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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 Agricultural Economics University Farm, St. Paul, Minnesota

TRENDS IN FARM LAND VALUES IN MINNESOTA Prepared by E. C. Johnson

What is farm land worth? This question is being raised frequently at the present time, but to answer it is difficult. Ordinarily, when we think of the value of farm land, we have in mind what the land will sell for under conditions existing at that particular time and presumably such sale value is based on the income that buyers and sellers think the land will yield over a period of years. Those who anticipate an increase in income on farms are likely to conclude that present sale values are too low and that land prices will rise, while those who expect farm incomes to continue low for a long time say that farm land will decline further in value. It is not the purpose of this discussion to forecast what future values will be, but merely to point out changes that have taken place in the value of farm land in Minnesota and some of the causes for these changes. The term farm land in this discussion refers to real estate, that is, the land proper and buildings.

Table 1. Average Sale Value per Acre of Farm Real Estate by

Years in Agricultural Districts of Minnesota 1910- 1912- 1914- 1916- 1918- 1920- 1922- 1924- 1926- 1928- 1930-31\* District \$69 \$78 \$92 \$117 \$141 \$114 \$104 \$106 \$100 \$88 Southeastern \$58 Southwestern West Central East Central 0 Northwestern Northeastern Minnesota 

Table 2. Index of Sale Value per Acre of Farm Real Estate by Years in Agricultural Districts of Minnesota (1918-13 = 100) 1910- 1912- 1914- 1916- 1918- 1920- 1922- 1924- 1926- 1928- 1930-District 31\* Southeastern Southwestern West Central 1.00 East Central Northwestern Northeastern Minnesota 

<sup>\*1930-31</sup> figures preliminary.

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Farm land values in Minnesota increased up to 1920 and since that time have decreased. These changes are shown in Table 1 which gives the average sale prices of farm real estate by major agricultural districts in Minnesota since 1910. The averages are for two-year periods and are based upon sales data obtained from the records of the Minnesota Tax Commission. In these data, all forced sales, such as sheriffs sales and transfers of farm land to creditors, are excluded as are also sales to relatives which are often made at comparatively low prices. Therefore, the sales included in the averages are the result of bargaining between buyers and sellers and should reflect fairly accurately the true sale value of land for the years given. These values, however, since 1920 may seem high because there has been much distress selling of land particularly since 1925. On the other hand, an increase in distress sales also has an effect on all sales and it is likely that the figures given represent approximately the actual situation in the land market. 1930-31 values are based upon comparatively few sales and therefore are not as representative as the figures of preceding years. During 1930-31, many farms were sold by creditors at low values and it is likely that the figures given which exclude such sales tend to be higher than the average of all land sales. The sale values in Table 1 are not simple averages of all sales of which a record was obtained in each district, but the average of sales in the counties, weighted according to the total acres of land in farms in each county as given in the United States Census of 1930. In other words, the figures in Table 1 are values for all farm land in each district based upon sales of farms in individual counties.

In all districts of the state, farm real estate increased in value between 1910 and 1920. The average value per acre in Minnesota in 1910-11 was \$41 compared with \$104 in 1920-21. During the latter years, farm land value reached a peak. Sharp declines occurred in the years 1922 to 1925, but from 1925 to 1929 land values declined less rapidly. This latter period was one of reasonably satisfactory farm incomes which retarded the decline of land values. The break in farm prices in 1930-32 was accompanied by another sharp decline in the value of Minnesota farms and sale prices in many sections are now near or below the levels of 1912-13.

Some interesting comparisons of land values in different sections in Minnesota may also be noted in Table 1. It is obvious that in southeastern and southwestern Minnesota land values are considerably higher than in other parts of the state. In general, these areas include the best developed and most productive farms and income from the land therefore has been higher in these regions than in others. Next in order is the west central district, a district of diversified agriculture where farm values at the present time on the average are approximately two-thirds of values in southern Minnesota. This is followed by the east central district, a dairy region where farm values are about two-thirds as great as in the west central region. Northwestern Minnesota with its broad prairies, important in small grain production, follows with values on the average somewhat lower than the value in east central Minnesota. Finally we have northeastern Minnesota, or what may be more properly described as the Northern Cut-Over Area. This is a region where much of the land is uncleared and agricultural development is below that of the other regions. The high cost of clearing land and developing farms has kept values at low levels. In this cut-over area, values in 1930-31 averaged \$19 per acre, and from there ranged upward among the districts to \$91 in southwestern Minnesota. It probably is unnecessary to point out that there is considerable variation in values between counties in each district and between farms within each county. The district averages, however, indicate in general the values of land in these areas.

While farm land values in all districts increased up to 1920-21 and then declined, the degree of change was not the same in all parts of the state. In Table 2 the values given in Table 1 are expressed as percentages of farm land values in 1912-13, thus showing the degree of change in each district. In all districts of the state, farm land values more than doubled between 1912-13 and 1920-21 except in the northwestern and northeastern areas where the increases were

97 and 86 per cent respectively. The greatest relative increase occurred in the east sentral district where farm real estate values in 1920-21 were 234 per cent of values in 1912-13.

Land values declined sharply during 1922 and 1923 in all districts of the state, but the greatest relative decline occurred in northwestern Minnesota. Prices of farm land tend to follow incomes from the land and in the northwestern counties where cash grain production is more important, farm incomes declined relatively more than in other districts. Livestock products did not decline as much relatively as grain prices in the years just following 1920, and in those districts where dairying was important, land values did not break as sharply as in northwestern Minnesota.

The years 1930 and 1931 were years of declining prices for products of Minnesota farms, and in all districts farm land values declined sharply. In the southern and central parts of the state, average sales values of land during these two years were only about 30 per cent above 1912-13. In northwestern Minnesota, they had declined to the same levels as in 1912-13, but in the cut-over area, they were still 46 per cent above the values in that region in 1912-13. It is in the latter region that land values have fluctuated the least of any district in Minnesota. Its agriculture is less commercialized than in other regions and a change in prices of farm products does not have as great an effect on the income of the farm family. Much of the production of farms is consumed by the family and a relatively larger share of the family income is from sources cutside the farm. The value of the farm as a home represents a relatively larger share of the value of farm real estate in the cut-over region than in other districts and the "home value share" is not likely to fluctuate as much as the share of total value that is based on cash income from the farm. Mainly for these reasons land values have fluctuated less in the cut-over area.

While no figures are presented for sales in 1932, it may be well to point out that in general farm land values have shown marked declines again as a result of sharp declines in prices of farm products. While many creditors who have taken title to farms as a result of foreclosures, are holding their properties off the market, on the whole we find a situation where there is a large supply of farms available for sale but very few people with the purchasing power or the confidence in walues to buy farm land. The result is that, generally speaking, the few farms that are being sold are going at comparatively low values, many in fact being sold for prices below those of 1912-13.

Farm land prices in final analysis are determined by factors affecting the supply of land on the market and demand for land. Any discussion therefore which seeks to throw light on the protable future trends in land prices must be based upon a consideration of factors affecting supply and demand for land. In the long run, land values are determined by income from the land and fundamentally the income from the land (present and expected) is the important factor affecting the supply and demand for land and therefore its market price. When incomes are low as at present and the future incomes very uncertain, we find a spirit of pessimism prevailing and many owners of land are willing to sell if they can get some return for their equities. The supply of land available for sale, therefore, is large. On the other hand, the low income and lack of purchasing power reduces the demand for farm land. This combination of circumstances causes low values.

When we view the present situation in the market for farm land, we find many conditions with respect to supply and demand for land that point toward the continuation of relatively low values for some time. Thousands of farms in Minnesota have been acquired by mortgages and if creditors continue an aggressive collection policy, a great many farms will be acquired by them in the future. On the whole, these farms represent a potential supply of farms available for sale.

Many farmers who are heavily in debt and whose equities in the farms are nearly wiped out, would be glad to sell if they could get something for their equity. Other farms which would normally have changed hands but which have been withheld from the market in hope that conditions would improve are coming into the market. Such cases also increase the supply of land available for sale. Looking at the demand side of the market, we note a condition of low incomes which discourages buyers from purchasing farms. Most buyers of land are farmers and very few farmers have accumulated capital sufficient to purchase a farm. Retired farmers and other investors hesitate to buy land because it has been unprofitable to hold land in recent years. Also high real estate taxes reduce the income from land and are an important factor in the decreased demand for farm land.

There are a number of favorable factors in the land market, however, which will operate in the direction of stabilizing farm land values and should be given consideration. In the first place, creditors are adopting a more liberal rolicy of carrying the debtor and not foreclosing and forcing able farmers off their farms. This policy will check the increase in farm holdings by creditors. Furthermore, creditors are not dumping farms on the market to the extent that they did a short time ago, but are holding the farms refusing to sell at abnormally low prices. These changes will reduce the number of farms offered at low prices. the second place, there are factors operating which should tend to increase the demand for farms. Farm wages are low, prices of supplies used on the farm have declined, in some communities taxes have been reduced, and there are evidences of reduction in public expenditures which should reduce taxes. This means that while declining prices are reducing income from the land, this decline is in part offset by a reduction in costs. There are also indications of an increasing demand for farms by tenants interested in having a farm of their own and by people who are leaving the cities. These groups generally do not have much capital but arrangements are being made for the purchase of farms on crop payment plans which will encourage individuals to become farm owners.

The mere fact that farm land values in the past have been high does not mean that they will go back to high levels in the future. The high prices for land existed during a period when prices generally were high. At the present time, the general price level is near that of the years 191) to 1914, and if we continue on this level then our basis for a price figure to represent the intrinsic value of land based on earning power over a period of years probably should be values near those shown in Table 1 for the years 1910 and 1911 or 1912 and 1913. In those years, the prices of farm land were based not only upon a capitalization of net income to land at that time but also upon expected increases in net income. People at that time expected land values to rise but in the future our viewpoint may be quite different. Estimates of population trends point to the fact that we are rapidly approaching the time when we will have a stationary population in this country. Furthermore, methods of agricultural production are continually being improved and there will not be the need for development of new agricultural regions to the extent which we formerly thought was necessary. It is likely therefore that the values of the years 1910 and 1911 may be a better figure to use than values of 1912 and 1913. On the other hand, it must be borne in mind that since 1910 we have had great improvements in the farms, in buildings particularly, and community improvements like roads and schools. These improvements add to the "home value" of a farm but their effect on land values may be offset, in part at least, by the maintenance of a higher level of taxes and by some decrease in the fertility of the soil, especially in the small grain areas of Minnesota.

Some farms are now being sold at extremely low prices. In some cases, these prices seem to be far below what we might term the intrinsic value of the land based upon earning power over a period of years. Purchasers of farms now have a chance to be discriminating in their choice of a farm and select the better lands. In the past, there has been a definite tendency to overvalue the poorer soils. Buyers are likely to have a better investment if they choose the farms having soils of high productivity.

## MINNESOTA FARM PRICES FOR OCTOBER 1932 Prepared by Adena E. Erickson

The index number of Minnesota farm prices for the month of October 1932 was 36.5. When the average of farm prices of the three Octobers of 1924-25-26 is represented by 100, the indexes for October of each year from 1924 to date are as follows:

October 1924 - 93.0

" 1925 - 103.6

" 1926 - 103.5

" 1927 - 98.1

" 1928 - 95.0

" 1929 - 107.2

" 1930 - 80.6\*

" 1931 - 51.2\*

" 1932 - 36.5\*

\*Preliminary

The price index of 36.5 for the past month is the net result of increases and decreases in the prices of farm products in October 1932 over the average of October 1924-25-26 weighted according to their relative importance.

Average Farm Prices Used in Computing the Minnesota Farm Price Index,

October 15, 1932 with Comparisons*							
	Oct.15,	Sept.15,	Oct.15	, Av. Oct.	% Oct.15,	% Oct.15,	% Oct.15,
	1932	1932	1931	1924-25-	1932 is	1932 is	1932 is of
				26	of Sept.	of Oct.	Oct. 15,
			-		15, 1932	15, 1931	1924-25-26
Wheat	\$.37	\$.41	<b>\$.4</b> 8	\$1.28	90	77	29
Corn	.15	.21	.28	<b>.</b> 78	71	53	19
Oats	.17	.12	.18	<b>.</b> 38	83	55	26
Barley	.16	.18	.31	.61	89	52	26
Rye	. 20	.22	. 27	1.01	91	74	20
Flax	•93	, 93	1.10	2.15	100	85	43
Potatoes	.21	.22	.30	.71	95	70	30
Hogs	3 <b>.0</b> 5	3.70	4.30	10.68	82	7 L	29
Cattle	4.00	4.60	4.50	5.97	87	89	67
Calves	4.85	5.50	6.20	9.36	88	78	52
Lambs-sheep	4.10	4.33	4.82	11.03	95	85	37
Chickens	.084	.100	.117	.166	84	72	51
Eggs	.21	.14	.19	.35	15 <b>0</b>	110	60
Butterfat	.19	.19	.33	<u>. 44</u>	100	58	43
Hay	6.66	6.66	9.06	11.90	100	73	56
Milk	1.19	1.21	1.65	2,26	98	72	53

<sup>\*</sup>Except for milk, these are the average prices for Minnesota as reported by the United States Department of Agriculture.