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Increasing the Profits by Good Management
How it was done

Many farmers think the only way to increase their incomes is to secure a higher level of prices for their products. The price received is set in a market over which they have very little direct control. Any farmer is essentially a producer. He has no control over the prices he receives. He can, however, make a study of the economical methods to be used in production. Expenses of production are much more within the farmer's control than are the prices he receives. By decreasing the cost of the elements of production he can widen the margin between gross income and gross expenses and thereby obtain a larger net income. He must strive to be a more efficient producer. He should attempt to secure a more economical combination of the factors of cost which fall under his supervision.

To show the possibilities of an efficiency program a farm has been selected from a group of farms in Steele County. Detailed records were kept on these farms for the five years 1920 to 1924 inclusive. Several farms in the group continually showed a substantial profit. The farm selected was outstanding in this respect. It is slightly more than 200 acres in size and is operated by two brothers. For the four years in which they kept records their average net income was increased by \$1300 over what it would have been if they had received only average incomes. The prices they were able to get were no higher than others in the community received, but they studied their farm business and adjusted their enterprises in such a manner that they got a much larger volume of production for less expense.

The farm is in a drained lake bed and is less productive than the higher land of the community. The crop yields were equal or slightly better than the average. By managing to keep the cost per acre pared down to a minimum, these brothers succeeded in producing each of their major crops at a slightly lower cost per unit than the average. These slight margins of superiority, however, are only small ~~small~~ contributing elements to the outstanding success they had. It was in the dairy and hog enterprises that these brothers showed unusual ability. Over ninety per cent of their gross income was derived from these two enterprises alone. Of the total income, thirty five per cent was from hogs and about fifty seven per cent was from dairy cattle. Their capacity to capitalize on their skill in these two lines is the principle factor that enabled them continually to maintain a greater net income.

Swine Enterprises:

1. Feeding. The largest single item in the total cost of producing pork is feed. A good hog^{man} must be primarily an efficient feeder. These brothers were. While others were using 488 pounds of grain to produce 100 pounds of pork these men needed only 405 pounds. The feed, which as fed in the community, would produce only 11000 pounds of pork was sufficient to produce more than 13000 pounds under their more efficient method. The average price of feed during these years was about a cent a pound. Their margin of profit, due to more economical feeding methods, would have been \$85.00 if they had produced no larger amount of pork than the average. Because of their efficiency in feeding, however, a certain amount of feed was released for use in expanding the size of the enterprise. Actually they produced double the amount of pork, so their income was \$170.00 larger than

it would have been if they had used 488 pounds of grain for each 100 pounds of pork. While the other farmers in the neighborhood were getting only slightly more than market price for their feed and labor, these brothers had a profit of 18 cents on each 56 pounds of grain. Their hogs paid them 74 cents for each 56 pounds of grain, roughly equal to a bushel of corn. The use of concrete feeding floors helped to cut down the waste of grain. A great saving in grain requirement was due to the utilization of good pastures, especially rape pastures.

2. Care and Management. The hog house was modern and comfortable. This permitted early spring farrowing. The best gilts from one farrowing season were carefully selected and kept for succeeding years. As mature sows these animals produced larger litters, farrowing both spring and fall litters. The fall litters reduced the overhead costs of the sows. They also enabled the operators to benefit by feeding hogs during the winter months. The conveniences in the hog house were designed to reduce labor requirements. A water system had been installed from which running water was always available. The feed bins were under the same roof. Because of such conveniences they were able to produce twice as much pork without seriously increasing the labor. For four years their profit was \$1.15 greater on each 100 pounds of pork. While others were receiving a scant market price for the feed and labor these men made a net profit of \$225.00 per year. This advantage could only be attributed to more efficient methods of conducting the enterprise.

Dairy Enterprise:

1. Comparative advantage over average. The dairy herd had been under control of the brothers since 1915. All the cows were grades but the effect of continual use of purebred sires was noticeable. The milking herd has been carefully selected for production and the process of weeding out the low producers was constantly being pursued. Each year showed an increase in the production per cow. The average production per cow of his herd for the four years was 245* pounds which was 47 pounds more than the others were receiving. It is significant to note that feed requirement per pound of butterfat was 5.9 pounds whereas the average was 9.1. The reason for the low comparative feed requirement was that the cows were fed according to production and attempts were made to keep the feed mixture balanced. Labor is also a large item of cost in the dairy industry. Here again the better farm shows a greater advantage. The labor requirement was 132 hours per cow or less than the community by 34 hours. The premium resulting from this labor saving alone increased the total income by nearly \$100.00. As feed and labor constitute three fourths of the total cost, the greater efficiency in these is very significant. They succeeded in getting a net return per cow \$43.00 greater than the average. This caused their total income from the herd to be \$650.00 greater than it would have been if they had been no more efficient producers than the average.

2. Yearly improvement in herd. The most interesting lesson to be learned from the dairy record is how the operators succeeded in increasing the average production per cow from year to year and also how they increased the net return per cow at the same time. In 1921 the grain allowance was comparatively low. The production of butterfat per cow was only 202 pounds. It occurred to the managers that they were not utilizing the full capacity of their cows. As a result they endeavored to improve by being more liberal with the feed. In 1922 nearly twice as much grain was fed per cow in addition to an increase in both hay and silage. The outcome of the trial was very satisfactory, the number of pounds of fat increased to 238. The return per hour of labor jumped from 38 to 55 cents. The net return went from \$26.26 to \$42.72 and the cost per pound of butter-

fat dropped from 35 to 30 cents. During the succeeding year an attempt was made to force the cows even more. Again the amount of grain was doubled and the hay and silage increased. While the production increased to 257 pounds the value of the additional 19 pounds of fat was not great enough to pay for the larger amount of feed given. Hence the return per hour of labor and per cow dropped and the cost per pound of fat went up. In order to supply the necessary protein for this large production a large surplus of other nutrients was being fed. The ratio of protein to total digestible nutrients was too wide.

Comparison of Dairy Costs and Returns per Cow

	1921	1922	1923	1924
Lbs. B.F. per cow	202*	238*	257*	285*
Grain(with oilmeal)	658 lbs.	1296 lbs.	2314 lbs.	1684 lbs.
Silage	3687 "	9629 "	10683 "	9714 "
Alfalfa	-	-	166 "	1472 "
Other roughage	1437 "	1999 "	2402 "	847 "
Nutritive ratio	1:9.9	1:8.3	1:8.3	1:7.3
Cost per lb. B.F.	.35	.30	.34	.29
Return per man hour	.38	.55	.49	.53
Net return per cow	\$26.26	\$42.72	\$36.96	\$55.19

Fortunately the brothers did not measure their success by the increase in production only, but they learned from their accounts that they had passed the point of greatest net return. So in 1924 they set out to correct the fault of the previous year. With an abundance of alfalfa a new ration was tried. In this the nutritive ratio was narrowed from 1:8.3 to 1:7.3, largely because of the introduction of alfalfa. The fault of the previous ration was at least partially corrected. In response to the larger proportion of protein the herd average continued to increase, this time to 285 pounds. The feed altho lower in amount per cow was utilized to better advantage. The return per hour showed an increase from 49 to 53 cents and the net return went from \$36.96 to \$55.19. The cost per pound of butterfat of 21 cents in 1924, the last year available was the lowest of any of the four years. The last year was the most profitable year.

The success that has resulted from the careful management of this farm suggests possibilities which others could well afford to adopt. It helps to show what accurate farm records can mean if intelligent use is made of them. A little greater efficiency in regulating the factors of cost may mean a very much greater net income at the end of the year. It also illustrates what an individual farmer may do to improve his well being, not only in times of depression in the business but also in times of prosperity. The man who produces at the lowest cost will always have the largest income or at least will incur the least loss in times of adversity.

* These figures represent creamery sales plus the amount used on the farm. To compare with cow testing figures, add about 15 per cent.

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