University of Nebraska - Lincoln
DigitalCommons@University of Nebraska - Lincoln

Historical Materials from University of Nebraska-Lincoln Extension

Extension

3-1931

EC841 Annual Farm Business Report : Ninety Cass County Farms 1930

Ralph H. Cole

Follow this and additional works at: http://digitalcommons.unl.edu/extensionhist

Cole, Ralph H., "EC841 Annual Farm Business Report : Ninety Cass County Farms 1930" (1931). *Historical Materials from University of Nebraska-Lincoln Extension*. 2295.
http://digitalcommons.unl.edu/extensionhist/2295

This Article is brought to you for free and open access by the Extension at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Historical Materials from University of Nebraska-Lincoln Extension by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

AGRI
S
85
E7
#841

E.C. #841 (1930)

COLLEGE OF AGRICULTURE
LIBRARY
LINCOLN, NEBRASKA

March 1931

Extension Circular 841

Annual Farm Business Report

Ninety Cass County Farms

1930

RECEIVED
MAY 27 1971
COLLEGE OF AGRICULTURE
LIBRARY

Farming is a business. The essentials
of success are good management
and efficient operation.

The University of Nebraska Agricultural College Extension Service
and Rural Economics Department, United States Department
of Agriculture, and Cass County Farm Bureau
Cooperating, W. H. Brokaw, Director
Lincoln, Nebraska.

c.1

ACKNOWLEDGMENT

The records which form the basis of this report were kept and collected under the supervision of County Extension Agent, D. D. Wainscott, of Cass county.

Acknowledgment is herewith made to Messrs. Arthur G. George, L. R. Snipes, and Wendell Huff who worked with Mr. Wainscott in placing and collecting the records, as well as to Messrs. Arthur W. Medlar and Harold Hedges for advice and suggestions relative to the analysis of the data included in this study.

* * *

ANNUAL FARM BUSINESS REPORT

Cass County, Nebraska, 1930

Prepared by Ralph H. Cole.

Farm earnings in 1930 were very low over the entire country. This situation is largely due to the severe decline in prices of farm products which took place in 1930. The world wide business depression, which started in July, 1929, continued thru 1930 and became more severe as the year progressed. In December of 1930 the index of farm prices stood at 97 per cent or 38 per cent below December 1929 and 3 per cent below the pre-war level, 1910-1914. These price declines during the past year made it necessary to reduce inventory values materially and thus contributed to the low earnings for 1930. Because prices of things which farmers sell always decline more rapidly than prices of things which farmers buy, agriculture has been placed in a very unfavorable position. The purchasing power of farm products in December stood at 65 as compared with an average of 100 in the 5 year period, 1910-14.

The 90 farmers in Cass county, who completed business records in the Nebraska Farm Account Project in 1930, earned, as pay for the use of capital invested and for the management and risk of operating the business, an average of .37 per cent on their investments. A wage of $60 per month was deducted for each operator's labor. Thus the percentage return on investment represents the combined return for the use of capital and the operator's management.

A second method of computing earnings is to deduct 5 per cent interest for the use of capital and to regard the remaining income (called Labor and Management Wage) as pay for the operator's labor and management. The average Labor and Management Wage on the 90 farms included in this study was a negative $1044. In other words, after a deduction was made for family labor the operators of the 90 farms lacked an average of $1044 of making enough to pay 5 per cent interest on the total investment in the business, and received nothing at all to pay for their labor and management.

The income figures given in this report should not be taken as representative of all farms in the county. Many of these men have been keeping books and studying their businesses for a number of years and are operating more efficiently than their farmer neighbors. A comparison of yields in Cass county indicates that the average yields of crops raised by the men in this project have been consistently higher than those for the entire county. Evidence that farmers who keep accounts make larger profits than the average of the community has been found in other states. A survey made by the Farm Management Department at the University of Illinois, indicates that the men who were keeping accounts in three Illinois counties made net incomes of approximately $1,200 per farm greater than the average of all farmers in the same localities.

DIFFERENCES IN EARNINGS BETWEEN FARMS

For purposes of comparison the farms included in this report have been divided into groups. The average figures for the 30 farms which earned the highest rate on the investment are found in Column 3 of Table I. The average figures for the 30 farms which returned the lowest rate on the investment are

3-25-31
MRC 3C
9937a

found in Column 4. Column 2 includes the average figures for the entire group of 90 farms. In this report comparisons are made between the group which includes the 30 most profitable and the group of the 30 least profitable farms without particular reference to the 30 farms in the intermediate group.

The 30 most profitable of the 90 farms, after deducting the value of family labor and $720 for the operator's labor, had an average of 3.19 per cent to pay the operator for his management and for the use of the capital invested, while the 30 least profitable farms, after the same deductions were made, showed an average loss of 2.91 per cent on the capital invested.

A comparison on the basis of the Labor and Management Wage shows similar results. The 30 most profitable farms, after allowing 5 per cent interest on investment and deducting the value of family labor, lacked an average of $37 of paying the operator for labor, management, and risk, while the 30 least profitable farms, after making the deduction, lacked $1,897 per farm of making 5 per cent interest on investment.

The 30 farms in the high-income group had an average gross income of $15.48 per acre while those in the low-income group had an income of $10.05 per acre. The total expenses per acre on the two groups of farms were $10.27 and $14.94 per acre, respectively. In other words, the most profitable group of farms with $4.67 less expense per acre returned an income of $5.43 more per acre. This gave the high-income group a net income of $5.21 per acre as contrasted with a net loss of $4.89 for those in the low-income group.

CAUSES OF DIFFERENCES IN EARNINGS

CROP YIELDS.- The average yields per acre on the 30 most profitable farms were: Corn 34 bushels, oats 29.8 bushels, and wheat 23.3 bushels. On the farms in the least profitable group, the yields were: Corn 28.5 bushels, oats 31.1 bushels, and wheat 21.2 bushels. The advantage of 5.5 bushels per acre in yield of corn was a factor in causing the higher incomes on the more profitable farms. While the least profitable farms had a small advantage in oat yield, it was not enough to make a material difference in income.

ACRES IN CROPS.- The farms in the high-income group had an average of 121 acres in corn, 32 acres in oats, 17 acres in wheat, 8 acres in alfalfa and 6 acres in clover. The farms in the low-income group had an average of 83 acres in corn, 22 acres in oats, 19 acres in wheat, 8 acres in alfalfa, and 4 acres in clover.

The high-income farms had an average of 38 acres more corn per farm than the farms in the low-income group. The larger corn acreage is significant because corn is the most important crop in Cass county.

LIVESTOCK RETURNS.- Livestock is an important source of income in Eastern Nebraska. Almost 90 per cent of the gross income on the 90 Cass county farms included in this study came from livestock and livestock products. Therefore, the efficiency with which livestock is produced and marketed has an important bearing upon farm profits in this section of the state.

For each $100 invested in productive livestock the farmers in the most profitable group received an average return of $112 while those in the least profitable group received a return of $78. For each $100 worth of feed

fed to productive livestock the farmers in the high-income group received $145 as compared with $95 for those in the low-income group. The average income per acre from productive livestock was $12.23 on the high-income farms as compared with $9.84 on those in the low-income group. The total livestock receipts per farm were $3,022 and $1,935 for the two groups of farms, respectively.

VOLUME OF BUSINESS.- A reasonably large volume of business is necessary for the profitable operation of the farm. One of the most satisfactory measures of volume of business is total receipts, often referred to as gross income. The average gross income of the 30 most profitable farms was $3,826 as compared with $1,977 for those in the least profitable group.

Since a large volume of business is necessary to the economical operation of a farm, it is to the interest of every farmer to secure such volume. One means of increasing volume is that of expanding farm acreage. Farmers who are not in a position to increase their farm acreages may increase volume by more intensive methods such as producing more livestock and livestock products.

EFFICIENCY OF MAN LABOR.- The labor cost, including the operator's and family labor at hired man rates, was $5.03 per acre on the high-income farms and $5.73 on those in the low-income group. This difference of 70 cents per acre in man labor cost was of some importance in accounting for the difference in average earnings between the two groups of farms.

POWER AND MACHINERY COSTS.- The average cost per acre in crops for horse power, tractor power, and machinery was $4.32 on the high-income farms and $6.35 on those in the low-income group. These figures include cost of horse feed, depreciation on horses, cost of repairs, fuel, oils, and greases as well as depreciation on all movable farm equipment. As indicated by the figures quoted, the high-income farms had an advantage of $2.03 per acre in crops in cost of power and machiney.

INVESTMENT

The average investment in the 90 farm businesses included in this study was $37,725, or $168 per acre. These figures represent the average farm unit value and include land, buildings (except residence), livestock, feed, supplies, machinery, and equipment.

In making the analysis of these records the investment in the residence of each operator was left out of the farm inventory. The depreciation and upkeep on the residences were also omitted. This is done for the same reason that the business man in town does not include his residence as a part of his business; namely that the use of the house is considered as an income from an investment outside of the farm business.

9937a

TABLE I. SUMMARY OF 90 FARM BUSINESSES IN CASS COUNTY, 1930

Factors Useful in Analyzing the Farm Business	Your Farm	Average of 90 Farms	30 Most Profitable Farms	30 Least Profitable Farms
Size of farm - Acres	A.	225 A.	247 A.	197 A.
Acres in crops	A.	169 A.	193 A.	142 A.
Per cent of land area tilled	%	82.3 %	83.6 %	83.0 %
Gross receipts per acre $		$ 11.82	$ 15.48	$ 10.05
Total expenses per acre		11.19	10.27	14.94
Net receipts per acre		.63	5.21	-4.89
Land investment per acre		122	121	116
Total investment per acre		168	164	168
Acres in Corn	A.	101 A.	121 A.	83 A.
Oats	A.	27 A.	32 A.	22 A.
Wheat	A.	19 A.	17 A.	19 A.
Alfalfa	A.	8 A.	8 A.	8 A.
Clover	A.	6 A.	6 A.	4 A.
Yield per acre of Corn	bu.	31.5 bu.	34.0 bu.	28.5 bu.
Oats	bu.	29.6 bu.	29.8 bu.	31.1 bu.
Wheat	bu.	22.7 bu.	23.3 bu.	21.2 bu.
Returns per $100 feed fed to productive livestock $		$ 119	$ 145	$ 95
Returns per $100 invested in:				
Productive livestock		97	112	78
Cattle		63	78	56
Hogs		157	170	131
Poultry		169	174	139
Dairy sales per cow		45	38	53
Receipts from productive livestock per acre		10.53	12.23	9.84
Investment in productive livestock per acre		10.83	10.91	12.68
Man labor cost per $100 gross income		45	32	57
Man labor, power, and mach. cost per $100 gross income		77	54	102
Man labor cost per acre		5.34	5.03	5.73
Total feed cost for horses		341	356	342
Power and machinery cost per acre in crops		4.93	4.32	6.35
Expense per $100 gross income $		$ 95	66	149
Farms with tractors		47	17	16

Table I. Continued

Item		Your Farm	Average of 90 farms	30 Most Profitable Farms	30 Least Profitable Farms
Capital Investments - Total	$		$ 37,725	$ 40,426	$ 32,963
Land	$		$ 27,467	$ 29,789	$ 22,778
Farm improvements	$		3,463	3,537	3,469
Horses	$		593	545	622
Cattle	$		1,471	1,697	1,488
Hogs	$		791	912	742
Sheep	$		88	25	195
Bees	$		2	2	3
Poultry	$		154	123	142
Livestock - Total	$		3,099	3,304	3,192
Machinery & Equipment	$		1,479	1,689	1,335
Feed, grain, & supplies	$		2,217	2,107	2,189
Receipts - Net Increases-Total			2,655	3,826	1,977
Horses	$		---	---	---
Cattle	$		699	1,125	583
Hogs	$		1,202	1,517	930
Sheep	$		6	6	2
Bees	$		4	2	8
Poultry	$		78	52	53
Egg Sales	$		164	150	130
Dairy Sales	$		213	170	229
Livestock - Total	$		2,366	3,022	1,935
Feed, grain, & supplies	$		240	723	---
Labor off farm	$		30	62	20
Miscellaneous receipts	$		19	19	22
Expenses-net Decreases- Total			1,650	1,693	2,060
Farm Improvements	$		249	222	270
Horses	$		57	46	88
Misc. L.S. Decreases	$		---	---	---
Mach. & equipment	$		434	432	468
Feed, grain, & supplies	$		---	---	467
Livestock expense	$		51	37	66
Crop expense	$		139	133	127
Hired Labor	$		336	397	251
Taxes	$		343	365	290
Miscellaneous expense	$		41	61	33
Receipts less Expenses	$		1,005	2,133	-83
Total unpaid labor	$		865	845	877
Net income from investment and management	$		140	1,288	-960
Rate earned on investment	%		.37%	3.19%	-2.91%
Return to capital and operator's labor and management	$		842	1,984	-249
Interest on investment at 5 per cent	$		1,886	2,021	1,648
Labor and Management Wage	$		-1,044	-37	-1,897

Table II. The numbers between the lines across the middle of the page are approximate averages in Cass county of the factors named at the top of each page. These columns are independent of each other and may be considered as a thermometer of efficiency. By drawing a line across each column at the number nearest approaching the figure for your farm in that factor (See Table I), you can compare your efficiency with that of other farms in Cass county.

Rate Earned on Inv. %	Bushels per Acre		Returns per $100 Invested			Returns per $100 worth of feed fed	Power and Machinery Cost per Acre in Crops	Man Labor Cost per Acre	Expense per $100 Gross Income	Gross Receipts		Size of Farm
	Corn	Oats	Cattle	Hogs	Poultry					Per Acre	Per Farm	
7.37	46	51	$133	$297	$309	$234	$1.43	-	-	$33	$9,600	365
6.37	44	48	$123	$277	$289	$219	$1.93	-	$ 35	$30	$8,600	345
5.37	42	45	$113	$257	$269	$204	$2.43	-	$ 45	$27	$7,600	325
4.37	40	42	$103	$237	$249	$189	$2.93	-	$ 55	$24	$6,600	305
3.37	38	39	$ 93	$217	$229	$174	$3.43	$2.34	$ 65	$21	$5,600	285
2.37	36	36	$ 83	$197	$209	$149	$3.93	$3.34	$ 75	$18	$4,600	265
1.37	34	33	$ 73	$177	$189	$134	$4.43	$4.34	$ 85	$15	$3,600	245
.37	32	30	$ 63	$157	$169	$119	$4.93	$5.34	$ 95	$12	$2,600	225
-.63	30	27	$ 53	$137	$149	$104	$5.43	$6.34	$105	$ 9	$1,600	205
-1.63	28	24	$ 43	$117	$129	$ 89	$5.93	$7.34	$115	$ 6	$ 600	185
-2.63	26	21	$ 33	$ 97	$109	$ 74	$6.43	$8.34	$125	$ 3	-	165
-3.63	24	18	$ 23	$ 77	$ 89	$ 59	$6.93	$9.34	$135	-	-	145
-4.63	22	15	$ 13	$ 57	$ 69	$ 44	$7.43	$10.34	$145	-	-	125
-5.63	20	12	$ 3	$ 37	$ 49	$ 29	$7.93	$11.34	$155	-	-	105
-6.63	18	-	$ -7	$ 17	$ 29	$ 14	$8.43	$12.34	$165	-	-	85

9937a

FARM MANAGEMENT SUGGESTIONS

The profitableness of any business is determined by the margin between cost of production and selling price. Farm profits to the individual farmer may be increased in two general ways:

I. An increase in the selling price of farm products.
II. A decrease in the cost of producing farm products.

Prices are made through the operation of the forces of supply and demand. By giving attention to quality and studying market conditions both as to time, place, and strategy, the farmer may take advantage of price variations and secure somewhat better prices than he would otherwise. However, the individual farmer has practically no control over the price level of farm products and can hope to accomplish little by the first method listed above.

The individual farmer does have considerable control over his costs of production. It is within his power to increase the efficiency of his business at certain points, and through this means, to decrease his production costs. He may approach the problem of increasing his efficiency from two different angles, as follows:

I. The proper organization of his farm business
II. The adoption and use of efficient practices in the operation of his farm.

The organization of the farm has to do with such questions as:

1. Size of farm,
2. Kinds of crops produced and acreages devoted to each,
3. Types of livestock produced and size of livestock enterprises,
4. Sources of power,
5. Supply of labor

Examples of practices which make for efficiency in the operation of a farm are as follows:

1. Use of legumes in building up soil fertility,
2. Prevention of erosion by various methods,
3. Feeding balanced rations to livestock,
4. Culling of low-producing cows and hens,
5. Sanitary methods in producing livestock in order to prevent disease,
6. Use of large units of equipment to save labor,
7. Early plowing of stubble to conserve moisture,

Farm management studies in various states have established certain definite principles which may well be observed in the organization and operation of a farm. A valuable treatment of these principles is included in Illinois Experiment Station Bulletin No. 329, "Organizing the Corn Belt Farm For Profitable Production". The principles discussed in Bulletin 329 are listed below:

"1. Good yields tend to reduce the unit cost of producing farm crops.

"2. A large percentage of land in the higher profit crops means larger profits.
"3. Livestock production as a means of marketing crops makes for larger farm income
"4. Efficient feeding and handling of livestock materially reduces cost of production.
"5. A large volume of business is necessary for profitable farming.
"6. A well-organized system of crop and livestock production helps use available man labor advantageously.
"7. Costs are reduced when the supply of horse and mechanical power fits the farm needs and is economically handled.
"8. Buildings, machinery, and other equipment expense must be kept under control if low production costs are to be obtained.
"9. A good farm layout and a well-developed farmstead make for economical operation.
"10. Diversity of crop production helps to insure long-time profits.
"11. Production planned in accordance with market demands makes for a larger margin of profit."

These principles are general in nature and certain ones of them may not apply under all circumatances.

Market demands are continually changing. This makes it necessary, for even those farmers who have their businesses well organized, to make adjustments in order to keep their production planned in accordance with market demands. So far as possible it is desirable that these adjustments be made on the basis of what "will be" rather than in response to what "has been" in the immediate past. In practice many adjustments are made on a basis of what is now happening or what has just happened. "Sheep are low in price so let's quit the sheep business," represents an attitude which is too common. A better basis for decision would be that implied by the question, "What is the outlook for sheep over the next three, five, or ten years?"

The organization of the farm should not be planned on the basis of profits for a single year, but should be planned in such a way as to give the greatest continuous profit over a period of years. Radical changes in the cropping or livestock system of a farm are costly. For example, a man may decide to double his number of brood sows because the prospect for hog prices is good. Such a move would involve the provision of more hog equipment, as well as more labor and a larger feed supply for the hog enterprise. If, a year or two later, because the outlook for hog prices appears unfavorable, this same farmer decides to breed only half as many sows as before his farm organization is again disrupted. He now has hog equipment lying idle, and a part of the labor and feed supply formerly utilized by the hog enterprise must be used elsewhere.

Slight increases or decreases in line with what supply and demand conditions "will be" are justifiable, but radical changes based on short time conditions are seldom advisable. The operations of the "in-and-outer" are usually detrimental both to himself and to the industry as a whole.

9937a

When a permanent change in supply and demand conditions occurs the quicker an adjustment is made in accordance with the change the better. For example, the demand for timothy and prairie hay has fallen off materially due to the decline of horse numbers, particularly in the cities. The farmer who recognized this change and shifted his production from timothy or prairie hay to some other crop, fared much better than the farmer who stuck tenaciously to his old cropping system in the face of a rapidly disappearing market.

The present wheat situation is in the nature of a permanent change which will require some adjustment. It is evident that some of the land in the United States which has been used in producing wheat must eventually be used for some other purpose. Many farmers in Nebraska are already reducing their wheat acreage or eliminating this crop from their cropping systems.

Two or three years hence the adjustments which are being made will probably place wheat in a more favorable position than it now is. However, there is little evidence to indicate that wheat will, in the next decade, return to the favorable price relationship which existed from 1925 to 1929.

These illustrations serve to point out the fact that permanent changes do occur and that these changes require adjustments in the farm program. When it becomes necessary to make such changes in the cropping and livestock program of the farm, economic information as to probable supply and demand conditions in the future provides a sound basis for use in deciding what changes to make.

Where may such economic information be secured? The county extension agent in each county having such an agent will be able to secure publications containing economic information for persons living in his county. Persons living in non-agent counties may secure these publications through the Nebraska College of Agriculture. A list of the original sources of economic information suitable for farmers is listed below.

SOURCES OF ECONOMIC INFORMATION

1. NEBRASKA ECONOMIC SITUATION

This brief publication is issued once each month by the Extension Service of the Nebraska College of Agriculture. It contains a discussion of supply, demand conditions, and the price situation of farm products of importance in Nebraska.

2. AGRICULTURAL OUTLOOK FOR NEBRASKA

This is a presentation of facts relating to the agricultural situation with particular reference to the supply and demand conditions affecting products produced on Nebraska farms. This report is published in February of each year and may be secured by addressing the Nebraska College of Agriculture, Lincoln.

9937a

3. UNITED STATES DEPARTMENT OF AGRICULTURE OUTLOOK REPORT

This report attempts to bring together facts relating to prospective world-wide supply and demand conditions which are not generally known to farmers. It is published early in February each year and may be secured in limited numbers by addressing the Nebraska College of Agriculture, or the United States Department of Agriculture, Washington, D. C.

4. THE FARM OUTLOOK FOR 1931

This is a shortened edition of the United States Department of Agriculture report mentioned just previously. It may be secured from the same sources.

5. THE AGRICULTURAL SITUATION

The Agricultural Situation, a monthly publication of the Bureau of Agricultural Economics of the United States Department of Agriculture, gives current information on supply, demand, and price conditions for the United States and for sections of the United States. It is condensed and is useful in keeping up to date on the latest economic information. It is not a free publication, but a subscription price of 25 cents per year is charged for it. Address the Superintendent of Documents, Government Printing Office, Washington, D. C.

6. MISCELLANEOUS MARKET REPORTS OF THE UNITED STATES DEPARTMENT OF AGRICULTURE

This group includes a variety of reports giving supply, demand, and price information on different commodities. Persons interested can secure a list of these reports by addressing the Bureau of Agricultural Economics of the United States Department of Agriculture, Washington, D. C. A few of these reports with the approximate date of release are listed below. They may be secured free of charge by writing to the Bureau of Agricultural Economics, United States Department of Agriculture, Washington, D. C.

a. Monthly Crop Report.- This report which shows acreage, condition, prices, and probable production of crops is issued once each month of the year beginning with March. A summary of this report may be secured from the "Agricultural Statistician's" office, State House, Lincoln, Nebraska.

b. Special Pig Surveys.- Results of pig surveys are published about January 1 and July 1 of each year. They show supplies of hogs on farms and intentions to breed for the following season.

c. Report of Cattle on Feed or Movement of Feeder Cattle.- This report is issued about the 12th of January, April, August, October, November and December.

d. Report of Lamb Crops and Sheep and Lambs on Feed.- This report is issued about the twelfth of January, March, July, October, November and December.