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AGRICULTURAL EXTENSION DIVISION  
UNIVERSITY OF MINNESOTA

F. W. Peck, Director

MINNESOTA FARM BUSINESS NOTES

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Prepared by the Division of Farm Management and Agricultural Economics  
University Farm, St. Paul, Minnesota

COSTS AND INCOMES OF FARMERS' ELEVATORS

Prepared by L. L. Ulliyot

Annual reports or auditors' records of representative elevator companies in Minnesota have been analyzed annually for the past six years for the purpose of obtaining information on costs and incomes of each concern. Since local elevators operate under widely varying conditions of volume of business, variety of products handled, competition, and other conditions that affect costs and incomes, the State has been divided into four districts. These districts were chosen so as to group elevators operating under similar conditions together. The four districts are as follows: District 1 Northwestern part, district 2 Southwestern part, district 3 Central and Northeastern part, and district 4 Southeastern part. The Northwestern district comprises a portion of the Red River Valley and includes elevators that market chiefly wheat and oats, and that sell only small amounts of sidelines. The elevators in Southwestern Minnesota handle large quantities of corn and oats and handle more sidelines than the elevators in Northwestern Minnesota. The elevators in the Central and Southeastern sections of Minnesota are characterized by smaller volumes and a large amount of sideline business.

The ninety-four elevators included in the study of the last crop year (1928-29) showed a range in volume of grain handled from 22,720 to 481,479 bushels, with an average for the entire group of 129,727 bushels. Costs ranged from 2.12 cents to 36.98 cents per bushel with an average of 7.72 cents per bushel. Grain margins ranged from 1.18 cents (loss) to 16.62 cents per bushel with an average of 3.77 cents per bushel. Total gross income, from all sources, ranged from .16 cents to 47.83 cents per bushel with an average of 9.37 cents per bushel. Net income, before dividends and federal taxes were deducted ranged from a loss of 4.54 cents to a gain of 14.09 cents per bushel with an average of 1.65 cents gain per bushel.

Twenty-six elevators in the Northwestern district showed a range in volume of grain handled from 55,893 to 389,627 bushels, with an average of 174,702 bushels. Costs ranged from 2.20 cents to 9.77 cents per bushel with an average of 4.26 cents per bushel. Grain margins ranged from 1.42 cents to 7.86 cents per bushel with an average of 3.62 cents per bushel. Total gross income, from all sources, ranged from 2.66 cents to 10.22 cents per bushel with an average of 5.92 cents per bushel. Net income, before dividends and federal taxes were deducted, ranged from a loss of 2.54 cents to a gain of 5.45 cents per bushel with an average of 1.66 cents gain per bushel.

Forty-nine elevators in the Southwestern district showed a range in volume of grain handled from 22,720 to 481,479 bushels with an average of 178,186 bushels. Costs ranged from 2.12 cents to 22.33 cents per bushel with an average of 4.24 cents per bushel. Grain margins ranged from 1.18 cents (loss) to 7.81 cents per bushel with an average of 3.33 cents per bushel. Total gross income, from all sources, ranged from .16 cents to 37.24 cents per bushel with an average of 5.95 cents per bushel. Net income, before dividends and federal taxes were deducted ranged from a loss of 4.21 cents to a gain of 14.09 cents per bushel with an average of 1.71 cents per bushel.

Ten elevators in the Central district showed a range in volume of grain handled 29,070 to 149,852 bushels with an average of 70,373 bushels. Costs ranged from 4.90 cents to 36.98 cents per bushel with an average of 12.13 cents per bushel. Grain margins ranged from 2.23 cents to 16.62 cents per bushel with an average of 4.93 cents per bushel. Total gross income, from all sources, ranged from 5.64 cents to 47.33 cents per bushel with an average of 13.81 cents per bushel. Net income, before dividends and federal taxes were deducted, ranged from a loss of 4.54 cents to a gain of 10.85 cents per bushel with an average of 1.68 cents gain per bushel.

Nine elevators in the Southeastern district showed a range in volume of grain handled from 44,894 to 271,625 bushels with an average of 95,647 bushels. Costs ranged from 6.17 cents to 19.52 cents per bushel with an average of 10.24 cents per bushel. Grain margins ranged from .62 cents to 5.90 cents per bushel with an average of 3.21 cents per bushel. Total gross income from all sources, ranged 3.57 cents to 25.71 cents per bushel with an average of 11.81 cents per bushel. Net income, before dividends and federal taxes were deducted, ranged from a loss of 3.55 cents to a gain of 7.53 cents with an average of 1.57 cents gain per bushel.

In computing the above figures expenses were not allocated to sidelines because of the large amount of time and expense that would be involved in making such allocations. In studying these results one must bear in mind that total expenses are charged to the grain business and that income from sidelines and other enterprises is regarded as profit. In some cases although a loss was made on grain handled the final result of the year's operations showed a net profit, due to the handling of sidelines and other profitable enterprises.

Those familiar with elevator operation will readily recognize the importance of volume of business in its effect on costs. In general, the study shows that large volumes are accompanied by lower costs and small volumes by higher costs per bushel. This fact is significant when the costs by districts are studied. The Southwestern district having the largest six-year average volume (227,571 bushels), had a six-year average cost of 4.1 cents per bushel. The Northwestern district having the next largest six-year average volume (165,546 bushels), had a six-year average cost of 4.8 cents per bushel. The combined Central and Southeastern districts, having the smallest six-year average volume (111,687 bushels) had a six-year average cost of 8.4 cents per bushel. An elevator is built and equipped and the labor and manager are employed to handle a given volume of grain and until that quantity is marketed these cost elements are not fully utilized and costs per bushel are higher.

Volume of business alone does not account for the wide variation in costs among elevators. Costs vary between elevators with the same volume. This is due to the fact that elevator associations are not equally successful in adjusting building, equipment, labor and management, and other cost factors to the volume of business.

The ninety-four elevators showed a range in grain margins from 1.18 cents loss to 16.62 cents gain per bushel with an average gain of 3.77 cents per bushel. The grain margin charged should be sufficient to cover costs of operation, provide adequate reserves and give a reasonable rate of return on the investment. Excessive margins reduce the amount paid to the farmer for his grain and create dissatisfaction among patrons.

The grain margin on which an elevator aims to operate and the grain margin it actually receives are not necessarily the same. The grain margin actually received may be higher or lower than the margin charged depending on the ability of the manager to judge the market conditions during the year and the outcome of the hedging and storing operations.

Grain margins vary among elevators principally because costs vary. In general those with higher costs have higher margins. Elevators that do not hedge are liable to realize larger gains or losses. Those that store are, likewise, liable to have larger gains or losses. Certain types of grain normally carry wider margins than others because of greater marketing costs. Competition varies and also plays an important part in margins.

Five out of twenty-six elevators in the Northwestern district showed a loss which averaged \$1,278. Five out of forty-nine elevators in the Southwestern district showed a loss and one elevator came out even. The average loss for the five elevators was \$1,969. There were four out of ten elevators in the Central district showing a loss with an average loss of \$1,042 for the four elevators. In the Southeastern district, four out of nine elevators operated at a loss. The losses for these four elevators averaged \$1,790.

It is significant to note (see table of Expense and Income of Farmers' Elevators in Minnesota by Years and Districts given below) that the net worth of the elevator companies has been steadily increasing the last six years. This indicates that although some elevator companies are not in such good financial position, the average farmers' elevator has steadily gained in financial security.

SUMMARY OF EXPENSE AND INCOME OF FARMERS' ELEVATORS  
IN MINNESOTA BY YEARS AND BY DISTRICTS  
(in cents per bushel)

Southwestern District

Year	Expense	Gross Income	Net Income	Volume	Net Worth
1923-24	3.1	3.5	0.4	308,630	\$16,638
1924-25	3.2	4.2	1.0	262,515	18,126
1925-26	3.1	4.1	1.0	314,442	23,470
1926-27	5.0	6.5	1.5	152,384	21,220
1927-28	6.0	8.4	2.4	149,266	23,416
1928-29	4.2	6.0	1.7	178,186	25,448
6-yr. Av.	4.1	5.5	1.3	227,571	21,385

Northwestern District

Year	Expense	Gross Income	Net Income	Volume	Net Worth
1923-24	6.0	7.0	1.0	99,635	\$14,490
1924-25	3.1	7.0	3.9	236,430	20,697
1925-26	4.6	7.5	2.9	202,185	26,300
1926-27	5.0	7.5	2.5	145,045	24,623
1927-28	5.8	8.9	3.1	135,198	22,776
1928-29	4.3	5.9	1.7	174,702	23,864
6-yr. Av.	4.8	7.3	2.5	165,546	22,125

Southeastern and Central Districts

Year	Expense	Gross Income	Net Income	Volume	Net Worth
1923-24	7.8	8.1	0.3	91,413	\$10,535
1924-25	6.7	10.7	4.0	118,403	20,286
1925-26*	5.3	5.9	-0.4	153,070	19,180
1926-27*	8.7	9.6	0.9	121,436	27,053
1927-28*	9.9	13.6	3.7	102,791	25,776
1928-29	11.2	12.9	1.6	83,010	28,542
6-yr. Av.	8.4	10.1	1.7	111,687	21,895

\*Excludes elevators handling more sidelines than grain.

MINNESOTA FARM PRICES FOR MAY 1930

Prepared by D. D. Kittredge

The index number of Minnesota farm prices for the month of May 1930 was 98.7. When the average of farm prices of the three Mays of 1924-25-26 is represented by 100, the indexes for May of each year from 1924 to date are as follows:

May 1924 -	84.3
" 1925 -	106.1
" 1926 -	110.1
" 1927 -	109.0
" 1928 -	113.4
" 1929 -	112.4*
" 1930 -	98.7*

\*Preliminary

The price index of 98.7 for the past month is the net result of increases and decreases in the prices of farm products in May 1930 over the average of May 1924-25-26 weighted according to their relative importance. These increases ranged from approximately 45 per cent to 7, and the decreases from 35 per cent to 3. The products ranked according to the size of their percentage increases or decreases in this comparison are shown in the following list:

Principal Farm Products which Showed Price Increases and Decreases in May 1930 when Compared with Average Prices in May 1924-25-26  
(arranged in descending order of percentage change)

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Increases

Potatoes  
Cattle  
Calves  
Flax

Decreases

Wheat  
Rye  
Barley  
Lambs-Sheep  
Eggs  
Chickens  
Hogs  
Oats  
Hay  
Corn  
Butterfat

Although the Minnesota index for May 1930, does not measure price changes from April 1930, a comparison of month to month changes in price has been made. The decrease range from 10 per cent to .2. The products ranked according to the size of their percentage decreases in May 1930 and April 1930, are shown in the following list:

Principal Farm Products which Showed Price Decreases in May 1930 when Compared with April 1930  
(arranged in descending order of percentage change)

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Decreases

Rye  
Eggs  
Calves  
Chickens  
Flax  
Wheat  
Oats  
Cattle  
Barley  
Hogs  
Corn  
Hay  
Lambs-Sheep

No Change

Potatoes  
Butterfat