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## MINNESOTA FARM BUSINESS NOTES

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

## the annuai cash income of minnesota fariers

One indication of the progress of tinnesota agriculture is found in the annual cash receipts of Minnesota farmers. Estimates of cash income are given in the following table, for the years 1910 to 1927 inclusive.

TABLE I<br>Gross Cash Income from the Sales of Principal Farm Products, 1910-1927

| 1910 | $\$ 165,861,000$ | 1919 | $\$ 437,553,000$ |
| :--- | ---: | ---: | ---: |
| 1911 | $144,113,000$ | 1920 | $379,231,000$ |
| 1912 | $162,631,000$ | $11,41,1921$ | $229,308,000$ |
| 1913 | $182,399,000$ | 21922 | $256,402,000$ |
| 1914 | $184,387,000$ | 1923 | $286,589,000$ |
| 1915 | $201,367,000$ | 1924 | $342,026,000$ |
| 1916 | $227,723,000$ | 1925 | $395,218,000$ |
| 1917 | $308,264,000$ | 1926 | $397,612,000$ |
| 1918 | $450,869,000$ | 1927 | $370,251,000 *$ |

* Preliminary

The above estimates include the cash sales of the following products, wheat, corn, oats, barley, rye, flax, hay, potatoes, hogs, cattle, calves, lambs and sheep, chickens, eggs, butterfat and milk. These are the sixteen most important farm products in Minnesota. It will be noted that the sales of fruits and vegetables, wool, honey and wax, and other minor farm products are not included. The totals would wrobably not be increased by more than five per cent if data of sales of these minor crops were available.

It should also be noted that these estimates do not show the total value of farm production but only cash seles. No ollovance is made for the farm products used by the farm famils or for changes in the inventory of livestock or crops on farms. The value of the use of the farm dwelling is not included.

Table I shows that from 1911 to 1916 there was a gradual increase in the value of farm marketings. From 1916 to 1918 there was an increase of almost 100 per cent in cash income. The peak of income came in 1918 with a total of $\$ 451,000,000$. There was a small drop in 1919 and a decided drop in 1920 and 1921. The 1921 income was only slightly higher than that for 1916 and was some $\$ 220,000,000$ less than the 1018 total. Since 1921 incomes have increased steadily to 1926 when total sales of $\$ 398,000,000$ were made. Only the incomes of 1918 and 1919 were larger than that received in 1926. The 1927 income is $\$ 27,000,000$ less than thet for 1926.

Table I may give an erroneous impression of the nrogress made by the agricultural industry unless the ourchasing power, as well as the absolute values of the annual incomes, is considered. Table II presents an index of annual gross incomes, accornpanied by an index of their purchasing power in terms of commodities bought by farmers.
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TABIE II
Indexes of Gross Cash Sales and Purchasing Power 1910-1927
$(1910-14=100)$

|  | Gross <br> cash <br> income | Purchasing <br> power | Gross <br> cash <br> income | Pu: chasing <br> power |  |
| ---: | :---: | :---: | ---: | :---: | :---: |
| 1910 | 99 | 101 | 1919 | 261 | 127 |
| 11 | 86 | 85 | 20 | 226 | 110 |
| 12 | 97 | 97 | 21 | 137 | 88 |
| 13 | 109 | 109 | 22 | 153 | 101 |
| 14 | 110 | 109 | 23 | 171 | 112 |
| 15 | 120 | 113 | 24 | 204 | 132 |
| 16 | 136 | 111 | 25 | 235 | 148 |
| 17 | 184 | 123 | 26 | 237 | 152 |
| 18 | 269 | 151 | 27 | 221 | 144 |

The above table shows that although income increased 169 per cent from 1910-14 to 1918, when expressed in terms of dollars, the purchasing power of that income increased only 51 per cent during the same period. From 1913 to 1921 there was a decline in both income and in purchasing power. In 1921 the agricultural income of Minnesota could purchase 12 per cent less than it could in 1910-14, although it was 37 per cent higher than it was in the earlier period. Since 1921 both income and purchasing power have increased, but purchasing power has increased more slowly than has income,

The above figures for purchasing power relate to the power of the gross cash incomes (as they have varied from year to year due to both price and quantity changes), to purchase a fixed quantity or the commodities which farmers buy. Altho this index of purchasing power takes account of changes in farm receipts, it does not take into account changes in farm expenses due to increased quantities of goods which farmers may be purchasing as a result of an increased standard of living. Neither does it include any expenses for taxes, interest or labor, and insofar as it fails to incorporate these items it fails to measure the purchasing power of the farmer.

The figures for purchasing power which are usually seen, represent the ratio of the price level of farm products so the price level of commodities which farmers buy, Such a figure shows tine power of a fixed quantity of farm products to purchase a fixed quantity of commodities. In failing to take into account changes in quantities marketed this figure for purchasing power of farm products is considerably different from one which is based on gross cash income during a period of increasing production. For 1927 the index of purchasing nower of farm products was 93. This indicates that a fixed quantity of those products would purchase less than was true in 1910-14.

Table III, below, shows sales of Minnesota farm products for the years 1926 and 1927 by commodities and the increase or decrease from 1926 to 1927. There were increases in the sale value of eight commodities and decreases for eight commodities, but the decreases were so large that total sales were $\$ 27,361,000$ less than for 1926 . Decreases were due for the most part to price declines but for corn and oats increased prices were more than offset by smaller quantities of these crops sold.

TABLE III
Sales of Minnesota Farm Products, 1926-1927

| Commodity | Cash Sales |  | Increase | Decrease |
| :---: | :---: | :---: | :---: | :---: |
|  | 1926 | 1927* |  |  |
| Wheat | 35,431,000 | 23,870,000 |  | 11,560,000 |
| Corn | 12,987,000 | 8,28\%,000 |  | 4,700,000 |
| Oats | 11,104,000 | 8,134,000 |  | 2,970,000 |
| Barley | 5,394,000 | 7,237,000 | 1,863,000 |  |
| Rye | 3,406,000 | 5,831,000 | 2,425,000 |  |
| Flax | 15,070,000 | 14,161,000 |  | 909,000 |
| Hay | 4,974,000 | 5,464,000 | 490,000 |  |
| Potatoes | 22,783,000 | 18,436,000 |  | 4,447,000 |
| Hogs | 113,498,000 | 94,984,000 |  | 18,514,000 |
| Cattle | 40,413,000 | 40,755,000 | 342,000 |  |
| Calves | 8,035,000 | 8,241,000 | 205,000 |  |
| Lambs-sheep | 3,818,000 | 4,018,000 | 200,000 |  |
| Chickens | 7,066,000 | 6,375,000 |  | 691,000 |
| Eggs | 13,920,000 | 12,087,000 |  | 1,823,000 |
| Butterfat | 87,184,000 | 99;,489,000 | 12,305,000 |  |
| Milk | 12,549,000 | 12,781,000 | 331,000 |  |
| Total | 397,612,000 | 370,251,000 | 18,162,000 | 45,523,000 |
| Net Increase |  |  |  |  |

* Preliminary

Comparison of the proportion of total cash income derived from sales of different commodities furnishes an index of the extent to which sources of income have shifted during the eighteen year period. During 1910-11-12 seles of wheat rere 30.5 per cent of total sales. In 1925-27 wheat contriouted only 8.6 oer cent or the total cash income. For the same two periods receints from the sales of homs were respectively 12.3 and 26.5 jer cent of the total. The proportion of the total contributed by receipts from sales of butterfat has increased from 15.1 per cent to 23.5 per cent. The most important shifts in sources of income occur in the above commodities. Wach of the other commodities contributes less then ten per cent of the total cash income, and shows only minor changes in the relative amount of cash income furnished during the period. Sales of cattle have increased during recent years and now contribute 9.8 per cent of the total income.

The two principal sources of income now are hoss and butterfat. These two commodities alone furnished half of the total can income in 1925-25 and 1927. Cattle sales are now more im ortant than wheat sales, whereas in 1910-11-12 wheat sales were four times as important as cattle sales. There is clear indication that Minnesota farmers are dependivg more upon sales of livestock and livestock products and less upon sales of cash grain crops.
A. G. Blacis and D. D. Kittrene

