The Farm Market

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Prepared by
The Advertising Department
Division of Commercial Research
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Foreword

THE world war has made us conscious, as never before, of our dependence upon agriculture.

Farming is and always has been the basic American industry and the industry of predominant importance.

War-time conditions have greatly accelerated the agricultural progress which has been in evidence for many years.

The farming population has now reached a new and a higher level of earning and spending.

In a word, the farm market offers a vast and increasing opportunity to American manufacturers.

A study has been made by The Curtis Publishing Company, through its Division of Commercial Research, in order to visualize the market opportunity in the farm field.

The report, in two volumes of about eleven hundred pages, illustrated by more than fifty maps and charts, is on file in the branch offices of the Advertising Department of The Curtis Publishing Company; and the volume containing the general conclusions is available for the use of manufacturers and advertising agencies.

Since the completion of the investigation more than two hundred conferences have been held with manufacturers and advertising agencies. It is in response to numerous requests that this brief summary has been prepared.

The Curtis Publishing Company.

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THE CURTIS PUBLISHING COMPANY
Metropolitan Tower, New York City
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The Farm Market

Farming the Predominant American Industry

THE importance of the farm market is commensurate with the importance of agriculture—the greatest American industry. Nearly one-third of the people in the United States, or over thirty million, live on farms. About twenty million more live in cities and villages of under 2,500. That is, approximately one-half of the population is included in the farm and small-town market.

However, the true farm market extends much farther than the small town. Nearly forty per cent of the farms in the United States are rented, and a large proportion of the owners live in cities and villages. It is estimated that 2,000,000 acres of land are "farmed" out of the city of Chicago—that is, the land is owned by residents of the city and operated directly or rented. This is more or less typical of other great cities. In most minor cities in agricultural sections one or more officials of the various banks, several of the members of the board of bank directors, merchants, lawyers, doctors, real estate operators and others own farms. In many instances they are directly interested in the operation of the farm and are purchasers of farm equipment. A manufacturer of a farm-lighting plant advertised his plant in a high grade farm paper. He received sixteen inquiries from residents of the city of New York. On investigation it was found that eleven of these city inquirers owned farms, one managed a farm, two

FARMING

AND OTHER INDUSTRIES

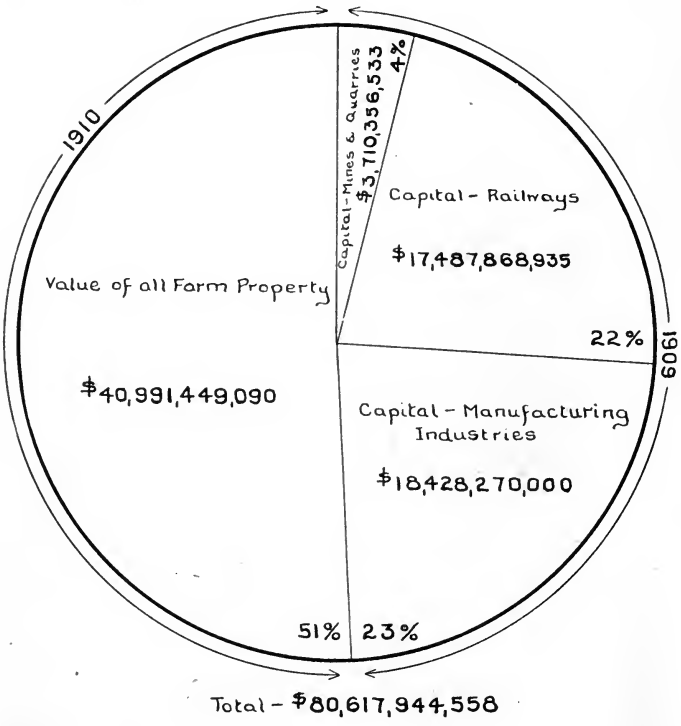


CHART 1

were planning to buy one and two had friends owning farms. All were potential purchasers of lighting plants, and three had bought plants after they made inquiry and before the investigator called on them.

That is, the true farm market extends all the way from the forty-acre farm in the isolated rural district to the top of the highest office buildings in our great cities.

Farming and Other Industries

The importance of the farm market is also indicated by the vast and rapidly increasing amount of capital invested in farming as indicated in Chart 1. The value of all farm property in 1910 amounted to approximately forty-one billions of dollars, which was more than the capital of all the manufacturing establishments, railways, mines and quarries of the United States as reported by the Census. In 1918 the value of farm property, conservatively estimated, is at least one-fourth more or fifty-one billions of dollars. Some estimates place the figure much higher.

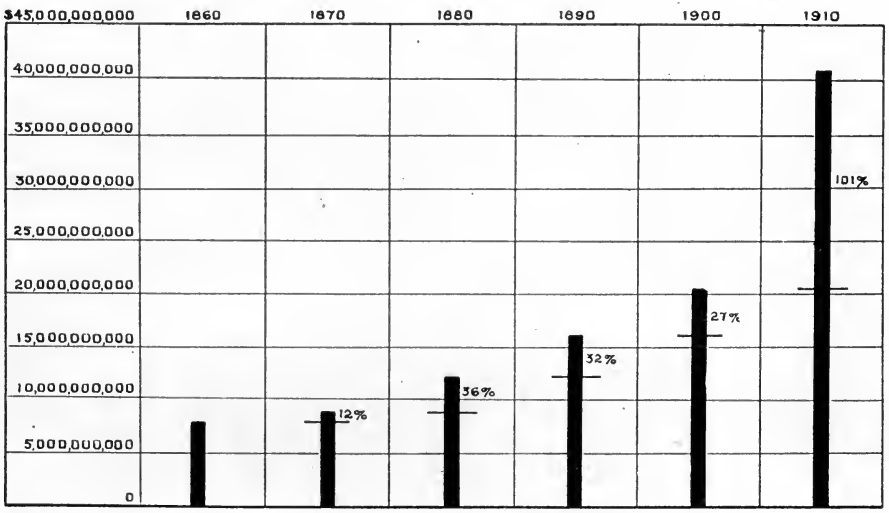
Increasing Value of Farm Property

In the period from 1860 to 1900 the value of farm property steadily increased at each census period as indicated in Chart 2. But in the decade 1900 to 1910 the value of farm property more than doubled. That is, the increase in farm property in this decade was more than the entire accumulation of farm property in all the preceding years of our history. The increasing capital invested in farming is of great significance, for it indicates a profound change in farming methods, a great increase in buying power, and a fundamental change in the ideals and standards of the farm family.

CHART 2

FARM PROPERTY

VALUE



(%) INCREASE OVER EACH PRECEDING DECADE

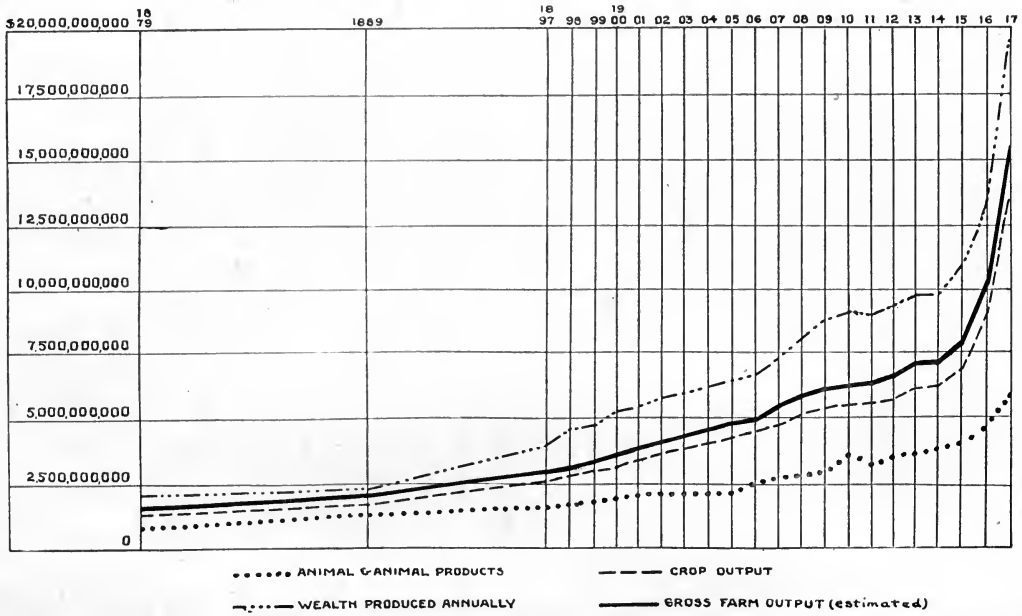
Changes in Farming

In the earlier years of this period the farm was primarily a home. It was largely a self-contained unit—that is, the farm family raised and manufactured most of what they needed. They had but a small amount of capital invested. They had a low buying power. The farmer and his family were essentially manual laborers. Their profit was made mostly on the rise in the value of the land. Gradually this condition has changed. The farm is still and always will be a home, but it is now far more largely a commercial establishment. More of the farm work is done by machinery. Relatively little manufacturing is now done on the farm. The farm family is now a business unit selling its output in the market and buying there what the family needs. They have a considerable amount of capital invested. To illustrate, a county agricultural agent in one of the prosperous corn-belt counties in the Middle West said: "There are 250 farmers in our farm bureau. They are the leading farmers in the county. How much capital do you suppose they have invested? It amounts to $60,000 on the average." That is, the modern leadership farm family is operating a manufacturing establishment with considerable capital invested.

To succeed, the farmer and his family must read, think, get expert assistance, and apply business principles to farming. Such a family demands in the home the same modern conveniences as are generally found in city homes. They demand far more power machinery besides expensive farm implements. They ride in a good automobile, wear good clothes, buy good furniture and house furnishings, and consume a great variety of manufactured foods. Briefly, the leadership farm family of today buys a larger

CHART 3

FARM OUTPUT



volume, a better quality and a greater variety of merchandise.

Farming of Basic Importance

Farming is the industry of basic importance. To illustrate, in normal times about forty per cent of the cost of manufacturing is wages. Over forty per cent of the average city family expenditure is for food. In other words, nearly half of the cost of production is labor, and about half of the cost of maintenance of labor is food. Hence, in that nation and in that section in which agriculture is backward and the cost of production of food is high, manufacturing is carried on at a disadvantage. Conversely, in those sections where more efficient agriculture keeps down the cost of food production, manufacturing can be carried on more advantageously.

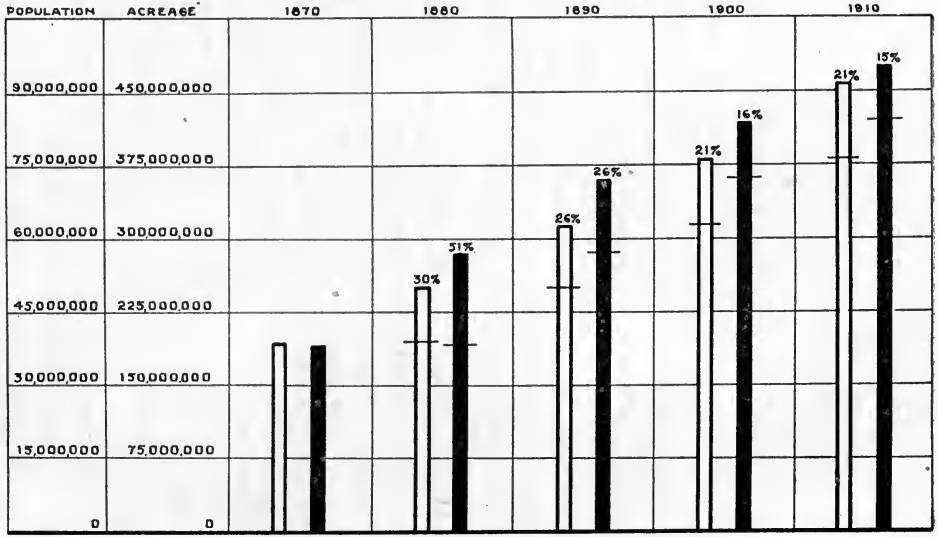
Until recent years the United States has only to a small extent exported manufactured articles. Its exports have consisted primarily of food and raw materials. The greater portion, therefore, of our manufacturing superstructure has rested upon the markets furnished by the products of the land. Whatever, therefore, affects the prosperity of the basic markets soon affects the prosperity of the secondary markets. If, therefore, it can be determined what the conditions are likely to be in the farm market following the war, it will furnish the best basis on which to estimate future merchandising possibilities in both the farm and the city market.

The Upward Trend of the Farm Market

The story of the farm market is a story of the struggle of a market upward. The farm output of the United States in 1879 was about $1,500,000,000. See Chart 3. For the next eighteen years its growth was

CHART 4

POPULATION OF THE UNITED STATES AND ACREAGE OF IMPROVED LAND IN FARMS



slow, but in the ten years that followed 1897 it increased about 100 per cent. In the next eight years it increased about 50 per cent. From 1915 to 1917 under the stimulus of war conditions farm output again increased 100 per cent, reaching a total gross income of approximately sixteen billion dollars. *

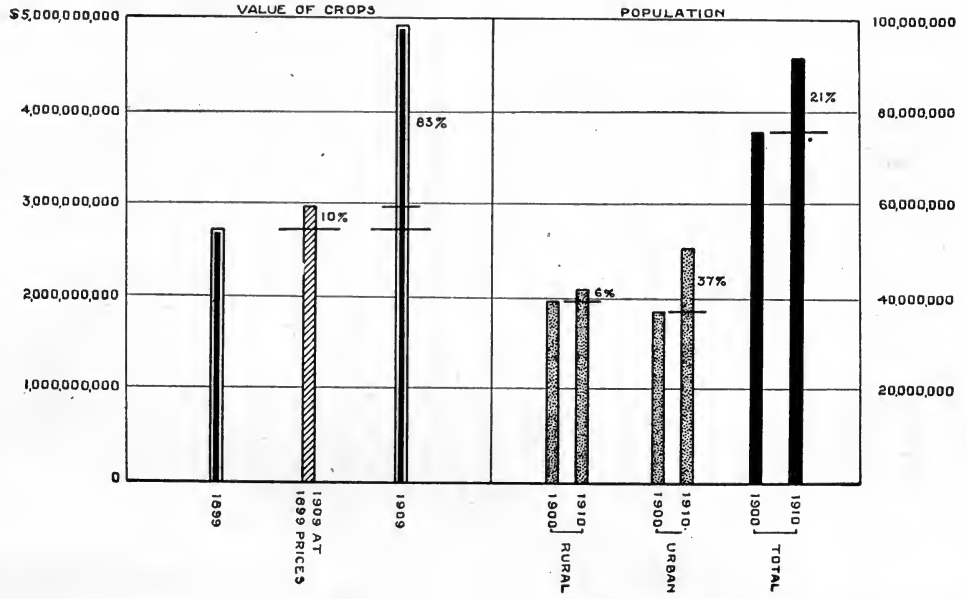
Acreage of Improved Land and Population

The upward trend of the farm market has been vitally affected by the relation between the growth of population and the increase in the amount of improved land under cultivation. For some years after the close of the war between the states, the acreage of improved land under cultivation increased more rapidly than the population. See Chart 4. From 1870 to 1880, while the population of the United States increased 30 per cent, the acreage of improved land increased more than 50 per cent, or in other words, about 96,000,000 acres of land were put under cultivation. In the next decade the population increased 26 per cent and acreage of improved land kept pace, also increasing 26 per cent, or in other words, some 73,000,000 acres more were added. But from 1890 to 1900 population increased 21 per cent and cultivated land acreage but 16 per cent. Approximately the same was true in the decade from 1900 to 1910. That is, about 1890, population began to increase materially faster than cultivated acreage. At the same time much of the fertility of the land put under the plow in the earlier period has been slowly depleted by continued cropping.

*The sum of the value of crops and of animal products as given in the Census indicates a total farm output, or wealth produced annually on farms, of about $19,500,000,000, but this includes duplication, as hay and other crops are in part fed to the animals included in the estimate. It seems conservative to estimate the gross farm output, exclusive of duplication, as exceeding sixteen billions.

CHART 5

FARM OUTPUT AND POPULATION



Changes in Farm Machinery

During the period following 1870 there was also a revolution in farm machinery. Before the Civil War a man did well in a day to cut two acres of grain with a cradle and another man did well to follow after and bind the grain by hand. Then came the mower, the reaper, the harvester and the self-binder. It is estimated that in the 90's, the so-called "machine period" in American agriculture, four men on the farm did as much work as fourteen men in the 40's, the "hand period" of agriculture. The combination of increased acreage and improved farm machinery resulted in overproduction of farm products. Prices were forced down and farming was unprofitable. It was in the 90's that in some of the western states corn was used for fuel because it was cheaper than coal.

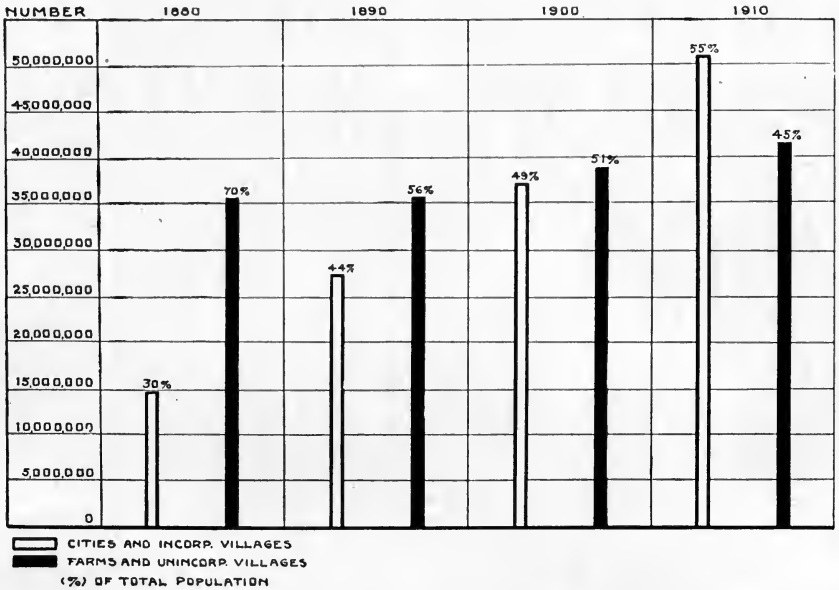
Population and Crop Output 1900 and 1910

However, in 1897 the farm income began to struggle upward. This was about the time when the population began to increase more rapidly than land acreage. The situation as to farm output and increase in population is further visualized in Chart 5. In the decade 1899 to 1909 the total volume of farm-crop output increased but 10 per cent, while the population increased 21 per cent, or twice as rapidly. Prices rose so that the total value of farm crops, that is quantity multiplied by price, increased 83 per cent. When demand as represented by population increases more rapidly than quantity of food produced, there is a disproportionate increase in price with a corresponding increase in the value of crops. This tends to produce on the one hand a higher level of food prices for consumers and on the other hand a longer margin of profit for the farmer.

CHART 6

POPULATION OF THE UNITED STATES

URBAN AND RURAL



Growth of Cities

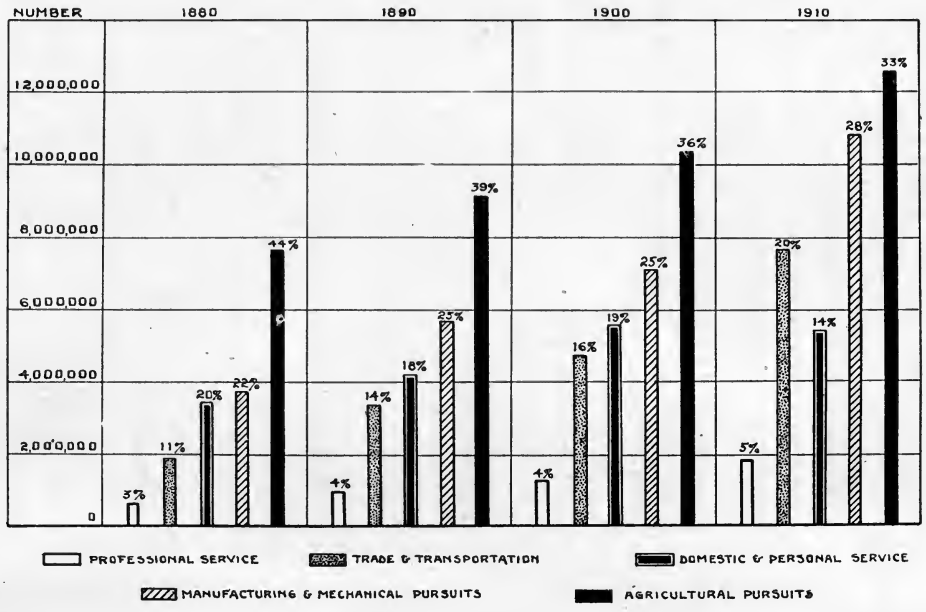
The upward trend of the farm market has been profoundly influenced by the rapid growth of cities. Not only is the total population increasing more rapidly than acreage of improved land, but city population is increasing more rapidly than rural. In 1880 30 per cent of the population of the United States lived in cities and incorporated villages, while 70 per cent lived on farms and in unincorporated villages. But as shown on Chart 6, the city population increased more rapidly than the rural until in 1910 it made up 55 per cent of the total. As a matter of fact, if from the 45 per cent representing the rural the number of families living in unincorporated villages is subtracted, it will be found that less than one-third of the population of the United States is now living on farms. That is, in 1880 one farm family needed to raise enough food to sustain itself and a fraction of another family, while in 1910 one farm family needed to raise enough food to sustain itself and two other families.

Population Gainfully Employed

The same situation is portrayed by the chart of population gainfully employed. See Chart 7. While the number of people gainfully employed on the farm has increased from decade to decade, it has fallen behind in proportion to the total from 44 per cent in 1880 to 33 per cent in 1910. On the other hand the population gainfully employed in manufacturing increased from 22 per cent to 28 per cent, and in transportation from 11 per cent to 20 per cent. In other words, in 1910 one-third of the population gainfully employed on the farms had to raise enough food and raw materials to sustain itself and the two-thirds of the population gainfully employed elsewhere.

CHART 7

POPULATION GAINFULLY EMPLOYED



Sources and Significance of Urban Growth

The increase in urban population in 1900 to 1910 amounted to nearly twelve million. Estimates of the sources of this urban growth indicate that 41 per cent came from immigration, 7 per cent was due to the incorporation of new city territory, 21 per cent was natural increase, while approximately 30 per cent or 3,500,000 was migration from rural to urban districts. See Chart 8. Economic opportunity has been greater in the city. There, work can be obtained throughout the year. The hours of work are shorter. In many lines wages in the city are better. Perhaps even more important, life is more pleasant in the city. Few if any city families in comfortable circumstances will consent to live in a house without modern conveniences—water, bath, indoor toilet, furnace heat, gas or electric lights. Only a small proportion of the farm homes, as yet, have these conveniences. Superior schools in cities and villages attract many from the farm. Those in middle life prefer to move to the city because a better church is more conveniently located. The picture show is just around the corner. The doctor is nearer at hand.

It seems human nature to desire to live in the city. The Greek preferred to live in Athens rather than in the rural district. The Roman loved the Circus rather than the farm. In both France and England, prior to the opening of the war, there was serious discussion on the relative decline of the rural population. In Germany also this same problem was receiving attention. It is customary to deplore the rapid growth of cities. But if the cities had not grown there would not be a market for farm products at prices which enable the American farmer and his family to maintain an American standard of living.

URBAN GROWTH IN THE UNITED STATES

1900-1910

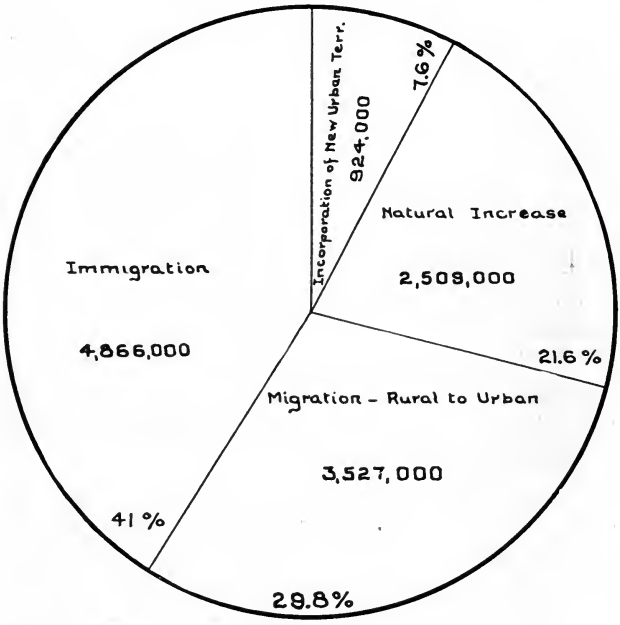


CHART 6

Total - 11,826,000

In other words, there would be no great farm market for manufactured products.

City Growth Likely to Continue

Summarized, the situation is as follows: The total volume of food and other farm products required increases with the growth of our population. Increased efficiency of farm labor, through the use of more power machinery and better methods of farming, makes it possible for a relatively smaller number of people to produce the food and raw materials required by our population.

It is generally agreed that in the near future, by employing better methods in farming and improved machinery, each farm family on the average will produce a larger volume of food—perhaps the food required for five or six families, or possibly even more, rather than for three families as at present. Hence, a relatively smaller number of families will be required on farms.

Each farm family produces more and has greater buying power. A rapidly rising standard of living inevitably follows.

Naturally this change means a vastly larger demand on the part of farm families for a great variety of merchandise. At the same time a larger city population is likely to be required to produce this increased output of manufactured products. Hence, the cities are likely to continue to grow more rapidly than the rural population.

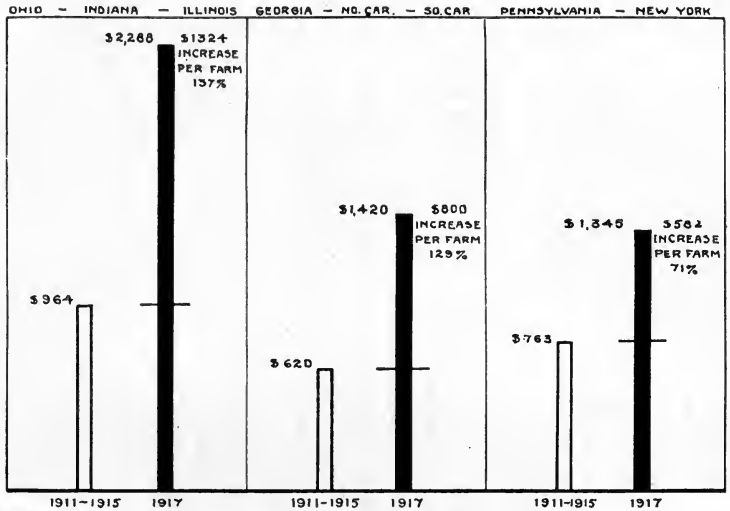
In other words, the farming population had permanently passed to a new standard of earning and spending even before the war opened. However, with war prices the upward movement of farm incomes proceeded far more rapidly.

CHART 9

AVERAGE VALUE OF CROPS

PER FARM

(15 PRINCIPAL CROPS)



TOTAL ACREAGE PER FARM	105.4	87.2	93.4
IMPR. ACREAGE PER FARM	66.8	37.7	63.3

The War and the Farmer

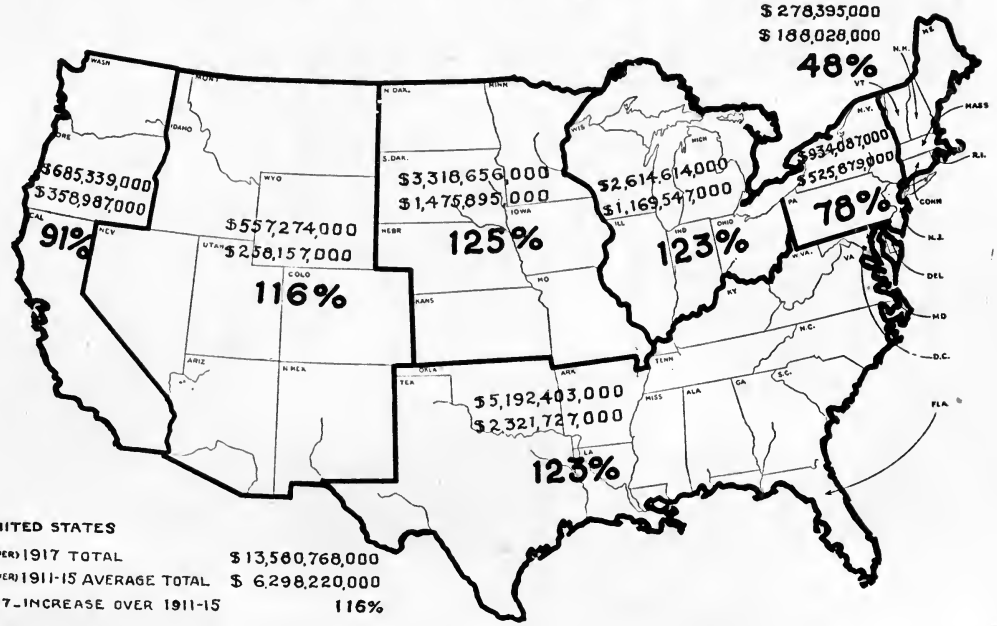
The gross farm income increased over 100 per cent after the war opened. The significance of this to the individual farmer is portrayed in Chart 9. In the three oldest of the middle western states—Ohio, Indiana and Illinois—the average gross value of the thirteen principal crops per farm in 1917 was $2,288, as compared with $964 on the average for the pre-war period of 1911 to 1915—an increase of 137 per cent. It is estimated that farm costs increased 50 per cent during the war. At this estimate the $964 received in the pre-war period had merely covered the cost of production; one-half of this amount or $482, would represent the increase in cost of production in 1917. Subtracting this from the total increase of $1,324, it leaves an increased net profit of $842, an amount comparable with the gross earnings on a pre-war basis. In Georgia, North Carolina and South Carolina the increase per farm was less, while the percentage increase, 129 per cent, was about the same. But in this section the average amount of improved land per farm was but 37 acres, whereas in the three middle western states it was 86 acres.

The true increase in farm prosperity was therefore not very different in the two sections. In the typical Middle Atlantic states the average increase was somewhat less.

The average output per farm is significant in comparing the condition of farming during the war with that of the pre-war period. Obviously this average is not an index of the buying power of the efficient farmer in either period. In averaging farmers together, as in averaging lawyers or doctors, so many are included who have made failures that the average is far below that for the successful. The efficient

MAP I

VALUE OF FARM CROPS



UNITED STATES

(UPPER) 1917 TOTAL	$13,560,768,000
(LOWER) 1911-15 AVERAGE TOTAL	$ 6,298,220,000
1917 - INCREASE OVER 1911-15	116%

leadership farmer had an income in both periods far above the figures which are indicated on the chart.

Every section of the country showed a marked increase in the value of the farm crops. The advance was least in New England (see Map I), where the increase of 48 per cent was only about enough to cover the increase in cost. It was highest in the great agricultural belt of the central portion of the United States, showing an increase of 123 per cent in the Central West and South and an increase of 125 per cent in the area between the Mississippi and Rocky Mountains.

Better Business Methods on the Farm

The war profoundly affected farming in many ways. It promoted better farming and better business methods on the farm. To illustrate, large numbers of farmers, especially those of the leadership type, must now make an income-tax return. Hence, it is now necessary to keep farm records. Farmers now far more generally recognize the necessity of keeping farm accounts. Agricultural colleges and other agencies have prepared farm business record books. County agents and bankers are distributing these books and instructing farmers in their use. Naturally this emphasizes the importance of knowing costs.

Nearly every survey of hundreds and even thousands of farms shows that a considerable proportion of farmers get nothing for their own labor and managerial ability. They barely make interest on their investment. When this fact is brought home to the farmer in a written record he will naturally be stimulated to get expert assistance, to improve his farm methods—in a word, to become a more efficient farmer with a larger income.

In all sections it is reported that the war has aroused a more open-minded attitude on the part of the farmers. They were never before so ready to vote money to hire a county agent, to listen to his advice, and to seek advice from agricultural experts. They have coöperated with city people in Liberty Bond, Red Cross, Young Men's Christian Association and other campaigns. They have been taken out of their rural isolation as never before. Further, when it costs 50 per cent more to operate a farm, when the hired man is getting $50 to $60 a month or even more, it costs more to be an inefficient farmer. On the other hand, when wheat is $2.20 a bushel and many other farm products proportionally high, it pays better to be an efficient farmer.

Greater Financial Independence for the Farmer

During the war large numbers of farmers paid off their debts and accumulated money. In all agricultural sections the banker reports: "Many farmers whom we have been carrying for years now have a comfortable bank balance." That is, the farmer is gaining a more independent financial position. He is not obliged to buy on credit and pay the merchant an abnormally large profit, but is in a position to pay cash and trade with whom he pleases. He is not obliged to sell his crops as soon as they are harvested, but can hold them for better prices. He is a better credit risk. Hence, the banker can afford to loan the farmer more money at a lower rate. At the same time the farmer is in a position to demand better terms. The net result is that the farmer is now able to make the farm pay him a larger net income. Stated briefly, the war has lifted farming to a new and higher plane of efficiency.

A Permanently Larger Farm Income

Apparently agriculture has permanently passed to a position in which it will yield a larger net income to the farmer. The basic economic forces affecting agriculture seem to assure the maintenance of relatively high prices for farm products and the maintenance of a larger margin of profit in farming. As food prices and land values rise, there will naturally be a stronger incentive to bring additional land under cultivation. Something can be done in this line. It is estimated that there are still some thirty million acres of land that can be irrigated, sixty million that can be made fertile by drainage, and roughly about two hundred million acres of fertile cut-over timberland. On great numbers of farms there is still waste land, some of which can be made productive. In the aggregate this is a large acreage. But these increases in acreage require capital, effort and time. The era of free land is practically past.

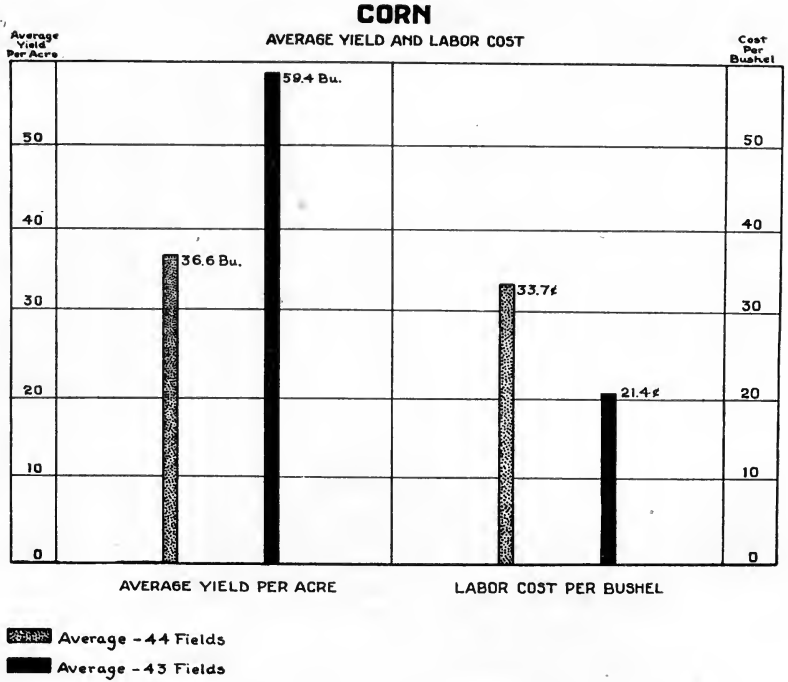
Nowhere does there exist land which as in the earlier days can be rapidly thrown under cultivation in a way to break food prices and make farming unprofitable.

Factors Promoting Agricultural Progress

Not only has agricultural income permanently reached a new and a higher level, but many factors are promoting further agricultural progress. In other words, agricultural incomes and farm standards of living seem destined in the near future to reach a still higher level.

Apparently the fundamental problem is to increase the yield per acre and the output per domestic animal, and at the same time to increase the net income per farmer.

CHART 10


CORN
AVERAGE YIELD AND LABOR COST
Average Yield Per Acre
Cost Per Bushel
59.4 Bu.
36.6 Bu.
33.7¢
21.4¢
50
40
30
20
10
0
AVERAGE YIELD PER ACRE
LABOR COST PER BUSHEL
Average - 44 Fields
Average - 43 Fields

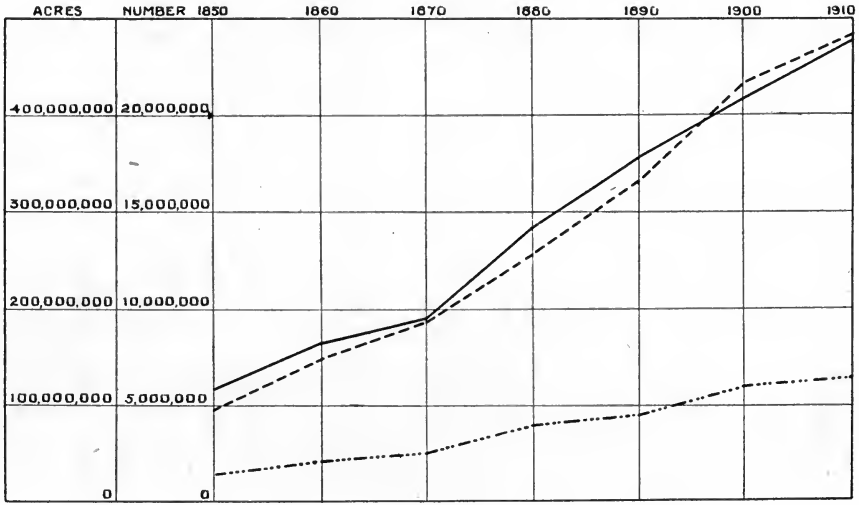
More Efficient Production

More efficient production is a vital element in solving this problem. When the yield per acre is increased above our present yields, the cost of production per unit of output, that is per bushel, bale or ton, tends to decrease. It costs about the same to plow, plant, cultivate and harvest an acre of corn whether the yield is 30 or 60 bushels per acre. Chart 10 illustrates a study of a number of farms in Ohio made by the Ohio State Agricultural College. On those farms where the yield of corn was 36 bushels per acre, the labor cost of producing it was 34 cents a bushel. But where the yield was 59 bushels, the labor cost of production was but 21 cents a bushel. In the latter instance the price of corn or pork might materially drop and still leave a net profit to the farmer. But with a 36-bushel yield a slight drop in price would mean a net loss to the farmer.

The same typical situation is true of all other crops. The average yield of wheat in the United States is approximately 15 bushels per acre. But the efficient farmer easily raises twenty-five and materially reduces his cost of production. The same is true in the production of dairy products. Large numbers of milch cows on the farms of the United States are "boarders." Gradually these are being displaced with cows which give a far larger yield at a lower cost of production per pound of butter fat. The same principle applies in the production of meat and poultry products. All that is included under the general term "good farming," such as rotation of crops, better seed, growing more legumes, raising crops on land best suited to the crop, keeping more and better stock, the judicious use of commercial fertilizer—all tend to increase yields and lower costs of production.

CHART 11

NUMBER OF HORSES AND MULES AND ACREAGE OF IMPROVED FARM LAND



Motorizing the Farm

Another vital element in increasing the output of food and raw materials is the motorizing or mechanizing of the farm. This is perhaps the most far-reaching change now taking place in farming.

The tractor is of fundamental importance in the motorizing of the farm. Plowing requires more power than any other one job on the average farm. On a farm for which the tractor is adapted the plowing can be done better with a tractor and in much shorter time. The man who plows with horses starts out doing a good piece of work in the morning. As the day wears on he gradually lifts the plow to save the horses, and by afternoon is doing less efficient work. But he who plows with the tractor can plow at exactly the depth best suited to the soil throughout the entire day, for the tractor will plow all day, and all night, too, without getting tired. Further, with the tractor he can plow in a single day nearly as much as he could in a week with two or three horses. He can therefore plow his ground quickly and when it is in the best condition for plowing.

Conservation of food makes it desirable that the tractor should replace part of the horses on American farms, for it is estimated that each horse or mule consumes about one-fourth of what it produces. The number of horses on the farms continued to increase up to 1910 at about the same rate as the acreage of improved land. See Chart 11. Contrary to the common impression, the number did not decrease materially after the outbreak of the war, but in 1917 the number of horses and mules on American farms stood at the highest point in our history, exceeding twenty-five million. With rising prices it is more advantageous to feed an engine with gasoline or even alcohol

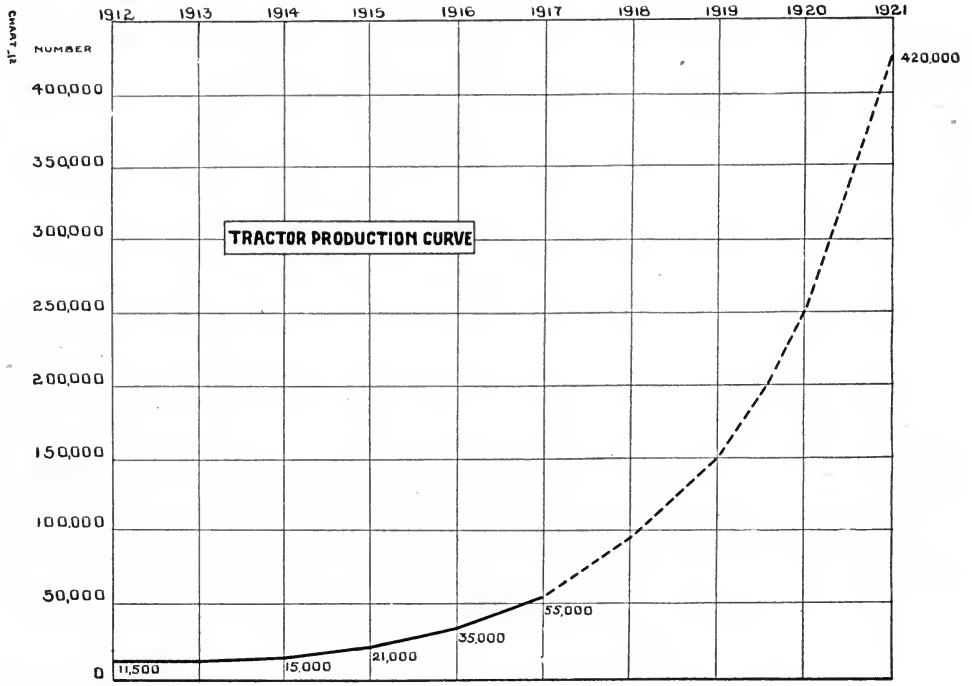


CHART 11
1912
1913
1914
1915
1916
1917
1918
1919
1920
1921
NUMBER
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
TRACTOR PRODUCTION CURVE
11,500
15,000
21,000
35,000
55,000
420,000

than to allow horses to consume so much food—part of which might be converted to human use.

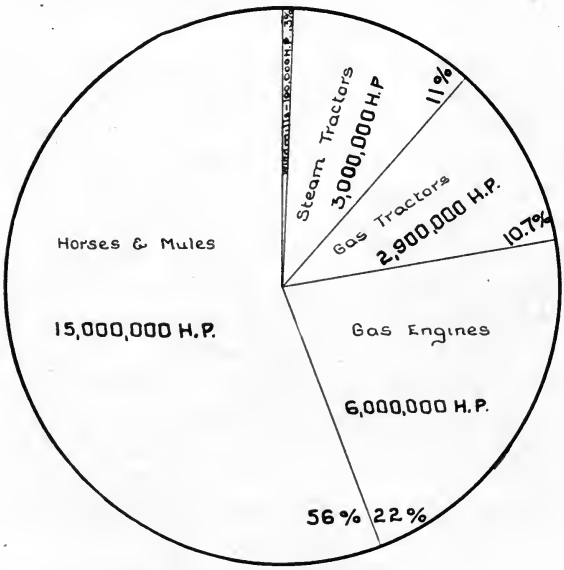
At first the tractor industry developed slowly, with a production in 1912 of 11,500. See Chart 12. Two years later the output was 15,000, then 21,000, then 35,000, and then 55,000 in 1917. In 1918 the output is estimated at about 100,000. It appears likely that the output will amount to 250,000 by 1920, if material and labor are available.

It is estimated conservatively that the potential tractor market will exceed 1,250,000. Some estimates place the number much larger. If the average life of a tractor be estimated at five years, it would indicate an annual replacement market of 250,000. This, together with the necessity of filling the original market, makes it seem quite possible that 400,000 or even 500,000 tractors may eventually be sold in a year. It is interesting to note that 250,000 tractors at $1,000 each means a market of $250,000,000, which is about as large as the entire annual output of the agricultural implement industry before the war, which amounted to $164,000,000 in 1914 at manufacturers' prices. The tractor industry in itself seems to offer greater possibilities than did the entire agricultural implement industry before the war.

It is estimated that there are on the farms of the United States from 1,500,000 to 2,000,000 automobiles. In every agricultural section dealers report that prior to the opening of the war they were selling more automobiles to farmers than to the city population. With the return of normal times the number of automobiles on farms is likely to materially increase, for the automobile is increasingly essential to the efficient operation of the farm.

It is estimated that in normal times farmers buy annually 250,000 gasoline engines. It is reported that

POWER ON AMERICAN FARMS



Total - 27,000,000 H.P.

Used on Farms — 27,000,000 H.P.

Used in Manufacturing Estab's — 22,500,000 H.P.

CHART 13

100,000 electric power plants will be sold to farmers in 1918. They are used not only for lighting farm homes and barns but also for supplying the mechanical power for a great variety of minor operations. Further, it is estimated that 60,000 water systems will be sold on farms in 1918. The number of milking machines sold annually is steadily increasing. Naturally this means that more dairy cows can be kept on farms, for one man can milk more cows, and at less cost.

The motor truck seems destined to have a wide sale on farms. In many sections, rural motor express routes are being established, operating out of large cities as centers. In many instances farmers ship produce into town on these trucks in the morning and have their purchases delivered in the afternoon. The Post Office Department is steadily increasing the number of trucks on the parcel post delivery routes. The farm family now orders goods by telephone and has goods delivered either by parcel post or rural truck express routes. Obviously, less time is then consumed by the farmer than in driving to town and more time is available for farm work on the mechanized farm.

The possession of these motor vehicles will necessitate a service station on many farms, for timeliness of operation is a large factor in the value of any of these motor vehicles. The man who must depend upon a garage man coming out for service work "day after tomorrow" is likely to lose a large part of the margin of profit on his investment. In a word, farming is increasingly a great power-using industry.

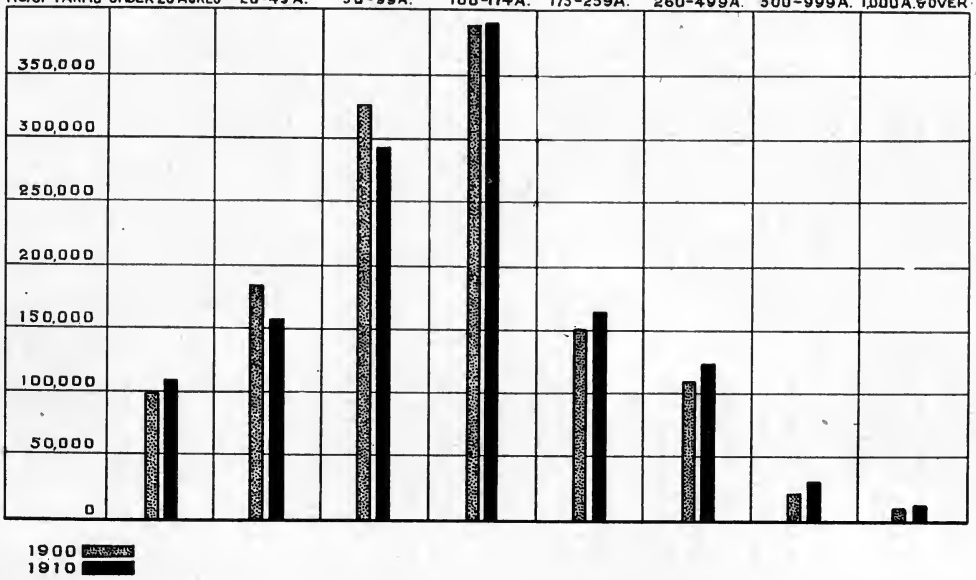
Usually we do not think of the farm as a power-using industry. But at a conservative estimate the horses on farms represent about fifteen million horse power. To this we must add six million for gasoline engines, three million for gasoline tractors and three

CHART 14

SIZE OF FARMS

MIDDLE WEST

1900 – 1910



million for steam tractors. We have a total of twenty-seven million horse power on farms, which is 20 per cent more than was accredited by the Census of 1914 to all manufacturing establishments in the United States. See Chart 13.

Trend to Larger Farms

The motorization of the farm is likely to mean larger farms, especially in sections devoted to general farming. It takes about the same investment in buildings, the same self-binder, automobile and tractor for a 100 as for a 160 acre farm. Granting that some implements must be duplicated, the overhead cost is usually greater on a smaller farm. With equally efficient management it costs more to raise a bushel of wheat, a pound of meat or a quart of milk on a small farm. This will be increasingly true as farms are more generally motorized. Surveys of large numbers of farms show that the farmer's labor income steadily rises up to at least a four or five hundred acre farm. On these farms the farmer is using his time, his ability and his investment more efficiently.

The tendency to larger farms was in evidence before the tractor became a factor in the Central West. See Chart 14. Comparing the Census of 1910 with the Census of 1900 we find that farms under 20 acres tended to increase, due probably to the development of truck and fruit farming. But the number of farms in the classification of smaller acreage, from 20 to 100 acres, tended to decrease. The farms from 100 to 175 acres in size remained about stationary, while the farms with larger acreage, at least up to 1,000 acres, showed a marked tendency to increase. The more general use of the tractor and other power machinery is likely to accelerate this movement.

FARMS IN UNITED STATES

BY SIZE

1910

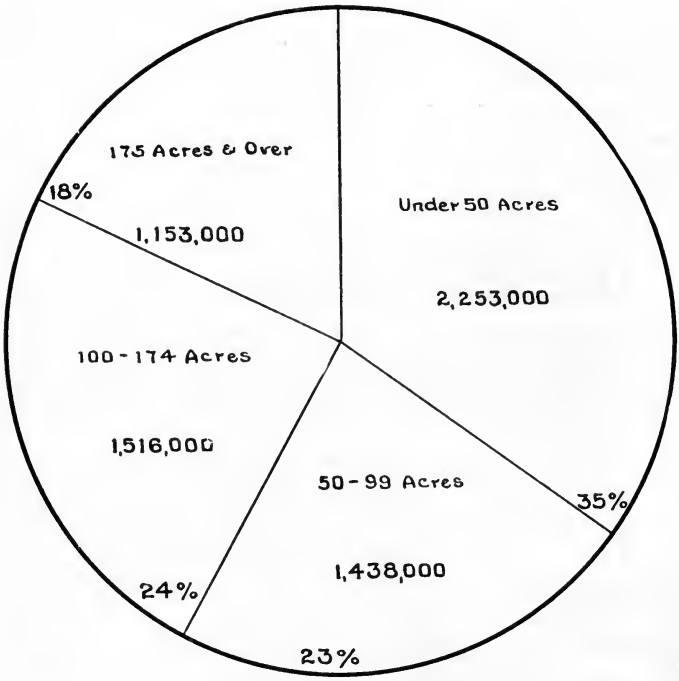


CHART 15

Total – 6,361,000 Farms

This does not necessarily mean a few very large farms, for agricultural experts tell us that at the present time when a farm exceeds 500 acres the increased cost of supervision more than equals the advantages of larger size. Possibly with a motorized farm the maximum number of acres for efficient handling as a unit may be larger. Obviously, there is some unit of maximum advantage in farming, and the man who utilizes this unit, while he operates at an advantage over the farmer with a smaller acreage, does not compete at a disadvantage with the producer who controls a larger acreage.

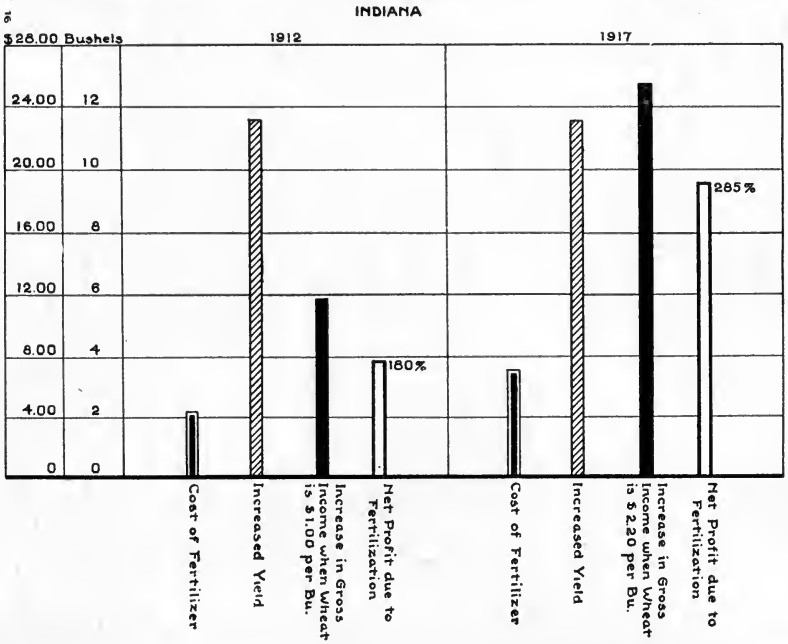
The tendency to larger farms, then, does not necessarily mean a few great landowners, but it apparently does mean that the 1,150,000 farms of over 175 acres are likely to be increased in number. See Chart 15. Stated otherwise, it means that there will be a larger number of leadership farm families who more efficiently apply business principles to farming, who have more wants, and who have the income necessary to buy the merchandise required to satisfy these wants.

Commercial Fertilizer

It is likely that the output on the farm and the farm income will be materially increased by the more general and judicious use of commercial fertilizers. The experience of leading farmers in all agricultural sections and a multitude of experiments prove that increased yields of most farm crops, and at a lower cost of production, can be secured by the use of commercial fertilizer. To illustrate, in Indiana the use of commercial fertilizer on wheat land by representative farmers in ten counties showed an average net profit of 180 per cent over and above the cost of the fertilizer. Stated otherwise, the average expenditure for

CHART 16

COMMERCIAL FERTILIZER AND WHEAT YIELD



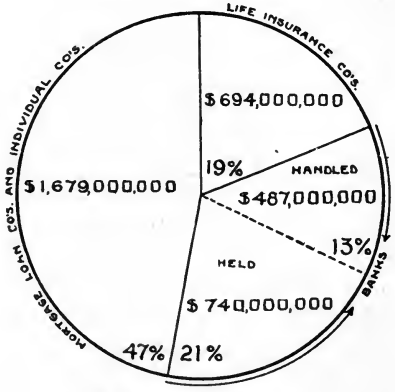
fertilizer per acre was about four dollars. The increased yield was a little over eleven bushels. The increased net profit was over seven dollars an acre when wheat sold at one dollar a bushel. In 1917, under wartime prices for both fertilizer and wheat, the net profit would have been 285 per cent. See Chart 16. Similar experiments in corn land in the Middle West, hay land in the East, fruit and truck land show fully as startling results. Not only is the yield increased, but usually the quality of the crop is much improved. It is matured earlier. The yield is more certain. Looked at from another angle, commercial fertilizer is a means of making farm labor more effective—that is, it reduces the amount of labor required to produce a bushel, bale, pound, ton or quart of output.

Thus far we have used commercial fertilizer for cotton, truck and fruit crops in regions of specialized farming, and more or less on farming lands in the East. In the great Central West the use of commercial fertilizer has increased but slowly. The middle western farmer has not yet felt obliged to use it to keep up his yields. At present he is likely to consider its use a reflection on his land. He is prejudiced against it. However, it is the consensus of opinion of those who are best informed that the general use of commercial fertilizer in the United States is but a question of time and education. In the leading nations of Western Europe the crop yields per acre in normal times are approximately double those of the United States. European agricultural experts estimate that in getting the increased yield, commercial fertilizer is at least a 75 per cent factor. It might not be profitable for American farmers to attempt to equal European yields, for the point of diminishing returns might be reached, and our aim in the United States is and must continue to be the maximum income per farmer. But

FARM INDEBTEDNESS

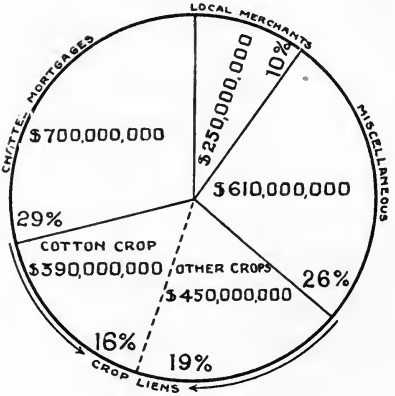
ESTIMATED

MORTGAGES



$3,600,000,000

PERSONAL



$2,400,000,000

CHART 17 **Total $6,000,000,000**

a multitude of experiments and the experience of great numbers of successful farmers prove that farm income can be materially increased by using commercial fertilizer to increase our yields considerably above our present level.

Farm Financing

The income of large numbers of farmers will be materially increased by better farm financing. The total farm indebtedness in the United States is estimated at approximately $6,000,000,000, of which a little less than two-thirds is mortgage indebtedness. See Chart 17. While $6,000,000,000 is a vast sum, it is only 12 per cent of the value of all farm property. It is estimated that the average interest rate on the total farm indebtedness—both mortgage and personal—is 8½ per cent. On mortgages the interest rate varies from 5 per cent on farms in the most highly developed sections to from 15 to 20 per cent, including commissions for renewals, in the West and South. On personal indebtedness the interest rates, especially for tenant farmers, often run far higher than this.

Many influences are operating to reduce this interest rate. In the past few years banks have done much to develop farming, by more liberal loans, by financing the purchase of high-grade stock, and by offering prizes to stimulate calf, pig and corn clubs. Several banks employ agricultural agents. As the farmer becomes more efficient he is a better credit risk. As he keeps farm accounts he is able to make a financial statement and get a larger line of credit at the bank. The Farm Loan Act was passed in July, 1916. On August 31, 1918, there were over three thousand farm-loan associations which have placed 88,000 approved loans aggregating $186,000,000. On this, farmers now pay 5½ per cent interest or 6½ per

cent including amortization payments. Previous to the opening of the war the interest was 5 per cent. That is, there is the equivalent of a farm-loan association for each agricultural county in the United States, although as yet they are located mostly in the West and South, where interest rates are higher.

The effect of farm-loan associations is far greater than the number of farmers who belong to them or the amount of money they have borrowed. The effect of these associations is to stabilize other farm mortgage loans at about the same rate. Bills have been introduced in Congress to improve farm-credit facilities on personal-credit loans. It has been well said: "In the past, money has been loaned the farmer primarily from the viewpoint of profit to the money lender. In the future, farming will be financed more largely from the standpoint of developing agriculture."

If interest rates on farm loans can now be reduced to an average of 5 per cent, as seems probable, it would mean a net saving in annual interest charges to farmers in the United States of $200,000,000. That is, the farmer's net profits would be increased by this amount which in itself would represent a vast market. It would buy 200,000 tractors at $1,000 each. It would buy nearly a half million lighting plants or several hundred thousand water systems. This addition to net profits would permit the installation of nearly a million furnaces in farm homes. It would buy many thousands of automobiles for farm families. It would buy a vast amount of additional furniture and house furnishings and better clothes.

However, better financing of the farm means far more than a vast saving in interest charges. Thousands of farms should have more and better stock, silos, and better barns. Thousands of acres can be made more productive by tiling. A vast area of land

would be made more productive by a liberal application of lime. Farm efficiency would be improved by better farm homes. More power machinery would increase farm output. In a word, under efficient management, more liberal financing of the farm would greatly increase the income of the farm family.

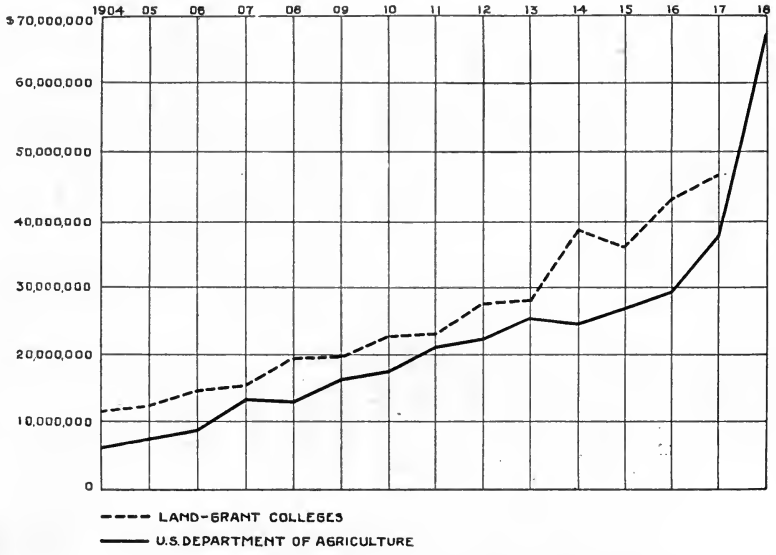
Better Farm Marketing and Buying

The farm income is steadily being increased by the more efficient marketing of farm crops and the more advantageous purchase of farm supplies. To illustrate, in California about 8,000 citrus growers marketed a crop valued at about $50,000,000 in 1917. The selling expense was but 1.55 per cent. That is, they saved in the aggregate several million dollars in lower selling expenses. On the average they save about one million dollars a year through cooperative purchasing of supplies in larger volume. But the advantages of the citrus growers' exchange are far greater than lower selling expenses. They have used national advertising effectively to develop a larger market for citrus fruit. More efficient selling methods are now used. The fruit is now distributed far more advantageously. The quality of the output has been greatly improved. The net result is a handsome addition to the net income of 8,000 growers.

In a somewhat less marked degree cooperative selling and buying is now used by many lines of farmers, such as the potato growers, as well as by producers of truck and fruit in several regions of specialized production. The cranberry growers have a strong selling organization. There are over two thousand farmer-owned grain elevators, about the same number of farmer-owned creameries, and several hundred cooperative stock-marketing associations. Several of the great organizations of farmers have been instru-

CHART 16

GOVERNMENT APPROPRIATIONS
TO
U.S. DEPARTMENT OF AGRICULTURE AND LAND-GRANT COLLEGES
1904-1918



mental in organizing a large number of local marketing and buying organizations of farmers. In the aggregate the number of farmers' cooperative marketing associations is estimated at 10,000, which market products valued at one billion dollars a year. Some failures are inevitable. But gradually the farmers in all sections are learning to apply better business methods in marketing and buying. This does not necessarily mean the elimination of the retail dealer. Where the dealer renders the same service on equally advantageous terms he is likely to do most of the business. In a word, he must do a larger volume at a lower percentage of gross profit.

More efficient methods of distribution, which increase the farmer's net income, naturally make farming more attractive and help to keep a larger number of more efficient men on the farms. More capable farmers produce a larger volume at a lower cost, tending in a measure to check rising food prices and at the same time provide a more satisfactory net income for the farm family.

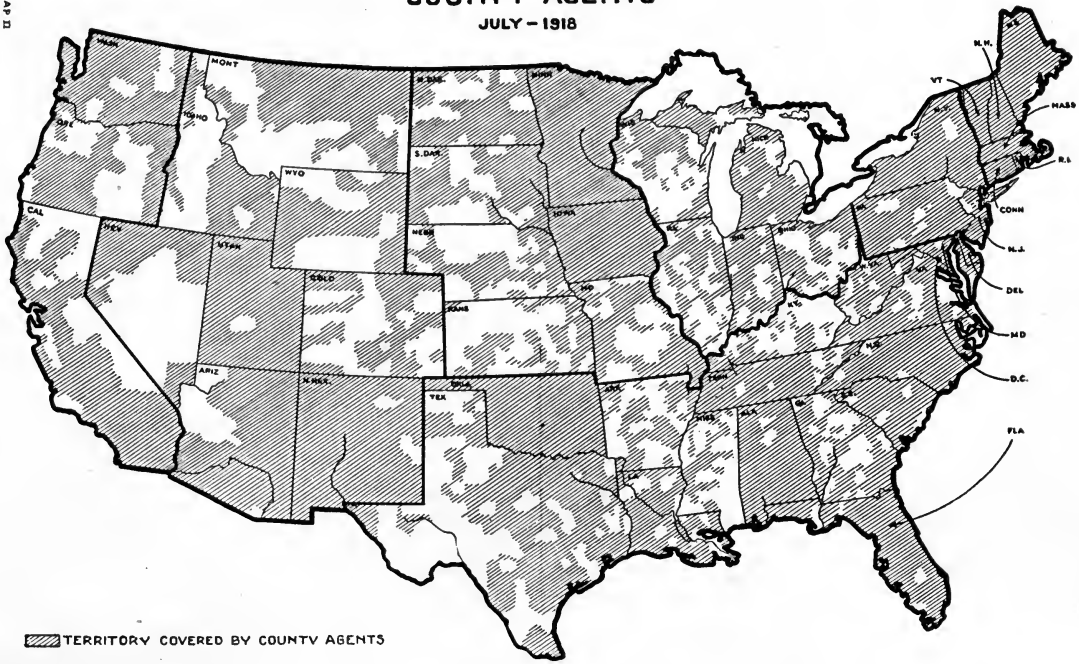
Governmental Agencies

Governmental agencies—national, state and local—are doing a vast amount to promote progress in agriculture. The United States Department of Agriculture is a great and interesting factor in agricultural progress. In 1904 the Department of Agriculture received appropriations of a little over $6,000,000. This amount has been increased from time to time until in 1918 under war conditions the appropriations were $68,000,000. Agricultural colleges everywhere are the backbone of agricultural progress. The aggregate amount voted to support the agricultural colleges in 1917 was nearly four times what it was in 1904. See Chart 18. Even more important, we now employ

MAP II

COUNTY AGENTS

JULY – 1918



▨ TERRITORY COVERED BY COUNTY AGENTS

experts to take the improved methods in agriculture worked out by the State Colleges of Agriculture and the United States Department of Agriculture out to the farmer. Leading farmers are induced to try new methods. Other farmers follow their example. That is, these agencies are now dynamic, whereas formerly they were more largely static.

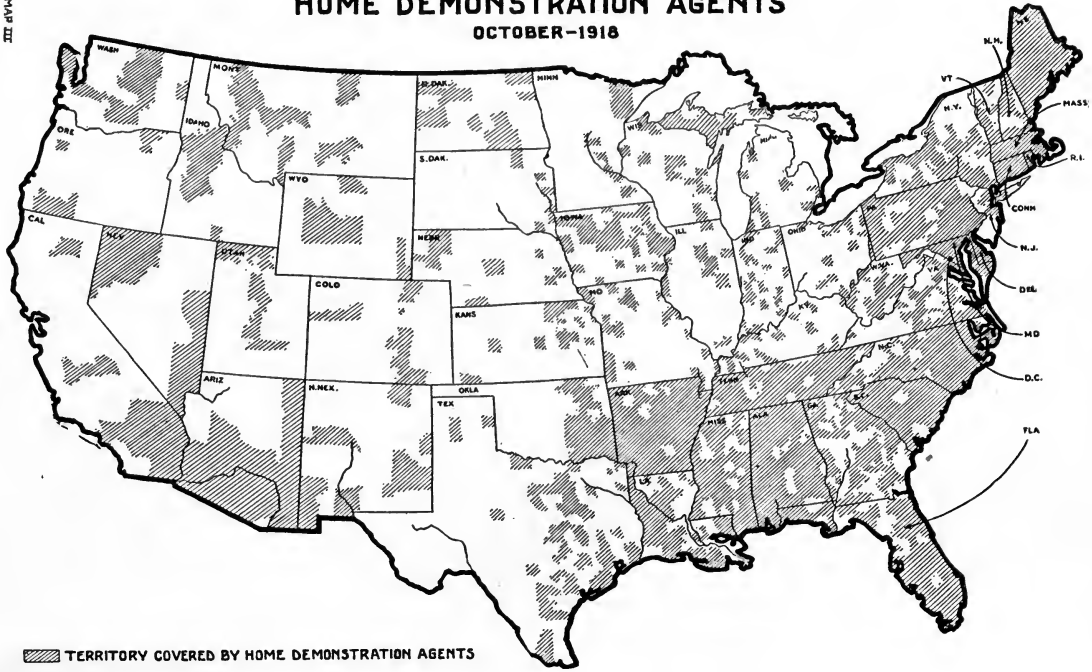
One of the most important forces in improving agriculture today is the county agent. There are 2,920 agricultural counties in the United States. In over three-fourths of the counties a county agent is now employed. See Map II. In several counties one or more assistant agents are also hired. They take out to the farmer better methods in farming, help him to produce more efficiently and to market his crops more advantageously—in a word, to earn more money. In addition to these county agents some of the large city banks employ county agents who guide the farmers in applying loans to uses that will increase net profits. In some instances railroads employ county agents. Banks, railroads and city chambers of commerce have actively promoted the county agent movement and have extended financial assistance.

In approximately 1,700 counties a woman home-demonstration agent is employed to work with the farmers' wives and daughters. Not only are better methods of canning, care of poultry, etc., taught, but better sanitation and more home improvements are installed and more organizations of farm women are promoted. That is, home demonstration agents help farm women to add to the farm income and also to establish a higher standard of living on the farm. This movement for more expert assistance on the farm is steadily growing, especially under the stimulus of war conditions. In the near future every agricultural county in the United States is likely to have

MAP III

HOME DEMONSTRATION AGENTS

OCTOBER–1918



▨ TERRITORY COVERED BY HOME DEMONSTRATION AGENTS

both a county agricultural agent and a home demonstration agent.

On June 30, 1918, over 600,000 boys and girls on the farm were enrolled in corn, calf, pig, poultry, home-garden and other clubs. It is estimated that the total enrollment for the year 1918 will reach well over one million. In the southern states, in 1917, the 40,000 boys enrolled in corn clubs raised on the average nearly 50 bushels of corn to the acre, or about twice the amount raised by their fathers. The same is also true in other sections. County agents generally report that next year the father "raises corn the corn club way." This is typical of the results in farm clubs in other lines. County agents generally report that the boy is the avenue through which in a very large number of instances the father is most effectively reached and influenced.

Education on the farm is improving. The one-room country school is slowly passing away. Its place is taken by the consolidated school, with a larger enrollment, better teachers and a more interesting school. In this school agriculture, domestic science and manual training are taught. That is, the school curriculum is more closely connected with the interests of the boys and girls on the farm. About 3,000 schools are now teaching agriculture.

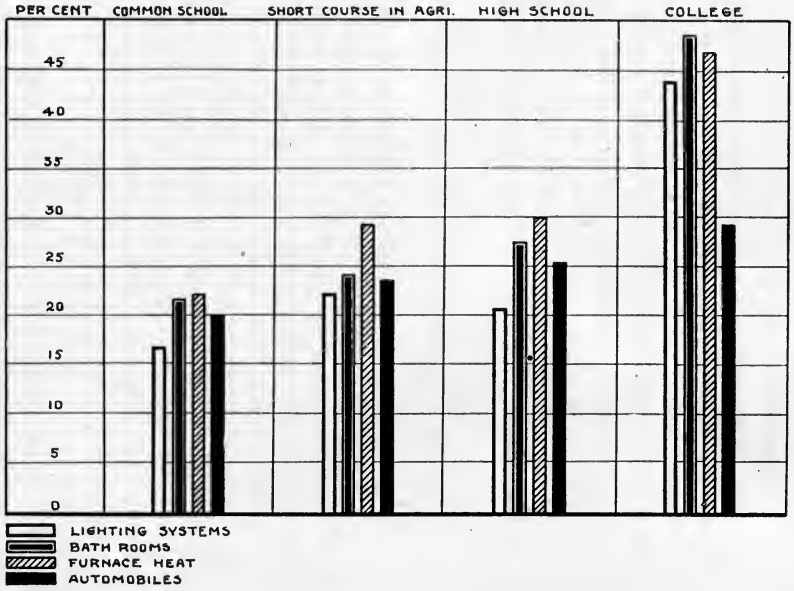
Farm Journals

Farm journals were the first great educational agencies in American agriculture. They have been a potent factor in promoting the fundamentals of better farming, more efficient production, better marketing, better rural education, farm home improvements and the encouragement of agriculture by governmental action. The better methods in agriculture worked out by agricultural colleges have been taken to great

CHART 19

EDUCATION AND FARM IMPROVEMENT

(825 WISCONSIN FARMS)



BASED ON A STUDY MADE BY THE COLLEGE OF AGRICULTURE, UNIVERSITY OF WISCONSIN.

numbers of farmers by the agricultural journals. They have been the medium for the interchange of farm experiences.

Agricultural journals which keep abreast of the times and which serve the needs of the modern scientific business farmer are playing a great and increasing part in raising agriculture to a new and higher level of income and of living.

All of these influences, and many others, are doing two things of fundamental importance: They are increasing the buying power of the farm family, and they are raising the standard of living on the farm—that is, they are arousing in the farm family a desire for a greater variety and a better quality of merchandise.

Rising Standard of Living on the Farm

The first and fundamental factor in determining the amount and kind of merchandise which an individual or a group of people purchase is buying power—that is, the amount of money and credit they have to buy with.

The second factor is the standard of living. To illustrate, thousands of farm families are financially able to have a water system and a bathtub in the house who do not as yet have these conveniences.

However, the standard of living on the farm is rapidly rising. More farm homes are being provided with modern conveniences—furnaces, water and lighting systems. These in turn stimulate a demand for better rugs and house furnishings and better clothes. A wider variety of food is now served on the farm table. Better linen and china are used. More labor-saving equipment is being installed in farm homes. In almost every line the taste of the farm family is being improved.

FARM HOME EQUIPMENT

ORANGE TOWNSHIP, BLACK HAWK COUNTY, IOWA.

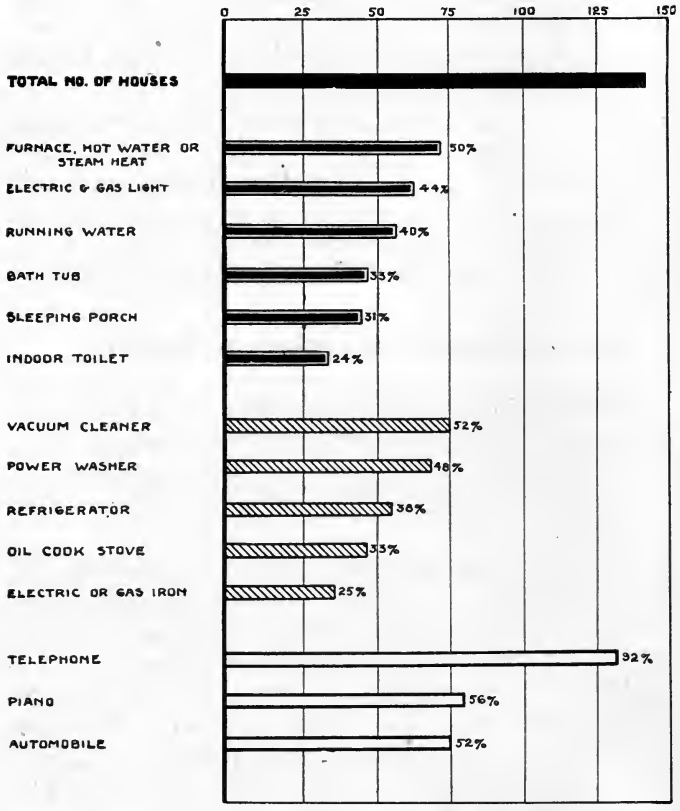


CHART 20

(%) OF TOTAL NUMBER OF HOUSES

BASED ON DATA TAKEN FROM
"THE RESULTS OF SOME RURAL SOCIAL SURVEYS IN IOWA"
BY MR. GEO. H. VON TUNGELN

Education and Home Improvements

The relation between education and home improvements is illustrated by a study of 825 farm homes made by the Agricultural College of the University of Wisconsin. See Chart 19. The proportion having home improvements steadily increases with education. Where the parents had taken a short course in agriculture have or have had a high-school education, a larger number insisted on home improvements. But the proportion rises far more rapidly among those who have had a college education.

A study of all the farm homes in Orange Township, Blackhawk County, Iowa, was made by the Iowa Agricultural College. Chart 20 illustrates the result of this study in graphic form. Half of all the farm homes in this township had furnaces, while the proportion having water, baths and electric or gas lights was somewhat less. Nearly half of the homes had such labor-saving conveniences as vacuum cleaners, power washers and electric irons. Nearly all these homes had telephones, over half had pianos, and about half of them had automobiles. This is not a picture of the average conditions in farm homes throughout the United States, but it is a picture of a condition somewhat exceptional at present but to which we are rapidly approaching. Each home improvement calls for others.

Modernizing the Farm Home

For example, it is the general experience of distributors of electric lighting plants that the purchase of a lighting plant is followed by the purchase of a considerable amount of better furniture and house furnishings. Better wall paper is required. More paint and varnish are used. When the electric lights

are turned on, the rugs, the furniture and other house furnishings, which seemed satisfactory when kerosene lamps were in use, are not now so attractive. The electric power plant makes it far easier to have a water system in the farm home, with indoor toilet and bath, and have the water system 100 per cent efficient. The power washer, the electrically operated ironing machine, the vacuum cleaner, the electric iron and the electric fan can be utilized. The water can be pumped, the churn can be operated, the grindstone turned, the cream separated, and a variety of other minor operations performed in and about the farm home by electric power.

The installation of a water system and a lighting plant raises the standard of sanitation in the farm home. More soap and cleaning compounds of all kinds are used. More frequent baths stimulate greater pride in personal appearance, leading not only to a demand for better clothes, but for more toilet preparations and all the other lines that are found essential by the well-groomed man or woman. The furnace eliminates the necessity of running several stoves and the resulting labor and inconvenience. Briefly stated, the modernizing of the farm home is an influence of tremendous power in promoting a taste for more and better things on the farm.

The Automobile on the Farm

The automobile has probably done more to revolutionize the methods on the farm and the farm standards than any other one influence. With the automobile the farm family travels more. In the next township they see farms with well-painted homes, and barns and fences. A silo has been built. Plowing is done with a tractor. When they call on their friends they may find that they have modern conveniences in

their homes, that they milk their cows with a milking machine, separate their cream, pump the water, do the washing, and perform much other more or less exhausting manual labor with a gasoline engine or with electric power. The farm family come home with a broader vision and more open minds. They go more frequently to the city trading center. They visit up-to-date city stores. They mingle with city people. They attend the moving-picture show or the theater. They patronize the ice-cream parlor. In a word, they gradually adopt city standards of living.

The automobile promotes more efficient farming. If a part is needed in a machine, it is quickly secured and the machine put in working order again. If hog-cholera serum is needed or insecticides or fungicides to fight plant enemies, they are readily secured. More and more in the busy season the family do their shopping in the evening or in the noon hour. In a word, with the automobile, labor is more efficiently employed on the farm. Also the automobile tends to raise the standard of farm family expenditures. Many a dealer reports that "whenever an unusually economical farmer has bought a car and paid a few automobile bills his standard of expenditure rises or he sells the car. He does not sell the car."

Concentration of Farm Trade

Not only is the buying power of the farm family steadily increasing and the standard of living rising, but the farm family is now more accessible than ever before. More and more the trade of farm families is concentrating in the county seat cities and in cities which are local trading centers. In all agricultural sections dealers generally report that their trade from the farms and villages covers a radius at least twice as large as a few years ago. Hence, the manufacturer

who has national distribution that adequately reaches the smaller cities is already reaching the farm market in all the more expensive or shopping lines. Also he is increasingly reaching the farm trade in less expensive lines, for when the family goes to the trading center to shop they naturally buy more or less of the cheaper articles. However, the village store does and is likely to continue to do a large volume of business in convenience lines, such as groceries, toilet preparations, notions, overalls and other work clothes, and staple lines of hardware. Hence, an adequate distribution of these convenience lines necessitates jobber cooperation, involving at most simply an extension rather than a change in selling methods.

The automobile has been the largest single factor in this concentration of trade. This is likely to be even more marked with the improvement of country roads. However, other factors have contributed to this concentration of trade. There are over three million telephones on the farm—that is, approximately one-half of all farm families now have the telephone. Over one-half of all farm families now have the rural free delivery. Briefly stated, the improvement in the means of communication and transportation has in fact moved the farm family nearer to the city.

Not only is the farm family physically more accessible. They are also more accessible to the message conveyed by the printed page, for more and more farm families read high grade farm publications, leading periodicals, daily papers and other literature delivered to the farm family each morning by rural free delivery.

At the same time the merchant in the small city is steadily improving. The up-to-date rural merchant now carries a well-selected stock of nationally known products. He runs an attractive store. He aggres-

sively goes after the trade in the farming territory tributary to the city. That is, he goes out with his message to the people. The concentration of trade in local trading centers affords to the merchant a larger opportunity. This attracts a more capable man to utilize the opportunity. The old-time merchants are gradually eliminated or are stimulated to growth and improvement. In brief, a race of far more efficient merchants in small cities is in process of evolution.

The Influence of Leadership

The problem of reaching any group of people is largely a problem of reaching the leaders. The retail merchant says: "I carry what my customers want." Analyzed, he means that he carries what a relatively small number of *leading* customers want. If he satisfies them he is certain to please the great majority of his customers. A few people in every community are aggressive, know what they want, and insist upon getting it. The great majority more or less meekly take what is handed out to them. Hence, a relatively small number of leadership families largely determines what the merchant carries and what will be bought by the majority of his customers. Hence, it is of vital importance to reach and influence these leadership families.

The influence of leadership is one of the most striking facts in the farm field. County agents and home demonstration agents in all sections work largely with leadership farm families. Their success depends largely upon securing the cooperation of these leaders. To illustrate, one of the ablest county agents in the United States says: "My problem is one of reaching a few leading farmers in the county. I depend largely on about twenty farmers of this type residing in different parts of the county. When I want

to put over a proposition, such as purchasing better seed, treating seed for smut, the more efficient combating of hog cholera, selling Liberty Bonds, or any other important matter, I call up these twenty men on the telephone. Each of these in turn gets in touch with a few of his neighbors and we put over our proposition." This is typical of the experience of county agents in all parts of the United States. The agricultural expert reaches a few farmers, and through these few influences the many.

A merchant in a middle western city says: "For several years I have owned a farm. I hired an expert from the agricultural college to put in the first field of alfalfa in the neighborhood. Other farmers and their sons looked on and said sarcastically, 'College alfalfa.' Within three years most of my neighbors had put in alfalfa, and all were exceedingly careful to put it in in the same way. I was the first farmer in the neighborhood to paint my fences white. Within a short time most of the fences in the neighborhood were painted white. I bought the first gasoline engine to pump water. Within a short time gasoline engines were in use on most of the farms in the neighborhood."

The same principle of leadership applies in merchandising to farm as well as city families. In the words of an Ohio merchant: "In normal times, when I have sold a $6 hat or a $35 overcoat or a $2 tie to the right farmer in a locality, I have assured the sale of several more in the same neighborhood." Every live retail merchant effectively uses this principle of leadership. The problem of selling to six million farm families is a problem of selling to the comparatively small proportion of those families who are the leaders in the various communities.

Almost invariably agricultural experts and others who are in direct touch with farmers estimate the

number of leadership farmers at from 5 to 10 per cent of the total number, depending upon how closely one defines leadership. This is but a rough estimate. However, certain facts seem to indicate that this may be approximately correct. Usually about 10 per cent of the farmers in a county belong to the farm bureau. It is estimated that about 10 per cent of the farmers in the United States belong to the various cooperative organizations. To the leadership families on the farms must, of course, be added city people who own farms and who are in many instances leaders among the farmers in the community. Thus the consensus of opinion seems to indicate that there may be from 500,000 to 1,000,000 families included in the farm leadership group in the farm market. It is to be noted, however, that with agricultural progress the number of leaders is steadily increasing and the influence of these leaders is steadily growing.

Farming Influenced by National Forces

The forces which are transforming farming are national in their operation. Farms in all sections are being motorized. In all parts of the United States modern improvements are being installed in farm homes. The county agent and the home demonstration agent movement is national in its extent. In all parts of the United States more efficient methods of marketing farm crops are being adopted. The more adequate financing of the farm is a national problem. Local influences are becoming relatively less effective, while national forces are of more vital importance.

The farmer is now more conscious that he is influenced by national forces. Since the war opened he has cooperated as never before with other farmers and with city people in the various war activities—Liberty Loan, Red Cross and Young Men's Christian

Association. His son is now in the Army in France. The farm family is, therefore, taken out of its former isolation and made keenly conscious that even what happens on the other side of the Atlantic directly affects it.

The farm family is now more clearly conscious that its prosperity depends directly on forces which it, acting alone, cannot control. It is the general experience of county agents and all who have to do with farming that the farmer was never before so conscious of the great national forces which now so largely determine his success or failure.

The war also profoundly affected established habits. To illustrate, in the words of a farm implement and tractor distributor in a great middle western city: "Three years ago before the war opened three farmers out of four were skeptical about the tractor. Now three out of four are thoroughly convinced that the tractor is the coming thing on the farm. 'Why the change?' The scarcity of labor has compelled farmers to seriously consider the problem of motorizing the farm." That is, in ordinary times the farmer would be far more likely to keep on plowing with horses—his accustomed method. The change to tractor plowing would have come far more slowly.

The wartime prices of stock feed have greatly stimulated the movement to eliminate scrub stock. More cow-testing associations are formed—more farmers now test the milk and eliminate the cows which are "boarders." Methods of stock feeding are changing. In one of the wealthiest agricultural counties in the East dealers report that prior to the war farmers had for years bought mostly wheat bran. The war and high prices stimulated them to study feeds and to get expert advice. The result is that other feeds are now more largely bought, because at

present they furnish the food elements needed at a lower price. That is, the war has compelled farmers to think and to act as the result of conscious thinking instead of proceeding in their habitual way.

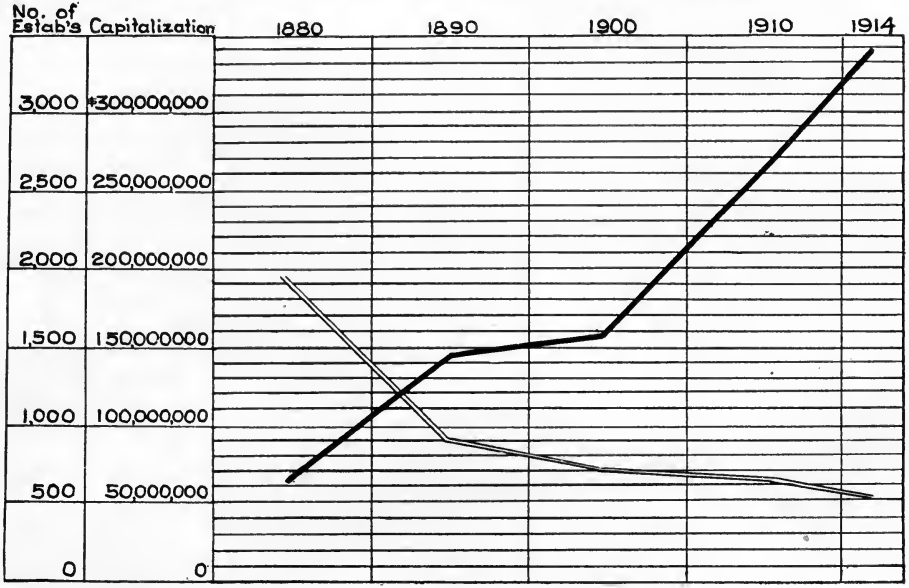
In our own diet we are now compelled in many instances to substitute other articles of food. Prices of many foods are much higher, so we are giving more thought to the buying of foods. We seek information from the printed pages of periodicals, books and newspapers. The same principle is now operative more or less in many lines. Hence, the message of the printed page has far more attention-value than in ordinary times. Therefore, the manufacturer seeking to break into a market with a new line or to establish his product under his own name and brand has an unusually favorable opportunity. At the same time, he who is already established in the market needs to be more keenly alert, for he can now rely less on habit to hold his market.

Advertising to the Farm Market

National advertising to the farm market is likely to prove unusually effective at the present time and to be increasingly effective in the future. The farm market offers a vast and constantly growing opportunity for the sale of a great variety of merchandise. Farming is the industry of predominant importance in the United States. Farm income or buying power has vastly increased. It is likely to further increase in the future. The standard of living on the farm is rapidly rising. The family on the farm increasingly demand a far greater amount and variety of machinery and merchandise. They exercise much finer taste in selecting. Farm families are now far more accessible and trade is concentrated over a much wider area in local shopping cities. The farming population is

CHART 21

AGRICULTURAL IMPLEMENTS



served by retailers in rural trading centers, who increasingly compare favorably with merchants in the larger city. Retailers in each locality are guided largely in the selection of merchandise by the preference of the leading families among their patrons. That is, on the farm as well as in the city the preferences of a comparatively small number of leaders determine what will be carried by the merchants and what will be sold in the community.

Obviously, those manufacturers who secure the good will of the leadership families occupy a position of great strategic advantage. They obtain a larger proportion of the business in their line. This has been one of the most powerful forces promoting concentration in the manufacture of products used in the farm market as well as in other fields. The agricultural implement industry is typical. The capital invested in this industry increased fivefold in the period from 1880 to 1914. But the number of establishments in 1914 was but one-third what it was in 1880. See Chart 21. Further, of the 600 establishments manufacturing agricultural implements in 1914 a small proportion did the bulk of the business. This is not exceptional. It is the story of industry. In the early history of an industry many firms enter. But mortality sets in. The number of firms is steadily reduced. A few persist to the end. The experience of the farm implement industry is likely to be duplicated in many lines of manufacture supplying the farm market. Apparently, the tendency toward concentration is likely to be even more rapid in the future, due largely to the more effective use of national advertising to reach the leadership families in the farm field and to the increasing influence of these families.

Methods in farming as well as the views and standards of the farm family are being transformed by

national forces which are taking the farm family out of their isolation and giving them a national viewpoint. These national forces influence first the leadership type of farm families in each locality. Through their influence the whole farming population is raised to a new and higher level. Leadership farm families have on the average quite as large an income as the average city family. They furnish their homes in substantially the same way as the corresponding city families. They dress in the same way. The same variety of food is served on their tables. They have equally cultivated tastes in the selection of merchandise.

The leadership farm families read intelligently both the editorial and the advertising pages of the farm journals which serve the needs of the progressive, scientific, business farmer. Their needs and interests cover a wide range. They include not only the methods, equipment and supplies used in the operation of the farm. They include also the great variety of equipment and merchandise used in the farm home and by the individual members of the family. Each member of the family is interested in the advertising message of the manufacturer who uses the pages of his favorite agricultural journal. This journal touches that in which they are most keenly interested—farming. They read its pages from the farm viewpoint.

But the modern leadership families on the farm are also citizens of the world, with national and even international interests. They read and are influenced by the editorial and advertising message in all those periodicals in which they have confidence. They act more largely as a result of information and less from habit. Hence, he who effectively uses national advertising to gain for his product the favor of the leaders on the farm will win his way into a vast and stable market among the millions of farm families.