
| Gen. machinery & equipment | _____ | 1,327 | 1,941 | 1,017 |
| Tractor | _____ | 283 | 402 | 274 |
| Truck | _____ | 68 | 145 | 56 |
| Auto (farm share) | _____ | 104 | 114 | 123 |
| Gas engine (farm share) | _____ | 24 | 19 | 25 |
| Electrical equipment (farm share) | _____ | 52 | 88 | 29 |
| Feeds & seeds | _____ | 1,354 | 1,904 | 940 |
| Miscellaneous supplies | _____ | 28 | 30 | 32 |
| Horses (total) | _____ | 443 | 509 | 412 |
| Horses | _____ | 412 | 464 | 400 |
| Colts | _____ | 31 | 45 | 12 |
| Productive livestock (total) | _____ | 1,546 | 2,276 | 1,182 |
| Cows | _____ | 787 | 1,141 | 559 |
| Other cattle | _____ | 421 | 625 | 395 |
| Hogs | _____ | 153 | 230 | 99 |
| Sheep | _____ | 54 | 40 | 46 |
| Poultry | _____ | 131 | 240 | 83 |

(1) Explanation of term: "Days of Productive Work".

The total "Days of Productive Work" for any one farm are a measure of size of that farm business. The average number of "ten-hour days" of man labor required per head of productive livestock and per acre of crops is used in combining the crops and the livestock in one single measure of size of business.

The number of days of productive work for each animal and each acre of crops, computed from data presented in Minnesota Technical Bulletin 44, "A Study of Dairy Farm Organization in Southeastern Minnesota", are listed as follows:

| Item | Per | No.of days of prod.work | Item | Per | No.of days of prod.work |
|---|---|---|---|---|---|
| Cows | Cow | 16.6 | Corn for grain (husked) | Acre | 2.1 |
| Other cattle | Animal unit* | 7.6 | Corn for grain (husk.& shred.) | " | 2.8 |
| Sheep | Animal unit* | 2.7 | Corn for silage | " | 2.6 |
| Poultry | 100 hens | 20.1 | Corn hogged | " | 1.25 |
| Hogs | 100 lbs. pork prod. | .55 | Corn for fodder | " | 1.8 |
| Alfalfa | Acre | 1.5 | Sweet corn | " | 3.0 |
| Tame & wild hay | " | .6 | Potatoes | " | 6.4 |
| Small grain & flax | " | 1.0 | Sugar beets | " | 4.0 |
| Small grain hogged | " | .4 | | | |
| Canning peas | " | 2.5 | | | |

*Animal Unit represents one cow, one bull, two head of young cattle, seven head of sheep, fourteen lambs, five hogs, ten pigs, or 100 hens.

Summary of Farm Earnings 1933

| Items | Your farm | Average of 108 farms | 22 most profitable farms | 22 least profitable farms |
|---|---|---|---|---|
| CASH EXPENSES | | | | |
| Tractor (new & exp.) | $_____ | $94 | $148 | $51 |
| Truck (new & exp.) | _____ | 44 | 111 | 38 |
| Auto (new & exp.) (farm share) | _____ | 66 | 81 | 58 |
| Gas engine (new & exp.) (farm share) | _____ | 9 | 7 | 5 |
| Electricity (new & exp.) (farm share) | _____ | 33 | 68 | 20 |
| Machinery and equipment (new) | _____ | 98 | 149 | 94 |
| Machinery and equipment (exp.) | _____ | 48 | 66 | 35 |
| Bldgs., fences, tiling (new) | _____ | 51 | 73 | 50 |
| Bldgs., fences, tiling (exp.) | _____ | 26 | 30 | 21 |
| Hired labor | _____ | 208 | 465 | 138 |
| Feed for livestock | _____ | 200 | 422 | 152 |
| Other expense for livestock | _____ | 49 | 65 | 49 |
| Horses bought | _____ | 33 | 57 | 16 |
| Cows bought | _____ | 15 | 28 | 31 |
| Other cattle bought | _____ | 52 | 37 | 143 |
| Hogs bought | _____ | 27 | 23 | 21 |
| Sheep bought | _____ | 8 | 6 | 1 |
| Poultry bought | _____ | 42 | 106 | 21 |
| Crop (seed, twine, spray) | _____ | 107 | 120 | 86 |
| Taxes and insurance | _____ | 275 | 377 | 229 |
| General farm | _____ | 25 | 29 | 27 |
| (1) Total cash expense | _____ | 1,510 | 2,468 | 1,286 |
| (2) Decrease in farm inventory | _____ | - | - | - |
| (3) Board for hired labor | _____ | 71 | 124 | 43 |
| (4) Total expense(sum of (1)(2) & (3) | _____ | 1,581 | 2,592 | 1,329 |
| CASH RECEIPTS | | | | |
| Horses | _____ | 17 | 33 | 11 |
| Cows | _____ | 100 | 139 | 88 |
| Dairy products | _____ | 1,064 | 1,970 | 758 |
| Other cattle | _____ | 204 | 241 | 206 |
| Hogs | _____ | 510 | 727 | 318 |
| Sheep | _____ | 62 | 49 | 46 |
| Poultry | _____ | 147 | 392 | 60 |
| Eggs | _____ | 229 | 477 | 124 |
| Small grain | _____ | 211 | 195 | 208 |
| Corn | _____ | 44 | 61 | 4 |
| Hay | _____ | 17 | 37 | 4 |
| Root crops | _____ | 53 | 189 | 5 |
| Other crops | _____ | 70 | 220 | 20 |
| Miscellaneous | _____ | 112 | 249 | 49 |
| Income from work off the farm | _____ | 96 | 245 | 26 |
| (5) Total cash receipts | _____ | 2,936 | 5,224 | 1,927 |
| (6) Increase in farm inventory | _____ | 505 | 727 | 253 |
| (7) Farm product used in house | _____ | 193 | 226 | 173 |
| (8) Total receipts (sum of (5) & (5) | _____ | 3,634 | 6,177 | 2,353 |
| Total expenses (4) | _____ | 1,581 | 2,592 | 1,329 |
| (9) Ret.to cap.& fam.labor(8)minus(4) | _____ | 2,053 | 3,585 | 1,024 |
| (10) Interest on farm inventory | _____ | 826 | 1,121 | 664 |
| (11) Family labor earnings (9)minus(10) | _____ | 1,227 | 2,464 | 360 |
| (12) Unpaid family labor | _____ | 241 | 305 | 230 |
| (13) Oper. labor earnings (11)minus(12) | _____ | 986 | 2,159 | 130 |

Summary of Farm Earnings 1933 (A)

| Items | Your farm | Average of 108 farms | 22 most profitable farms | 22 least profitable farms |
|---|---|---|---|---|
| EXPENSES AND NET DECREASES | | | | |
| Total power machinery and equipment | $_____ | $327 | $530 | $246 |
| Hired | _____ | 66 | 68 | 53 |
| Tractor | _____ | 97 | 174 | 76 |
| Truck | _____ | 44 | 111 | 22 |
| Auto (farm share) | _____ | 75 | 96 | 72 |
| Gas engine (farm share) | _____ | 10 | 9 | 6 |
| Elec. plant or current (farm share) | _____ | 35 | 72 | 17 |
| Gen. machinery and equipment | _____ | 162 | 260 | 128 |
| Bldgs., fencing, tiling | _____ | 140 | 148 | 136 |
| Hired Labor | _____ | 208 | 465 | 138 |
| Prod. livestock misc. expense | _____ | 37 | 58 | 35 |
| Miscellaneous horse expense | _____ | 3 | 1 | 2 |
| Crop | _____ | 62 | 77 | 53 |
| Real estate taxes | _____ | 207 | 278 | 175 |
| Personal property tax | _____ | 21 | 34 | 16 |
| Insurance | _____ | 47 | 65 | 38 |
| General farm | _____ | 25 | 29 | 28 |
| Crops and feeds | _____ | - | - | - |
| Horses | _____ | 1 | 6 | 3 |
| Board for hired labor | _____ | 71 | 124 | 43 |
| Interest on farm inventory | _____ | 826 | 1,121 | 664 |
| Unpaid family labor | _____ | 241 | 305 | 230 |
| (1) Total | _____ | 2,378 | 3,501 | 1,935 |
| RETURNS AND NET INCREASES | | | | |
| Crops | _____ | 953 | 1,372 | 497 |
| All productive livestock | _____ | 2,453 | 4,197 | 1,652 |
| Cows (including milk to other lvst.) | _____ | 1,195 | 2,127 | 854 |
| Other cattle | _____ | 299 | 409 | 244 |
| Hogs | _____ | 516 | 753 | 321 |
| Sheep | _____ | 68 | 51 | 56 |
| Poultry | _____ | 375 | 857 | 177 |
| Horses | _____ | - | - | - |
| Miscellaneous | _____ | 16 | 35 | 9 |
| Income from work off the farm | _____ | 97 | 245 | 26 |
| (2) Total | _____ | 3,519 | 5,849 | 2,184 |
| (3) Milk produced and fed on farm | _____ | 155 | 189 | 119 |
| (4) Tot.ret.& net incr.,(2) minus (3) | _____ | 3,364 | 5,660 | 2,065 |
| Total expenses (1) | _____ | 2,378 | 3,501 | 1,935 |
| (5) Oper. labor earnings (4) minus (1) | _____ | 986 | 2,159 | 130 |

(A) 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 6.

## EFFECT OF WELL BALANCED EFFICIENCY ON FARM PROFITS

It is quite evident from this report that few farmers have a monopoly on efficiency. Quite often farm operators show efficient management in one part of the farm business, which is offset by poor results in other phases of the business. These farmers get medium returns while those who fall down all along the line get the lowest returns and those few who can manage a large volume of business with high all around efficiency receive returns well above the average.

The data in this report and the reports of recent years in this same area, indicate that there are many factors of various degrees of importance which show relationships with operator's labor earnings or which offer opportunities for increasing earnings. Size of business tends to be a disadvantage to those who show a loss, for greater size is a factor serving to increase the loss. However, for those who excell in most of the other factors and receive some return for their labor and management, the latter tends to be increased by size of business. Likewise, it is an advantage to have more livestock per hundred acres when the stock shows a profit and a disadvantage when it shows a loss. Hence, a high balanced standing in the following eight factors is quite essential in order to secure the highest possible returns:

1. Pounds of butterfat per cow.
2. Returns above feed cost for productive livestock (other than cows) per animal unit.
3. Productive livestock units per 100 acres.
4. Crop yields.
5. Percentage of tillable acres in high return crops.
6. Size of business--days of productive work.
7. Days of productive work per worker.
8. Equipment and farm power expense (building, fencing, all machinery, horse feed, and miscellaneous horse expense) per day of productive work.

In Chart I is shown the effect of the number of the above factors in which the farmer excels on his labor earnings. The ten farmers who excelled in 7 or 8 factors had earnings of $1,821 above the average of 2 farmers who did not excell in any of the factors.

Chart I. Relation of Operator's Labor Earnings to the Number of Factors in which Farmer is above the Average

| No. of factors in which farm excels | No. of farms | Your farm | The length of the shaded lines are in proportion to the average operator's labor earnings | Average operator's earnings |
|---|---|---|---|---|
| Seven or eight | 10 | _____ | xxxxxxxxxxxxxxxxxxxxxxxxxxx | $1,631 |
| Five or six | 20 | _____ | xxxxxxxxxxxxxxxxxxxxxxxx | 1,535 |
| Three or four | 59 | _____ | xxxxxxxxxxxxxxx | 875 |
| One or two | 17 | _____ | xxxxxxxx | 485 |
| None | 2 | _____ | xxx | -190 |

The array in Chart I suggests that it will be worth while for each cooperator to study carefully his ranking on pages 9 and 10, and learn through his standing in respect to each of the above factors the elements of strength and weakness in his farm business.

Measures of Farm Organization and Management Efficiency 1933

| Measures used in chart on page 10 | | Your farm | Average of 108 farms | 22 most profitable farms | 22 least profitable farms |
|---|---|---|---|---|---|
| Operator's Labor Earnings | $ | | $986 | $2,159 | $130 |
| (1) Lbs. of butterfat per cow | | | 243 | 254 | 236 |
| (2) Return over feed (pr. lvst. other than cows)* | $ | | $14.13 | $23.19 | $9.04 |
| (3) Productive livestock units per 100 acres | | | 20.9 | 22.2 | 20.5 |
| (4) Crop yields** | | | 100. | 106. | 86. |
| (5) % of tillable land in high return crops*** | | | 40.5 | 44.8 | 40.8 |
| (6) Size of business--days of prod. work | | | 768 | 1,120 | 572 |
| (7) Days of prod. work per worker | | | 331 | 370 | 276 |
| (8) Power & eq. exp. per day of prod. work | $ | | $1.10 | $1.05 | $1.23 |
| Measures and items related to some of the above measures | | | | | |
| (2) Return over feed per head other cattle | $ | | $-.58 | $-1.24 | $-.20 |
| Return over feed per 100 lbs. pork prod. | | | .53 | .77 | .27 |
| Return over feed per hen | | | .75 | .89 | .55 |
| Return over feed per head sheep | | | 2.36 | 3.31 | 1.45 |
| (6) Days of productive work on crops | | | 209 | 296 | 169 |
| Days of productive work on prod. livestock | | | 518 | 712 | 393 |
| Days of other productive work | | | 41 | 112 | 10 |
| (7) Total number of workers | | | 2.3 | 3.1 | 2.1 |
| Number of family workers | | | 1.6 | 1.9 | 1.7 |
| Number of hired workers | | | .7 | 1.2 | .4 |
| (8) Power expense per day or prod. work | $ | | $.70 | $.69 | $.75 |
| Mach. & equip. exp. per day of prod. work | | | .21 | .22 | .23 |
| Bldg. & fencing exp. per day of prod. work | | | .19 | .14 | .25 |

*Given as returns over feed cost per animal unit of productive livestock other than cows.

**Given as a percentage of the average.

***Crops are marked on page 11 as (A), (B), (C), (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 per cent of tillable land in high return crops.

## Find Your Weak Links

Using your figures from page 9, locate your standing with respect to the various measures of farm organization and management efficiency. The average for the 108 farms included in this summary are located between the two limes across the center of the page.

| Oper. labor earnings | Lbs. B.F. per cow | Ret. above feed; prod. livestock other than cows | Prod. livestock units per 100 A. | Crop yields | High return crops | Days of prod. work | Days prod. work per worker | Power & eq. exp. per day prod. work |
|---|---|---|---|---|---|---|---|---|
| High | | | | | | | | |
| $6,438 | 399 | $87.02 | 45.2 | 160 | 70.8 | 2707 | 627 | $.55 |
| 2,486 | 328 | 64.13 | 35.9 | 140 | 65.5 | 1518 | 506 | .65 |
| 2,186 | 311 | 54.13 | 32.9 | 132 | 60.5 | 1368 | 471 | .74 |
| 1,886 | 294 | 44.13 | 29.9 | 124 | 55.5 | 1218 | 436 | .83 |
| 1,586 | 277 | 34.13 | 26.9 | 116 | 50.5 | 1068 | 401 | .92 |
| 1,286 | 260 | 24.13 | 23.9 | 108 | 45.5 | 918 | 366 | 1.01 |
| 986 | 243 | 14.13 | 20.9 | 100 | 40.5 | 768 | 331 | 1.10 |
| 786 | 226 | 9.13 | 18.9 | 92 | 37.0 | 688 | 306 | 1.21 |
| 586 | 209 | 4.13 | 16.9 | 84 | 33.5 | 608 | 281 | 1.32 |
| 386 | 192 | -.87 | 14.9 | 76 | 30.0 | 528 | 256 | 1.43 |
| 186 | 175 | -5.87 | 12.9 | 68 | 26.5 | 448 | 231 | 1.54 |
| -14 | 158 | -10.87 | 10.9 | 60 | 23.0 | 368 | 206 | 1.65 |
| -588 | 139 | -18.79 | 9.6 | 51 | 18.5 | 260 | 139 | 2.17 |
| Low | | | | | | | | |

Distribution of Acres in Farm 1933

| Crop (A)(B)(C)(D) refer to ranking used in calculating % of tillable land in High Return Crops (see page 9) | | No. of farms growing this crop | Your farm | Aver. of 108 farms | 22 most profitable farms | 22 least profitable farms |
|---|---|---|---|---|---|---|
| Winter wheat | (B) | 26 | | 3.8 | 4.4 | 2.8 |
| Spring wheat | (C) | 14 | | .7 | .1 | 1.9 |
| Oats | (D) | 69 | | 14.6 | 12.9 | 17.9 |
| Barley | (B) | 53 | | 12.6 | 11.9 | 20.2 |
| Rye | (D) | 8 | | .9 | 1.1 | 1.0 |
| Flax | (B) | 9 | | .8 | .8 | .5 |
| Wheat and oats | (C) | 27 | | 3.9 | 10.9 | 1.6 |
| Oats and barley | (C) | 64 | | 18.0 | 20.1 | 6.9 |
| Flax and wheat | (B) | 16 | | 3.5 | 1.4 | 4.3 |
| Oats, wheat, and barley | (C) | 8 | | 3.7 | 10.9 | .8 |
| Canning peas | (A) | 7 | | 1.1 | 5.3 | 0 |
| Total grain and peas | | | | 63.6 | 79.8 | 57.9 |
| Corn, grain | (B) | 106 | | 34.7 | 47.0 | 25.6 |
| Corn, silage | (C) | 90 | | 9.7 | 11.5 | 8.8 |
| Corn, fodder | (D) | 36 | | 1.5 | 1.3 | .6 |
| Sweet corn | (B) | 9 | | .8 | 2.1 | .7 |
| Sugar beets | (A) | 3 | | 1.0 | 5.2 | 0 |
| Potatoes | (A) | 67 | | .7 | 1.0 | .5 |
| Truck crops | (A) | 16 | | .2 | .2 | .2 |
| Total cultivated crops | | | | 48.6 | 68.3 | 36.4 |
| Alfalfa | (A) | 93 | | 12.2 | 16.9 | 12.7 |
| Red clover | (B) | 29 | | 4.6 | 7.0 | 1.5 |
| Other legumes & mixtures | (B)or (C) | 40 | | 4.7 | 3.2 | 7.1 |
| Timothy | (D) | 16 | | 1.1 | .1 | 1.3 |
| Annual hay | (D) | 8 | | .4 | .7 | .1 |
| Philaris (non-tillable land) | | 10 | | .8 | 2.4 | .4 |
| Wild hay (non-tillable land) | | 37 | | 4.7 | 5.6 | .6 |
| Seed crops | | 7 | | .4 | .9 | 0 |
| Total hay | | | | 28.9 | 36.8 | 23.7 |
| Total crop acreage | | | | 141.1 | 184.9 | 118.0 |
| Sweet clover pasture | (B) | 57 | | 8.8 | 8.8 | 10.4 |
| Alfalfa pasture | (A) | 19 | | .6 | 1.9 | .2 |
| Red clov.or rape pasture (hogs) | (B) | 19 | | .7 | .6 | .4 |
| Misc. legume pasture | (B) or (C) | 29 | | 3.5 | 5.8 | 3.1 |
| Other tillable pasture | (D) | 34 | | 5.2 | .6 | 9.7 |
| Non-tillable pasture | | 78 | | 24.8 | 34.4 | 16.4 |
| Total pasture | | | | 43.6 | 52.1 | 40.2 |
| Tillable land not cropped | | 5 | | .3 | - | 1.0 |
| Timber (not pastured) | | 39 | | 6.3 | 4.1 | 3.4 |
| Roads and waste | | | | 5.3 | 7.5 | 3.4 |
| Farmstead | | | | 5.7 | 5.9 | 5.8 |
| Total acres in farm | | | | 202.3 | 254.5 | 171.8 |
| % of land tillable | | | | 77.0 | 77.0 | 83.0 |
| % of tillable land in high return crops | | | | 40.5 | 44.8 | 40.8 |

Yield of Crops 1933

| Yield of crops | Your farm | Average 108 farms | 22 most profitable farms | 22 least profitable farms |
|---|---|---|---|---|
| Winter wheat, bu. | _____ | 16.3 | 20.5 | 10.2 |
| Spring wheat, bu. | _____ | 16.3 | 24.0 | 15.2 |
| Oats, bu. | _____ | 35.7 | 34.9 | 29.6 |
| Barley, bu. | _____ | 23.6 | 27.0 | 15.4 |
| Rye, bu. | _____ | 13.3 | 13.8 | 8.7 |
| Flax, bu. | _____ | 8.4 | 10.9 | 6.5 |
| Wheat and oats, bu. | _____ | 24.5 | 29.5 | 17.8 |
| Oats and barley, bu. | _____ | 34.7 | 41.5 | 21.7 |
| Flax and wheat, bu. | _____ | 10.4 | 13.2 | 9.4 |
| Oats, barley, and wheat, bu. | _____ | 28.7 | 35.3 | 29.0 |
| Canning peas, value above seed cost | _____ | $12.29 | $14.78 | - |
| Corn, grain, bu. | _____ | 54.7 | 55.3 | 50.9 |
| Corn, silage, tons | _____ | 9.5 | 9.0 | 9.0 |
| Corn, fodder, tons | _____ | 3.3 | 3.5 | 2.4 |
| Sweet corn, tons | _____ | 3.2 | 3.6 | 3.2 |
| Sugar beets, tons | _____ | 11.5 | 11.5 | - |
| Potatoes, bu. | _____ | 81.6 | 83.8 | 72.1 |
| Alfalfa, tons | _____ | 2.5 | 2.7 | 2.5 |
| Red clover, tons | _____ | 1.8 | 1.9 | 1.4 |
| Clover and timothy, tons | _____ | 1.4 | .7 | 1.2 |
| Soybean hay, tons | _____ | 1.7 | 2.2 | - |
| Timothy hay, tons | _____ | 1.1 | 1.0 | .8 |
| Sudan grass, tons | _____ | 1.9 | - | 1.5 |
| Small grain, tons | _____ | 1.1 | .7 | - |
| Philaris hay, tons | _____ | 2.1 | 2.6 | .5 |
| Wild hay, tons | _____ | 1.2 | 1.2 | 1.0 |
| Miscellaneous crops | _____ | _____ | | |

Some methods farmers use to increase their crop yields:

1. Tile, if necessary.
2. Plow under legumes--grow sweet clover in small grains on high lime soil--lime for alfalfa, if necessary.
3. Test out commercial fertilizers on strips of land to see if they pay.
4. Utilize manure effectively.
5. Use rotated legume pastures.
6. Raise and feed hogs on these pastures and hog down corn.
7. Grow recommended varieties of crops.
8. Use best tested seed available.
9. Prepare seed-bed throughly and timely.

Summary of Amount of Livestock

| | Your farm | Average 108 farms | 22 most profitable farms | 22 least profitable farms |
|---|---|---|---|---|
| Acres in farm | _____ | 202 | 255 | 172 |
| No. of horses (with tractor)* | _____ | 5.4 | 6.3 | 4.8 |
| No. of horses (without tractor)** | _____ | 5.5 | 6.5 | 4.5 |
| No. of colts | _____ | .6 | .9 | .3 |
| No. of cows | _____ | 18.7 | 24.4 | 14.9 |
| No. of cows per worker | _____ | 8.2 | 8.1 | 7.3 |
| Head of other cattle | _____ | 19.8 | 27.4 | 15.9 |
| Litters of pigs raised | _____ | 12.0 | 15.0 | 7.0 |
| Pounds of pork produced | _____ | 15094 | 21703 | 9869 |
| Head of sheep (2 lambs equal 1 head) | _____ | 14.5 | 9.5 | 13.6 |
| No. of hens | _____ | 187.0 | 324.0 | 106.0 |
| Total no. of prod. livestock animal units | _____ | 40.1 | 54.0 | 30.7 |
| % of tot. prod. lvst. units that are cows | _____ | 47.8 | 45.4 | 50.5 |
| % of tot. prod. lvst. units that are o.cattle | _____ | 25.3 | 25.5 | 26.1 |
| % of tot. prod. lvst. units that are hogs | _____ | 16.9 | 18.9 | 13.4 |
| % of tot. prod. lvst. units that are sheep | _____ | 4.7 | 2.4 | 6.1 |
| % of tot. prod. lvst. units that are hens & turkeys | _____ | 5.3 | 7.8 | 3.9 |
| * Number of farms with tractors | | 72 | 17 | 14 |
| **Number of farms without tractors | | 36 | 5 | 8 |

Feed Costs and Returns for Turkeys 1933

| | Your farm | Average 8 farms | 4 farms highest in returns above feed per 100 lbs. turkeys produced | 4 farms lowest in returns above feed per 100 lbs. turkeys produced |
|---|---|---|---|---|
| Lbs. of feed per 100 lbs. turkeys produced: | | | | |
| Grain | _____ | 420 | 294 | 547 |
| Grain by-products | _____ | 69 | 75 | 64 |
| Tankage and meat scraps | _____ | 36 | 42 | 29 |
| Other commercial feeds | _____ | 56 | 65 | 47 |
| Total concentrates | _____ | 581 | 476 | 687 |
| Skimmilk | _____ | 166 | 324 | 9 |
| COST OF FEED PER 100 LBS. TURKEYS PRODUCED | $_____ | $5.38 | $4.85 | $5.92 |
| Value of product per 100 lbs. turkeys prod.: | | | | |
| Eggs | $_____ | $.17 | $.35 | $- |
| Turkeys | _____ | 12.80 | 13.62 | 11.98 |
| TOTAL | $_____ | $12.97 | $13.97 | $11.98 |
| RETURNS ABOVE FEED COST PER 100 LBS. TURKEYS PRODUCED | $_____ | $7.59 | $9.12 | $6.06 |
| Price received per lb. turkey sold, cents | _____ | 13.9 | 14.4 | 13.4 |
| Pounds of turkeys produced | _____ | 4617 | 8242 | 993 |

Factors of Cost and Returns in Dairy Production 1933

| Items | Your farm | Average 108 farms | 22 farms highest in B.F. per cow | 22 farms lowest in B.F. per cow |
|---|---|---|---|---|
| Lbs. butterfat per cow | _____ | 243 | 302 | 180 |
| Feeds per cow, lbs.: | | | | |
| Corn | _____ | 646 | 801 | 586 |
| Small grain | _____ | 1,124 | 1,247 | 893 |
| Com. feeds - under 25% protein | _____ | 173 | 404 | 81 |
| Com. feeds - over 25% protein | _____ | 46 | 80 | 20 |
| Tame hay | _____ | 744 | 530 | 855 |
| Alfalfa | _____ | 2,114 | 2,732 | 1,548 |
| Wild hay | _____ | 129 | 187 | 179 |
| Corn fodder | _____ | 643 | 453 | 744 |
| Silage | _____ | 6,779 | 6,577 | 6,201 |
| Total concentrates | _____ | 1,989 | 2,532 | 1,580 |
| Total dry roughage | _____ | 3,630 | 3,902 | 3,326 |
| Total digestible nutrients | _____ | 4,412 | 4,946 | 3,849 |
| Total digest. nutrients per lb. B.F.* | _____ | 18.5 | 16.4 | 21.5 |
| % protein in ration | _____ | 12.7 | 13.6 | 12.2 |
| % cows fresh - Sept. to Dec. inclusive | _____ | 59.0 | 67.0 | 52.0 |
| Feed cost per cow: | | | | |
| Concentrates | $_____ | $11.41 | $15.37 | $8.15 |
| Roughages | _____ | 19.46 | 20.88 | 17.20 |
| Pasture | _____ | 3.60 | 3.66 | 3.75 |
| TOTAL FEED COSTS | $_____ | $34.47 | $39.91 | $29.10 |
| Value of produce per cow: | | | | |
| B.F. sales | $_____ | $53.08 | $71.60 | $34.79 |
| Dairy produce used in house | _____ | 2.79 | 3.28 | 2.79 |
| Milk to other livestock | _____ | 8.71 | 10.60 | 7.38 |
| Appreciation or depreciation | _____ | -3.65 | -5.81 | -2.71 |
| TOTAL VALUE OF PRODUCT | $_____ | $60.93 | $79.67 | $42.25 |
| RETURNS ABOVE FEED COST PER COW | $_____ | $26.46 | $39.76 | $13.15 |
| Price received per lb. B.F. sold: | | | | |
| As manufacturing cream | $_____ | $.22 | $.22 | $.22 |
| As market milk & cream & cheese milk | _____ | .42 | .41 | .41 |
| Feed cost per lb. B.F. | _____ | .14 | .13 | .16 |
| Number of cows** | _____ | 18.7 | 18.4 | 18.6 |

*Not including nutrients secured from pasture.

**All cows which have at some time in the past freshened are included in the dairy herd, and affect tha 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 the farms.

Feed Costs and Returns for Other Cattle and Sheep 1933

| Items | Your farm | Average of all farms | Farms highest in returns above feed per head | Farms lowest in returns above feed per head |
|---|---|---|---|---|
| Other cattle; no of farms: | | 108 | 22 | 22 |
| Feeds used per head, lbs.: | | | | |
| Concentrates | _____ | 614 | 658 | 640 |
| Hay and fodder | _____ | 1,427 | 1,252 | 1,692 |
| Silage | _____ | 2,306 | 1,805 | 2,488 |
| Whole milk | _____ | 473 | 469 | 870 |
| Skimmilk | _____ | 1,207 | 1,209 | 1,004 |
| Feed cost per head: | | | | |
| Concentrates | $_____ | $3.14 | $3.28 | $3.26 |
| Roughages | _____ | 6.68 | 5.47 | 7.76 |
| Milk | _____ | 5.40 | 5.27 | 8.66 |
| Pasture | _____ | 1.29 | 1.19 | 1.38 |
| TOTAL | $_____ | $16.51 | $15.21 | $21.06 |
| RETURNS PER HEAD | $_____ | $15.93 | $23.98 | $12.43 |
| RETURNS ABOVE FEED COST PER HEAD | $_____ | $-.58 | $8.77 | $-8.63 |
| % death loss | _____ | 9.0 | 8.0 | 13.0 |
| Number of head of young cattle | _____ | 19.8 | 16.2 | 21.5 |
| Sheep; no. of farms: | | 47 | 10 | 10 |
| Feeds used per head,* lbs.: | | | | |
| Concentrates | _____ | 128 | 105 | 234 |
| Tame hay | _____ | 68 | 100 | 45 |
| Alfalfa | _____ | 80 | 71 | 88 |
| Corn fodder and wild hay | _____ | 83 | 55 | 114 |
| Silage | _____ | 81 | 63 | 133 |
| Feed cost per head: | | | | |
| Concentrates | $_____ | $.63 | $.47 | $1.15 |
| Roughages | _____ | .68 | .68 | .77 |
| Pasture | _____ | .60 | .61 | .57 |
| TOTAL | $_____ | $1.91 | $1.76 | $2.49 |
| Value of production per head: | | | | |
| Wool | $_____ | $1.35 | $1.31 | $.90 |
| Mutton | _____ | 2.92 | 5.35 | 1.00 |
| TOTAL | $_____ | $4.27 | $6.66 | $1.90 |
| RETURNS ABOVE FEED COST PER HEAD | $_____ | $2.36 | $4.90 | $-.59 |
| Price per lb. wool sold | $_____ | $.23 | $.24 | $.19 |
| Value per lamb sold | _____ | 4.73 | 5.70 | 4.10 |
| % lamb crop | _____ | 109.0 | 136.0 | 93.0 |
| % death loss | _____ | 8.0 | 5.0 | 4.0 |
| No. of head of sheep* | _____ | 33.3 | 26.5 | 36.4 |

*Two lambs under 6 months of age considered as one head.

## Feed Costs and Returns for Hogs 1933

| Items | Your farm | Average 104 farms | 22 farms highest in returns above feed per 100 lbs. pork prod. | 22 farms lowest in returns above feed per 100 lbs. pork prod. |
|---|---|---|---|---|
| Lbs. of feed per 100 lbs. pork produced: | | | | |
| Corn | _____ | 352 | 294 | 475 |
| Small grain | _____ | 87 | 63 | 137 |
| Commercial grain feeds | _____ | 7 | 6 | 3 |
| Total grain and commercial feeds | _____ | 446 | 363 | 615 |
| Tankage | _____ | 2 | 3 | 1 |
| Skimmilk | _____ | 417 | 330 | 542 |
| Cost of feed per 100 lbs. pork produced: | | | | |
| Grain and commercial feeds | $_____ | $2.28 | $1.75 | $3.18 |
| Tankage and skimmilk | _____ | .44 | .37 | .56 |
| Pasture | _____ | .11 | .09 | .14 |
| Total Feed Cost per 100 lbs. Pork Prod. | _____ | $2.83 | $2.21 | $3.88 |
| RETURNS PER 100 LBS. PORK PRODUCED | $_____ | $3.36 | $3.66 | $3.15 |
| RET. ABOVE FEED COST PER 100# PORK PROD. | $_____ | $.53 | $1.45 | $-.73 |
| Price received per 100 lbs. pork sold | $_____ | $3.42 | $3.55 | $3.29 |
| Total no. of litters | _____ | 12.0 | 13.0 | 10.0 |
| Total no. of pigs weaned per litter | _____ | 5.8 | 6.0 | 5.6 |
| Lbs. of pork produced | _____ | 15,677 | 19,389 | 10,960 |

## Feed Costs and Returns for Poultry 1933

| Items | Your Farm | Average 102 farms | 22 farms highest in returns above feed per hen | 22 farms lowest in returns above feed per hen |
|---|---|---|---|---|
| Lbs. of feed per hen: | | | | |
| Concentrates | _____ | 113 | 120 | 105 |
| Skimmilk | _____ | 70 | 75 | 75 |
| Cost of feed per hen: | | | | |
| Concentrates | $_____ | $.86 | $.97 | $.77 |
| Skimmilk | _____ | .07 | .08 | .07 |
| TOTAL | $_____ | $.93 | $1.05 | $.84 |
| Value of product per hen: | | | | |
| Eggs sold and used in house | _____ | $1.22 | $1.71 | $.75 |
| Poultry sold & used in house plus appreciation or less depreciation | _____ | .46 | .94 | .09 |
| TOTAL | $_____ | $1.68 | $2.65 | $.84 |
| RETURNS ABOVE FEED COST PER HEN | $_____ | $.75 | $1.60 | 0 |
| Price received per doz. eggs sold (cents) | _____ | 12.3 | 14.0 | 10.9 |
| Eggs laid per hen | _____ | 118 | 151 | 81 |
| No. of hens | _____ | 198 | 291 | 116 |
| % of hens that are pullets | _____ | 72 | 83 | 62 |

## Feed Costs per Horse and Other Power Expense Items - 1933

| Farms with Tractors | Your farm | Average | Most profitable farms | Least Profitable farms |
|---|---|---|---|---|
| Number of farms: | | 72 | 14 | 14 |
| Feed per horse,* lbs. | | | | |
| Grain | _____ | 2823 | 3188 | 2504 |
| Tame hay & alfalfa | _____ | 2821 | 1560 | 3745 |
| Wild hay & fodder | _____ | 2165 | 2543 | 982 |
| Feed costs per horse | | | | |
| Grain | $ _____ | $ 16.11 | $ 19.63 | $ 14.25 |
| Roughage | _____ | 11.14 | 8.34 | 12.80 |
| Pasture | _____ | 1.58 | 1.29 | 1.96 |
| Total | $ _____ | $ 28.83 | $ 29.26 | $ 29.01 |
| Number of work horses | _____ | 5.4 | 6.1 | 4.8 |
| Number of colts | _____ | .6 | .8 | .2 |
| Crop acres per horse | _____ | 30.2 | 35.0 | 28.1 |
| Tractor & horse exp. per cropA | $_____ | $ 2.31 | $ 2.42 | $ 2.54 |
| Farm power expense per day prod. work | | .72 | .74 | .77 |
| **Farms without Tractors** | | | | |
| Number of farms: | | 36 | 7 | 7 |
| Feed per horse,* lbs. | | | | |
| Grain | _____ | 2652 | 2981 | 2911 |
| Tame hay & alfalfa | _____ | 2553 | 1951 | 2860 |
| Wild hay & fodder | _____ | 1428 | 1337 | 249 |
| Feed costs per horse | | | | |
| Grain | $_____ | $ 15.13 | $ 18.15 | $ 16.40 |
| Roughage | _____ | 9.02 | 7.55 | 8.03 |
| Pasture | _____ | 2.12 | 1.76 | 2.47 |
| Total | $_____ | $ 26.27 | $ 27.46 | $ 26.90 |
| Number of work horses | _____ | 5.5 | 6.2 | 4.8 |
| Number of colts | _____ | .5 | .8 | .4 |
| Crop acres per horse | _____ | 19.4 | 21.4 | 20.9 |
| Horse expense per crop acre | $_____ | $ 1.76 | $ 1.75 | $ 1.74 |
| Farm power exp. pr. day prod. work | _____ | .65 | .63 | .73 |

* Two colts equal one horse.

## Distribution of Farm Produce Used in House 1933

| | Quantities | | Values | |
|---|---|---|---|---|
| | Your farm | Average 108 farms | Your farm | Average 108 farms |
| Whole milk | _____ | 1,189 qts. | $_____ | $23.04 |
| Skimmilk | _____ | 243 qts. | _____ | .52 |
| Cream | _____ | 321 pts. | _____ | 21.10 |
| Farm made butter | _____ | 5 lbs. | _____ | 1.18 |
| Eggs | _____ | 138 doz. | _____ | 22.81 |
| Poultry | _____ | 47 head | _____ | 12.85 |
| Cattle | _____ | 409 lbs. | _____ | 12.23 |
| Hogs | _____ | 673 lbs. | _____ | 19.56 |
| Sheep | _____ | 3 lbs. | _____ | .10 |
| Potatoes | _____ | 30 bu. | _____ | 13.39 |
| Vegetables and fruit | _____ | - | _____ | 32.28 |
| Farm fuel | _____ | 8 cds. | _____ | 33.62 |
| Total | | | $_____ | $192.68 |

| | Your farm | Average 108 farms |
|---|---|---|
| Average value of farm dwelling | $_____ | $1,948 |
| Interest and depreciation on farm dwelling | _____ | 154 |

## Distribution of Household and Personal Expenses for Those Farms which Kept Complete Accounts of These Expenses 1933

| | Your farm | Average 68 farms | 14 most profitable | 14 least profitable |
|---|---|---|---|---|
| Number of persons,) Family | _____ | 3.8 | 3.9 | 3.6 |
| adult equivalent ) Other* | _____ | .5 | .5 | .7 |
| Food | _____ | $199.98 | $222.30 | $167.58 |
| Operating and supplies | _____ | 64.62 | 85.17 | 55.49 |
| Furnishing and equipment | _____ | 24.08 | 30.88 | 29.29 |
| Clothing and materials | _____ | 86.34 | 132.71 | 53.65 |
| Health | _____ | 33.41 | 48.34 | 46.09 |
| Development and recreation | _____ | 55.85 | 81.19 | 25.88 |
| Personal | _____ | 48.32 | 73.80 | 32.69 |
| Life insurance and savings | _____ | 63.65 | 70.21 | 72.98 |
| Personal share of auto expense | _____ | 50.09 | 65.72 | 30.58 |
| Housing | _____ | 12.91 | 1.82 | 13.39 |
| Total Household and Personal Cash Exp. | $_____ | $639.25 | $812.14 | $527.62 |
| Food furnished by the farm | _____ | 166.02 | 180.59 | 151.81 |
| Fuel furnished by the farm | _____ | 34.78 | 38.00 | 30.64 |
| Interest and deprec. on farm dwelling | _____ | 138.60 | 154.57 | 134.27 |
| Interest and deprec. on misc. items** | _____ | 57.71 | 63.03 | 56.39 |
| Total Household and Personal Expenses | $_____ | $1,036.36 | $1,248.33 | $900.73 |

*Hired help or others boarded.
**Personal share of auto, gas engine, and electric plant, and household goods.

Summary of Farm Inventories 1933

| County: | Dodge & Mower | Freeborn | Goodhue |
|---|---|---|---|
| Number of farms | 17 | 17 | 25 |
| Average farm inventory (without house) | $18,012 | $15,925 | $16,304 |
| Land | 8,241 | 7,878 | 7,536 |
| Farm improvements | 3,630 | 3,079 | 3,741 |
| Machinery and equipment (total) | 2,031 | 1,649 | 1,930 |
| General machinery and equipment | 1,428 | 1,137 | 1,349 |
| Tractor | 337 | 281 | 288 |
| Truck | 104 | 46 | 83 |
| Auto (farm share) | 106 | 97 | 124 |
| Gas engine (farm share) | 26 | 18 | 42 |
| Elec. equipment (farm share) | 30 | 70 | 44 |
| Feeds and seeds | 1,435 | 1,399 | 1,335 |
| Miscellaneous supplies | 23 | 16 | 29 |
| Horses (total) | 528 | 416 | 490 |
| Horses | 509 | 397 | 447 |
| Colts | 19 | 19 | 43 |
| Productive livestock (total) | 2,124 | 1,488 | 1,243 |
| Cows | 1,086 | 765 | 618 |
| Other cattle | 737 | 358 | 337 |
| Hogs | 134 | 179 | 114 |
| Sheep | 69 | 69 | 80 |
| Poultry | 98 | 117 | 94 |

| County: | Rice | Steele | Waseca & Le Sueur |
|---|---|---|---|
| Number of farms | 11 | 23 | 15 |
| Average farm inventory (without house) | $14,794 | $16,484 | $17,199 |
| Land | 6,857 | 7,608 | 8,245 |
| Farm improvements | 3,217 | 3,684 | 3,699 |
| Machinery and equipment (total) | 1,868 | 1,760 | 1,921 |
| General machinery and equipment | 1,443 | 1,275 | 1,388 |
| Tractor | 207 | 264 | 299 |
| Truck | 19 | 47 | 93 |
| Auto (farm share) | 92 | 117 | 70 |
| Gas engine (farm share) | 15 | 12 | 21 |
| Elec. equipment (farm share) | 92 | 45 | 50 |
| Feeds and seeds | 1,111 | 1,446 | 1,281 |
| Miscellaneous supplies | 27 | 21 | 56 |
| Horses (total) | 348 | 408 | 420 |
| Horses | 345 | 370 | 372 |
| Colts | 3 | 38 | 48 |
| Productive livestock (total) | 1,366 | 1,557 | 1,577 |
| Cows | 723 | 805 | 771 |
| Other cattle | 272 | 411 | 400 |
| Hogs | 132 | 208 | 140 |
| Sheep | 50 | 18 | 34 |
| Poultry | 189 | 115 | 232 |

Summary of Farm Earnings 1933

| Items | Dodge & Mower | Free-born | Good-hue | Rice | Steele | Waseca & LeSueur |
|---|---|---|---|---|---|---|
| CASH EXPENSES | | | | | | |
| Tractor (new & exp.) | $158 | $76 | $90 | $72 | $91 | $70 |
| Truck (new & exp.) | 60 | 19 | 62 | 8 | 44 | 50 |
| Auto (new & exp.) (farm share) | 81 | 70 | 64 | 62 | 59 | 64 |
| Gas engine (new & exp.) (farm sh.) | 11 | 12 | 8 | 9 | 6 | 7 |
| Electricity (new & exp.)(farm sh.) | 44 | 18 | 14 | 44 | 38 | 55 |
| Machinery & equipment (new) | 92 | 67 | 75 | 163 | 107 | 116 |
| Machinery & equipment (exp.) | 51 | 42 | 48 | 40 | 53 | 51 |
| Bldgs., fen., til. (new) | 40 | 94 | 19 | 61 | 51 | 58 |
| Bldgs., fen., til. (exp.) | 21 | 27 | 21 | 23 | 31 | 32 |
| Hired labor | 395 | 131 | 134 | 167 | 220 | 217 |
| Feed for livestock | 209 | 108 | 166 | 277 | 173 | 330 |
| Other exp. for livestock | 64 | 38 | 43 | 63 | 35 | 67 |
| Horses bought | 27 | 47 | 16 | 23 | 38 | 53 |
| Cows bought | 36 | 1 | 6 | 8 | 30 | 6 |
| Other cattle bought | 220 | 16 | 18 | 10 | 21 | 39 |
| Hogs bought | 28 | 13 | 14 | 30 | 53 | 20 |
| Sheep bought | 13 | 5 | 3 | 38 | 0 | 3 |
| Poultry bought | 29 | 36 | 25 | 56 | 27 | 106 |
| Crop (seed, twine, spray) | 131 | 116 | 104 | 99 | 104 | 90 |
| Taxes and insurance | 358 | 237 | 239 | 306 | 267 | 275 |
| General farm | 26 | 21 | 24 | 33 | 20 | 30 |
| Total cash expense | 2,094 | 1,194 | 1,193 | 1,592 | 1,468 | 1,739 |
| Board for hired labor | 103 | 66 | 58 | 65 | 57 | 86 |
| Total expense | 2,197 | 1,260 | 1,251 | 1,657 | 1,525 | 1,825 |
| CASH RECEIPTS | | | | | | |
| Horses | 25 | 20 | 30 | 9 | 5 | 10 |
| Cows | 136 | 64 | 87 | 94 | 127 | 82 |
| Dairy products | 1,871 | 865 | 737 | 840 | 1,042 | 1,119 |
| Other cattle | 320 | 183 | 193 | 98 | 161 | 260 |
| Hogs | 460 | 663 | 401 | 428 | 610 | 485 |
| Sheep | 76 | 90 | 81 | 67 | 19 | 42 |
| Poultry | 90 | 106 | 62 | 281 | 72 | 411 |
| Eggs | 132 | 153 | 189 | 326 | 194 | 473 |
| Small grain | 148 | 84 | 377 | 314 | 140 | 184 |
| Corn | 50 | 35 | 17 | 123 | 49 | 30 |
| Hay | 10 | 9 | 11 | 3 | 24 | 45 |
| Root crops | 4 | 82 | 3 | 2 | 4 | 273 |
| Other crops | 22 | 15 | 38 | 42 | 118 | 188 |
| Miscellaneous | 108 | 98 | 69 | 103 | 80 | 257 |
| Work off farm | 344 | 90 | 27 | 53 | 62 | 22 |
| Total cash receipts | 3,796 | 2,557 | 2,322 | 2,783 | 2,707 | 3,881 |
| Increase in farm inventory | 654 | 556 | 276 | 527 | 764 | 243 |
| Farm produce used in house | 211 | 186 | 176 | 164 | 196 | 223 |
| Total receipts | 4,661 | 3,299 | 2,774 | 3,474 | 3,667 | 4,347 |
| Total expenses | 2,197 | 1,260 | 1,251 | 1,657 | 1,525 | 1,825 |
| Return to cap. & family labor | 2,464 | 2,039 | 1,523 | 1,817 | 2,142 | 2,522 |
| Int. on farm inventory | 901 | 796 | 815 | 739 | 824 | 860 |
| Family labor earnings | 1,563 | 1,243 | 708 | 1,078 | 1,318 | 1,662 |
| Unpaid family labor | 271 | 235 | 211 | 169 | 286 | 245 |
| Operator's labor earnings | 1,292 | 1,008 | 497 | 909 | 1,032 | 1,417 |

Summary of Farm Earnings 1933 (Grouped by Size of Farm)

| Range in Size | Under 100 A. | 100 to 139 A. | 140 to 179 A. | 180 to 219 A. | 220 to 259 A. | 260 A. & above |
|---|---|---|---|---|---|---|
| Number of farms | 9 | 10 | 28 | 22 | 20 | 19 |
| CASH EXPENSES | | | | | | |
| Tractor (new & exp.) | $22 | $29 | $30 | $78 | $161 | $204 |
| Truck (new & exp.) | 66 | 14 | 17 | 29 | 64 | 84 |
| Auto (new & exp.)(f.sh.) | 35 | 52 | 64 | 57 | 65 | 104 |
| Gas engine (new & exp.)(f.sh.) | 5 | 11 | 7 | 8 | 14 | 7 |
| Elec. (new & exp.)(f.sh.) | 29 | 55 | 18 | 30 | 42 | 40 |
| Mach. & equip. (new) | 48 | 47 | 92 | 141 | 61 | 145 |
| Mach. & equip. (exp.) | 23 | 32 | 42 | 45 | 63 | 67 |
| Bldgs., fencing, tiling (new) | 49 | 64 | 71 | 50 | 52 | 14 |
| Bldgs., fencing, tiling (exp.) | 12 | 17 | 26 | 25 | 30 | 34 |
| Hired labor | 54 | 113 | 110 | 184 | 427 | 273 |
| Feed for livestock | 147 | 290 | 191 | 150 | 175 | 270 |
| Other expense for livestock | 37 | 53 | 48 | 45 | 59 | 50 |
| Horses bought | 41 | 34 | 35 | 34 | 24 | 34 |
| Cows bought | 65 | 0 | 3 | 8 | 9 | 33 |
| Other cattle bought | 14 | 1 | 20 | 18 | 42 | 195 |
| Hogs bought | 10 | 29 | 51 | 13 | 19 | 23 |
| Sheep bought | 3 | 1 | 4 | 3 | 25 | 8 |
| Poultry bought | 18 | 117 | 37 | 28 | 27 | 54 |
| Crop (seed, twine, spray) | 39 | 80 | 99 | 106 | 134 | 140 |
| Taxes & insurance | 167 | 163 | 202 | 275 | 353 | 412 |
| General farm | 28 | 22 | 23 | 24 | 27 | 27 |
| Total cash expense | 912 | 1,224 | 1,190 | 1,351 | 1,873 | 2,218 |
| Board for hired labor | 22 | 33 | 52 | 72 | 113 | 95 |
| Total expense | 934 | 1,257 | 1,242 | 1,423 | 1,986 | 2,313 |
| CASH RECEIPTS | | | | | | |
| Horses | 14 | 7 | 18 | 6 | 3 | 52 |
| Cows | 50 | 132 | 76 | 80 | 104 | 160 |
| Dairy products | 739 | 799 | 754 | 1,065 | 1,454 | 1,403 |
| Other cattle | 76 | 170 | 140 | 136 | 265 | 392 |
| Hogs | 245 | 248 | 522 | 487 | 665 | 621 |
| Sheep | 14 | 17 | 33 | 34 | 131 | 110 |
| Poultry | 48 | 297 | 181 | 99 | 52 | 218 |
| Eggs | 89 | 362 | 268 | 201 | 136 | 298 |
| Small grain | 44 | 84 | 192 | 175 | 315 | 316 |
| Corn | 7 | 71 | 15 | 67 | 40 | 71 |
| Hay | 1 | 13 | 16 | 11 | 28 | 26 |
| Root crops | 2 | 164 | 3 | 13 | 75 | 116 |
| Other crops | 48 | 18 | 27 | 31 | 78 | 207 |
| Miscellaneous | 60 | 71 | 48 | 102 | 260 | 106 |
| Work off farm | 50 | 46 | 36 | 53 | 273 | 97 |
| Total cash receipts | 1,487 | 2,499 | 2,329 | 2,560 | 3,879 | 4,193 |
| Increase in farm inventory | 305 | 147 | 423 | 545 | 480 | 884 |
| Farm produce used in house | 146 | 224 | 173 | 172 | 202 | 242 |
| Total receipts | 1,938 | 2,870 | 2,925 | 3,277 | 4,561 | 5,319 |
| Total expenses | 934 | 1,257 | 1,242 | 1,423 | 1,986 | 2,313 |
| Ret. to cap. & family labor | 1,004 | 1,613 | 1,683 | 1,854 | 2,575 | 3,006 |
| Interest on farm inventory | 441 | 569 | 681 | 791 | 970 | 1,246 |
| Family labor earnings | 563 | 1,044 | 1,002 | 1,063 | 1,605 | 1,760 |
| Unpaid family labor | 63 | 233 | 211 | 188 | 277 | 395 |
| Operator's labor earnings | 500 | 811 | 791 | 875 | 1,328 | 1,365 |

Distribution of Acres in Farm 1933

| Crop (A)(B)(C)(D) refer to ranking used in calculating Index of Selection of High Return Crops, as explained on page 9 | | Dodge & Mower | Freeborn | Goodhue | Rice | Steele | Waseca & LeSueur |
|---|---|---|---|---|---|---|---|
| Winter wheat | (B) | 1.8 | 0 | 7.7 | 6.4 | 1.8 | 5.1 |
| Spring wheat | (C) | .7 | 0 | .5 | .5 | 1.4 | .9 |
| Oats | (D) | 20.1 | 11.2 | 19.5 | 10.9 | 12.1 | 10.6 |
| Barley | (B) | 13.2 | 3.2 | 33.2 | 10.4 | 4.0 | 2.9 |
| Rye | (D) | 0 | 0 | 3.5 | 0 | .4 | 0 |
| Flax | (B) | .6 | 2.2 | .4 | 0 | .5 | .9 |
| Wheat and oats | (C) | 5.6 | 4.3 | .9 | 4.5 | 2.8 | 7.9 |
| Oats and barley | (C) | 19.5 | 26.9 | 5.4 | 15.9 | 26.7 | 15.8 |
| Flax and wheat | (B) | 1.6 | .6 | 12.3 | 0 | 1.3 | 0 |
| Other mixtures | (C) | 14.1 | .2 | .6 | .5 | 4.9 | 1.2 |
| Canning peas | (A) | 0 | 0 | 0 | 0 | 3.3 | 3.3 |
| Total grain and peas | | 77.2 | 48.6 | 84.0 | 49.1 | 59.2 | 48.6 |
| Corn, grain | (B) | 37.7 | 46.9 | 24.0 | 29.5 | 36.2 | 36.9 |
| Corn, silage | (C) | 17.1 | 9.1 | 8.7 | 8.5 | 9.1 | 5.1 |
| Corn, fodder | (D) | 2.2 | .9 | 1.1 | 2.6 | 1.9 | .3 |
| Sweet corn | (B) | 0 | 0 | 0 | 1.4 | 1.2 | 3.2 |
| Sugar beets | (A) | 0 | 0 | 0 | 0 | 0 | 7.6 |
| Potatoes | (A) | .6 | 1.7 | .3 | .7 | .6 | .8 |
| Truck crops | (A) | .1 | .3 | .1 | .4 | .1 | .1 |
| Total cultivated crops | | 57.7 | 58.9 | 34.2 | 43.1 | 49.1 | 54.0 |
| Alfalfa | (A) | 9.3 | 10.7 | 11.1 | 14.9 | 14.3 | 13.6 |
| Red clover | (B) | 8.2 | 6.4 | 6.1 | .6 | 2.2 | 2.4 |
| Other leg. and mixtures | (B) or (C) | 12.4 | 2.8 | 6.9 | 2.3 | 2.2 | .3 |
| Timothy | (D) | .7 | 1.1 | 1.5 | .5 | 1.9 | .2 |
| Annual hay | (D) | 1.1 | .4 | 0 | .2 | .6 | 0 |
| Philaris (non-tillable land) | | 0 | .2 | 0 | .2 | 2.0 | 2.6 |
| Wild hay (non-tillable land) | | 2.1 | 5.4 | .6 | 1.9 | 9.7 | 7.6 |
| Seed crops | | 0 | 0 | 1.0 | 0 | .4 | 1.0 |
| Total hay | | 33.8 | 27.0 | 27.2 | 20.6 | 33.3 | 27.7 |
| Total crop acreage | | 168.7 | 134.5 | 145.4 | 112.8 | 141.6 | 130.3 |
| Sweet clover pasture | (B) | 4.0 | 9.6 | 15.4 | 7.9 | 4.8 | 9.5 |
| Alfalfa pasture | (A) | .9 | .4 | .2 | .9 | .9 | .7 |
| Red clover or rape pasture (hogs) | (B) | 2.4 | .6 | .4 | .4 | .4 | .3 |
| Misc. legume pasture | (B) or (C) | 10.0 | .9 | 4.0 | .6 | 3.8 | 0 |
| Other tillable pasture | (D) | 15.5 | 3.4 | 4.5 | 4.7 | 2.2 | 1.5 |
| Non-tillable pasture | | 28.1 | 24.7 | 14.7 | 12.0 | 31.7 | 36.2 |
| Total pasture | | 60.9 | 39.6 | 39.2 | 26.5 | 43.8 | 48.2 |
| Tillable land not cropped | | 0 | 0 | .7 | 0 | .8 | 0 |
| Timber (not pastured) | | 8.2 | 4.3 | 10.9 | 5.8 | 3.5 | 3.1 |
| Roads and waste | | 5.8 | 7.7 | 3.4 | 3.7 | 5.2 | 6.7 |
| Farmstead | | 7.0 | 6.1 | 4.9 | 4.5 | 6.1 | 5.4 |
| Total acres in farm | | 250.6 | 192.2 | 204.5 | 153.3 | 201.0 | 193.7 |
| % land tillable | | 80.0 | 74.0 | 85.0 | 85.0 | 71.0 | 69.0 |
| Index of tillable land in high return crops | | 31.4 | 41.5 | 40.7 | 43.2 | 39.7 | 48.9 |

Yields of Crops 1933

| Counties: | Dodge & Mower | Free-born | Good-hue | Rice | Steele | Waseca & LeSueur |
|---|---|---|---|---|---|---|
| Crops: | | | | | | |
| Winter wheat, bu. | 9.0 | - | 13.5 | 22.2 | 10.3 | 26.7 |
| Spring wheat, bu. | 14.9 | - | 13.8 | 20.3 | 16.7 | 17.5 |
| Oats, bu. | 34.7 | 35.2 | 34.4 | 31.8 | 37.6 | 41.7 |
| Barley, bu. | 19.3 | 34.8 | 17.8 | 28.8 | 28.0 | 33.6 |
| Rye, bu. | - | - | 12.1 | - | 16.8 | - |
| Flax, bu. | 6.2 | 11.5 | 6.5 | - | 6.7 | 7.8 |
| Wheat and oats, bu. | 23.4 | 24.6 | 16.9 | 27.2 | 26.4 | 23.3 |
| Oats and barley, bu. | 33.9 | 31.7 | 27.9 | 33.7 | 36.2 | 44.8 |
| Flax and wheat, bu. | 10.5 | 5.6 | 10.6 | - | 13.2 | - |
| Oats, barley and wheat, bu. | 21.5 | 42.6 | 15.4 | 18.0 | 29.4 | 51.9 |
| Canning peas, bu. | - | - | - | - | $17.26 | $5.67 |
| Corn, grain, bu. | 46.7 | 57.6 | 52.9 | 55.6 | 60.2 | 54.7 |
| Corn, silage, tons | 7.8 | 9.8 | 9.3 | 10.5 | 10.4 | 9.9 |
| Corn, fodder, tons | 3.2 | 3.6 | 2.2 | 3.6 | 4.1 | 3.0 |
| Sweet corn, tons | - | - | - | 3.2 | 3.3 | 3.2 |
| Sugar beets, tons | - | - | - | - | - | 11.5 |
| Potatoes, bu. | 41.3 | 115.3 | 82.5 | 64.0 | 98.4 | 74.2 |
| Alfalfa, tons | 2.6 | 2.1 | 2.1 | 2.6 | 2.8 | 2.6 |
| Red clover, tons | 1.0 | 1.5 | 1.7 | - | 2.1 | 2.2 |
| Clover and timothy, tons | 1.2 | 1.3 | 1.5 | - | 1.1 | - |
| Soy bean hay, tons | 1.3 | 2.0 | 1.3 | - | - | 3.0 |
| Timothy, tons | .9 | 1.3 | .9 | .6 | 1.1 | 2.1 |
| Wild hay, tons | .8 | 1.2 | 1.1 | 1.4 | .9 | 1.7 |

Factors Related with Earnings 1933

| Counties: | Dodge & Mower | Freeborn | Goodhue |
|---|---|---|---|
| Lbs. B.F. per cow | 256 | 231 | 227 |
| Ret.above feed (P.L.S. other than cows) | $11.73 | $9.72 | $9.19 |
| Prod. livestock units per 100 acres | 19.4 | 23.0 | 18.0 |
| Crop yields (% of average) | 87 | 107 | 88 |
| % tillable land in high return crops | 31.4 | 41.5 | 40.7 |
| Days of productive work | 966 | 789 | 649 |
| Days of productive work per worker | 357 | 357 | 311 |
| Power & equip. expense per day prod. work | $1.03 | $.95 | $1.25 |

| Counties: | Rice | Steele | Waseca & LeSueur |
|---|---|---|---|
| Lbs. B.F. per cow | 251 | 249 | 249 |
| Ret. above feed (P.L.S. other than cows) | $26.69 | $15.70 | $18.43 |
| Prod. livestock units per 100 acres | 23.3 | 21.8 | 22.5 |
| Crop yields (% of average) | 110 | 108 | 107 |
| % tillable land in high return crops | 43.2 | 39.7 | 48.9 |
| Days of productive work | 627 | 774 | 814 |
| Days productive work per worker | 315 | 314 | 339 |
| Power & equip. expense per day prod. work | $1.10 | $1.11 | $1.08 |

Summary of Amount of Livestock 1933

| Counties: | Dodge & Mower | Free-born | Good-hue |
|---|---|---|---|
| Items | | | |
| No. of horses (farms with tractor) | 6.1 | 5.1 | 5.7 |
| No. of horses (farms without tractor) | 6.3 | 5.7 | 5.0 |
| No. of colts | .2 | .4 | .7 |
| No. of cows | 22.6 | 19.1 | 16.5 |
| No. of cows per worker | 8.8 | 8.8 | 7.8 |
| Head of other cattle | 27.1 | 20.3 | 17.2 |
| Litters of pigs raised | 10.0 | 15.0 | 9.0 |
| Pounds of pork produced | 12996 | 17998 | 12376 |
| Head of sheep (2 lambs equal 1 head) | 19.3 | 26.4 | 18.1 |
| No. of hens | 129.0 | 175.0 | 147.0 |
| Total no. of prod. livestock animal units | 46.8 | 43.8 | 35.0 |
| % of total prod. livestock units that are cows | 48.5 | 45.9 | 46.8 |
| % of total prod. livestock units that are cattle* | 28.4 | 24.4 | 26.5 |
| % of total prod. livestock units that are hogs | 13.6 | 19.3 | 14.4 |
| % of total prod. livestock units that are sheep | 6.0 | 5.8 | 8.0 |
| % of total prod. livestock units that are hens & turkeys | 3.5 | 4.6 | 4.3 |

| Counties: | Rice | Steele | Waseca & LeSueur |
|---|---|---|---|
| Items | | | |
| No. of horses (farms with tractor) | 4.1 | 5.2 | 5.7 |
| No. of horses (farms without tractor) | 4.0 | 6.2 | 5.1 |
| No. of colts | .1 | .7 | 1.1 |
| No. of cows | 15.5 | 19.0 | 19.0 |
| No. of cows per worker | 8.1 | 7.7 | 8.1 |
| Head of other cattle | 13.6 | 19.2 | 20.4 |
| Litters of pigs raised | 9.0 | 15.0 | 11.8 |
| Pounds of pork produced | 11479 | 19673 | 14342 |
| Head of sheep (2 lambs equal 1 head) | 8.2 | 4.5 | 9.5 |
| No. of hens | 197.0 | 167.0 | 356.0 |
| Total no. of prod. livestock animal units | 32.2 | 40.2 | 42.4 |
| % of total prod. livestock units that are cows | 51.4 | 48.8 | 46.8 |
| % of total prod. livestock units that are cattle* | 23.8 | 24.9 | 22.8 |
| % of total prod. livestock units that are hogs | 15.3 | 20.3 | 17.9 |
| % of total prod. livestock units that are sheep | 1.8 | 1.4 | 3.5 |
| % of total prod. livestock units that are hens & turkeys | 7.7 | 4.6 | 9.0 |

*Cattle other than cows.

Factors of Cost and Returns in Dairy Production 1933

| Counties | Dodge & Mower | Free-born | Good-hue | Rice | Steele | Waseca & LeSueur |
|---|---|---|---|---|---|---|
| No. of farms | 17 | 17 | 25 | 11 | 23 | 15 |
| Butterfat per cow | 256 | 231 | 227 | 251 | 249 | 249 |
| Feed per cow, lbs.: | | | | | | |
| Corn | 654 | 886 | 544 | 401 | 593 | 798 |
| Small grain | 1,194 | 1,400 | 964 | 1,159 | 1,253 | 778 |
| Com. feeds - under 25% protein | 108 | 56 | 208 | 446 | 116 | 210 |
| Com. feeds - over 25% protein | 98 | 36 | 45 | 25 | 37 | 27 |
| Tame hay | 871 | 597 | 780 | 442 | 759 | 907 |
| Alfalfa | 1,245 | 2,025 | 2,059 | 3,257 | 2,389 | 2,029 |
| Wild hay | 202 | 214 | 22 | 0 | 100 | 270 |
| Corn fodder | 596 | 572 | 448 | 850 | 789 | 726 |
| Silage | 7,650 | 6,548 | 6,274 | 8,396 | 6,957 | 5,441 |
| Total concentrates | 2,054 | 2,378 | 1,761 | 2,031 | 1,999 | 1,813 |
| Total dry roughage | 2,914 | 3,408 | 3,309 | 4,549 | 4,037 | 3,932 |
| Total digestible nutrients | 4,256 | 4,607 | 4,009 | 5,163 | 4,650 | 4,126 |
| Total digestible nutrients per lb. B.F. | 16.9 | 20.4 | 18.1 | 20.7 | 18.8 | 16.9 |
| % protein in ration | 11.5 | 12.5 | 13.1 | 13.4 | 12.8 | 13.1 |
| % cows fresh - Sept. to Dec. | 52.0 | 62.0 | 55.0 | 76.0 | 58.0 | 61.0 |
| Feed cost per cow: | | | | | | |
| Concentrates | $12.22 | $13.23 | $9.66 | $13.51 | $11.51 | $9.61 |
| Roughages | 17.84 | 18.82 | 18.40 | 24.90 | 20.95 | 17.54 |
| Pasture | 3.53 | 3.52 | 3.77 | 3.49 | 3.45 | 3.81 |
| Total feed cost | 33.59 | 35.57 | 31.83 | 41.90 | 35.91 | 30.96 |
| Feed cost per lb. B.F. | .13 | .15 | .14 | .17 | .15 | .12 |
| Value of produce per cow: | | | | | | |
| B.F. sales | 68.10 | 45.51 | 42.75 | 56.05 | 54.29 | 57.79 |
| Dairy products used in house | 3.00 | 3.07 | 3.08 | 2.39 | 2.26 | 2.89 |
| Milk to other livestock | 8.25 | 8.91 | 8.94 | 8.74 | 8.91 | 8.25 |
| Appreciation or depreciation | -5.38 | -3.09 | -4.95 | -2.77 | -1.90 | -3.47 |
| Total value of product | 73.97 | 54.40 | 49.82 | 64.41 | 63.56 | 65.46 |
| Return above feed cost per cow | 40.38 | 18.83 | 17.99 | 22.51 | 27.65 | 34.50 |
| Price received per lb. B.F. sold: | | | | | | |
| As manufacturing cream | .23 | .22 | .22 | .20 | .23 | .22 |
| As market milk & cream & cheese milk | .48 | .35 | .40 | .33 | .46 | .44 |
| Number of cows | 22.6 | 19.1 | 16.5 | 15.5 | 19.0 | 19.0 |

Feed Costs and Returns for Other Cattle and Sheep 1933

| Counties | Dodge & Mower | Free-born | Good-hue | Rice | Steele | Waseca & LeSueur |
|---|---|---|---|---|---|---|
| Other cattle; no. of farms: | 17 | 17 | 25 | 11 | 23 | 15 |
| Feeds used per head, lbs.: | | | | | | |
| Concentrates | 739 | 745 | 646 | 447 | 424 | 685 |
| Hay and fodder | 1,240 | 1,275 | 1,307 | 1,692 | 1,514 | 1,685 |
| Silage | 2,594 | 1,817 | 2,216 | 2,914 | 2,371 | 2,142 |
| Whole milk | 475 | 448 | 523 | 605 | 405 | 426 |
| Skimmilk | 827 | 1,446 | 1,252 | 1,078 | 1,316 | 1,219 |
| Feed costs per head: | | | | | | |
| Concentrates | $3.79 | $3.72 | $3.19 | $2.81 | $2.22 | $3.30 |
| Roughages | 6.21 | 5.82 | 6.37 | 8.52 | 6.99 | 6.89 |
| Milk | 4.96 | 5.61 | 5.85 | 6.45 | 4.86 | 5.01 |
| Pasture | 1.30 | 1.29 | 1.35 | 1.11 | 1.20 | 1.42 |
| Total | 16.26 | 16.44 | 16.76 | 18.89 | 15.27 | 16.62 |
| Returns per head | 16.72 | 13.12 | 14.72 | 18.75 | 18.21 | 14.70 |
| Ret. above feed cost per head | .46 | -3.32 | -2.04 | -.14 | 2.94 | -1.92 |
| % death loss | 12.0 | 10.0 | 8.0 | 4.0 | 8.0 | 12.0 |
| No. of head of young cattle | 27.1 | 20.3 | 17.2 | 13.6 | 19.2 | 20.4 |
| Sheep; no. of farms: | 9 | 11 | 12 | 2 | 6 | 7 |
| Feeds used per head,* lbs.: | | | | | | |
| Concentrates | 193 | 228 | 78 | 31 | 59 | 62 |
| Tame hay | 77 | 56 | 65 | 324 | 57 | 16 |
| Alfalfa | 30 | 71 | 124 | 64 | 31 | 132 |
| Corn fodder & wild hay | 99 | 105 | 80 | 0 | 85 | 58 |
| Silage | 71 | 68 | 163 | 65 | 24 | 28 |
| Feed cost per head: | | | | | | |
| Concentrates | $.99 | $1.12 | $.37 | $.13 | $.29 | $.25 |
| Roughages | .54 | .66 | .92 | 1.09 | .41 | .61 |
| Pasture | .55 | .57 | .67 | .60 | .61 | .55 |
| Total | 2.08 | 2.35 | 1.96 | 1.82 | 1.31 | 1.41 |
| Value of production per head: | | | | | | |
| Wool | 1.32 | .93 | 1.45 | 1.63 | 1.88 | 1.33 |
| Mutton | 4.42 | 1.92 | 2.31 | 3.67 | 2.53 | 3.72 |
| Total | 5.74 | 2.85 | 3.76 | 5.30 | 4.41 | 5.05 |
| Ret. above feed cost per head | 3.66 | .50 | 1.80 | 3.48 | 3.10 | 3.64 |
| Price per lb. wool sold | .25 | .21 | .22 | .24 | .24 | .24 |
| Value per lamb sold | 4.78 | 5.07 | 4.10 | 4.76 | 5.31 | 5.08 |
| % lamb crop | 113.0 | 85.0 | 106.0 | 125.0 | 109.0 | 133.0 |
| % death loss | 7.0 | 2.0 | 8.0 | 13.0 | 14.0 | 11.0 |
| No. of head of sheep* | 36.5 | 40.8 | 37.7 | 45.1 | 17.4 | 20.3 |

*Two lambs under 6 months of age considered as one head.

Feed Costs and Returns for Hogs and Poultry 1933

| County: | Dodge & Mower | Free-born | Good-hue | Rice | Steele | Waseca & Le Sueur |
|---|---|---|---|---|---|---|
| Hogs; no. of farms: | 17 | 16 | 24 | 11 | 23 | 13 |
| Lbs. feed per 100 lbs. pork produced: | | | | | | |
| Corn | 403 | 405 | 316 | 356 | 321 | 339 |
| Small grain | 112 | 58 | 105 | 58 | 86 | 83 |
| Commercial grain feeds | 6 | 2 | 10 | 20 | 4 | 4 |
| Total gr. and commercial feeds | 521 | 465 | 431 | 434 | 411 | 426 |
| Tankage | 2 | 2 | 3 | 1 | 1 | 1 |
| Skimmilk | 404 | 409 | 408 | 383 | 478 | 381 |
| Value of feed per 100 lbs. pork prod.: | | | | | | |
| Grain & commercial feeds | $2.64 | $2.23 | $2.25 | $2.12 | $2.19 | $2.22 |
| Tankage & skimmilk | .41 | .43 | .45 | .40 | .50 | .40 |
| Pasture | .13 | .12 | .11 | .10 | .11 | .10 |
| Total | 3.18 | 2.78 | 2.81 | 2.62 | 2.80 | 2.72 |
| Return per 100 lbs. pork produced | 3.54 | 3.50 | 3.20 | 3.28 | 3.31 | 3.39 |
| Return above feed cost per 100 lbs. pork produced | .36 | .72 | .39 | .66 | .51 | .67 |
| Price rec. per 100 lbs. pork sold | 3.49 | 3.40 | 3.25 | 3.39 | 3.54 | 3.44 |
| Total no. of litters | 10.0 | 16.0 | 9.0 | 9.0 | 15.0 | 14.0 |
| Total no. of pigs weaned per litter | 5.6 | 5.9 | 6.1 | 5.0 | 5.9 | 6.0 |
| Lbs. of pork produced | 12,996 | 19,123 | 12,900 | 11,479 | 19,673 | 16,549 |
| Poultry; no. of farms: | 15 | 16 | 24 | 11 | 22 | 14 |
| Lbs. of feed per hen: | | | | | | |
| Concentrates | 126 | 120 | 101 | 113 | 110 | 116 |
| Skimmilk | 81 | 75 | 66 | 77 | 78 | 43 |
| Cost of feed per hen: | | | | | | |
| Concentrates | $.90 | $.77 | $.82 | $1.01 | $.84 | $.91 |
| Skimmilk | .08 | .08 | .07 | .08 | .08 | .04 |
| Total | .98 | .85 | .89 | 1.09 | .92 | .95 |
| Value of product per hen: | | | | | | |
| Eggs sold and used in house | $1.10 | $.98 | $1.36 | $1.49 | $1.24 | $1.11 |
| Poultry sold and used in house plus appreciation or less depreciation | .54 | .72 | .23 | .69 | .47 | .31 |
| Total | 1.64 | 1.70 | 1.59 | 2.18 | 1.71 | 1.42 |
| Return above feed cost per hen | .66 | .85 | .70 | 1.09 | .79 | .47 |
| Price rec. per dozen eggs sold (cents) | 11.9 | 11.2 | 12.3 | 14.4 | 12.1 | 12.0 |
| Eggs laid per hen | 113.0 | 99.0 | 131.0 | 125.0 | 124.0 | 109.0 |
| No. of hens | 146.0 | 186.0 | 153.0 | 197.0 | 174.0 | 381.0 |
| % of total no. that are pullets | 70.0 | 71.0 | 70.0 | 85.0 | 71.0 | 70.0 |

Feed Costs per Horse and Other Power Expense Items 1933

| Counties: | Dodge & Mower | Free-born | Good-hue | Rice | Steele | Waseca & Le Sueur |
|---|---|---|---|---|---|---|
| Farms with tractors: no. | 10 | 10 | 16 | 8 | 18 | 10 |
| Feed per horse,* lbs. | | | | | | |
| Grain | 2711 | 3173 | 2726 | 2385 | 3126 | 2542 |
| Tame hay & alfalfa | 3128 | 2797 | 3349 | 4271 | 2573 | 978 |
| Wild hay & fodder | 1423 | 1950 | 1124 | 2133 | 2926 | 3446 |
| Feed costs per horse | | | | | | |
| Grain | $15.13 | $16.53 | $15.67 | $13.59 | $18.82 | $14.54 |
| Roughage | 10.30 | 10.69 | 10.28 | 16.38 | 11.94 | 8.20 |
| Pasture | 1.88 | 1.79 | 2.18 | .77 | 1.04 | 1.72 |
| Total | 27.31 | 29.01 | 28.13 | 30.74 | 31.80 | 24.46 |
| Number of work horses | 6.1 | 5.1 | 5.7 | 4.1 | 5.2 | 5.7 |
| Number of colts | .2 | .6 | .8 | .2 | .7 | .8 |
| Crop acres per horse | 35.3 | 30.1 | 30.3 | 29.8 | 28.9 | 27.5 |
| Trac.& horse exp.per crop A. | $ 2.20 | $ 2.22 | $ 2.26 | $ 1.97 | $ 2.53 | $ 2.44 |
| Farm pow.exp. per day prod.work | .76 | .61 | .80 | .68 | .71 | .71 |
| Farms without tractors: no. | 7 | 7 | 9 | 3 | 5 | 5 |
| Feed per horse,* lbs. | | | | | | |
| Grain | 2488 | 2764 | 3076 | 2765 | 2250 | 2294 |
| Tame hay & alfalfa | 2783 | 1617 | 3362 | 3222 | 2782 | 1456 |
| Wild hay & fodder | 2135 | 1004 | 497 | 1685 | 1050 | 2934 |
| Feed costs per horse | | | | | | |
| Grain | $14.09 | $14.28 | $18.29 | $19.70 | $11.93 | $12.57 |
| Roughage | 9.45 | 6.06 | 9.54 | 12.87 | 10.55 | 7.78 |
| Pasture | 2.53 | 2.02 | 2.49 | 1.49 | 1.26 | 2.23 |
| Total | 26.07 | 22.36 | 30.32 | 34.06 | 23.74 | 22.58 |
| Number of work horses | 6.3 | 5.7 | 5.0 | 4.0 | 6.2 | 5.1 |
| Number of colts | .1 | .2 | .5 | .4 | .6 | 1.9 |
| Crop acres per horse | 18.5 | 19.3 | 21.1 | 18.8 | 18.2 | 19.0 |
| Horse exp. per crop A. | $ 1.72 | $ 1.42 | $ 1.84 | $ 2.44 | $ 1.74 | $ 1.80 |
| Farm pow.exp per day prod.work | .65 | .54 | .76 | .69 | .55 | .67 |

* Two colts equal one horse

Comparison of Various Items with Previous Years (See page 31)

| Items | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 |
|---|---|---|---|---|---|---|
| Number of farms | 124 | 172 | 180 | 147 | 143 | 108 |
| Acres in farm | 163 | 176 | 183 | 198 | 201 | 202 |
| Crop acres in farm | 112 | 121 | 128 | 137 | 138 | 141 |
| Farm inventory (not including house) | $23,655 | $25,494 | $25,562 | $23,060 | $16,680 | $16,522 |
| No. of work horses | 5.5 | 5.4 | 5.3 | 5.6 | 5.4 | 5.4 |
| No. of colts | .7 | .8 | .7 | .9 | .8 | .6 |
| No. of cows | 13.8 | 14.7 | 15.5 | 17.7 | 18.2 | 18.7 |
| No. of head of other cattle | 14.2 | 15.5 | 16.7 | 20.3 | 20.6 | 19.8 |
| No. of litters of spring pigs | 5.9 | 6.3 | 6.8 | 8.9 | 7.2 | 6.9 |
| No. of litters of fall pigs | 3.3 | 3.2 | 3.2 | 5.0 | 4.0 | 4.9 |
| Lbs. of pork produced | 12143.0 | 13270.0 | 14974.0 | 18886.0 | 14796.0 | 15094.0 |
| No. of head of sheep | 6.7 | 7.3 | 7.8 | 12.2 | 14.4 | 14.5 |
| No. of hens | 139.3 | 134.0 | 146.9 | 157.0 | 165.0 | 187.0 |
| Lbs. of B.F. per cow | 241.4 | 246.7 | 241.6 | 241.3 | 240.0 | 242.5 |
| No. of pigs per litter | 6.2 | 6.4 | 6.3 | 6.4 | 5.9 | 5.8 |
| No. of eggs laid per hen | 92.8 | 96.5 | 110.0 | 119.0 | 106.0 | 118.0 |
| Price received per lb. B.F. sold | $.53 | $.50 | $.40 | $.29 | $.22 | $.22 |
| Price received per cwt. hogs sold | 8.23 | 9.60 | 8.94 | 5.33 | 3.18 | 3.42 |
| Amount received per lamb sold | 10.02 | 9.55 | 5.92 | 4.36 | 3.63 | 4.73 |
| Price received per lb. wool sold | .42 | .30 | .18 | .13 | .08 | .23 |
| Price received per dozen eggs sold | .27 | .28 | .22 | .16 | .13 | .12 |
| Returns above feed cost per cow | $77.43 | $75.56 | $45.17 | $21.54 | $17.78 | $26.46 |
| Ret. above feed cost per head o.cattle | 15.74 | 20.55 | 1.76 | -4.57 | -4.12 | -.58 |
| Ret. above feed cost per cwt. pork prod. | .54 | 2.46 | 1.69 | -.24 | -.56 | .53 |
| Ret. above feed cost per head sheep | 6.72 | 4.28 | -.14 | 0 | -.08 | 2.36 |
| Ret. above feed cost per hen | 1.86 | 1.78 | 1.35 | 1.22 | .81 | .75 |
| Feed cost per cow | $70.85 | $68.16 | $61.38 | $53.98 | $41.46 | $34.47 |
| Feed cost per head other cattle | 33.92 | 32.10 | 29.42 | 23.50 | 17.75 | 16.51 |
| Feed cost per cwt. pork produced | 7.98 | 7.34 | 6.32 | 4.03 | 3.14 | 2.83 |
| Feed cost per head sheep | 2.56 | 3.07 | 2.69 | 2.31 | 1.78 | 1.91 |
| Feed cost per hen | 1.55 | 1.69 | 1.38 | 1.04 | .86 | .93 |
| Feed cost per horse | 57.11 | 53.07 | 43.21 | 36.74 | 28.44 | 27.98 |
| Price of feed, shelled corn (per bu.) | $.66 | $.73 | $.64 | $.46 | $.36 | $.27 |
| Price of feed, barley (per bu.) | .67 | .52 | .42 | .37 | .29 | .35 |
| Price of feed, oats (per bu.) | .49 | .40 | .31 | .24 | .19 | .19 |
| Price of feed, bran (per cwt.) | 1.80 | 1.60 | 1.40 | .90 | .68 | .77 |
| Price of feed, oil meal (per cwt.) | 2.90 | 3.05 | 2.75 | 1.85 | 1.48 | 1.60 |
| Price of feed, alfalfa (per ton) | 15.00 | 14.50 | 13.09 | 13.00 | 10.00 | 7.50 |
| Yield per acre, corn (bu.) | 40.9 | 48.6 | 47.1 | 32.1 | 51.3 | 54.7 |
| Yield per acre, barley (bu.) | 36.9 | 35.1 | 31.8 | 24.9 | 33.7 | 23.6 |
| Yield per acre, oats (bu.) | 44.6 | 47.5 | 50.6 | 39.0 | 54.8 | 35.7 |
| Yield per acre, alfalfa (tons) | 2.9 | 3.1 | 2.6 | 2.3 | 2.8 | 2.5 |
| % of tillable land in high return crops | 31.0 | 32.8 | 33.4 | 33.4 | 35.6 | 40.5 |
| Prod. livestock units per 100 A. | 19.4 | 18.9 | 19.4 | 21.7 | 20.9 | 20.9 |
| No. of days of productive work | 587 | 611 | 653 | 776 | 757 | 768 |
| Days of productive work per worker | 308 | 312 | 327 | 354 | 337 | 331 |
| Pow. & eq. exp. per day of prod. work | 1.82 | 1.69 | 1.51 | 1.37 | 1.15 | 1.10 |
| No. of farms with tractors | 59 | 100 | 112 | 96 | 94 | 72 |

Summary of Farm Earnings by Years*

| Items | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 |
|---|---|---|---|---|---|---|
| CASH EXPENSES | | | | | | |
| Tractor (new & exp.) | $94 | $249 | $224 | $151 | $98 | $94 |
| Truck (new & exp.) | 29 | 65 | 51 | 53 | 52 | 44 |
| Auto (new & exp.) (farm share) | 127 | 144 | 111 | 89 | 63 | 66 |
| Gas engine (new & exp.) (farm share) | 14 | 19 | 14 | 13 | 10 | 9 |
| Electricity (new & exp.) (farm share) | 32 | 24 | 22 | 36 | 31 | 33 |
| Machinery and equipment (new) | 151 | 228 | 174 | 134 | 89 | 98 |
| Machinery and equipment (exp.) | 74 | 70 | 57 | 63 | 51 | 48 |
| Bldgs., fences, tiling (new) | 94 | 167 | 178 | 69 | 47 | 51 |
| Bldgs., fences, tiling (exp.) | 54 | 49 | 32 | 37 | 19 | 26 |
| Hired labor | 252 | 293 | 262 | 275 | 220 | 208 |
| Feed for livestock | 504 | 376 | 309 | 380 | 282 | 200 |
| Other expense for livestock | 59 | 74 | 80 | 82 | 55 | 49 |
| Horses bought | 44 | 28 | 38 | 26 | 32 | 33 |
| Cows bought | 79 | 41 | 45 | 18 | 17 | 15 |
| Other cattle bought | 63 | 99 | 78 | 45 | 34 | 52 |
| Hogs bought | 69 | 101 | 116 | 69 | 23 | 27 |
| Sheep bought | 5 | 8 | 4 | 15 | 10 | 8 |
| Poultry bought | 35 | 39 | 43 | 39 | 35 | 42 |
| Crop (seed, twine, spray) | 172 | 199 | 202 | 200 | 129 | 107 |
| Taxes and insurance | 285 | 312 | 324 | 349 | 341 | 275 |
| General farm | 30 | 29 | 26 | 34 | 31 | 25 |
| (1) Total cash expense | 2,266 | 2,614 | 2,390 | 2,177 | 1,669 | 1,510 |
| (2) Decrease in farm inventory | - | - | 375 | 971 | 919 | - |
| (3) Board for hired labor | 95 | 110 | 113 | 100 | 68 | 71 |
| (4) Total expense (sum of (1)(2) & (3) | 2,361 | 2,724 | 2,878 | 3,248 | 2,656 | 1,581 |
| CASH RECEIPTS | | | | | | |
| Horses | 33 | 28 | 40 | 26 | 25 | 17 |
| Cows | 353 | 350 | 281 | 174 | 128 | 100 |
| Dairy products | 1,649 | 1,674 | 1,374 | 1,276 | 978 | 1,064 |
| Other cattle | 375 | 427 | 319 | 286 | 213 | 204 |
| Hogs | 1,040 | 1,287 | 1,323 | 1,024 | 502 | 510 |
| Sheep | 45 | 59 | 35 | 46 | 37 | 62 |
| Poultry | 142 | 138 | 135 | 143 | 140 | 147 |
| Eggs | 272 | 278 | 272 | 231 | 193 | 229 |
| Small grain | 214 | 268 | 164 | 145 | 111 | 211 |
| Corn | 29 | 45 | 44 | 43 | 30 | 44 |
| Hay | 28 | 21 | 19 | 13 | 23 | 17 |
| Root crops | 1 | 57 | 56 | 38 | 33 | 53 |
| Other crops | 85 | 136 | 150 | 84 | 91 | 70 |
| Miscellaneous | 81 | 187 | 175 | 135 | 144 | 112 |
| Income from work off the farm | 117 | 88 | 89 | 140 | 106 | 96 |
| (5) Total cash receipts | 4,464 | 5,043 | 4,476 | 3,804 | 2,754 | 2,936 |
| (6) Increase in farm inventory | 387 | 847 | - | - | - | 505 |
| (7) Farm produce used in house | 323 | 326 | 304 | 242 | 197 | 193 |
| (8) Total receipts (sum of (5)(6) & (7) | 5,174 | 6,216 | 4,780 | 4,046 | 2,951 | 3,634 |
| Total expenses (4) | 2,361 | 2,724 | 2,878 | 3,248 | 2,656 | 1,581 |
| (9) Ret. to cap. & fam. labor (8) - (4) | 2,813 | 3,492 | 1,902 | 798 | 295 | 2,053 |
| (10) Interest on farm inventory | 1,182 | 1,274 | 1,278 | 1,153 | 834 | 826 |
| (11) Family labor (9) - (10) | 1,631 | 2,218 | 624 | -355 | -539 | 1,227 |
| (12) Unpaid family labor | 354 | 361 | 381 | 267 | 229 | 241 |
| (13) Oper. labor earnings (11) - (12) | 1,277 | 1,857 | 243 | -622 | -768 | 986 |

*See page 31.

Footnote for pages 29 and 30.

The values of farm real estate in 1931 were reduced approximately 25% from 1928-1930 values. The values in 1932 were reduced about 29% from the 1931 values. Only land was affected by the reduction in 1931, but in 1932 buildings and improvements were cut 25%. The value of dairy cows was also adjusted downward in 1932. These capital losses were not included in the inventory decreases in the financial statement but the decreased valuation resulted in a lower interest charge. No changes in the basis of inventory valuations were made in 1933.

The financial statements differ also in that the unpaid family labor rate was $60 per month for the 1928 to 1930 period, $40 in 1931, and $30 in 1932 and 1933; and the board for hired labor was figured at $20 per month in 1928, 1929, and 1930, $15 per month in 1931, and $10 per month in 1932 and 1933.

These adjustments to meet changes in the price level, should be considered in comparing 1933 results with previous years.

None of the wheat adjustment payments received on account of the A.A.A. program were included in the farm receipts for 1933. As only part of the farmers had received these payments before December 31, 1933, they were carried over to the 1934 records, in order that the 1933 records would be comparable.

The calculation of the per cent of tillable land in high return crops was changed slightly in 1933; barley was moved from the (C) group to the (B) group, (see page 9 for explanation of method of calculation).

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Suggestions for Improvement