

It appears from this comparison that the farmer's money income was affected by the postwar depression a year earlier and more seriously than either farm or factory wage earnings, that the recovery has been much slower, and that it is still incomplete. Factory wage earnings per person employed fell in 1921-22 to 88 per cent of the 1919-20 figure, equaled the 1919-20 earnings in 1923, and were maintained at that level for the past three years. Income per farm family in 1921-22 dropped to one-third of the predepression income and during the past year, after four years of gradual improvement, reached 72 per cent of the 1919-20 earnings.

#### Comparison with Other Industries

If these earnings are adjusted for the changes in cost of living in the United States since 1919, it is found that the purchasing power of the average farmer's income during 1920 and 1921 dropped to less than half of what it was in 1919-20, and during the recent recovery, gradually reached 81 per cent of the predepression purchasing power. Farm wages dropped less and can now buy about 94 per cent of the amount of goods and services they were able to buy in 1919. The purchasing power of employed factory workers, on the other hand, has throughout the past six years remained greater than in 1919-20, and during the past three years has averaged 16 per cent above. In other words, the farmer with his net income during the past two years could buy 81 per cent of the things he was able to buy before the depression, while employed factory workers could buy 116 per cent of a comparable amount.

L. H. BEAN.

**I** **NCOME** Data Farm business records available to the  
**Show Earnings** United States Department of Agriculture  
**Vary Widely** and the agricultural colleges and experiment  
stations show that some farms in every locality  
return larger incomes than others from a year's operations. This  
holds true whatever the type of farming, and whether the year  
be a good one or a poor one. It is true whether the income be ex-  
pressed in terms of farm receipts, farm income, or labor income.  
Farm income, in this connection, means farm receipts less expenses,  
and labor income means farm income less an interest charge for  
use of the farm capital.

In all, data are on file in the Bureau of Agricultural Economics from 70,516 farm business records from 450 localities in 45 States and they cover the years 1907 to 1924. Figures 124 and 125 illustrate how labor incomes vary from farm to farm in two localities.

Comparisons should not be made between these two localities as to highest, lowest, or average labor incomes, because unlike economic conditions prevailed during the periods represented. One locality was selected to show variations from farm to farm in a single year; the other, over a period of several years.

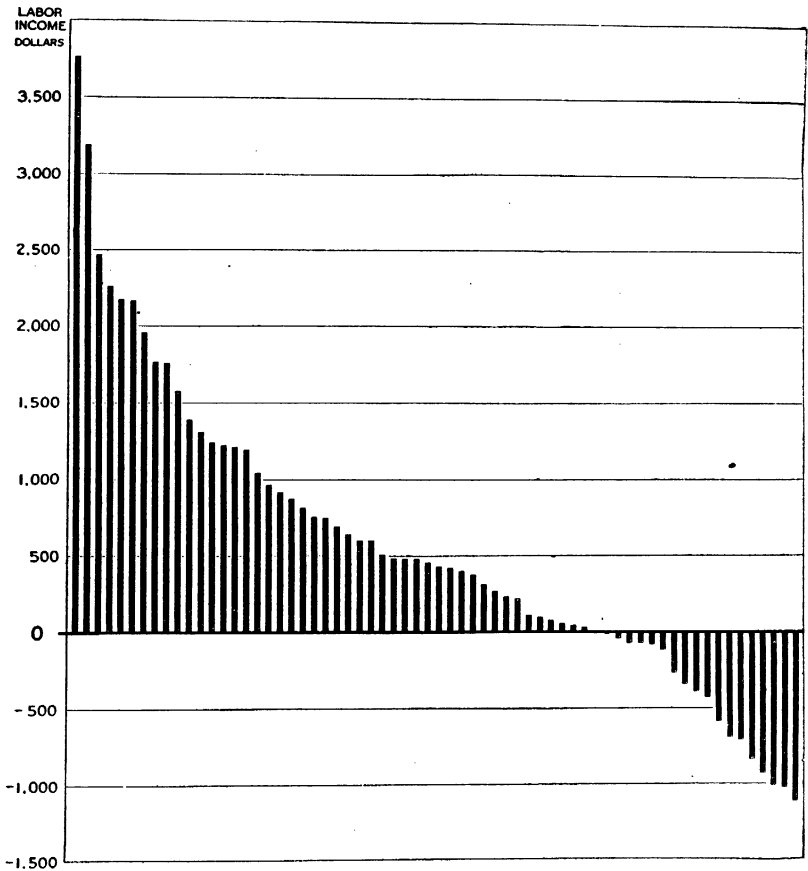


FIG. 124.—How the labor incomes from 65 wheat and dairy farms near Middletown, Del., varied in 1924. The highest labor income was \$3,761, the lowest —\$1,122, and the average \$554

#### Results by Groups

By grouping a large number of the farm business records by labor incomes and into periods of different economic conditions, the labor incomes were:

Over \$2,000 from—

- 4.5 per cent of the farms from 1910 to 1915,
- 15.8 per cent of the farms from 1916 to 1919, and
- 6.6 per cent of the farms from 1920 to 1922,

From \$1 to \$2,000 from—

- 67.2 per cent of the farms from 1910 to 1915,
- 66.0 per cent of the farms from 1916 to 1919, and
- 36.9 per cent of the farms from 1920 to 1922.

Zero or less from—

- 28.3 per cent of the farms from 1910 to 1915,
- 18.2 per cent of the farms from 1916 to 1919, and
- 56.5 per cent of the farms from 1920 to 1922.

From these figures it may be observed that: While most of the farms during the first and second periods returned from \$1 to \$2,000

in labor income, a much larger percentage of them returned over \$2,000 from 1916 to 1919 than from 1910 to 1915, and a much smaller percentage of them returned zero or less.

Although about as many of the farms returned over \$2,000 for the labor and management of the operator from 1920 to 1922 as from 1910 to 1915, just about twice as many of them returned zero or less.

To present the variation in incomes in another way, the records were grouped by periods as before, but with one-fifth of the farms highest in labor incomes in each locality in one group, the one-fifth second highest in another group, etc.

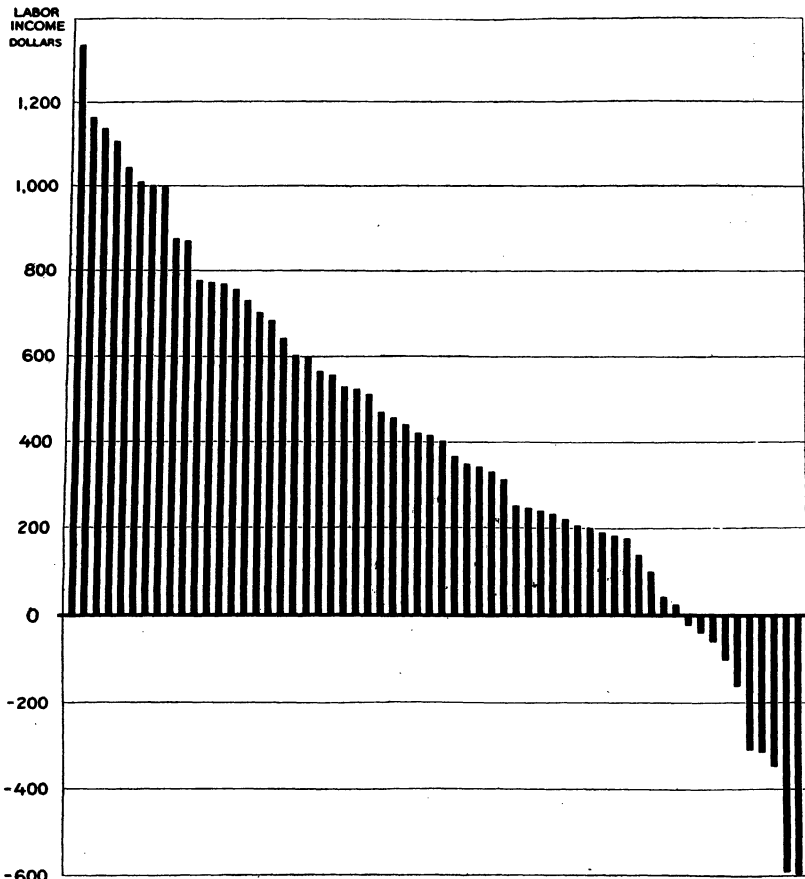


FIG. 125.—How the labor incomes from 60 dairy and hog farms near Verona, Wis., varied over the period 1913 to 1917, the income for each farm being a five-year average. The highest labor income was \$1,337, the lowest —\$598, and the average \$408

There was over \$2,000 difference between the average labor incomes of the highest and lowest fifths during the first period; over \$3,000 during the second period; and over \$4,000 during the third.

The group highest in labor income in the first and last periods averaged about as much as the group second highest in 1916 to 1919, whereas the group highest in 1916 to 1919 stood out with an average about twice as much as the highest in the two other periods.

The group third highest in 1910 to 1915 averaged about as much as the group fourth highest in 1916 to 1919, and as the group second highest in 1920 to 1922.

Only the group lowest in labor incomes averaged less than zero in both the periods 1910 to 1915 and 1916 to 1919, whereas all but the groups which were highest and second highest, averaged less than zero in 1920 to 1922.

H. W. HAWTHORNE.

**I****NFERTILITY** The dairy-cattle industry is suffering a constant economic drain and loss of valuable hereditary material because of uncertain breeding ability, delayed conception, and temporary sterility of both males and females. These conditions are found in heifers as well as in older cows and are causing much concern to dairy farmers and breeders of dairy cattle. In ordinary practice a cow is expected to calve once in each period of 12 to 14 months and is bred accordingly. Failure to conceive to the first or second service seriously interferes with the regularity of herd management and frequently results in an extended period of low or unprofitable production between calvings, thereby reducing the average earnings of the herd.

#### Effect on Rats Is Clue

The discovery by other investigators of the effects on the reproductive powers of white rats of feeding a ration deficient in vitamin E led to the conclusion that this shy breeding trouble in cattle might be similarly caused, particularly since it prevails in herds where management and feeding are highly specialized and also in herds where natural feeding conditions vary from one extreme to the other.

Sprouted oats have been reported to be one of the abundant carriers of vitamin E. For this reason this feed was selected for trial to determine its effect on the uncertain breeding condition in cattle.

During 1923 a limited trial was conducted in the Government dairy herd at Beltsville, Md. The favorable results which followed led to preparations for more extensive feeding of sprouted oats. From this later trial, thirteen animals have already been pronounced pregnant after receiving sprouted oats for periods varying from 10 to 122 days. These cases fall naturally into two distinct groups of 6 cows and 7 heifers.

#### Results of Sprouted-Oats Ration

Space does not permit a detailed discussion of each case, but the 6 cows varied in age from 8 to 3½ years. The number of services before oats were fed ranged from 5 to 17, and the average length of time from last previous calving to the first oats feeding was 14 months. Two of these cows conceived at the first service after receiving oats, two at the second, one at the third, and the other at the sixth service. The intervals from first oats feeding to conception ranged from 19 to 132 days, the latter in the case of the cow requiring six services.