## Federal Reserve Bank of Chicago - -

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FARM PRODUCTION EXPENSES have continued an upward trend during 1964, although at a somewhat slower pace than in the past few years. Preliminary estimates indicate that production costs this year will total about \$29.5 billion. This would be nearly \$300 million more than in 1963—again less than the average annual increase of about \$1 billion during the preceding three years. Increased quantities, as well as higher prices, for some of the more important production items, mainly those of nonfarm origin, continue to account for much of the uptrend.

Wage rates of farm workers continued to rise during 1964 reflecting the influence of higher wages paid to most nonfarm workers. Estimates for the first three quarters indicate that the composite farm wage rate will average 90 cents per hour—about 2 per cent above the 1963 average.

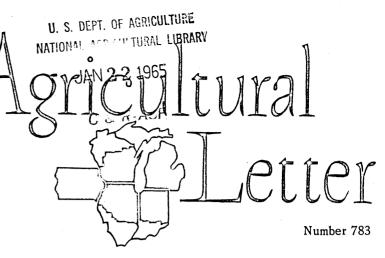
Tax and interest outlays also rose further during 1964. Taxes per acre of farmland averaged almost 5 per cent above the 1963 level reflecting the expanding revenue requirements of state and local governments, especially for schools. Interest payable on both real estate and non-real estate debt this year compared with 1963 is expected to increase nearly 11 per cent, primarily due to the increase in the amount of such debt. Increased credit needs to finance capital expenditures and larger loans per farm, stemming from farm enlargement and the upward trend in land values, have boosted farm debt and the associated interest expense. Total farm debt is estimated at about \$36.4 billion, 10 per cent above the 1963 level.

While prices of fertilizer, pesticides and herbicides have been relatively stable during 1964, expenditures for these items continued upward as farmers increased applications per acre in efforts to boost production on available land. Fertilizer usage is estimated to be 10 per cent above the 1963 level and application of herbicides is also substantially above a year ago.

Expenditures for farm machinery are also above a year ago. Prices of farm machinery through the third quarter averaged about 2 per cent higher than the corresponding year-earlier period. The amounts purchased during 1964 were also greater than a year ago. Retail sales of tractors—the major implement expenditure—during the first nine months rose 6 per cent from the same period in 1963.

Farm production expenses in 1963 have risen \$8 billion or about 37 per cent from the 1950-54 average. Increases in prices paid for production items over this period account for slightly less than half of the rise in total farm production expenses while the remainder, of course, is attributable to greater quantities of production goods and services purchased.

The index of prices paid by farmers for commodities, interest, taxes and wage rates has risen about 14 per cent since the early Fifties. Prices of some production



items, however, have risen considerably more than others. For example, farm wage rates have risen about 43 per cent in contrast with relative stability of fertilizer prices. Machinery prices rose about 38 per cent while those for production items of farm origin—feed, seed and livestock—are now generally lower than during the 1950-54 period.

Farmers have attempted to offset these higher costs by extensive farm reorganization and by substituting more productive inputs and methods for those giving lower returns.

Increased productivity can be achieved in two ways: by reducing the amount of resources needed to produce the same amount of products, or by using the same amount of resources to produce more products. For agriculture, the latter description has been more accurate during the past several years.

Gains in Farm Productivity Have Been Substantial

	<u>1962</u> (1	<u>1963</u> .957 <b>-</b> 59=10	0) 1964
Farm output per unit input Farm output per man hour	107 127	110 135	108 137
Crop production per acre Livestock production per breeding unit	116 108	119 110	118

SOURCE: U.S.D.A.

With little change in the total amount of production items, agricultural output has increased steadily since 1957-59. Farm productivity, or output per unit of input, has increased about 10 per cent during this period. Without this gain in productivity, about one-tenth more production resources-with a value of about \$3.6 billionwould have been required to produce the 1963 level of farm output, according to U.S. Department of Agriculture estimates. While these calculations provide only a rough measure of the value of savings gained through increased productivity, they do illustrate the dramatic progress that has been made. With continued improvements in productivity, agricultural capacity to produce many commodities has continued to outrun existing demand, thus causing downward pressure on prices. But it should never be overlooked that substantial benefits to the nation's economy are derived from these and other gains in productivity.